Volume 3:
Modeling Technical Appendix to the Draft Environmental Impact Report/ Environmental Impact Statement

Freeport Regional Water Project

State Clearinghouse No. 2002032132

July 2003

U.S. Department of the Interior
Bureau of Reclamation

FREEPORT
REGIONAL WATER AUTHORITY

Sacramento County Water Agency
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Jones & Stokes. 2003. Freeport Regional Water Project. Volume 3: *Modeling technical appendix to the draft environmental impact report/ environmental impact statement*. July. (J&S 03-072.) Sacramento, CA. Prepared for Freeport Regional Water Authority, Sacramento, CA, and U.S. Department of Interior, Bureau of Reclamation, Folsom, CA.

Modeling Technical Appendix

Freeport Regional Water Project DEIR/EIS

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1. Introduction

This appendix provides documentation for the computer simulations performed for the Freeport Regional Water Project (FRWP) EIR/EIS. The modeling described in this appendix was used to assess the potential effects of project alternatives, including those on river flow, reservoir storage, surface water deliveries, water quality, water temperature, salmon mortality, and hydroelectric power generation. The simulations were performed using a set of computer models that are described in this appendix. Assumptions used for the modeling studies, the inter-relationships between models, and the simulation results supporting the impact assessment in the body of the Draft EIR/EIS are also included in this appendix.

The models used to assess impacts of the FRWP alternatives are the best and most appropriate modeling tools available at the time this work was performed. Many of these same models are being used in other environmental impact assessments currently underway in the region and are being applied in the same way.

At the core of the modeling effort for the FRWP EIR/EIS is use of CALSIM II, a general-purpose planning model developed jointly by the California Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) for simulating operation of California's water resources system, specifically the Central Valley Project (CVP) and the State Water Project (SWP). The version of CALSIM II used for the FRWP DEIR/EIS is the same as currently being used by USBR for the Long-Term CVP Operations Criteria and Plan (OCAP), a description and assessment of USBR's operations policies for the northern California divisions of the CVP. CALSIM II studies for the FRWP EIR/EIS were prepared interactively with EBMUD's reservoir operation model, EBMUDSIM, and SCWA's water allocation model. A daily simulation model of Pardee Reservoir and Camanche Reservoir operations was also utilized to assist in the refinement and evaluation of Alternative 6, which included enlarging of Pardee Reservoir.

River flow results from the CALSIM II studies were used to simulate water quality within the Sacramento/San Joaquin Delta utilizing the Fisher Delta Model (FDM). Delta Simulation Model II (DSM2), a hydrodynamic and water quality model developed by DWR, and the empirical G-model were utilized to confirm the FDM modeling results. Water quality effects of worst case reverse flow events in the Sacramento River near the FRWA intake were simulated using a river transport model developed for use in evaluation of the Sacramento Regional Wastewater Treatment Plant Master Plan.

CALSIM II river flow and reservoir storage results were used as input to USBR's temperature models, which were used to simulate water temperature in key surface water bodies within north and central California. USBR's salmon mortality model was used to estimate potential Chinook salmon spawning losses for each project alternative. Both the FRWP analyses and the CVP OCAP used the same versions of the temperature and the salmon mortality models.

Hydroelectric power generation potentially affected by the FRWP alternatives was simulated using LongTermGen, a model recently developed by the Western Area Power Administration (WAPA). LongTermGen was specifically designed to utilize results from CALSIM II.

1.1 APPENDIX ORGANIZATION

Section 2 of this appendix provides an overview of the modeling methodology, the alternatives evaluated, and the appropriate use of the modeling results. Detailed discussion of the modeling is provided in the sections of the appendix that follow.

Surface water and reservoir operations modeling is the subject of Section 3. This section of the appendix describes the models used to simulate hydrologic impacts of the project alternatives, how the models interacted, and the general and project-specific assumptions made. The key results of the hydrologic modeling are presented in a series of figures and tables.

Delta water quality modeling methodology, issues and results are contained in Section 4.

Section 5 describes the temperature and salmon mortality modeling, and includes all results of this work that were utilized in the assessment of fishery impacts.

Modeling of CVP hydroelectric power generation is described in Section 6.

Attachment A is a task report summarizing the modeling of worst case reverse flow events for the Sacramento River near the proposed FRWP intake.

1.2 MODELING TEAM

A blended team of modeling experts composed of FRWA member agency staff and consultants performed the modeling for the FRWP DEIR/EIS. Members of that team are listed in Table 1.2-1.

Table 1.2-1. FRWP modeling team members

Organization	Member	Principal Responsibility
CH2M HILL	Robert Tull	CALSIM II, DSM2, LongTermGen
	Randy Ritzema	CALSIM II, LongTermGen
	Rob Leaf	CALSIM II
	Kyle Winslow	DSM2
EBMUD	Mark Bluestein	Modeling team manager
	K.T. Shum	Delta water quality modeling
	John Skinner	EBMUDSIM
	Ana Ulloa	EBMUDSIM
	Kevin Richards	EBMUDSIM
	Edward Chang	CALSIM II, EBMUDSIM
Flow Science	Susan Paulsen	Sacramento River transport model
Jones & Stokes	Russ Brown	Mokelumne reservoirs daily model
Montgomery Watson Harza	Jon Goetz	SCWA conjunctive water operations model
SCWA	Jim Peifer	SCWA modeling manager
USBR	Russ Yaworsky	Temperature and salmon mortality models, CALSIM II

FRWP modeling was done in close coordination with the modeling prepared for the preliminary working draft of the CVP OCAP. This coordination was facilitated by having team members who worked on both efforts. CH2M HILL modeling staff performing the FRWA modeling also worked closely with DWR and USBR in the development and release of the September 2002 CALSIM II Benchmark Study version 2.0 and on the development of the Benchmark Study Update version 2.1 that was used to perform the modeling for the FRWP and preliminary working draft of the CVP OCAP. Rob Tull and Rob Leaf conducted a major portion of the CALSIM II modeling used as the basis for the preliminary working draft of the CVP OCAP. Russ Yaworsky, reviewed all FRWP CALSIM II studies, and prepared the water temperature and salmon mortality modeling for both the FRWP and CVP OCAP.

2. Modeling Methodology Overview

The potential effects of the FRWP and alternatives on California's surface water system were evaluated using a suite of state-of-the-art computer simulation models. This section provides an introduction to how these simulations were performed. In-depth discussion of each modeling tool, including assumptions and results, is provided in the following sections of this appendix.

The operation of the simulation models used for the FRWP analyses were linked through the exchange of information between the models. Figure 2-1 displays in a general sense how the models interacted. The appendix section containing detail for each model is also indicated.

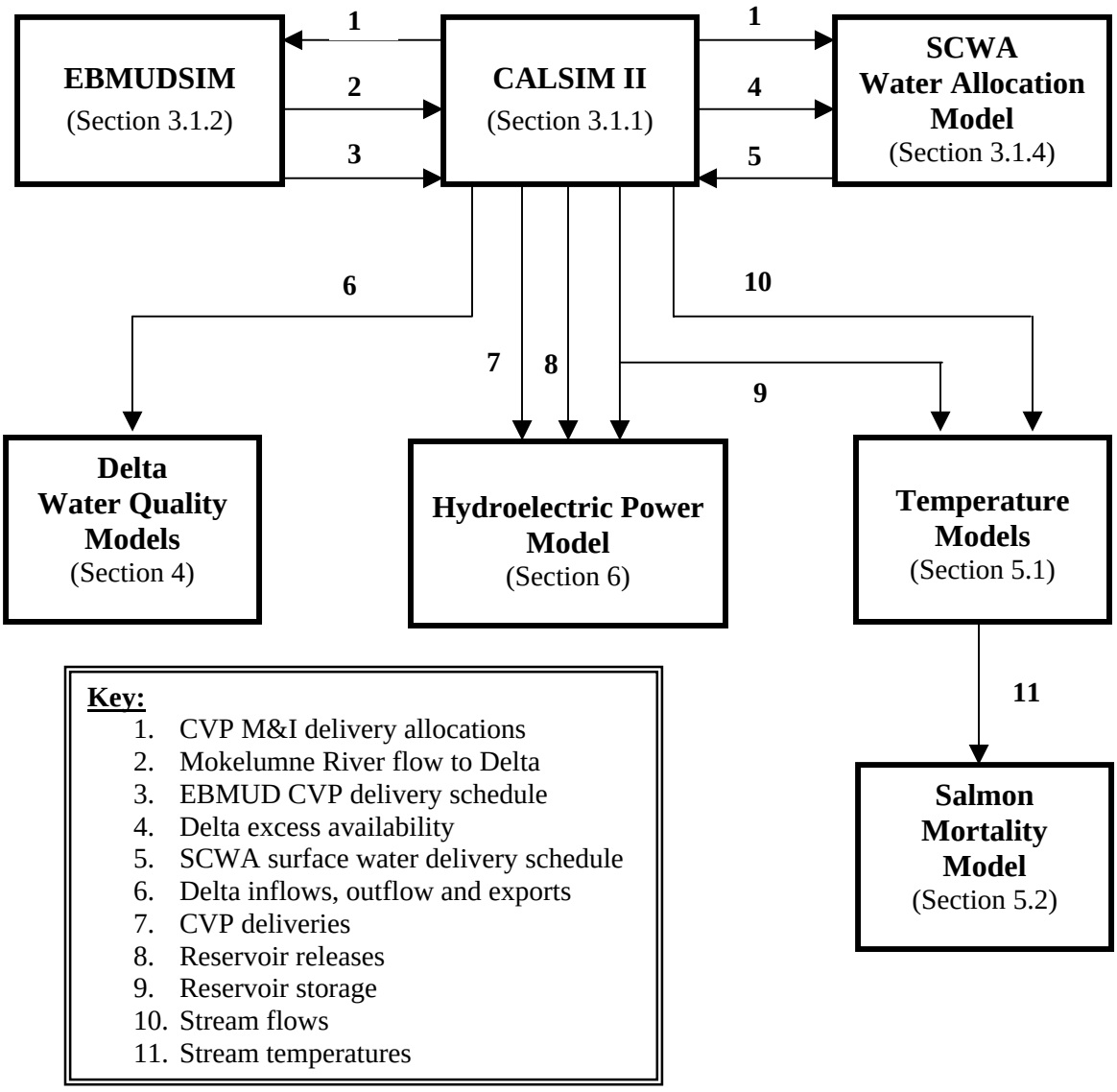

Figure 2-1 Information Exchange Between FRWP Simulation Models

2.1 SURFACE WATER AND RESERVOIR OPERATIONS MODELING

The first modeling step was to simulate the hydrologic effects of the proposed project and alternatives on the surface water system. This system is composed of both natural water bodies (rivers and streams) and constructed facilities (reservoirs and diversions). Hydrologic effects include changes in stream flow, reservoir levels, and water deliveries. Water is a highly valued resource in California. Consequently the hydrologic system within the potential zone of influence of the FRWP is managed carefully to provide for multiple beneficial uses of water; including aquatic habitat, water supply, power production, and recreation. Therefore the hydrologic models used for this analysis must take into account and integrate many water supply priorities and constraints.

2.1.1 CVP/SWP System

The Central Valley Project (CVP) operated by the US Bureau of Reclamation (USBR) and the State Water Project (SWP) operated by the California Department of Water Resources (DWR) constitute the bulk of the water supply in California and have the most significance on surface-water-related environmental considerations.

The current planning model used by DWR and USBR is CALSIM II, a general-purpose simulation model of the combined CVP/SWP systems, as well as a host of smaller water supply entities with which the CVP/SWP systems interact. A geographically comprehensive model, CALSIM II includes the Sacramento River basin, the San Joaquin River basin, and the Delta, as well as portions of the Tulare Basin and Southern California. The model was developed jointly by DWR and USBR, and replaces DWRSIM and PROSIM, earlier hydrologic planning models for the CVP/SWP systems. CALSIM II provides a platform for assessing changes in Delta water quality and water supply operations of the CVP and SWP projects.

2.1.2 EBMUD System

The East Bay Municipal Utilities District (EBMUD) currently owns two reservoirs within the Mokelumne River watershed (Pardee and Camanche Reservoirs) and operates them to provide on average 95% of its current water supply, as well as meet downstream environmental and water supply requirements. To increase the dry-year supply reliability of its water supply system and provide greater operational flexibility, EBMUD is proposing to enhance this system by accessing CVP contract water from the Sacramento River through a diversion at Freeport. As an alternative to this approach, the modeling explores enlarging Pardee Reservoir to increase the yield of EBMUD's Mokelumne River water supply.

EBMUDSIM is the planning model used by EBMUD for simulating its Mokelumne River system (i.e. operational decisions and constraints for Pardee Reservoir, Camanche Reservoir, the Mokelumne River, and the Mokelumne Aqueduct; as well as EBMUD demands). Because it allows for more detailed analysis of Mokelumne system operations, EBMUDSIM was used to model the Mokelumne River system for the FRWP studies, instead of the more generalized representation of the system in CALSIM II. EBMUDSIM was also used to determine the timing of EBMUD's diversions at Freeport, taking into account the provisions of EBMUD's amendatory

CVP water supply contract. Interactions between EBMUDSIM and CALSIM II are outlined in a later section of this appendix.

A separate model of Pardee and Camanche Reservoir operations was used to assist in the evaluation of project alternatives that involved enlargement of either reservoir. This spreadsheet model, developed by Jones & Stokes, uses a daily time step. The daily model was not integrated with CALSIM II studies, but was useful for feasibility analyses and to refine operating rules.

2.1.3 SCWA System

The Sacramento County Water Agency (SCWA) currently relies on a combination of groundwater supplies and CVP contract water from the Sacramento River, which it diverts at the City of Sacramento's water treatment facility immediately downstream of the American River confluence. SCWA is seeking to increase surface water supplies from several sources to both meet increasing water demands within its jurisdiction and to ensure sustainable groundwater yields in the future. SCWA proposes to accomplish this goal by adding a diversion at Freeport on the Sacramento River. SCWA's ability to operate its surface water and groundwater supplies conjunctively will give SCWA the flexibility to divert more of its surface water in wet years when impacts to other water users and environmental interests are minimized.

Utilizing a diversion at Freeport offers SCWA access to the remainder of its current CVP "Fazio" contract amount (15 TAF/yr), presently limited by the existing biological opinion. CVP contract water reassigned from the Sacramento Municipal Utility District, up to an additional 30 TAF/yr, would also be diverted at Freeport.

A second potential supply source for SCWA is appropriative rights to natural flows that are available when excess water conditions exist. Excess water conditions exist when releases from upstream reservoirs plus unregulated flow exceed existing legal uses of water in the Sacramento Basin, including water required to meet Sacramento-San Joaquin Delta water quality standards, plus exports.

A third SCWA surface water supply source is "Other Water" obtained through transfers or an additional appropriation of water. In the CALSIM II model, "Other Water" is not limited to appropriations when excess water conditions exist, but also includes diversions of unregulated flow when there are balanced water conditions. Balanced water conditions exist when releases from upstream reservoirs plus unregulated flow approximately equal the water supply needed to meet legal uses of water in the Sacramento Basin, plus exports. Treating "Other Water" in this manner provides a "worst-case" estimate of the impact of SCWA "Other Water" diversions on the state water resources system, since such diversions have the potential to impact CVP/SWP operations and supplies.

A spreadsheet model developed for SCWA was utilized to determine the mix of the various surface water supplies and groundwater, based upon diversion capacities at the two diversion points on the Sacramento River, CVP contract allocations, and Delta Excess water availability. These diversion patterns were then used in CALSIM II to estimate system changes.

2.1.4 Modeling Framework

The surface water analysis for the FRWP involves the interaction of the three principal models listed above. A description of the modeling methodology used for the FRWP analyses can be found in Section 3 of this appendix. Section 3.3 specifically addresses interaction of the surface water models.

Although CALSIM II includes a simplified representation of the Mokelumne River system, EBMUDSIM provides more detailed analysis of the effects of Mokelumne River operations on the Delta and upstream users, and captures the dynamic nature of EBMUD's operation of the proposed FRWP diversion and the Mokelumne River system. CALSIM II and EBMUDSIM interact in two locations, as shown in Figure 2.1.4-1. Mokelumne River flows into the Delta, determined using EBMUDSIM, are modeled as an inflow time series in CALSIM II. The schedule of Freeport diversions for EBMUD is also generated by EBMUDSIM, utilizing CVP delivery allocations determined using CALSIM II. Diversions for EBMUD at Freeport, modeled as an EBMUD demand pattern in CALSIM II, are conveyed to the Mokelumne Aqueducts via the Folsom South Canal. While these deliveries may affect Mokelumne River flows into the Delta, as determined using EBMUDSIM, there are no direct return flows to the Sacramento River from EBMUD surface diversions at Freeport.

The SCWA allocation model provides a level of detail and control in SCWA operations that would be difficult to obtain by modeling SCWA demands and diversion patterns directly in CALSIM II. Similar to the CALSIM II/EBMUDSIM interaction, output from the SCWA model is input into CALSIM II as CVP and "Other Water" diversion patterns, based upon estimated Delta Excess availability from previous CALSIM II results. CALSIM II is structured to divert Excess water, subject to availability and diversion capacity, to meet surface water demands unmet by SCWA CVP and "Other Water". Return flows associated with SCWA diversions are calculated by CALSIM II and re-enter the river downstream of the Freeport diversion.

Due to the interactions of CALSIM II and the EBMUD and SCWA system models, iterations of modeling were required for each modeling case, until the values shared by the models closed.

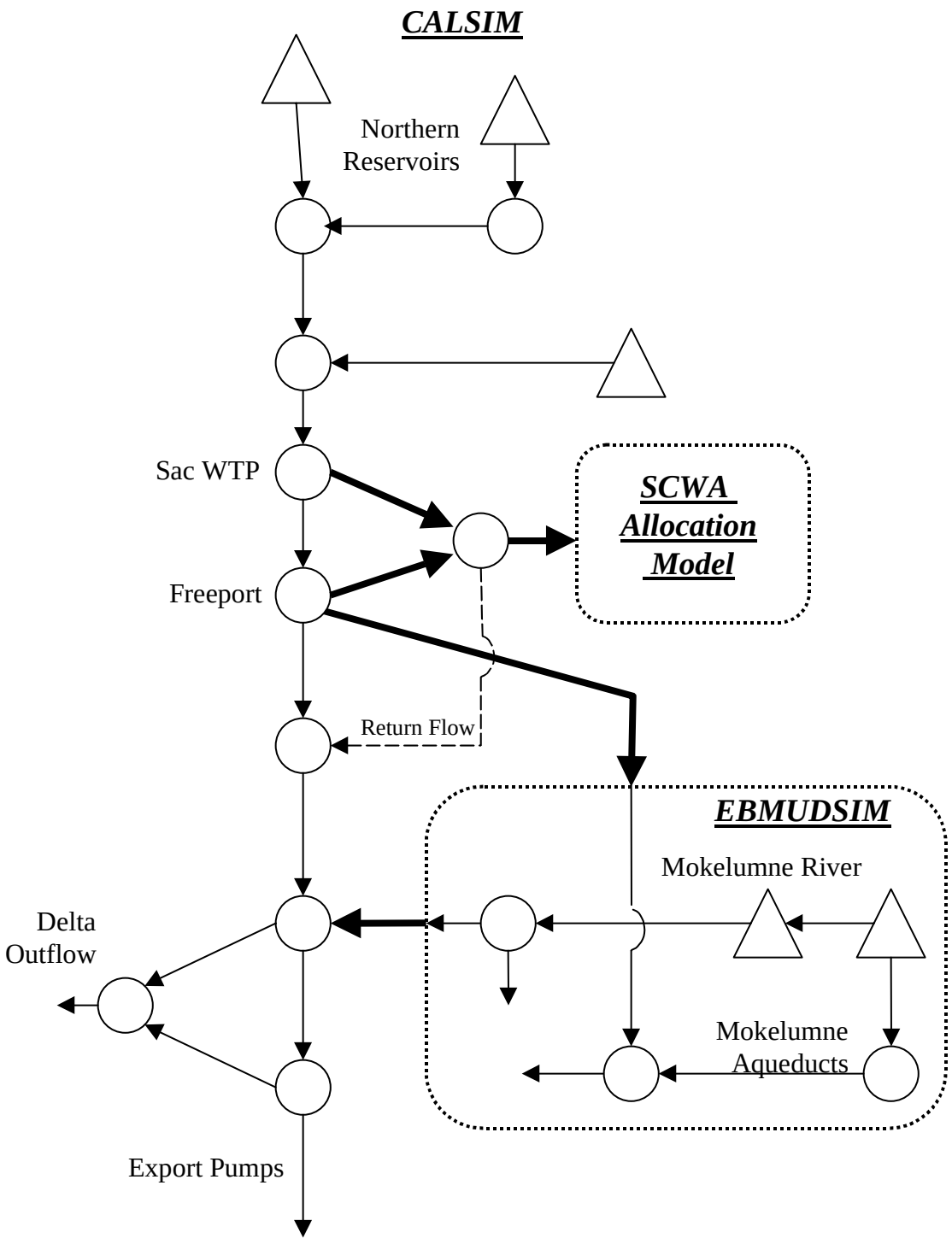

Figure 2.1.4-1 FRWP Surface Water and Reservoir Operations Model Interactions

2.2 WATER QUALITY MODELING FOR THE SACRAMENTO-SAN JOAQUIN DELTA

Five water quality models were utilized to simulate potential salinity changes in the Sacramento-San Joaquin Delta. These models, listed in order of complexity, are:

- Outflow-X2 model of Kimmerer and Monismith
- Outflow-salinity model of the Contra Costa Water District (the "G-model")
- Artificial Neural Network (ANN) Algorithm of the Department of Water Resources
- Fischer Delta Model (Hugo B. Fischer, Inc.)
- Delta Simulation Model II (DSM2) of the Department of Water Resources

The X2 model and the Artificial Neural Network are incorporated in CALSIM II. The other models were run separately, utilizing hydrologic output from the FRWP CALSIM II studies.

Potential impacts of salinity on disinfection byproducts formation were estimated using two empirical relationships based on regression of data from a pilot treatment plant.

2.3 TEMPERATURE AND SALMON MORTALITY MODELING

River flow and reservoir storage results from the hydrologic modeling, as well as historic climatic data, were input into USBR's temperature models for the Sacramento, Feather and American Rivers. These models simulated monthly mean temperatures in key reservoirs and each of the rivers at several locations. The temperature model utilized for the FRWP analysis is identical to the version used by USBR for its OCAP.

Results from the temperature modeling were used by USBR's salmon mortality model. This modeling simulated the effects of the FRWP alternatives on egg survival and early life stages of chinook salmon.

2.4 HYDROELECTRIC POWER MODELING

Hydroelectric power generated and utilized by the CVP was simulated using LongTermGen, a spreadsheet model recently developed by the Western Area Power Administration. This model utilizes output from CALSIM II to simulate power generation at 11 hydroelectric power plants directly affected by operation of the CVP. The model takes into account transmission losses and utilization of power to operate the CVP to estimate net power available for sale. USBR Central Valley Operations has reviewed LongTermGen and approved of its use.

2.5 REVERSE FLOW MODELING FOR THE SACRAMENTO RIVER

To support screening of possible FRWP intake locations and to refine planning for project operations, a river transport model for the Sacramento River near Freeport was utilized. The focus of this modeling was on two representative "worst case" reverse flow periods. The model used was originally developed for use in the Sacramento Regional Wastewater Treatment Plant Expansion DEIR.

Results of the reverse flow modeling included the percentage of wastewater effluent that could be present at the FRWP intake location during the severe reverse flow events simulated, as well as the duration of the reverse flow events.

2.6 MODELING SCENARIOS EVALUATED FOR THE FREEPORT REGIONAL WATER PROJECT

As described in the FRWP DEIR/EIS report, three modeling scenarios were considered in the impact analysis. Each scenario was modeled for existing and future conditions. In combination, this resulted in six sets of modeling studies.

2.6.1 Alternatives

The FRWP EIR/EIS evaluates six primary alternatives. For the purposes of modeling, this required the following three modeling cases:

Alternative 1, the "No Action" alternative, does not include the FRWP and thus represents the state of both the EBMUD/Mokelumne and the CVP/SWP systems without operation of the FRWP. SCWA diversions under this scenario are limited to those made at the Sacramento River Water Treatment Plant, subject to the limitations of SCWA's current Biological Opinion for its "Fazio" CVP contract. Alternative 1 provides a basis for comparison with the "Action" alternatives. Alternative 1 modeling for existing conditions is identical to the OCAP "Today" studies.

Alternatives 2-5 are the Joint Project alternatives, representing joint operations of EBMUD and SCWA at the Freeport diversion. As described in Chapter 2 of the FRWP DEIR/EIS, Alternatives 2, 3, 4 and 5 differ only in the pipeline alignment they include. Operation of these four alternatives is identical, so a single modeling scenario can cover them all. In this modeling case, EBMUD diverts CVP water when its forecasted reservoir storage is below the trigger set in its amendatory CVP water supply contract. In the modeling studies for Alternatives 2-5, it has been assumed that EBMUD diversions will be taken as early as allowable (starting on March 1, the first day of the CVP contract year, March 1) and at the full rate allocated to EBMUD (100 mgd). SCWA annual diversions fluctuate based on CVP contract allocations, available excess flows, and "Other Water" needs.

Alternative 6 is the SCWA Freeport/Enlarged Pardee alternative. In this alternative EBMUD does not divert water at Freeport, but instead obtains greater supply reliability through enlarging the capacity of Pardee Reservoir from 190 TAF to 360 TAF and by modifying Mokelumne River release operations. SCWA operations at Freeport for this alternative are assumed to be identical to Alternatives 2-5.

More detailed discussion of modeling assumptions for each alternative is contained in Section 3 of this appendix, particularly Section 3.2.

2.6.2 Level of Development

In order to assess system-wide effects of the FRWP alternatives under existing and future conditions, each alternative was modeled at both 2001 and 2020 levels of development, under demands and hydrology as determined by the California Department of Water Resources Bulletin 160-98. The 2001 level-of-development studies were the primary studies used for impact assessment in the EIR/EIS. The 2020 level-of-development studies were used for the cumulative impact analysis.

The following table describes how the levels of development and demand were structured for each of the studies.

Table 2.6.2-1. Level of Development and Demands for FRWP Modeling Analyses

Study	Existing Condition	Future Condition
Alternative 1 (No Action)	**CVP/SWP system and Mokelumne River watershed**: 2001 Level of Development[1] **EBMUD:** 2001 demand level[2], no Freeport diversion **SCWA:** 2001 demand level[3], no Freeport diversion	**CVP/SWP system and Mokelumne River watershed**: 2020 Level of Development[1] **EBMUD:** 2020 demand level[2], no Freeport diversion **SCWA**: 2020 demand level[3], no Freeport diversion
Alternatives 2-5 (Joint Project)	**CVP/SWP system and Mokelumne River watershed**: 2001 Level of Development **EBMUD:** 2020 demand level[2], Freeport diversion **SCWA**: "Build-Out" demand level[3], Freeport diversion	**CVP/SWP system and Mokelumne River watershed**: 2020 Level of Development **EBMUD:** 2020 demand level[2], Freeport diversion **SCWA**: "Build-Out" demand level[3], Freeport diversion
Alternative 6 (SCWA at Freeport, Enlarged Pardee Reservoir)	**CVP/SWP system and Mokelumne River watershed**: 2001 Level of Development **EBMUD:** 2020 demand level[2], no Freeport diversion **SCWA:** "Build-Out" demand level[3], Freeport diversion	**CVP/SWP system and Mokelumne River watershed**: 2020 Level of Development **EBMUD:** 2020 demand level[2], no Freeport diversion **SCWA**: "Build-Out" demand level[3], Freeport diversion

[1] Bulletin 160-98 (DWR 1998)
[2] Urban Water Management Plan 2000 (EBMUD 2001)
[3] Draft Zone 40 Water Supply Master Plan (SCWA 2002)

The FRWA member agencies were conservative in estimating impacts by assuming future demand levels in the existing condition modeling studies for the action alternatives (Alternatives 2-5 and Alternative 6).

EBMUD's average annual current customer demand was assumed to be 220 mgd (196 TAF/yr). This demand level was applied only to the Alternative 1 existing condition study. For all other studies, the average annual demand for EBMUD was assumed to be 228 mgd (255 TAF/yr), EBMUD's projected demand in 2020.

Current surface water demand for SCWA was assumed to be 5.7 mgd (6.3 TAF/yr). SCWA future, or "Build Out" total potable water demand, has been estimated to be 98 mgd (109.5 TAF/yr). Annual average surface water diversions of at least 68.5 TAF/yr are needed to prevent annual long-term average groundwater pumping from exceeding a sustainable yield of 41

TAF/yr. SCWA's build out demand is expected to occur sometime between 2030 and 2050, depending on the rate of growth in SCWA's service area.

Use of future project demands with existing level of development by others is appropriate for the EIR/EIS impact assessment because it provides for analysis of the full project against existing conditions, thereby fully analyzing the environmental effects of the entire project without including major (and likely speculative) assumptions about what other projects and water uses may be developed in the future.

2.6.3 Simulation period hydrology

A hydrologic sequence based on historical hydrology developed by DWR is utilized for these analyses. This hydrology is adjusted to a projected 2001 and 2020 level of development and extends from Water Year 1922 through 1994. (Water Year begins on October 1.) The sequence of hydrologic events in the adjusted historic record is considered to be representative of conditions the system might encounter currently or in the future. This method is preferred over an explicitly stochastic modeling approach, since such an approach would be highly data-intensive and complex for such a large-scale system.

This 73-year period encompasses several drought periods, including WY 1928-1934, WY 1977-1978, and WY 1987-1992. In most cases, dry-year results reported in later sections of this appendix are extracted from the WY 1928-1934 period, since this dry period is one of the longest on record, and wet conditions preceding WY 1928 result in full reservoirs at the beginning of the period, eliminating operational effects from previous years. Results for other dry periods are also presented in this appendix for particular parameters.

2.7 APPLICATION AND LIMITATIONS OF MODELING RESULTS TO ESTIMATES OF IMPACTS ON BENEFICIAL USES

The FRWP EIR/EIS assesses the potential impacts of the FRWP on a wide variety of environmental considerations. Due to the complexity and integration of water supply and quality considerations in California and their ramifications on target fish populations, appropriate hydrologic and water quality models are important for quantifying the potential effects of the FRWP. This approach provides a more rigorous assessment than qualitative impact estimates.

CALSIM II, EBMUDSIM, the SCWA Water Allocation Model, and the various water quality models utilized for the FRWP modeling analysis are state-of-the-art planning models that provide generalized insight on project and environmental effects as a result of the FRWP alternatives. Though providing quantitative insights, planning models differ from actual project operations in several ways (as outlined in the following paragraphs). Proper interpretation of planning model results presented in this appendix therefore requires exercise of professional experience and judgment.

Because of the difficulty of incorporating complex operating criteria into long-term planning scenarios, CALSIM II, EBMUDSIM, and the SCWA Water Allocation models, as is typical of planning models in general, use a monthly time step and simplified system representations. The models used in this analysis use a monthly time step, whereas actual operational decisions may be

formulated on weekly, daily, or hourly time steps. Operational adjustments on time steps less than one month, such as flood control spills or diurnal hydropower operations, are assumed to be included in monthly averaged storages, releases, and streamflows. Inputs and results are therefore monthly averages. Operations and calculations in these models are based on generalized monthly operational rules. Interpretation of results from planning models must therefore consider this lower "resolution" and conclusions must remain generalized in nature.

CALSIM II assumes average monthly flows to meet instream flow requirements and contract demands. If streamflows vary during the month, some daily and weekly flows will exceed the minimum requirements/demands and others will not meet the minimum requirements/demands. In actuality, additional water may need to be released to meet minimum requirements/demands if the streamflow fluctuations are due to uncontrolled events (e.g. as flood releases from a reservoir and local accretions due to precipitation).

As a monthly model, CALSIM II does not account for the travel time associated with reservoir releases for downstream requirements. In actuality, reservoir releases must be made hours or days in advance of a downstream requirement. If it rains before the released water reaches the required location and the resultant streamflows increase, more water than necessary may have been released to meet the requirement. CALSIM II uses perfect foresight on a monthly basis and therefore may underestimate the water volume that would be spent during a month trying to maintain a minimum flow requirement.

The simplified representation of allocation procedures in CALSIM II does not explicitly consider many policies regarding storage targets and pumping limitations. This results in situations where allocations may use supplies more efficiently than forecast uncertainty and operational policies may actually allow. Conversely, because of loss of detail, local and specific conditions may not be recognized.

Unlike operations models, which would be infeasible to simulate long-term periods, planning models do not describe operations in absolute terms. Results from a single study, therefore, should not be presented as "stand alone" output, e.g. model output should always be presented in comparison with output from other studies. As such, CALSIM II is not designed to *predict* system river, reservoir, or water quality conditions based upon simulated operational decisions, but instead provides relative magnitudes and timing of "with FRWP" effects compared to "without FRWP".

Since CALSIM II is not designed to predict operations and flows, results from individual months should be considered only in the context of overall trends and averages. CALSIM II represents operational or regulatory thresholds through the use of step functions. Due to CALSIM II's dynamic responses to system conditions, slight changes in model inputs or operations could trigger responses which may significantly vary on an individual monthly basis from the ”No-Action” simulation to the “With Project” alternative simulation. These dynamic responses, however, often average out over longer time periods. It is these longer-term trends that are useful in determining potential impacts of the FRWP on the SWP/CVP system. Therefore, it is most appropriate to interpret results of CALSIM II and the models utilizing those results by evaluating averages over a suitable period (season, year, drought) or exceedence, rather than focusing on a single monthly value.

CALSIM II, in conjunction with EBMUDSIM, the SCWA Water Allocation Model, the Delta water quality models, the temperature models, the salmon mortality model, and the hydroelectric generation model provide indices for:

- FRWP water supply reliability
- Reservoir storage
- River flows and temperatures
- Delta water quality and exports
- Water supply reliability for other CVP/SWP users
- Hydroelectric power generation

The models utilized in the FRWP analysis represent the best tools and information available for hydrologic and water quality impact assessments for both the EBMUD and SCWA systems, as well as the integrated CVP/SWP systems.

3. Surface Water and Reservoir Operations Modeling

Hydrologic modeling was used to estimate how the FRWP alternatives would affect river flows, reservoir levels, and water diversions. This section describes the methods used to determine these effects. The modeling assumptions and results are also presented.

3.1 MODELING METHODOLOGY

The potential hydrologic effects of the FRWP alternatives were evaluated using four computer models: CALSIM II, EBMUDSIM, the Mokelumne daily operations model, and the SCWA water allocation model. Each of these tools and their application for the FRWP environmental documentation is described below.

3.1.1 CALSIM II

At the core of the FRWP modeling is the application of CALSIM II. All other modeling described in this appendix (except the Mokelumne daily operations model) was related to the results of this simulation model.

3.1.1.1 Model Overview

CALSIM II is a general-purpose planning simulation model developed by DWR and USBR for simulating the operation of California's water resources system, specifically the CVP and SWP. On a monthly time-step, CALSIM II utilizes optimization techniques to route water through a network. A linear programming (LP)/mixed integer linear programming (MILP) solver determines an optimal set of decisions for each time period given a set of weights and system constraints. A key component for specification of the physical and operational constraints is the WRESL language. The model user describes the physical system (dams, reservoirs, channels, pumping plants, etc.), operational rules (flood-control diagrams, minimum flows, delivery requirements, etc.), and priorities for allocating water to different uses in WRESL statements.

It is intended that CALSIM II be used in a comparative mode. The results from a "With Project" alternative simulation are compared to the results of a "Base" simulation to determine the incremental effects of a project. The results from a single simulation may not necessarily represent the exact operations for a specific month or year, but should reflect long-term trends.

Since CALSIM II is not designed to predict operations and flows, results from individual months should be considered only in the context of overall trends and averages. CALSIM II represents operational or regulatory thresholds through the use of step functions. Due to CALSIM's dynamic responses to system conditions, slight changes in model inputs or operations could trigger responses which may significantly vary on an individual monthly basis from the "Base" simulation to the "With Project" alternative simulation. These dynamic responses, however, often average out over longer time periods. It is these longer-term trends which are useful in determining potential effects of the Freeport Regional Water Project (FRWP) on the SWP/CVP system.

3.1.1.2 Consistency with USBR OCAP CALSIM II Analyses

The Long-Term CVP Operations Criteria and Plan (OCAP), produced by the USBR, in agreement with DWR, is a description and assessment of the operations policies of USBR for the northern California divisions of the CVP. The OCAP currently being prepared is a revision of the previous 1992 OCAP release and incorporates additional operational constraints and criteria that have arisen since that time, including: the Anadramous Fish Restoration Program (AFRP) flow objectives, the 1993 Winter Run Biological Opinion, the revised decision on CVPIA Section 3406(b)(2) water, the Environmental Water Account (EWA), and Joint Point of Diversion. The assessment of OCAP currently underway is based upon a series of CALSIM II simulations and analyses. These studies use a set of standardized CALSIM II code and data and implement a variety of assumptions to support the overall OCAP analysis.

The FRWP CALSIM II modeling analyses have been developed in parallel with the modeling analysis for the preliminary working draft of OCAP. This parallel development of CALSIM II code and input files has ensured that the FRWP modeling analyses are consistent with current operating policy and planning standards of the USBR and DWR, as they are represented in CALSIM II. The code and inputs for the FRWP CALSIM II 2001 LOD Alternative 1 and the preliminary working draft OCAP 2001 LOD Base Case (Today) study are identical. Furthermore, the FRWP CALSIM II 2020 LOD Alternatives 2-5 study is identical to the preliminary working draft OCAP Future Case study, except that the OCAP study incorporates USBR's final interpretation for future implementation of 3406(b)(2) water. This interpretation of future (b)(2) procedures and actions was still under development at the time the FRWA modeling was prepared, and thus was not incorporated in the FRWP 2020 LOD CALSIM II studies.

All FRWP CALSIM II studies were based on the version of CALSIM II used for the preliminary working draft OCAP studies (Benchmark Study Update, Version 2.1). Differences between the FRWP and preliminary working draft OCAP CALSIM II studies are summarized in Table 3.1.1.2-1.

Table 3.1.1.2-1. Relationship between Preliminary Working Draft OCAP and FRWP CALSIM II Studies

LOD	**FRWP Alternative 1**	**FRWP Alternatives 2-5**	**FRWP Alternative 6**
2001	Identical to preliminary working draft OCAP 2001 LOD Today Study with 3406(b)(2) accounting per February 2002 Wanger Decision	Preliminary working draft OCAP 2001 LOD Today Study with addition of Joint Freeport Project	Preliminary working draft OCAP 2001 LOD Today Study with SCWA at Freeport per Alternative 2-5, no EBMUD Freeport diversion, and re-operated Mokelumne system based on Enlarged Pardee Reservoir
2020	Identical to preliminary working draft OCAP Future Study D1641 circa 2000, except with 3406(b)(2) accounting per the OCAP Today Study and without the Joint Freeport Project	Identical to preliminary working draft OCAP Future Study D1641 circa 2000, except with 3406(b)(2) accounting per the OCAP Today Study	Identical to preliminary working draft OCAP Future Study D1641 circa 2000, except with 3406(b)(2) accounting per the OCAP Today Study, SCWA at Freeport per Alternative 2-5, no EBMUD Freeport diversion, and re-operated Mokelumne system based on Enlarged Pardee Reservoir

3.1.1.3 Base Assumptions

This section outlines the hydrologic and operational assumptions behind the FRWP and preliminary working draft OCAP 2001 LOD and 2020 LOD CALSIM II modeling studies. Specific assumptions that differ between each of the FRWP CALSIM II studies are described in Section 3.2 of this appendix. The preliminary working drafts of the CVP OCAP and the OCAP Biological Assessment present more detailed information about these general assumptions and methods.

3.1.1.3.1 Assumptions Overview

Geographic Coverage

The valley floor drainage area of the Sacramento and San Joaquin Rivers, the upper Trinity River, and the San Joaquin Valley, Tulare Basin, and southern California areas served by the Federal Central Valley Project (CVP) and the California State Water Project (SWP) are simulated in CALSIM II. The focus of CALSIM II is on the major CVP and SWP facilities, but operations of many other facilities are included to varying degrees.

Hydrology

CALSIM II includes a hydrology developed jointly by DWR and USBR. Water diversion requirements (demands), stream accretions and depletions, rim basin inflows, irrigation efficiencies, return flows, non-recoverable losses, and groundwater operation are components that make up the hydrology used in CALSIM II. Sacramento Valley and tributary rim basin hydrologies are developed using a process designed to adjust the historical sequence of monthly stream flows to represent a sequence of flows at a future level of development. Adjustments to historic water supplies are determined by imposing future level land use on historical meteorological and hydrologic conditions. San Joaquin River basin hydrology is developed using fixed annual demands and regression analysis to develop accretions and depletions. The resulting hydrology represents the water supply available from Central Valley streams to the CVP and SWP at a future level of development.

Delta Water Quality

CALSIM II uses DWR's Artificial Neural Network (ANN) model to simulate the flow-salinity relationships for the Delta. The ANN model correlates DSM2 model-generated salinity at key locations in the Delta with Delta inflows, Delta exports, and Delta Cross Channel operations. The ANN flow-salinity model estimates electrical conductivity at the following four locations for the purpose of modeling Delta water quality standards: Old River at Rock Slough, San Joaquin River at Jersey Point, Sacramento River at Emmaton, and Sacramento River at Collinsville. In its estimates, the ANN model considers antecedent conditions up to 148 days, and considers a "carriage-water" type of effect associated with Delta exports.

CVP/SWP Delivery Logic

The delivery logic CALSIM II utilizes in determining deliveries to north-of-Delta and south-of-Delta CVP and south-of-Delta SWP contractors uses runoff forecast information that incorporates uncertainty and standardized rule curves (i.e. Water Supply Index versus Demand Index Curve) to estimate the water available for delivery and carryover storage. Updates of delivery levels occur monthly from January 1 through May 1 for the SWP and March 1 through May 1 for the CVP as water supply parameters become more certain. The south-of Delta SWP delivery is determined based upon water supply parameters and operational constraints. The CVP system wide delivery and south-of-Delta delivery are determined similarly upon water supply parameters and operational constraints with specific consideration for export constraints.

CVPIA 3406(b)(2) Water

CALSIM II incorporates procedures for dynamic modeling of CVPIA Section 3406(b)(2) water and the Environmental Water Account (EWA), under the CALFED Framework and Record of Decision (ROD). Per the October, 1999 Decision and the subsequent February, 2002 Decision, CVPIA 3406(b)(2) accounting procedures are based on system conditions under operations associated with SWRCB D-1485 and D-1641 regulatory requirements. Similarly, the operating guidelines for selection of actions and allocation of assets under the EWA are based on system conditions under operations associated with SWRCB D-1641 regulatory requirements. This requires sequential layering of multiple system requirements and simulations.

CVPIA 3406(b)(2) allocates 800 TAF (600 TAF in Shasta critical years) of CVP project water to targeted fish actions. The full amount provides support for SWRCB D-1641 implementation. According to monthly accounting, 3406(b)(2) actions are dynamically selected according to an action matrix. Several actions in this matrix have defined reserve amounts that limit 3406(b)(2) expenditures for lower priority actions early in the year such that the higher priority actions can be met later in the year.

Environmental Water Account

Under CALFED, the EWA acquires water through "operational" and "fixed" assets, and then allocates water to targeted fish actions. "Operational" assets include relaxation of regulatory requirements and dedication of conveyance capacities to EWA purposes. "Fixed" assets are water purchased from willing sellers or previously banked supplies. According to monthly accounting, EWA assets are evaluated and actions are dynamically selected according to an action matrix. Several actions in this matrix have defined reserve amounts that limit EWA allocation for lower priority actions early in the year such that the higher priority actions can be met later in the year, subject to uncertain "operational" assets.

Table 3.1.1.3.1-1 outlines the general assumptions behind the FRWP and OCAP modeling analyses at both 2001 and 2020 levels of development. These assumptions are consistent across all studies unless otherwise noted. The assumptions are grouped into four general categories: Hydrology, Facilities, Regulatory Standards, and Operations Criteria. Following Table 3.1.1.3.1-1 is a more detailed discussion of base modeling assumptions, arranged according to theses four general categories.

Table 3.1.1.3.1-1 CALSIM II FRWP Studies Assumptions

	Existing Condition (2001)	Future Condition (2020)
Period of Simulation	73 years (1922-1994)	Same
HYDROLOGY		
Level of Development (Land Use)	2001 Level, DWR Bulletin 160-98[1]	2020 Level, DWR Bulletin 160-98
Demands		
North of Delta (exc American R)		
CVP	Land Use based, limited by Full Contract	Same
SWP (FRSA)	Land Use based, limited by Full Contract	Same
Non-Project	Land Use based	Same
CVP Refuges	Firm Level 2	Same
American River Basin		
Water rights	2001[2]	2020, Sacramento Water Forum[3]
CVP	2001[4]	2020, Sacramento Water Forum[5]
San Joaquin River Basin		
Friant Unit	Regression of historical	Same
Lower Basin	Fixed annual demands	Same
Stanslaus River Basin	New Melones Interim Operations Plan	Same
South of Delta		
CVP	Full Contract	Same
CCWD	140 TAF/YR[6]	195 TAF/YR[7]
SWP (w/ North Bay Aqueduct)	3.0-4.1 MAF/YR	3.3-4.1 MAF/YR
SWP Article 21 Demand	MWDSC up to 50 TAF/month, Dec-Mar, others up to 84 TAF/month	MWDSC up to 50 TAF/month, Dec-Mar, others up to 84 TAF/month
FACILITIES		
	Existing Facilities (2001)	Same

[1] 2000 Level of Development defined by linearly interpolated values from the 1995 Level of Development and 2020 Level of Development from DWR Bulletin 160-98

[2] 1998 Level Demands defined in Sacramento Water Forum's EIR with a few updated entries

[3] Sacramento Water Forum 2025 Level Demands defined in Sacramento Water Forum's EIR

[4] Same as footnote 2

[5] Same as footnote 3

[6] Delta diversions include operations of Los Vaqueros Reservoir operations
Same as footnote 7

REGULATORY STANDARDS		
Trinity River		
Minimum Flow below Lewiston Dam	Limited Implementation of theTrinity EIS Preferred Alternative (369-453 TAF/YR)	Trinity EIS Preferred Alternative (369-815 TAF/YR)
Trinity Reservoir End-of-September Minimum Storage	Trinity EIS Preferred Alternative (600 TAF as able)	Same
Clear Creek		
Minimum Flow below Whiskeytown Dam	Downstream water rights, 1963 USBR Proposal to USFWS and NPS, and USFWS discretionary use of CVPIA 3406(b)(2)	Same
Upper Sacramento River		
Shasta Lake End-of-September Minimum Storage	SWRCB WR 1993 Winter-run Biological Opinion (1900 TAF)	Same
Minimum Flow below Keswick Dam	Flows for SWRCB WR 90-5 and 1993 Winter-run Biological Opinion temperature control, and USFWS discretionary use of CVPIA 3406(b)(2)	Same
Feather River		
Minimum Flow below Thermalito Diversion Dam	1983 DWR, DFG Agreement (600 CFS)	Same
Minimum Flow below Thermalito Afterbay outlet	1983 DWR, DFG Agreement (1000 – 1700 CFS)	Same
American River		
Minimum Flow below Nimbus Dam	SWRCB D-893 (see accompanying Operations Criteria), and USFWS discretionary use of CVPIA 3406(b)(2)	Same
Minimum Flow at H Street Bridge	SWRCB D-893	Same
Lower Sacramento River		
Minimum Flow near Rio Vista	SWRCB D-1641	Same
Mokelumne River		
	Inflow time series from EBMUDSIM	Same
Minimum Flow below Camanche Dam	FERC 2916-029, 1996 (Joint Settlement Agreement) (100-325 CFS)	
Minimum Flow below Woodbridge Diversion Dam	FERC 2916-029, 1996 (Joint Settlement Agreement) (25-300 CFS)	
Stanislaus River		
Minimum Flow below Goodwin Dam	1987 USBR, DFG agreement , and USFWS discretionary use of CVPIA 3406(b)(2)	Same
Minimum Dissolved Oxygen	SWRCB D-1422	Same
Merced River		
Minimum Flow below Crocker-Huffman Diversion Dam	Davis-Grunsky (180 – 220 CFS, Nov – Mar), and Cowell Agreement	Same
Minimum Flow at Shaffer Bridge	FERC 2179 (25 – 100 CFS)	Same
Tuolumne River		
Minimum Flow at Lagrange Bridge	FERC 2299-024, 1995 (Settlement Agreement) (94 – 301 TAF/YR)	Same

San Joaquin River		
Maximum Salinity near Vernalis	SWRCB D-1641	Same
Minimum Flow near Vernalis	SWRCB D-1641, and Vernalis Adaptive Management Program per San Joaquin River Agreement	Same
Sacrameto River-San Joaquin River Delta		
Delta Outflow Index (Flow and Salinity)	SWRCB D-1641	Same
Delta Cross Channel Gate Operation	SWRCB D-1641	Same
Delta Exports	SWRCB D-1641, USFWS discretionary use of CVPIA 3406(b)(2), and CALFED Fisheries Agencies discretionary use of EWA	Same
OPERATIONS CRITERIA		
Subsystem		
Upper Sacramento River		
Flow Objective for Navigation (Wilkins Slough)	Discretionary 3,250 – 5,000 CFS based on CVP system water supply forecast	Same
American River		
Folsom Dam Flood Control	SAFCA, Interim-Reoperation of Folsom Dam, Variable 400/670 (without outlet modifications)	Same
Flow below Nimbus Dam	Discretionary operations criteria corresponding to SWRCB D-893 required minimum flow	Same
Sacramento Water Forum Mitigation Water	None	Sacramento Water Forum (up to 47 TAF/YR in dry years)
Stanislaus River		
Flow below Goodwin Dam	1997 New Melones Interim Operations Plan	Same
San Joaquin River		
Flow near Vernalis	San Joaquin River Agreement in support of the Vernalis Adaptive Management Program	Same
System-wide		
CVP Water Allocation		
CVP Settlement and Exchange	100% (75% in Shasta Critical years)	Same
CVP Refuges	100% (75% in Shasta Critical years)	Same
CVP Agriculture	100% - 0% based on supply (reduced by 3406(b)(2) allocation)	Same
CVP Municipal & Industrial	100% - 50% based on supply (reduced by 3406(b)(2) allocation)	Same
SWP Water Allocation		
North of Delta (FRSA)	Contract specific	Same
South of Delta	Based on supply; Monterey Agreement	Same
CVP/SWP Coordinated Operations		
Sharing of Responsibility for In-Basin-Use	1986 Coordinated Operations Agreement	Same
Sharing of Surplus Flows	1986 Coordinated Operations Agreement	Same

Sharing of Restricted Export Capacity	Equal sharing of export capacity under SWRCB D-1641; use of CVPIA 3406(b)(2) only restricts CVP exports; EWA use restricts CVP and/or SWP as directed by CALFED Fisheries Agencies	Same
CVPIA 3406(b)(2)		
Allocation	800 TAF/YR (600 TAF/YR in Shasta Critical years)	Same
Actions	1995 WQCP (non-discretionary), Fish flow objectives (Oct-Jan), CVP export reduction (Dec-Jan), VAMP (Apr 15- May 16) CVP export restriction, 3000 CFS CVP export limit in May and June (D1485 Striped Bass continuation), Post (May 16-31) VAMP CVP export restriction, Ramping of CVP export (Jun), Pre (Apr 1-15) VAMP CVP export restriction, CVP export reduction (Feb-Mar), Upstream Releases (Feb-Sep)	Same
Accounting Adjustments	Per February 2002 Interior Decision, no limit on responsibility for non-discretionary D1641 requirements, no Reset with the Storage metric and no Offset with the Release and Export metrics	Same
CALFED Environmental Water Account		
Actions	Total exports restricted to 4000 CFS, 1 wk/mon, Dec-Mar (wet year: 2 wk/mon), VAMP (Apr 15- May 16) export restriction, Pre (Apr 1-15) and Post (May 16-31) VAMP export restriction, Ramping of export (Jun)	Same
Assets	50% of use of JPOD, 50% of any CVPIA 3406(b)(2) releases pumped by SWP, flexing of Delta Export/Inflow Ratio (not explicitly modeled), dedicated 500 CFS increase of Jul – Sep Banks PP capacity, north-of-Delta (0 - 135 TAF/Yr) and south-of-Delta purchases (50 - 185 TAF/Yr), and 200 TAF/YR south-of-Delta groundwater storage capacity	Same
Debt restrictions	No planned carryover of debt past Sep, asset carryover allowed	Same

3.1.1.3.2 Hydrology

Level of Development

Source: DWR Bulletin 160-98

CALSIM II uses a hydrology which is in part the result of an analysis of agricultural and urban land use. The assumptions used for land use result from aggregation of historical survey and projected data developed for the California Water Plan Update (Bulletin 160). The last Bulletin 160 was published in 1998. Land use data is used in the development of CALSIM II hydrology pertaining to the Sacramento Valley floor.

2001 Level Land Use:

Only historical 1995 and projected 2020 data was developed for Bulletin 160-98. The 2001 Level Land Use was defined through linear interpolation of the 1995 and 2020 data. Table 3.1.1.3.2-1 identifies the 2001 Level Land Use assumptions for the depletion study areas (DSA) that make up the Sacramento Valley floor.

2020 Level Land Use:

Projected 2020 Level data was developed for Bulletin 160-98. Table 3.1.1.3.2-2 identifies the 2020 Level Land Use assumptions for the depletion study areas (DSA) that make up the Sacramento Valley floor.

Demands – North-of-Delta (excluding the American River Basin)

Source: DWR/USBR Joint Hydrology

Demands in the Sacramento River Basin, including the Feather River, are determined based on land use for each depletion area. The land use acreage used to develop water demands is based on the desired Level of Development (LOD). A Consumptive Use model is used to estimate demands for each depletion study area (DSA).

Demands within each DSA must be disaggregated into CVP and/or SWP project and non-project demands. Project demands are subject to reduced water allocations based on contracts with the CVP and SWP, while non-project demands are satisfied from sources other than the CVP and SWP project facilities.

Demands within each DSA must be disaggregated into CVP and/or SWP project and non-project demands. Project demands are subject to reduced water allocations based on contracts with the CVP and SWP, while non-project demands are satisfied from sources other than the CVP and SWP project facilities.

Table 3.1.1.3.2-1 Level of Development - Land Use Assumptions

	2001		2020		Difference	
DSA	Urban	Agriculture	Urban	Agriculture	Urban	Agriculture
58	77,624	36,512	110,000	33,700	32,376	-2,812
10	24,560	190,784	33,000	199,600	8,440	8,816
12	9,076	373,916	12,800	386,000	3,724	12,084
15	3,736	279,344	4,800	279,800	1,064	456
69	57,364	390,492	81,000	384,450	23,636	-6,042
65	43,620	262,988	61,000	255,600	17,380	-7,388
70	205,484	122,312	284,600	108,100	79,116	-14,212
54	19,469	296,778	24,440	293,860	4,971	-2,918
55	27,492	135,088	35,700	128,400	8,208	-6,688
Total	468,425	2,088,214	647,340	2,069,510	178,915	-18,704

Non-project demands can be associated with senior riparian water rights, ground water pumping, or private storage projects. Releases from CVP and SWP are increased to satisfy project demands, but no additional releases are made to satisfy non-project demands.

Demands in the Sacramento Basin are divided into project/non-project in CALSIM II using a GIS "snapshot" of the crop and urban acreage (based on county surveys done in the 1990s). The CVP

and SWP district boundaries were superimposed on Depletion Area boundaries, and the project area percentages are determined (Table 3.1.1.3.2-2).

Table 3.1.1.3.2-2: Project / Non-project Land Use Split

DSA	Project % by land area	Non-project % by land area
10	19	81
12	75	25
15	66	34
58	90	10
65	12	88
69	70	30
70	71	29

These percentages are then applied to the diversion requirement as calculated by the Consumptive Use model to determine the project and non-project demands in each depletion area.

CVP contracts in the Sacramento Valley, excluding the American River Basin, consist of Settlement contracts (approximately 2.2 MAF) and agricultural service contracts (approximately 460 TAF). Feather River Service Area (FRSA) demands are the only SWP demands north of the Delta. The FRSA users are entitled to approximately 1.0 MAF/Yr diversion from the Feather River. Although diversion requirements for contractors north of the Delta are determined using the consumptive use model based on land use, their deliveries are limited to the maximum under their contract amount by CALSIM II.

The diversion requirement for DSA 70 includes the SCWA outdoor M&I pattern. The Action Alternatives, therefore, use a modified diversion requirement for DSA 70 based on the changes to the CVP outdoor M&I diversion pattern for SCWA at the Sacramento WTP.

Demands – CVP Refuges – Firm Level 2

Source: USBR Report On Refuge Water Supply Investigations Central Valley Hydrologic Basin,

California - March 1989 and USBR DRAFT Refuge Water Supply - Long Term Water Supply Agreements, San Joaquin River Basin - November 2000

Firm Level II, current average annual, national wildlife refuge water demands are used for the Sacramento, San Joaquin, and Tulare basins. The refuge demands are consistent with the USBR Report On Refuge Water Supply Investigations, Central Valley Hydrologic Basin, California - March 1989, with the exception of East Bear Creek Unit data that is from Table 1-1 of USBR DRAFT Refuge Water Supply - Long Term Water Supply Agreements, San Joaquin River Basin - November 2000. The quantities in the following Table 3.1.1.2.2-3 represent the amount of water that needs to be diverted in order to meet refuge demands at the refuge boundaries (firm). Thus, they include conveyance losses.

Table 3.1.1.2.2-3 Refuge Water Demand- Firm Level 2

Table 4-A: Sacramento Basin	Total (AF)
Sacramento NWR Complex	
Sacramento NWR	61,867
Delevan NWR	29,267
Colusa NWR	33,333
Sutter NWR	26,111
Gray Lodge WMA	40,602
Modoc NWR	23,752
Total	214,932

Table 4-B: Tulare Basin	Total (AF)
Pixley NWR	1,280
Kern NWR	11,437
Total	12,717

Table 4-C: San Joaquin Basin	Total (AF)
San Luis NWR Complex	
San Luis Unit	17,800
West Bear Creek Unit	9,609
Kesterson Unit	7,647
Freitas Unit	4,702
Merced Unit	13,500
East Bear Creek Unit	8,863
Los Banos WMA	13,253
Volta WA	13,000
North Grassland WMA	
China Island Unit	8,196
Salt Slough Unit	7,859
Mendota WMA	27,594
Grassland RCD	147,059
Total	279,082

Demands – American River Basin

Source: 1999 Sacramento Water Forum EIR/S

Surface water deliveries are subject to reductions during dryer years based on the Water Forum Agreement. Table 3.1.1.3.2-4 summarizes the surface water demands for the American River.

The Water Forum Agreement provides for surface diversion reductions from the American River in "dry" through "driest" years. "Driest" year diversions are no greater than the "1995 Baseline" defined by the Water Forum participants. A "Dry" year is defined as a year in which the forecasted Folsom Unimpaired Inflow (FUI) for Mar – Nov (modeled as Mar 1 – Sep 30 plus 60 TAF) is less than 950 TAF. A "Driest" year is defined as a year in which the forecasted Folsom Unimpaired Inflow (FUI) for Mar – Nov is less than 400 TAF. Also refer to Water Forum Mitigation Water/Operations Criteria section for more information on the Water Forum Agreement and how it is implemented.

Table 3.1.1.3.2-3 American River Demand Summary (TAF/Yr)

	CVP Agricultural Contracts	CVP M&I Contracts	Water Rights / Non-Project	Total	Total "Driest" Year	Approximate "Driest" Year Reduction
Total 2001 Level	0	65,850	231,350	297,200		0
Total 2020 Level	15,000	180,850	400,850	596,700	450,100	146,600

Demands – San Joaquin River Basin

Source: USBR's San Joaquin River Simulation Model (SANJASM)

Demands in the San Joaquin River Basin are generally set to fixed annual amounts rather than based on land use and hydrologic conditions as for the Sacramento Valley demands presented above. The operation of the Friant Unit is extracted from a SANJASM model simulation and is

not operated in CALSIM II. The following Table presents annual average diversions and fixed annual demands for projects in the San Joaquin River Basin.

Table 3.1.1.3.2-4 San Joaquin River Basin Demand Assumptions

	Demand (TAF)	
Friant-Kern canal	1,100	*
Madera Canal to Madera ID	145	*
Madera Canal to Chowchilla ID	98	*
Madera ID	386	**
Chowchilla	293	**
Merced ID	620	**
Turlock ID	733	**
Modesto ID	417	**
Tri-dams	574	**
*Annual average delivery **Fixed Annual demand		

Demands – South-of-Delta

Source: CVP and SWP Contract data
CVP and SWP demands south of the Delta are based on contract amounts, SWP demands vary depending on a wetness index.

CVP South-of-Delta:
South-of-Delta CVP demands include agricultural and M&I needs served from the San Luis Reservoir and San Felipe Unit, the Cross Valley Canal, the Delta-Mendota Canal and Mendota Pool. CVP demands south of the Delta are always set to contract amount and do not vary based on hydrologic conditions. These demands also contain exchange contractors, refuge water supplies and operational losses. CVP demands are aggregated based on contract type and the following geographic locations: Upper DMC, Lower DMC, Mendota Pool, San Felipe Unit, and California Aqueduct.

Monthly demand patterns are determined for Exchange, M&I, and agricultural contractors based on recent historical CVP deliveries. Table 3.1.1.3.2-5 contains a summary of the total CVP demands south of the Delta, not including refuge demands.

Table 3.1.1.3.2-5 CVP South-of-Delta Contract based Demands

Contract Type	Amount (AF)
Water Right	40,813
Project AG	1,824,758
Exchange	840,000
M&I	154,150
Losses	183,700
Total	3,043,421

SWP South-of-Delta:
Twenty-nine agencies have contracts for a long-term water supply from the SWP totaling about 4.2 million acre-feet annually, of which about 4.1 million acre-feet are for contracting agencies

with service areas south of the Sacramento-San Joaquin Delta. About 70 percent of this amount is the contract entitlement for urban users and the remaining 30 percent for agricultural users.

Demands are set in accordance with the Monterey Agreement. They are calculated from the 1996 Table A entitlements. Aqueduct deliveries to San Joaquin Valley agricultural contractors are reduced in wetter years using a wetness index developed from annual Kern River inflows to Lake Isabella. Deliveries to Metropolitan Water District of Southern California (MWDSC) are reduced in wetter years using the 10-station, two-year average precipitation index or based upon MWDSC integrated operations with Eastside Reservoir in future scenarios.

SWP Article 21:
When available, "Article 21" water is delivered to SWP south-of-Delta contractors in accordance with the Monterey Agreement. Article 21 water results from direct diversions from Banks Pumping Plant; it is not stored in San Luis Reservoir for later delivery to contractors. A contractor may accept Article 21 water in addition to its monthly scheduled entitlement water. Article 21 water deliveries do not affect entitlement water allocations. If demand for Article 21 water is greater than supply in any month, the supply is allocated in proportion to the Table A entitlements of those contractors requesting Article 21 water.

3.1.1.3.3 Facilities

Table 3.1.1.3.3-1 and Table 3.1.1.3.3-2 identify the major facilities included in CALSIM II. Specific criteria have been defined for each of these facilities for implementation into the model. Criteria include physical characteristics, evaporation and loss estimates, regulatory and operational requirements and integration of each facility into the system. Many of these requirements are described throughout this document.

Table 3.1.1.3.3-1 Major Storage Facilities

	Gross Storage Capacity (TAF)
Sacramento Basin	
Trinity Lake	2447
Whiskeytown Lake	240
Shasta Lake	4552
Keswick Reservoir	24
Lake Oroville	3558
Thermalito Forebay	12
Folsom Lake	975
Lake Natoma	9
CVP / SWP South-of-Delta	
Cvp San Luis Reservoir	972
Swp San Luis Reservoir	1067
Lake Del Valle	77
Silverwood Lake	75
Lake Perris	131
Pyramid Lake	171
Castaic Lake	324
San Joaquin River Basin	
Millerton Lake	521
Hensley Lake	90
Eastman Lake	151
Lake Mcclure	1024
New Don Pedro Reservoir	2030
New Melones Reservoir	2420
Tulloch Lake	67
New Hogan Reservoir	325
Pardee Reservoir	210
Camanche Reservoir	438

Table 3.1.1.3.3-2 Major Conveyance Facilities

	Conveyance Capacity (CFS)
Clear Creek Tunnel	3300
Spring Creek Tunnel	4200
California Aqueduct upstream of O'Neill Forebay	10000
California Aqueduct downstream of O'Neill Forebay	13100
California Aqueduct downstream of end of joint use reach	8100
California Aqueduct upstream of Cross Valley Canal	5950
California Aqueduct downstream of Cross Valley Canal	5350
California Aqueduct downstream of Wheeler Ridge Pmp Plant	4600
California Aqueduct beginning of East Branch	3149
California Aqueduct beginning of West Branch	3129
San Luis Pumping Plant	11000
Delta Mendota Canal upstream of O'Neill Forebay	4200
Delta Mendota Canal downstream of O'Neill Forebay	3500
Delta Mendota Canal upstream of Delta Mendota Pool	3200

3.1.1.3.4 Regulatory Standards

Trinity River - Trinity EIS/R Preferred Alternative

Source: Trinity Mainstem Fishery Restoration – EIS/R – November 2000

Minimum Flow below Lewiston Dam:
Table 3.1.1.3.4-1 identifies the minimum flow volumes required for the Trinity River at both the 2001 and 2020 levels of development. The 2001 LOD is categorized into 2 water-year classes, and the 2020 LOD utilizes 5 water-year classes, which are used to determine the annual volume of minimum flows below Lewiston Dam.
Table 3.1.1.3.4-2 identifies the schedule of flows for each of these water-year classes.

Table 3.1.1.3.4-1 Trinity River Water-year Classification

		Trinity Reservoir Inflow (Oct-Sep, TAF)	Minimum Flow Volume (Oct-Sep, TAF)
2001 LOD			
	Critically Dry (CD)	< 650	369
	Other	> 650	453
2020 LOD			
	Critically Dry (CD)	< 650	369
	Dry (D)	650 – 1025	453
	Normal (N)	1025 – 1350	636
	Wet (W)	1350 – 2000	701
	Extremely Wet (EW)	> 2000	815

Table 3.1.1.3.4-2 Trinity River Minimum Flow Schedules (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
CD	373	300	300	300	300	300	600	1498	783	450	450	450
D	373	300	300	300	300	300	540	2924	783	450	450	450
N	373	300	300	300	300	300	493	4189	2120	1102	450	450
W	373	300	300	300	300	300	460	4710	2526	1102	450	450
EW	373	300	300	300	300	300	427	4570	4626	1102	450	450

Trinity Reservoir End-of-September Minimum Storage:
The EIS/R suggests a minimum carryover objective of 600 TAF at Trinity Reservoir to help provide coldwater resource protection. This objective, active in both 2001 and 2020 levels of development cannot be fully accomplished in extended drought periods.

Clear Creek – Downstream Water Rights and 1963 USBR Proposal to USFWS and National Park Service (NPS)

Source: CVP-OCAP 1992

This agreement was never formalized, but USBR operates Whiskeytown Dam to this schedule as a matter of convenience to comply with the 1960 DFG agreement and water rights settlement agreements on Clear Creek.

Minimum Flow below Whiskeytown Dam:
Table 3.1.1.3.4-3 identifies the proposed flow schedules under the 1963 USBR proposal. Critical years are identified under the Shasta Index critical year criteria. These flows apply to the entire length of Clear Creek, therefore additional flows are needed to insure the satisfaction of

downstream water rights diversions. DWR developed the time series of additional flows through analysis of historical data. CALSIM II implements a combined water rights and 1963 USBR proposed flow schedule for minimum flow below Whiskeytown Dam.

Table 3.1.1.3.4-3 Clear Creek Proposed Flow Schedules (CFS)

	Normal Year	Critical year
Jan. 1 – Oct. 31	50	30
Nov. 1 – Dec. 31	100	70

Clear Creek - USFWS discretionary use of CVPIA 3406(b)(2) – Whiskeytown Release Objective

Source: Trial values developed from Central Valley Operations Office and U.S. Fish and Wildlife Service discussions

Minimum Flow below Whiskeytown Dam:
A procedure for implementing CVPIA Section 3406(b)(2) based fish actions and accounting is incorporated into CALSIM II. The procedure maintains a 3406(b)(2) water account and allocates the account based on forecast information and action specific priorities. Refer to the 3406(b)(2) section under Operations Criteria. Management agencies are continuing to refine the rules for implementation of 3406(b)(2), so until further information is available, the schedules shown in Table 3.1.1.3.4-4 are assumed for Whiskeytown releases. Stability criteria require November and December flow objectives to equal or exceed October's flows, and February through May flow objectives to equal or exceed January's flows.

Sacramento River – SWRCB WR 90-5 and 1993 Winter-run Biological Opinion

Source: 1993 NMFS Biological Opinion for the Operation of the Federal Central Valley Project and the California State Water Project.

Table 3.1.1.3.4-4 Clear Creek Flow Schedules

Month	Trinity Reservoir Previous Month Storage (MAF)	Whiskeytown Release (CFS)
October	> 1.40 > 0.75 < 0.75	200 150 100
November	> 1.40 > 0.70 < 0.70	200 150 100
December	> 1.40 > 0.80 < 0.80	200 150 100
January	> 1.15 > 0.85 < 0.85	200 150 100
February	> 1.30 > 0.90 < 0.90	200 150 100
March	> 1.45 > 1.00 < 1.00	200 150 100

Month	Trinity Reservoir Previous Month Storage (MAF)	Whiskeytown Release (CFS)
April	> 1.60	200
	> 1.20	150
	< 1.20	100
May	> 1.60	200
	> 1.20	150
	< 1.20	100
June	> 1.10	150
	< 1.10	100
July	> 1.00	150
	< 1.00	100
August	> 0.90	150
	< 0.90	100
September	> 0.80	150
	< 0.80	100

Shasta Lake End-of-September Minimum Storage:
The 1993 Winter Run Biological Opinion includes provisions for minimum carryover storage in Lake Shasta. The Bureau must maintain a minimum end-of-September carryover storage in Shasta Reservoir of 1.9 MAF. A carryover storage of 1.9 MAF in Shasta Reservoir has been judged by the NMFS and DFG to be attainable in all but critical and extremely critical water year types (approximately 10% of years).

Flow below Keswick Dam:
The 1993 Winter Run Biological Opinion includes provisions for control of riverine temperatures downstream from Keswick Dam. In general, the 1993 Winter Run Biological Opinion requires daily average water temperatures no more than 56°F at Bend Bridge from April 15 through September , and 60°F in October, except in Dry and Critical years in which the compliance location is moved upstream to Jelly's Ferry. In extreme critically dry conditions Reclamation must reinitiate consultation.

CALSIM II does not determine riverine temperatures or objectives for application in developing its operations of reservoir facilities. Table 3.1.1.3.4-5 identifies the flow objectives applied as a surrogate for temperature control objectives. These flows are dependent upon Shasta storage conditions.

Table 3.1.1.3.4-5 Temperature Control Objective Surrogate Flow Schedules (CFS)

Shasta Storage (TAF)	April	May	June	July	August	September	October
> 0	3250	3250	3250	3250	3250	3250	3250
> 2500	4000	5500	5500	6000	6000	4500	3250
> 3250	4250	6350	7000	8500	8000	5500	4000
> 3750	4500	7000	8000	9500	9000	6000	4500
> 4500	5000	8000	9000	11000	10000	6500	5000

Sacramento River – USFWS discretionary use of CVPIA 3406(b)(2) - Keswick Release Objective

Source: Trial values developed from Central Valley Operations Office and U.S. Fish and Wildlife Service discussions

Minimum Flow below Keswick Dam:
A procedure for implementing CVPIA Section 3406(b)(2) based fish actions and accounting is incorporated into CALSIM II. The procedure maintains a 3406(b)(2) water account and allocates the account based on forecast information and action specific priorities. Refer to the 3406(b)(2) section under Operations Criteria. Management agencies are continuing to refine the rules for implementation of 3406(b)(2), so until further information is available, the schedules shown in Table 3.1.1.3.4-6 are assumed for Keswick releases. The table only applies to the months of November through March.

Table 3.1.1.3.4-6 Sacramento River Flow Schedules

Period	Keswick Release (CFS)	Limit
November	Maximum of 65% of October's flow or Pre-CVPIA flow objective	If October's flow exceeds 6,000 cfs, then maintain 65% of 6,000 cfs
December	Maximum of 85% of November's flow or Pre-CVPIA flow objective	If November's flow exceeds 4,500 cfs, then maintain 85% of 4,500 cfs
January	Maximum of 80% of December's flow or Pre-CVPIA flow objective	If December's flow exceeds 4,500 cfs, then maintain 80% of 4,500 cfs
February	Maximum of 80% of January's flow or Pre-CVPIA flow objective	If January's flow exceeds 4,500 cfs, then maintain 80% of 4,500 cfs
March	Maximum of 80% of February's flow or Pre-CVPIA flow objective	If February's flow exceeds 4,500 cfs, then maintain 80% of 4,500 cfs

Feather River – 1983 DWR, DFG Agreement

Source: 1967 agreement between DWR and DFG, Concerning the Operation of the Oroville Division of the State Water Project for Management of Fish & Wildlife, amended by 1983 FERC re-licensing process

Minimum Flow below Thermalito Diversion Dam:
The 1983 agreement specifies that DWR release a minimum of 600 cfs into the Feather River from the Thermalito Diversion Dam for fishery purposes. This is the total volume of flows from the diversion dam outlet, diversion dam powerplant, and the Feather River Fish Hatchery pipeline.

Minimum Flow below Thermalito Afterbay Outlet: Table 3.1.1.3.4-7 identifies the minimum flow requirement downstream of the Thermalito Afterbay outlet. Table 3.1.1.3.4-7 applies if Lake Oroville's surface elevation is greater than 733 feet MSL. Normal runoff is defined as the mean (1911-1960) April through July unimpaired runoff: 1,942 TAF.

Table 3.1.1.3.4-7 Feather River Minimum Flow Schedule

Percent of Normal Runoff (%)	Oct – Feb (CFS)	Mar (CFS)	Apr - Sep (CFS)
> 55	1700	1700	1000
< 55	1200	1000	1000

In addition, if during October 15 through November 30, the hourly flow is greater than 2,500 CFS then the flow minus 500 CFS must be maintained until the following March unless the high flow was due to flood control operation or mechanical problems. This requirement is to protect any spawning that could occur in overbank areas during the higher flow rate by maintaining flow levels high enough to keep the overbank areas submerged. In practice, the flows are maintained below 2,500 CFS from October 15 to November 30 to prevent spawning in the overbank areas.

American River - SWRCB D-893
Source: SWRCB D-893

Minimum Flow below Nimbus Dam and at H Street:
D-893 Folsom Lake permit conditions require minimum releases from Folsom Dam as shown in Table 3.1.1.3.4-8. A critical year is defined when the forecasted unimpaired flow at Folsom between April 1 and September 30 is less than 600 TAF.

Table 3.1.1.3.4-8 American River Minimum Flow Schedule

	Normal Years (CFS)	Critical Years
September 16 through December 31	500	25% reduction
January 1 through September 15	250	25% reduction

American River – USFWS discretionary use of CVPIA 3406(b)(2) – Nimbus Release Objective
Source: Trial values developed from Central Valley Operations Office and U.S. Fish and Wildlife Service discussions

Minimum Flow below Nimbus Dam:
A procedure for implementing CVPIA Section 3406(b)(2) based FISH actions and accounting is incorporated into CALSIM II. The procedure maintains a 3406(b)(2) water account and allocates the account based on forecast information and action specific priorities. Refer to the 3406(b)(2) section in Operations Criteria. Management agencies are continuing to refine the rules for implementation of 3406(b)(2), until further information is available, the schedules shown in Table 3.1.1.3.4-9 are assumed for Nimbus releases. These flow objectives are not implemented if Folsom storage falls below 300 TAF.

Table 3.1.1.3.4-9 American River Flow Schedules

Period	Nimbus Release (CFS)	Limit
November	Maximum of 80% of October's flow or Pre-CVPIA flow objective	If October's flow exceeds 3,000 cfs, then maintain 80% of 3,000 cfs
December	Maximum of 90% of November's flow or Pre-CVPIA flow objective	If November's flow exceeds 3,000 cfs, then maintain 90% of 3,000 cfs
January	Maximum of 75% of December's flow or Pre-CVPIA flow objective	If December's flow exceeds 3,000 cfs, then maintain 75% of 3,000 cfs
February	Maximum of 75% of January's flow or Pre-CVPIA flow objective	If January's flow exceeds 3,000 cfs, then maintain 75% of 3,000 cfs

Period	Nimbus Release (CFS)	Limit
March	Maximum of 75% of February's flow or Pre-CVPIA flow objective	If February's flow exceeds 3,000 cfs, then maintain 75% of 3,000 cfs

Lower Sacramento River - SWRCB D-1641

Source: SWRCB D-1641

Minimum Flow near Rio Vista:
Table 3.1.1.3.4-10 identifies the minimum flow required on the Sacramento River at Rio Vista under the Water Quality Control Plan, SWRCB D-1641. The year type classification used is the D-1641 40-30-30 index.

Table 3.1.1.3.4-10 Sacramento River at Rio Vista Flow Schedule (CFS)

	Wet (W)	Above Normal (AN)	Below Normal (BN)	Dry (D)	Critical (C)
Sep	3,000	3,000	3,000	3,000	3,000
Oct	4,000	4,000	4,000	4,000	3,000
Nov-Dec	4,500	4,500	4,500	4,500	3,500

Mokelumne River –FERC 2916-029

This requirement is not explicitly modeled in CALSIM II, but rather is reflected in the inflow time series for the Mokelumne River from EBMUDSIM. These criteria are addressed further in Section 3.1.2.2.1 of this appendix.

Source: 1996 Lower Mokelumne River Project Joint Settlement Agreement

Minimum Flow below Camanche Dam:
Table 3.1.1.3.4-11 identifies four year type classes. Combined Pardee Reservoir and Camanche Reservoir storage on November 5 (forecasted if not actual) is used to classify the Oct – Mar period, and April forecasted unimpaired runoff for the Apr – Sep period is used to classify the Apr – Sep period. If combined Pardee Reservoir and Camanche Reservoir storage is forecasted to be less than 200 TAF, than the whole year is classified as Critically Dry. Table 3.1.1.3.4-12 identifies the schedule of minimum flows below Camanche Dam for each of the year type classifications. For the months of April, May and June during the Below Normal, Normal and Above year types, additional release of 50, 100, 150 or 200 CFS is required if the combined Pardee Reservoir and Camanche reservoir storage is within 40, 30, 20 or 10 TAF, respectively, of maximum allowable storage at the end of the prior month.

Table 3.1.1.3.4-11 Mokelumne River Year Type Classification

	Normal/Above	Below Normal	Dry	Critically Dry
Oct – Mar (Pardee/Camanche Storage)	Max Allowable	Max Allowable to 400 TAF	399 TAF to 270 TAF	269 TAF or less
Apr – Sep (Unimpaired Runoff)	890 TAF or More	889 TAF to 500 TAF	499 TAF to 300 TAF	299 TAF or less

Table 3.1.1.3.4-12 Mokelumne River below Camanche Dam Minimum Flow Schedule (CFS)

Life Stage	Period(s)	Normal/Above	Below Normal	Dry	Critically Dry
Adult Immigration	10/1 – 10/15	325	250	220	100
Spawn/ Incubation	10/16 – 12/31	325	250	220	130
Incubation/ Alevin	1/1 – 2/28	325	250	220	130
Fry Rearing	3/1 – 3/31 4/1 – 4/30	325	250	220	130
Fry Rearing/ Junvenile Rearing/ Outmigration	5/1 – 5/31 6/1 - 6/30	325	250	220 100	100
Oversummer	7/1 – 9/30	100	100	100	100

Minimum Flow below Woodbridge Diversion Dam:
Table 3.1.1.3.4-13 identifies the schedule of minimum flows below Woodbridge Diversion Dam for each of the year type classifications. The additional release criteria for releases from Camanche Dam apply at Woodbridge Diversion Dam as well.

Table 3.1.1.3.4-13 Mokelumne River below Woodbridge Diversion Dam Minimum Flow Schedule (CFS)

Life Stage	Period(s)	Normal/Above	Below Normal	Dry	Critically Dry
Adult Immigration	10/1 – 10/15	100	100	80	15
Spawn/ Incubation	10/16 – 12/31	100	100	80	75
Incubation/ Alevin	1/1 – 2/28	100	100	80	75
Fry Rearing	3/1 – 3/31 4/1 – 4/30	100 150	100 150	80 150	75
Fry Rearing/ Junvenile Rearing/ Outmigration	5/1 – 5/31 6/1 - 6/30	300	200	150 20	15
Oversummer	7/1 – 9/30	25	20	20	15

Gainsharing:
Twenty percent of the yield from new projects, up to 20,000 acre-feet, is to be made available to CDFG and USFWS to release at their discretion into the lower Mokelumne River. Gainsharing water is to be available in any year in which carryover storage in EBMUD's storage in the Lower Mokelumne River Project on November 5th is projected to be at the maximum allowable level by the Corps of Engineers flood control manual. When carryover storage on November 5th is projected to be less than the maximum allowable, the gainsharing water may be used only once during a drought sequence.

Stanislaus River – 1987 USBR, DFG Agreement, and USFWS discretionary use of CVPIA 3406(b)(2) – Goodwin Release Objective

Source: 1987 USBR, DFG Agreement and New Melones Interim Operations Plan

Minimum Flow below Goodwin Dam:

Depending on the Fishery allocation (0 – 467 TAF/Yr) under the New Melones Interim Operations Plan, the combined release at Goodwin Dam is managed under the minimum and pulse flow schedules shown in Table 3.1.1.3.4-14. Refer to the New Melones Interim Operations Plan section in Operations Criteria.

A procedure for implementing CVPIA Section 3406(b)(2) based fish actions and accounting is incorporated into CALSIM II. The 1987 USBR, DFG Agreement allocates less water to the Stanislaus fisheries (98-302 TAF/Yr). CVPIA 3406(b)(2) water is prededicated by operations under the New Melones Interim Operations Plan. The extent to which 3406(b)(2) water is prededicated is the increase in allocation between the 1987 agreement and the plan.

Table 3.1.1.3.4-14 Stanislaus River Minimum and Pulse Flow Schedules

Annual Fishery Allocation (TAF)	0	83	172	182	275	410	467
Minimum Flow Schedules (CFS)							
January	0	125	250	275	300	350	400
February	0	125	250	275	300	350	400
March	0	125	250	275	300	350	400
April	0	250	300	300	900	1500	1500
May	0	250	300	300	900	1500	1500
June	0	0	200	200	250	800	1500
July	0	0	200	200	250	300	300
August	0	0	200	200	250	300	300
September	0	0	200	200	250	300	300
October	0	110	200	250	250	350	350
November	0	200	250	275	300	350	400
December	0	200	250	275	300	350	400
Pulse Flow Schedules (CFS)							
Apr 15 – May 16	0	500	1500	1500	1500	1500	1500

Stanislaus River – D-1422

Source: SWRCB D-1422

Minimum Dissolved Oxygen:
CALSIM II has neither the ability to predict nor adjust operations for dissolved oxygen. D-1422 requires that water be released from New Melones to maintain a minimum dissolved oxygen concentration in the Stanislaus River of 7 mg/l as measured near Ripon. As a surrogate, specific volumes of release are made, as required, per the New Melones Interim Operations Plan, to insure this criteria is met. The surrogate volumes are shown in Table 3.1.1.3.4-15. Refer to the New Melones Interim Operations Plan section in Operations Criteria.

Table 3.1.1.3.4-15 Surrogate Dissolved Oxygen Release Volumes

Month	Release Volume (TAF)
June	13.2
July	16.2
August	16.4
September	14.3

Merced River – Davis-Grunsky

This requirement is not explicitly modeled in CALSIM II at this time, however, the requirement is incorporated into the appropriate input datasets.

Source: 1967 Davis-Grunsky Contract No D-GGR17

Minimum Flow below Crocker-Huffman Diversion Dam:
Under a Davis-Grunsky agreement with the California Department of Water Resources for grant funding of portions of the Merced River Development Plan, MID must provide 180 to 220 CFS of flow downstream of the Crocker-Huffman Diversion Dam to support Chinook salmon spawning runs. The schedule of this requirement is shown in Table 3.1.1.4-16.
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Merced River – FERC 2179

This requirement is not explicitly modeled in CALSIM II at this time, however, the requirement is incorporated into the appropriate input datasets.

Source: FERC 2179

Minimum Flow at Shaffer Bridge:
Under its FERC license, MID must operate Lake McClure to provide minimum flows at Shaffer Bridge. The schedules of minimum flows are shown in Table 3.1.1.4-16. A dry year is defined by the FERC license as a forecasted April through July inflow to Lake McClure less than 450 TAF, as forecasted by DWR.

Merced River – Cowell Agreement

This requirement is not explicitly modeled in CALSIM II at this time, however, the requirement is incorporated into the appropriate input datasets.

Source: 19?? Cowell Agreement

Minimum Flow below Crocker-Huffman Diversion Dam:
Due to water rights adjudication (Cowell Agreement), Merced must make available, below Crocker-Huffman diversion Dam an amount of water that could then be diverted from the river at a number of private ditches between Crocker-Huffman Diversion Dam and Shaffer Bridge. This amount is shown in Table 3.1.1.4-16.

For the period of Oct – Feb, the water rights entitlement is limited to 50 cfs or the natural flow of the Merced River (inflow to Lake McClure), whichever is less. If the natural flow of the Merced River falls below 1,200 cfs in the month of June, the entitlement flows are reduced accordingly from that day: 225 cfs flow for next 31 days; 175 cfs flow for next 31 days; 150 cfs for next 30 days; 50 cfs for the remainder of September.

Table 3.1.1.3.4-16 Merced River Minimum Flow Schedules (CFS)

Month	Davis-Grunsky Minimum Flow below Crocker-Huffman Diversion Dam	FERC 2179 Minimum Flow at Shaffer Bridge		Cowell Agreement Entitlement
		Normal Year	Dry Year	
Oct 1-15	0	25	15	50
Oct 16-31	0	75	60	50
Nov	180-220	100	75	50
Dec	180-220	100	75	50
Jan	180-220	75	60	50
Feb	180-220	75	60	50
Mar	180-220	75	60	100
Apr	0	75	60	175
May	0	75	60	225
Jun	0	25	15	250
Jul	0	25	15	225
Aug	0	25	15	175
Sep	0	25	15	150

Tuolumne River - FERC 2299-024
Source: 1995 Settlement Agreement

Minimum Flow at LaGrange Bridge:
Table 3.1.1.3.4-17 identifies the 10 year type classifications for the Tuolumne River. Only 7 of these classifications have distinctly different minimum flow schedules.

Table 3.1.1.3.4-17: Tuolumne River Year Type Classification

	San Joaquin Basin 60-20-20 Index (TAF)
Critical and Below	<1500
Median Critical	1500
Intermediate Critical/Dry	2000
Median Dry	2200
Intermediate Dry/Below Normal	2400
Median Below Normal	2700
Intermediate Below Normal/ Above Normal	3100
Median Above Normal	3100
Intermediate Above Normal/ Wet	3100
Median Wet/ Maximum	3100

Table 3.1.1.3.4-18 identifies these 7 minimum flow schedules.

Table 3.1.1.3.4-18 Tuolumne River Minimum Flow Schedules

	Critical and Below	Median Critical	Inter-mediate Critical/ Dry	Median Dry	Inter-mediate Dry/ Below Normal	Median Below Normal	Inter-mediate Below Normal/ Above Normal and Above
Annual Volume (AC-FT)	94,000	103,000	117,016	127,507	142,502	165,002	300,923
October 1 – 15 (CFS)	100	100	150	150	180	200	300
Attraction Pulse Flow (AC-FT)	None	None	None	None	1,676	1,736	5,950
October 16-May 31 (CFS)	150	150	150	150	180	175	300
Out migration Pulse Flow (AC-FT)	11,091	20,091	32,619	37,060	35,920	60,027	89,882
June 1 – September 30 (CFS)	50	50	50	75	75	75	250

San Joaquin River – D-1641
Source: SWRCB D-1641

Maximum Salinity near Vernalis:
The maximum salinity near Vernalis was originally defined in SWRCB D-1422. SWRCB D-1641 provisions have revised this requirement. CALSIM II does not have the capability to predict salinity concentration at Vernalis, except through a simplified empirically blending of flows and their associated assumed salinity concentrations. D-1641 requires salinity near Vernalis to be less than 0.7 EC for April - August and less than 1.0 EC September – March. Releases are made from New Melones, as required, per the New Melones Interim Operations Plan, to insure this criteria is met. Refer to the New Melones Interim Operations Plan section in Operations Criteria.

San Joaquin River – D-1641
Source: SWRCB D-1641

Minimum Flow near Vernalis:
Table 3.1.1.4-19 identifies the minimum flow schedules required at Vernalis under SWRCB D-1641. D-1641 also has a higher pulse flow requirement specifically for the Apr 15 – May 16 period which is not included. D-1641 provides for an interim evaluation period, use of the Vernalis Adaptive Management Program. The year type classification used is the D-1641 60-20-20 index. Release are made from New Melones, as required, per the New Melones Interim Operations Plan, to insure this criteria is met. Refer to the New Melones Interim Operations Plan section in Operations Criteria.

Table 3.1.1.3.4-19 San Joaquin River at Vernalis Minimum Flow Schedule (CFS)

Period	Condition	Wet (W) and Above Normal (AN)	Below Normal (BN) and Dry (D)	Critical (C)
February – June		2,130	1,420	710
	When X2 is required to be at or West of Chipps Island	3,420	2,280	1,140

San Joaquin River – Vernalis Adaptive Management Program
Source: 1998 San Joaquin River Agreement

Minimum Flow near Vernalis:
The Vernalis Adaptive Management Program specifies pulse period (Apr 15 – May 16) flow targets on the San Joaquin River near Vernalis. The meeting of these flow targets is supported through water purchases. These water purchases are described under the San Joaquuin River Agreement section under Operations Criteria. In addition, the Vernalis Adaptive Management Program specifies export reductions concurrent with the flow targets . This is described under the Export Restrictions section.

The pulse period, Apr 15 – May 16, VAMP flow targets are shown in Table 3.1.1.3.4-20. Based upon a forecast of operations, the "existing" flow is determined and the VAMP target selected accordingly.

In addition, each year is identified with a numeric adjunct, 1 – 5, corresponding to the SWRCB D-1641 60-20-20 year type classifications, Critical, Dry, Below Normal, Above Normal and Wet respectively. In any year when the sum of the current year's and previous year's year types total 7 or greater, the VAMP flow target used will be the next step higher than that determined by use the "existing" flow criteria. In any year when the sum of the current year's and previous two year's year types total 4 or less no releases for VAMP are required.

Table 3.1.1.3.4-20 San Joaquin River Minimum Flows (VAMP)

Existing Flow (CFS)	VAMP Target Pulse Flow (CFS)
0 – 1,999	2,000
2,000 – 3,199	3,200
3,200 – 4,449	4,450
4,450 – 5,699	5,700
5,700 – 7,000	7,000
> 7,000	Provide stable flow to the extent possible

Sacramento River-San Joaquin River Delta – SWRCB D-1641
Source: SWRCB D-1641

Delta Outflow Index (Flow and Salinity):
All flow based Delta outflow requirements included in SWRCB D-1641 are included in these assumptions, however not all salinity based Delta outflow requirements are included. CALSIM II is not capable of predicting salinities in the Delta. Instead, empirically based equations and models are used to relate interior salinity conditions with Delta outflow requirements. The

Kimmerer-Monismith equation is used to predict and interpret the location of "X2". DWR's Artificial Neural Network (ANN) technology is used to predict and interpret salinity conditions at the Emmaton, Jersey Point, Rock Slough and Collinsville stations.

Table 3.1.1.3.4-21 identifies the primary flow based requirement for Delta Outflow. For the period of Feb – Jun the X2 standard is used. The term "8RI" refers to the eight river index which is the sum of the unimpaired forecast for: 1) Sacramento River at Bend Bridge; 2) Feather River at Lake Oroville; 3) Yuba River at Smartsville; 4) American River at Folsom Lake; 5) Stanislaus River at New Melones Reservoir; 6) Tuolumne River at Don Pedro Reservoir; 7) Merced River at Exchequer Reservoir; and 8) San Joaquin River at Millerton Lake.

Table 3.1.1.3.4-21 Minimum Delta Outflow Schedule (CFS)

	Wet	Above Normal	Below Normal	Dry	Critical
Jan	4,500 (6,000 if Dec 8RI > 800 TAF)				
Feb-Jun	X2 Standard				
Jul	8,000		6,500	5,000	4,000
Aug	4,000			3,500	3,000
Sep	3,000				
Oct	4,000				3,000
Nov – Dec	4,500				3,500

There are three ways to meet the X2 (2.64 mmhos) standard: 1) 2.64 mmhos or less 3 day running average EC at compliance location; 2) 2.64 mmhos or less 14 day running average EC at compliance location; or 3) Daily Net Delta Outflow equivalent (Collinsville = 7,100 CFS; Chipps Island = 11,400 CFS; Port Chicago = 29,200 CFS).

At the Collinsville location, X2 compliance is required February through June. If the Sacramento River Index (SRI) is less than 8.1 MAF (90% exceedence), the Collinsville standard does not apply in May and June and the minimum 14 day running average of 4,000 CFS is used.

At the Chipps Island location, X2 compliance is required for at least the number of days shown in Table 3.1.1.3.4-22. The required days are linearly interpolated between the values shown in the table. The same 90% exceedence exception for Collinsville applies here as well.

Table 3.1.1.3.4-22 Required X2 Compliance days at Chipps Island (days)

Previous Month's 8RI (TAF)	Feb	Mar	Apr	May	Jun
<= 500	0	0	0	0	0
750		0	0	0	0
800	0				
1000	28	12	2	0	0
1250	28	31	6	0	0
1500	28	31	13	0	0
1750	28	31	20	0	0
2000	28	31	25	1	0
2250	28	31	27	3	0
2500	28	31	29	11	1
2750	28	31	29	20	2
3000	28	31	30	27	4
3250	28	31	30	29	8
3500	28	31	30	30	13
3750	28	31	30	31	18
4000	28	31	30	31	23
4250	28	31	30	31	25
4500	28	31	30	31	27
4750	28	31	30	31	28
5000	28	31	30	31	29
5250	28	31	30	31	29
>=5250	28	31	30	31	30

When "triggered", at the Roe Island (Port Chicago) location, X2 compliance is required for at least the number of days shown in Table 3.1.1.3.4-23. This requirement is "triggered" if the 14-day running average EC at Roe Island is less than or equal to 2.64 mmhos on the last day of the previous month. The required days are linearly interpolated between the values shown in the table. The same 90% exceedence exception for Collinsville applies here as well.

Table 3.1.1.3.4-23 Required X2 Compliance days at Roe Island (days)

Previous Month's 8RI (TAF)	Feb	Mar	Apr	May	Jun
0	0	0	0	0	0
250	1	0	0	0	0
500	4	1	0	0	0
750	8	2	0	0	0
1000	12	4	0	0	0
1250	15	6	1	0	0
1500	18	9	1	0	0
1750	20	12	2	0	0
2000	21	15	4	0	0
2250	22	17	5	1	0
2500	23	19	8	1	0
2750	24	21	10	2	0
3000	25	23	12	4	0
3250	25	24	14	6	0
3500	25	25	16	9	0
3750	26	26	18	12	0
4000	26	27	20	15	0
4250	26	27	21	18	1
4500	26	28	23	21	2
4750	27	28	24	23	3
5000	27	28	25	25	4
5250	27	29	25	26	6
5500	27	29	26	28	9
5750	27	29	27	28	13
6000	27	29	27	29	16
6250	27	30	27	29	19
6500	27	30	28	30	22
6750	27	30	28	30	24
7000	27	30	28	30	26
7250	27	30	28	30	27
7500	27	30	29	30	28
7750	27	30	29	31	28
8000	27	30	29	31	29
8250	28	30	29	31	29
8500	28	30	29	31	29
8750	28	30	29	31	30
9000	28	30	29	31	30
9250	28	30	29	31	30
9500	28	31	29	31	30
9750	28	31	29	31	30
10000	28	31	30	31	30
>10000	28	31	30	31	30

Tables 3.1.1.3.4-24, 3.1.1.3.4-25, 3.1.1.3.4-26, and 3.1.1.3.4-27 show the salinity requirements at the Emmaton, Jersey Point, Rock Slough and Collinsville compliance stations. The 40-30-30 year type classification defined in D-1641 is used. These requirements are interpreted by use of the ANN logic and applied as Delta outflow requirements. The standards shown here may be buffered (lower) or ramped (preceded) when applied in the model in ensure compliance with the standard.

Table 3.1.1.3.4-24 Sacramento River at Emmaton Maximum Salinity Requirement

	Apr 1 to Date Shown 0.45 mmhos EC	EC from Date Shown to Aug 15 (mmhos)
Wet	Aug 15	---
Above Normal	July 1	0.63
Below Normal	June 20	1.14
Dry	June 15	1.67
Critical	----	2.78

Table 3.1.1.3.4-25 San Joaquin River at Jersey Point Maximum Salinity Requirement

	Apr 1 to Date Shown 0.45 mmhos EC	EC from Date Shown to Aug 15 (mmhos)
Wet	Aug 15	---
Above Normal	July 1	---
Below Normal	June 20	0.74
Dry	June 15	1.35
Critical	----	2.20

Table 3.1.1.3.4-26 Rock Slough Maximum Salinity Requirement

	Number of Days Each Calendar Year < 150 mg/l Chloride
Wet	240
Above Normal	190
Below Normal	175
Dry	165
Critical	155

Table 3.1.1.3.4-27 Sacramento River at Collinsville Maximum Salinity Requirement

	EC (mmhos)
Oct	19.0
Nov – Dec	15.5
Jan	12.5
Feb – Mar	8.0
Apr – May	11.0

Delta Cross Channel Gate Operations:
Under D-1641, the Cross Channel Gate are closed for 45 days through the Nov – Jan period for fishery protection, as follows: 1) Nov, 10 days closed; 2) Dec, 15 days closed; and 3) Jan, 20 days closed. The Cross Channel Gates are closed Feb – May 20, and closed for 14 days between May 21 – Jun 15. In addition, to prevent channel scour, whenever Freeport flows are sustained above 25,000 CFS the gates are closed.

Delta Exports:
Under D-1641 the combined export of the CVP Tracy Pumping Plant and SWP Banks Pumping Plant is limited to a percentage of 3-day running average Delta inflow or flow in the San Joaguin River at Vernalis as shown in Table 3.1.1.3.4-28.

Table 3.1.1.3.4-28 Export Restrictions

	Export/Inflow Ratio Restriction	Export/San Jaoquin River Flow Ratio Restriction
Oct – Jan	<= 65 %	
Feb	35 % (If Jan 8RI >= 1.5 MAF) 45 % (If Jan 8RI <= 1.0 MAF) (linearly interpolate inbetween)	
Apr 15 – May 16	<= 35%	< =100% (1,500 CFS minimum allowable export)
May 16 – Jun	<= 35%	
Jul – Sep	<= 65%	

Sacramento River-San Joaquin River Delta – USFWS discretionary use of CVPIA 3406(b)(2)
Source: 1999 Department of Interior

Delta Exports:
A procedure for implementing CVPIA Section 3406(b)(2) based actions and accounting is incorporated into CALSIM II. The procedure maintains a 3406(b)(2) water account and allocates the account based on forecast information and action specific priorities. Only CVP Export at Tracy Pumping Plant and SWP Wheeling for CVP Export is restricted in various degrees based upon the 3406(b)(2) water allocation. The specific actions and scheduling of implementation are briefly described under the CVPIA 3406(b)(2)/Operations Criteria section. Because 3406(b)(2) only applies to the CVP, full application of Delta export reductions requires some mechanism for cooperation of the SWP at Banks Pumping Plant; this is discussed in the sections on the CALFED Environmental Water Account (EWA).

One specific action for 3406(b)(2) implementation is the Vernalis Adaptive Management Program specified export reductions (Apr 15 – May 16). These reductions are implemented concurrent with pulse period flow targets at Vernalis. The pulse period, Apr 15 – May 16, VAMP export restrictions are shown in Table 3.1.1.3.4-29. The VAMP target pulse flow rules are described under the Minimum Flow at San Joaquin near Vernalis section.

Table 3.1.1.3.4-29 Restriction of Total Export, VAMP Criteria

VAMP Target Pulse Flow (CFS)	VAMP Restriction of Total Exports (CFS)
2,000	1,500
3,200	1,500
4,450	1,500
5,700	2,250
7,000	1,500 or 3,000

Sacramento River-San Joaquin River Delta – CALFED Fisheries Agencies discretionary use of EWA
Source: 1999 CALFED ROD, Environmental Water Account

Delta Exports:
A procedure for implementing EWA based actions and asset expenditure is incorporated into CALSIM II. The procedure maintains a water account and allocates the account based on forecast information and action specific priorities. The account is maintained through exercise of EWA assets. The specific actions and scheduling of implementation of actions are briefly described under the CALFED Environmental Water Account/Operations Criteria section.

One specific action for EWA is the Vernalis Adaptive Management Program specified export reductions (Apr 15 – May 16), shown in Table 3.1.1.3.4-29 and discussed in the preceding Delta Export/3406(b)(2) section. The EWA allows for SWP cooperation for full implementation of Delta Export reductions in conjunction with use of the 3406(b)(2) water allocation of the CVP.

3.1.1.3.5 Operations Criteria

Upper Sacramento River – Discretionary Operations for Navigation Control Point
Source: CVP-OCAP 1992

Flow Objective for Navigation (Wilkins Slough):
The navigational flow objective, at Wilkins Slough, of 5,000 CFS has been used as the basis for designing many of the pumping stations along the Sacramento River. At flows below 5,000 CFS, diverters have reported increased pump cavitation as well as greater pumping head requirements. Diverters are able to operate for an extended time at flows as low as 4,000 CFS at Wilkins Slough, but pumping operations are affected, and some pumps become inoperable at flows lower than this. On a daily operating basis, flows may drop as low as 3,500 CFS for short periods while changes are made in Keswick releases to reach target levels at Wilkins Slough, but using the 3,500 CFS rate as a target level for an extended period would have major impacts on diverters.

No criteria have been established that specifies when the flow criteria should be relaxed to conserve water in Trinity Reservoir or Lake Shasta for future times when water supplies are not sufficient to meet contractual delivery and other operational requirements. NCP flow criteria are currently based on the CVP system water supply forecast. Agricultural service allocations serve as a surrogate for forecasted conditions, as outlined in Table 3.1.1.3.5-1.

Table 3.1.1.3.5-1 NCP Flow Objectives

Ag Service Contract Allocation (NOD)	NCP Flow Objective
0%-10%	3250 cfs
10%-25%	3500 cfs
25%-40%	4000 cfs
40%-65%	4500 cfs
65%-100%	5000 cfs

American River – SAFCA, Interim Reoperation of Folsom Dam

Source: SAFCA Interim Reoperation of Folsom Dam and Reservoir, Final EIR, 1994

Folsom Dam Flood Control:
Folsom Lake is operated in accordance with the 400-670 TAF variable flood control diagram described in the *Interim Reoperation of Folsom Dam and Reservoir, Final EIR*, December, 1994. This operation recognizes flood control capability provided by the available storage capacity in three upstream reservoirs (French Meadows Reservoir, Hell Hole Reservoir and Union Valley Reservoir). The current "creditable" upstream storage space allows the Folsom Reservoir flood control reservation to be varied from 400 TAF to 670 TAF.

Table 3.1.1.3.5-2 identifies the schedules of end-of-month required flood control space in Folsom Lake as a function of upstream creditable space. Upstream Creditable Space is the sum of end-of-month available storage capacity in French Meadows Reservoir, Hell Hole Reservoir and Union Valley Reservoir up to 45, 80, and 75 TAF respectively. This table assumes that the modifications to Folsom Dam's outlets have not been included. Appropriate interpretation of Folsom Dam flood control requirements requires a definition of these upstream reservoir operations under the appropriate level of development.

Table 3.1.1.3.5-2 Folsom Lake Flood Control

Upstream Creditable Space	End-of-month Required Flood Control Space in Folsom Lake (TAF) *(linear interpolation for intermediate values)*						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr
0	350	670	670	670	670	405	175
100	290	575	575	575	575	375	175
130	255	500	500	500	500	340	175
150	255	450	450	450	450	320	175
175	255	425	425	425	425	305	175
200	255	400	400	400	400	300	175

American River – Discretionary Operations Criteria under SWRCB D-893

Source: unsupported

Flow below Nimbus Dam:
Folsom Lake operates for water supply, salinity control, fisheries related requirements and enhancement, flood control and hydropower. CALSIM II lacks sophisticated rules for hydropower related operations. A flow objective below Nimbus Dam is used to operate Folsom Dam in a surrogate fashion balancing all these benefits. Table 3.1.1.3.5-3 identifies the operation criteria which was developed based upon historical Nimbus release data from 1976 – 2000. The discretionary releases based on these flow schedules are capped at 3,000 CFS. This flow schedule is the basis of operation from which the resulting discretionary use of CVPIA 3406(b)(2) water is developed. These flow objectives are not implemented if Folsom storage falls below 300 TAF.

Table 3.1.1.3.5-3 Nimbus Dam Discretionary Operations Criteria

Period	Folsom Lake end of month storage plus remainder of water year projected Folsom Lake inflow *(when indicated)* (TAF)	Nimbus Release (CFS) *(linear interpolate for intermediate values)*
October	Sep storage > 750	2750
	Sep storage > 700	1750
	Sep storage > 600	1500
	Sep storage > 400	750
	Sep storage > 200	600
	Sep storage > 100	500
November	Oct storage > 700	2500
	Oct storage > 650	1300
	Oct storage > 600	1150
	Oct storage > 400	800
	Oct storage > 150	500
December	Nov storage > 700	3000
	Nov storage > 650	1500
	Nov storage > 600	1300
	Nov storage > 300	1000
	Nov storage < 200	800
	Nov storage < 150	500
January	Dec storage > 700	3000
	Dec storage > 650	1750
	Dec storage > 600	1500
	Dec storage > 500	1200
	Dec storage < 400	1000
	Dec storage < 300	750
	Dec storage < 250	500
February	Jan storage > 725	3000
	Jan storage > 700	2500
	Jan storage > 650	1500
	Jan storage > 600	1350
	Jan storage > 500	1100
	Jan storage < 400	750
	Jan storage < 300	500
	Jan storage < 150	400
March	Feb Storage + Inflow > 2500	3000
	Feb Storage + Inflow > 1750	1500
	Feb Storage + Inflow > 1000	750
	Feb Storage + Inflow > 500	250
April	Mar Storage + Inflow > 2250	3000
	Mar Storage + Inflow > 1500	1750
	Mar Storage + Inflow > 1000	750
	Mar Storage + Inflow > 500	250
May	Apr Storage + Inflow > 2000	3000
	Apr Storage + Inflow > 1500	2250
	Apr Storage + Inflow > 1000	1000
	Apr Storage + Inflow > 500	500
June	May Storage + Inflow > 1600	3000
	May Storage + Inflow > 1000	1500
	May Storage + Inflow > 250	1000
July	Jun Storage + Inflow > 1500	3000
	Jun Storage + Inflow > 1000	2500
	Jun Storage + Inflow > 750	1750
	Jun Storage + Inflow > 250	750

Period	Folsom Lake end of month storage plus remainder of water year projected Folsom Lake inflow *(when indicated)* (TAF)	Nimbus Release (CFS) *(linear interpolate for intermediate values)*
August	Jul Storage + Inflow > 1000 Jul Storage + Inflow > 750 Jul Storage + Inflow > 500 Jul Storage + Inflow > 100	2500 1500 1000 750
September	Aug Storage + Inflow > 1000 Aug Storage + Inflow > 500 Aug Storage + Inflow > 150	2500 1000 500

American River – Sacramento Water Forum

This requirement is not explicitly modeled in CALSIM II at this time, however, the requirement is incorporated into the appropriate input datasets.

Source: 1999 Sacramento Water Forum EIR/S

Sacramento Water Forum Mitigation Water:
Under the Sacramento Water Forum, any diversions from the American River for Placer County Water Agency (PCWA) or the City of Roseville in excess of their "1995 Baseline" diversion amounts may require "bucket for bucket" replacement under "mitigation" water operations criteria in the Water Forum Agreement. The "1995 Baseline" diversion amounts from the American River for PCWA and the City of Roseville are 8.5 TAF/Yr and 19.8 TAF/Yr respectively. Under four-party arrangements (specific purveyor receiving mitigation, USBR, Water Forum environmental caucus, downstream consumptive user), "mitigation" water is released from PCWA's Middle Fork Project (MFP) in excess of all other normal release operations for maintaining flow conditions in the lower American River. "Mitigation" water is passed (or reoperated according to agreement) through Folsom Dam and the lower American River and recovered for consumptive use downstream of the American River.

The Water Forum Agreement provides for surface diversion reductions from the American River in "dry" through "driest" years. "Driest" year diversions are no greater than the "1995 Baseline" defined by the Water Forum participants. A "Dry" year is defined as a year in which the forecasted Folsom Unimpaired Inflow (FUI) for Mar – Nov (modeled as Mar 1 – Sep 30 plus 60 TAF) is less than 950 TAF. A "Driest" year is defined as a year in which the forecasted Folsom Unimpaired Inflow (FUI) for Mar – Nov is less than 400 TAF. The PCWA and City of Roseville purveyor specific information from the Water Forum Agreement is presented in Table 3.1.1.3.5-4.

Table 3.1.1.3.5-4 Water Forum Mitigation Water Schedules

	PCWA		City of Roseville	
	Annual Diversion Amount (TAF/Yr)	Associated Mitigation Water (TAF/Yr)	Annual Diversion Amount (TAF/Yr)	Associated Mitigation Water (TAF/Yr)
"1995 Baseline" *(negotiated)*	8.5	n/a	19.8	n/a
Water Forum Agreement				
$FUI_{Mar-Nov} > 950$ TAF	35.5	0.0	54.9	0.0
400 TAF < $FUI_{Mar-Nov} < 950$ TAF	35.5	linearly interpolated	linearly interpolated	linearly interpolated
$FUI_{Mar-Nov} < 400$ TAF	35.5	27.0	39.8	20.0

In implementing the operation of "mitigation" water:

- Mitigation water is released at a constant rate during the months of March through September.
- MFP baseline releases (the releases from the MFP that would have normally occurred without prior or current mitigation water releases) are maintained for a period starting with the mitigation water release operation and ending with the start of the mitigation water "refill" operation.
- The mitigation water "refill" operation begins as soon as Folsom Reservoir storage reaches its maximum allowable under flood control operations. The MFP is allowed to "refill" the MFP storage deficit from preceding mitigation water release operations by storing inflow and reducing power releases that are not needed for any other downstream requirement.
- If refill of the MFP storage deficit is not completely achieved by the time a subsequent mitigation water release operation commences, the preceding unrefilled deficit is carried through until the next "refill" operation begins.
- If mitigation water releases would reduce forecasted MFP storage to lower than minimum pool requirements, or prevent MFP operations from maintaining flow requirements or "1995 baseline" diversion, mitigation water release operations and diversions above the "1995 baseline" must cease.

Stanislaus River – 1997 New Melones Interim Operations Plan

Source: 1997 New Melones Interim Operations Plan

Minimum Flow below Goodwin Dam:
The New Melones Interim Operations Plan documents a negotiated basis for allocation of supply to four purposes: fishery, water quality, instream flow and water supply. In this discussion fishery refers to flow requirements of the 1987 USBR, DFG Agreement, and prescriptive use of CVPIA 3406(b)(2); water quality refers to SWRCB D-1641 maximum salinity requirements at Vernalis; instream flow refers to D-1641 minimum flow requirements at Vernalis (not including pulse flows during the Apr 15- May 16 period or VAMP); and water supply refers to CVP contractors, Stockton East WD and Central San Joaquin.

Table 3.1.1.3.5-5 identifies the annual water supply classifications. Table 3.1.1.3.5-6 identifies the maximum allocation of annual water supply to each of the purposes. Based on the value of

the End-of-Feb New Melones Storage plus Mar – Sep Forecast the allocation ranges in Table 43 are linearly interpolated. The resulting allocation is accounted for as releases to the Stanislaus River measured at Goodwin Dam. The allocations for fisheries, water quality and instream flows is interpreted as follows: 1) All releases up to the amount of the fishery pattern are included in the annual Fishery allocation; 2) All release up to the amount of the D-1641 Vernalis Minimum Flow Requirement, excluding the amount of Fishery allocation, are included in the annual Bay-Delta allocation; and 3) All releases up to the amount of the Vernalis water quality requirement, excluding the amount of Fishery and Bay-Delta allocations, are included in the annual Vernalis Water Quality allocation.

Additional releases are required if necessary to meet the the D-1422 minimum dissolved oxygen content requirement. Releases from Goodwin Dam to the Stanislaus River (except for flood control) can not exceed 1,500 CFS.

Table 3.1.1.3.5-5 Annual Water Supply Categories

	End-of-Feb New Melones Storage plus Mar – Sep Forecast (TAF)
Low	0 – 1,400
Medium – Low	1,400 – 2,000
Medium	2,000 – 2,500
Medium – High	2,500 – 3,000
High	3,000 – 6,000

Table 3.1.1.3.5-6 Annual Water Supply Allocations (TAF)

	Fishery	Vernalis Water Quality	Bay-Delta (D-1641 Vernalis Minimum Flow Requirement)	CVP Contractors
Low	0 – 98	0 – 70	0	0
Medium – Low	98 – 125	70 – 80	0	0
Medium	125 – 345	80 – 175	0	0 – 59
Medium – High	345 – 467	175 – 250	75	90
High	467 – 467	250 – 250	75	90

San Joaquin River – San Joaquin River Agreement

Source: 1998 San Joaquin River Agreement and related "Diversion Agreement"

Flow near Vernalis:
The San Joaquin River Agreement provides for the implementation of the Vernalis Adaptive Management Program (VAMP). VAMP includes pulse period (Apr 15 – May 16) flow targets on the San Joaquin River near Vernalis and associated Delta export reductions. The flow targets and export reductions are detailed under the previous discussion of regulatory requirements on the San Joaquin River and the Delta. This section discusses the water purchases under the San Joaquin River Agreement for supporting VAMP.

Under the agreement, annually, the San Joaquin River Group Authority (SJRGA) members (Modesto Irrigation District (MID), Turlock Irrigation District (TID), Merced Irrigation District

(Merced), South San Joaquin Irrigation District (SSJID), and Oakdale Irrigation District(OID)), during the pulse period (Apr 15 – May 16), provide water to meet the VAMP target flow or 110 TAF, whichever is less. The SJRGA has executed a "Division Agreement" which specifies amount and order of the individual contributions of water by its members (Table 3.1.1.3.5-7). The agreement assumes that the Stanislaus River is operated in accordance with the New Melones Interim Operations Plan (see preceding section) and that releases under the plan are included in the "existing" flow at Vernalis (see San Joaquin River – Vernalis Adaptive Management Program section).

An additional 12.5 TAF of water above "existing" flow in the Merced River is provided by Merced in October of all years. Also, an additional 15.0 TAF of water and up to 11.0 TAF of any unused OID VAMP water is made available to Reclamation by OID.

Table 3.1.1.3.5-7 Division Agreement Schedule (TAF)

	Entity	First Tier	Second Tier	Third Tier	Fourth Tier
First	Merced	25	11.5	8.5	10
Second	OID/SSJID	10	4.6	3.4	4
Third	Exchange Contactors	5	2.3	1.7	2
Fourth	MID/TID	10	4.6	3.4	4
Total		50	23	17	20

SWP Water Allocation – FRSA Contract specific

Source: Feather River Service Area (FRSA) Contracts

North-of-Delta (FRSA) Allocation:
Under contracts between DWR and each of the FRSA diverters, deliveries can be reduced, due to "Drought," by no more than 50% in any one year, and no more than 100% in any series of seven (7) consecutive years. In addition, reductions can not exceed the percentages for the reduction in annual entitlements for water to be put to agricultural use by water supply contractors in the San Joaquin Valley. There are certain amounts of entitlement that are not subject to reduction: Joint Water District Board, 5 TAF; Western Canal, 145 TAF; Garden Highway, 5.13 TAF; Plumas Mutual, 6 TAF; Tudor Mutual, 210 AF; and Oswald, 150 AF. "Drought" criteria are defined in the contracts.

SWP Water Allocation – Monterey Agreement

Source: 1995 Monterey Agreement

South-of-Delta Allocation:
Total south-of-Delta SWP deliveries are determined based upon spring storage conditions at Lake Oroville and SWP San Luis and forecasted runoff available to the SWP. Based upon the annual delivery determined, the annual delivery is allocated as a percentage of contractual entitlement that is equal for all SWP contractors.

CVP Water Allocation

Source: various CVP Settlement, Exchange, Agriculture and Municipal Water Service Contracts

CVP water supply allocation is performed based on Shasta index and a tiered priority method. Water supply allocation to Settlement contractors, Exchange contractors, and refuge are based on Shasta index alone. Deliveries to agricultural service contractors and M&I contractors are determined based on available water supply.

If Shasta index is critical then deliveries to Settlement contractors, Exchange contractors, and refuges are reduced to 75% of contract amount. Allocation to these contractors is not affected by water availability, and they receive full allocation in all non-Shasta critical years.

Water allocation to agricultural service contractors and M&I contractors are accomplished using a tiered allocation. In the first tier, agricultural service contractors are reduced to 75% of contract amount while M&I allocations are not reduced. In the second tier, both M&I and agricultural service contractors are reduced by equal percent of allocation until M&I is reduced to 75% and agricultural service is reduced to 50%. In the third tier, M&I remains at 75 % and agricultural service contractors are reduced to 25% of contract. In the fourth and final tier, M&I and agricultural service contractors are reduced on an equal percentage basis until M&I reaches 50% and agricultural service contractors are reduced to 0%.

CVP/SWP Coordinated Operations - 1986 Coordinated Operations Agreement

Source: 1986 Coordinated Operations Agreement (COA)

Sharing of Responsibility for In-Basin-Use:
Based upon the rules in the Coordinated Operations Agreement, specifically the definition of "Balanced Condition", the project shares of responsibility for In-Basin-Use are 75% for the CVP, and 25% for the SWP. In-Basin-Use includes project storage withdrawals (including Trinity River imports into the Sacramento River) for maintaining Delta water quality requirements. The 1986 COA was negotiated in the context of SWRCB D-1485.

Sharing of Surplus Flows:
Based upon the rules in the Coordinated Operations Agreement, the project shares of Surplus Flows are 55% for the CVP, and 45% for the SWP. A project's share of Surplus flows includes project storage increase (after accounting for Trinity River imports into the Sacramento River) and Delta exports. The 1986 COA was negotiated in the context of SWRCB D-1485.

D-1485 requires export reductions for Striped Bass, and through agreements CVP provides support for these export reductions. In turn SWP wheels, at priority, at a later time, replacement water for the CVP. This replacement pumping is accounted for as a CVP export. No other Wheeling is accounted for under COA.
CALSIM II uses a simplified accounting of the COA. CALSIM II operates to COA sharing formulas to the extent possible within each time-step. Any outstanding imbalance in this sharing is ignored. In actuality, CVP and SWP operators will similarly allow an imbalance to necessarily occur during periods of the year, but will track and frequently attempt to reconcile these imbalances throughout the year. Due to the need to account more closely for CVP and SWP actions that require and are based on project specific accounting techniques, it is anticiapted that "annual" COA accounting is required.

CVP/SWP Coordinated Operations – SWRCB D-1641
Source: unsupported

Sharing of Restricted Export Capacity:
The 1986 COA makes no specification regarding the project obligations for reducing export under D-1641 export restrictions. Under informal operating arrangements, USBR and DWR have shared the remaining allowable export capacity. A 50%-50% split of export capacity sharing is assumed.

CVP/SWP Coordinated Operations – USFWS discretionary use of CVPIA 3406(b)(2)
Source: 1992 CVPIA

Sharing of Restricted Export Capacity:
The obligation for 3406(b)(2) related reductions in Delta export is the sole responsibility of the CVP. In order to implement 3406(b)(2) reductions in Delta export, cooperation is required from SWP operations (i.e if CVP exports are reduced and CVP water abandoned in the Delta, the SWP export could increase to capture the abandoned supply unless SWP cooperates in the export reduction action). Any such SWP cooperation must be provided for through other mechanisms besides 3406(b)(2), the most logically being the CALFED Environmental Water Account.

CVP/SWP Coordinated Operations – CALFED Fisheries Agencies discretionary use of EWA
Source: 2000 CALFED ROD, Environmental Water Account

Sharing of Restricted Export Capacity:
The obligation for EWA related reductions in Delta export is the EWA's. The projects are assumed to cooperate as needed to facilitate EWA actions in so far that the EWA operations adhere to the agreed upon EWA operations guidelines attached to the CALFED ROD. These guidelines require the EWA to use its assets to maintain the project's capability for current and future year deliveries, as defined under the CALFED ROD.

CVPIA 3406(b)(2)
Source: 1992 CVPIA

Allocation:
CVPIA 3406(b)(2) requires that 800 TAF of CVP yield, annually, be allocated to fisheries purposes. This allocation is reduced to 600 TAF in years that fall within the Shasta Index Critical year criteria.

Actions:
A procedure for implementing CVPIA Section 3406(b)(2) based actions and accounting is incorporated into CALSIM II. The procedure maintains a 3406(b)(2) water account and allocates the account based on forecast information and action specific priorities. These actions are shown in Table 45. Specifics about assumptions for individual actions are included in the Regulatory Standards section.

In the dynamic accounting, each month the remaining allocation of 3406(b)(2) is assessed. Actions are taken each month if the remaining allocation exceeds the amount of reserve required for equal or higher priority later actions shown in Table 3.1.1.3.5-8. Later actions may end up

actually costing more or less than the reserve amount shown. The reserve amounts are adjusted to obtain the desired action implementation through the simulation period.

As a result of the February, 2002, court decision, 3406(b)(2) support for the WQCP is non-discretionary and unlimited, no reset adjustment is used with the storage metric and no offset adjustment is used with either the release or export metric.

Table 3.1.1.3.5-8 CVPIA 3406(b)(2) Actions Schedule

Action Description	Oct	Nov	Dec	Jan	Feb	Mar	Apr		May		Jun	Jul	Aug	Sep
WQCP Support (D-1641)														
Fish Releases														
Export Reductions (150 taf)														
VAMP Export Restrictions														
Post VAMP Export Restrictions														
Export Ramping														
3000 cfs Export Limit														
Pre VAMP Export Restrictions														
Export Reduction (35 taf)														

CVP

CALFED Environmental Water Account

Source: 2000 CALFED ROD, Environmental Water Account

Actions:
A procedure for implementing EWA based actions and asset expenditure is incorporated into CALSIM II. The procedure maintains a water account and allocates the account based on forecast information and action specific priorities. These actions are shown in Table 3.1.1.3.5-9. Specifics about assumptions for individual actions are included in the Regulatory Standards section. The account is maintained through exercise of EWA assets, which are discussed in the following section.

In the dynamic accounting, each month the remaining available EWA assets are assessed. Actions are taken each month if the amount of remaining available assets exceeds the amount of reserve required for equal or higher priority later actions shown in Table 46. Later actions may end up actually costing more or less than the reserve amount shown. The reserve amounts are adjusted to obtain the desired action implementation through the simulation period.

Table 3.1.1.3.5-9 EWA Actions Schedule

Action Description	Oct	Nov	Dec	Jan	Feb	Mar	Apr		May		Jun	Jul	Aug	Sep
Fish Releases														
Export Reductions – 4000 cfs for 1 week/month (2 weeks/month in Wet years)														
VAMP Export Restrictions														
Pre VAMP Export Restrictions														
Post VAMP Export Restrictions														
Export Ramping														

CVP CVP/SWP

Assets:
Two types of assets support the EWA: "operational" and "fixed" assets. The assets and their associated potential benefit to the EWA is shown in Table 3.1.1.3.5-10. The operational assets values will not be known until they are applied. The fixed assets, particularly the south-of-Delta purchases, can be used to temporarily cover the risk of the uncertainty of the benefit of the operational assets.

Table 3.1.1.3.5-10 EWA Assets

Asset Description	Fixed asset potential
50% of use of JPOD (Excess SWP Capacity)	N/A
50% of any CVPIA 3406(b)(2) releases pumped by SWP	N/A
Flexing of Delta Export/Inflow Ratio (not explicitly modeled)	N/A
Dedicated 500 CFS increase of Jul – Sep Banks PP capacity	N/A
North-of-Delta purchases	0 – 135 TAF/Yr
South-of-Delta purchases	50 – 185 TAF/Yr
South-of-Delta source shifting agreements (not explicitly modeled)	N/A
200 TAF/YR South-of-Delta groundwater storage capacity	One time initial 200 TAF

Debt Restrictions:
No planned carryover of debt is allowed past the end-of-September. Therefore, actions must be limited to the amount of assets that are maintained and accrued with minimal uncertainty.

3.1.2 EBMUDSIM

The East Bay Municipal Utility District's hydrologic simulation model (EBMUDSIM) simulates the operation of the District's reservoir system under present and future conditions. The model is used as a planning tool to analyze the effects of modified facilities and changed operation rules. Its primary purpose is to determine the system's ability to meet customer demands.

3.1.2.1 Model Description

The main physical components of the EBMUDSIM model are the Mokelumne River system (Pardee and Camanche Reservoirs and the river below Camanche Dam), the Mokelumne Aqueducts, and the District's Terminal Reservoirs. Figure 3.1.2.1-1 displays a schematic of the model.

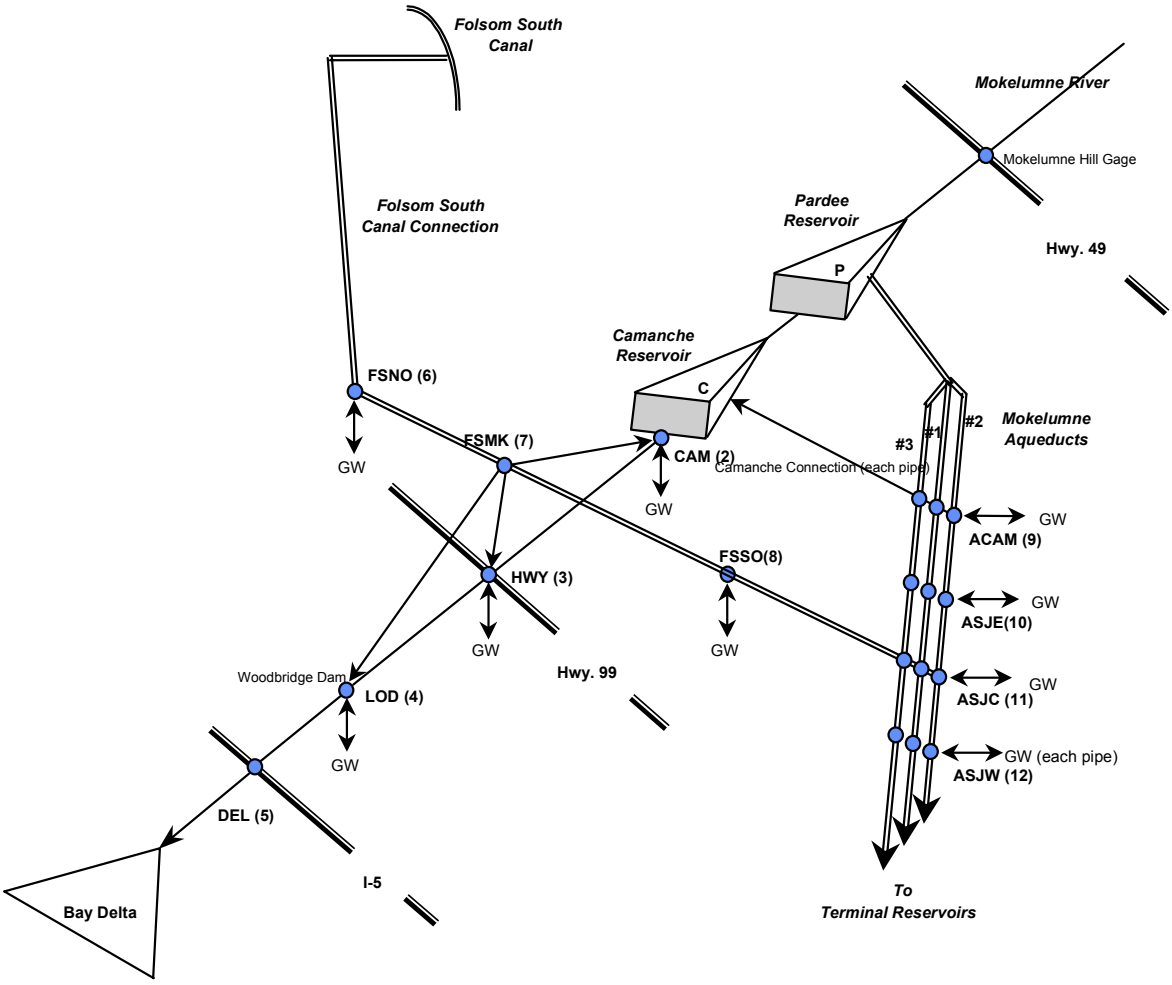
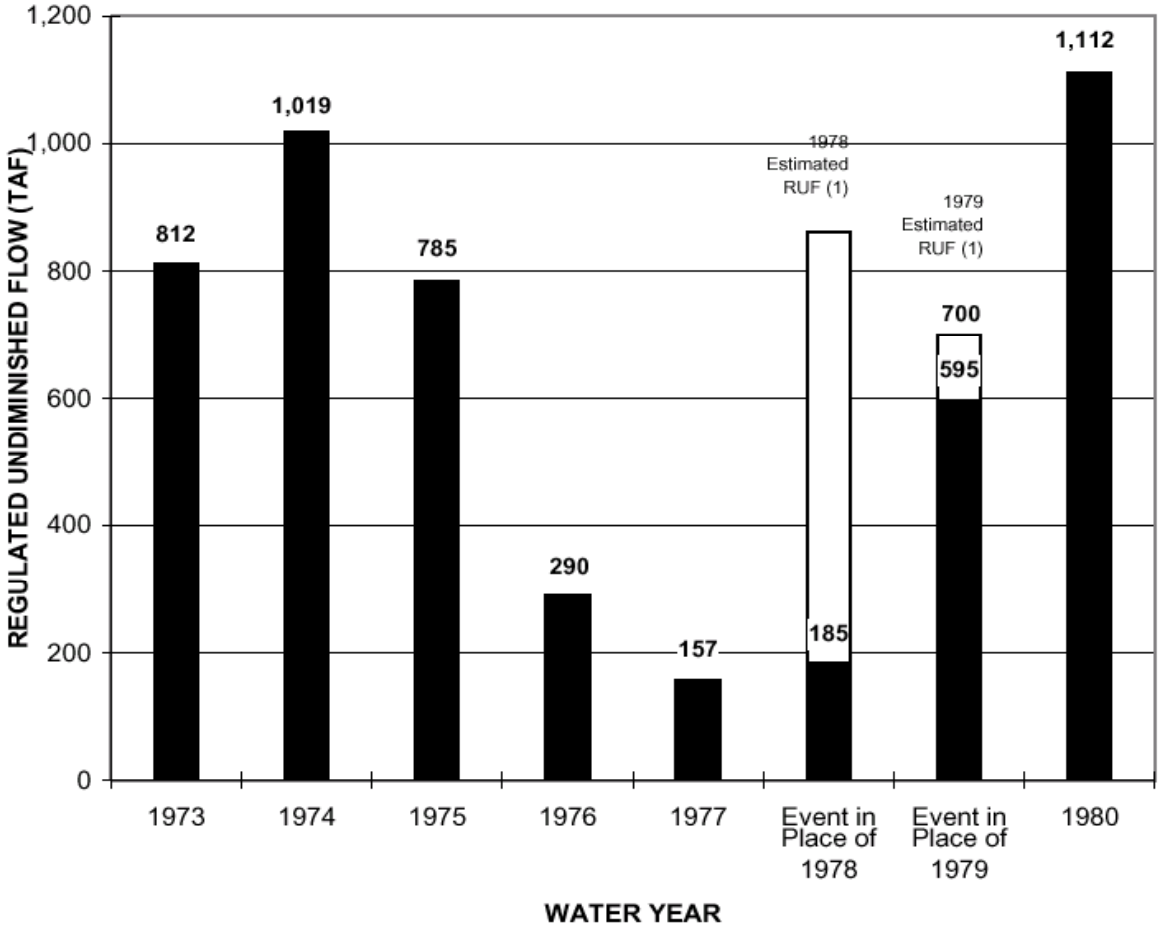


Figure 3.1.2.1-1 EBMUDSIM System Schematic

Mokelumne River inflow to Pardee Reservoir is the basic hydrologic input used by EBMUDSIM to perform its simulations. This inflow, derived from historic records, forms a 75-year sequence of hydrological input data for a period beginning in January 1921 and ending in December 1995. In FRWP simulations, historic inflow to Pardee for Water Year 1978 has been altered to simulate a three-year drought sequence beginning in 1976. (Water Year begins on October 1). The Drought Planning Sequence is displayed graphically in Figure 3.1.2.1-2. The basis for the Drought Planning Sequence is discussed in Appendix A.

Figure 3.1.2.1-2 Drought Planning Sequence Hydrology



EBMUDSIM incorporates all of the operational constraints governing the District's water supply system. EBMUDSIM accounts for water use by diverters upstream of Pardee Reservoir and downstream of Camanche Reservoir. The model calculates minimum release requirements for downstream diverters, channel losses, and instream flows. Remaining water is available for storage or delivery to the District's customers. The model also accounts for flood control operations. The combined effects of physical and operational constraints dictate the resulting EBMUDSIM hydrologic output for all conditions simulated.

EBMUDSIM uses a monthly time step as the basis for its simulations. The output generated by EBMUDSIM represents average monthly or end-of-month values. The model provides the user with output that shows inflow, outflow, and changes in storage for elements of the system over

the study period under the conditions analyzed. By changing the input data the user can explore the effects on the system of changes in such variables as projected customer demands, facilities development alternatives, operational requirements, and water supply availability. This allows EBMUD to assess impacts of potential changed conditions for planning purposes. For actual system operations, however, the District uses different tools that incorporate more detailed, real-time, system components.

For more information about EBMUDSIM, refer to Bay-Delta Water Rights Hearing before the State Water Resources Control Board – East Bay Municipal Utility District, June 1998 – Exhibit No.4 – Testimony of John Skinner – EBMUDSIM Model Description, Assumptions, Verification, and Output.

3.1.2.1.1 Verification Study

To ensure that EBMUDSIM simulates Mokelumne River conditions appropriately, a verification analysis was conducted. This verification study compares theoretical simulation results with records of historical observation for two parameters: Total System Storage (TSS) and Total Camanche Reservoir Releases to the lower Mokelumne River.

The following assumptions were made for the EBMUDSIM verification study:

1) Analysis is from 1970-2000 to correspond to the time period that the existing supply system has been full and operational.
2) 220 MGD EBMUD Demand. Because EBMUD demand levels have been relatively constant since the early 1970's, this assumption corresponds closely with EBMUD demands during the period simulated.
3) 2000 Level of Development for other Mokelumne Water Users.
4) Historical runoff values for all years, including 1978 are used.
5) EBMUD's Demand Management Program is implemented. Table 3.1.2.1.1-1 contains rationing percentages and corresponding storage triggers that summarize the program.
6) Woodbridge Irrigation District (WID) diversions are set to 65,855 AF during years in which the undiminished, unregulated runoff at the Mokelumne Hill gage is less than 300 TAF; and 75,855 AF when runoff volume is greater than 300 TAF. This assumption corresponds more closely with higher diversions made by WID prior to 1988 before EBMUD terminated the contract provisions allowing higher WID diversions.
7) Camanche Reservoir releases for fishery and instream benefits are scheduled according to the District's 1961 Agreement with the California Department of Fish and Game. This assumption corresponds more closely with fishery release requirements prior to 1996 when EBMUD and Resource Agencies agreed to revised fishery release requirements.

Table 3.1.2.1.1-1 EBMUD Demand Management Program

Carry-over Storage (TAF)	Rationing Goal
500>Stor>450	0 to 15%
450>stor>300	15 to 25%
stor below 300	25%

Results of the verification study are shown in Figures 3.1.2.1.1-1 to 3.1.2.1.1-3. Figure 3.1.2.1.1-1 displays the simulation results and historical records for TSS. Although there is a very high correlation between historic and modeled TSS in EBMUDSIM, some simplifying assumptions in

depicting local system operations cause some differences between historic and projected values. Figure 3.1.2.1.1-2 displays the total releases from Camanche Reservoir for simulated and historic conditions. Figure 3.1.2.1.1-3 displays the results of a regression analysis between historical and simulated values for total annual Camanche releases.

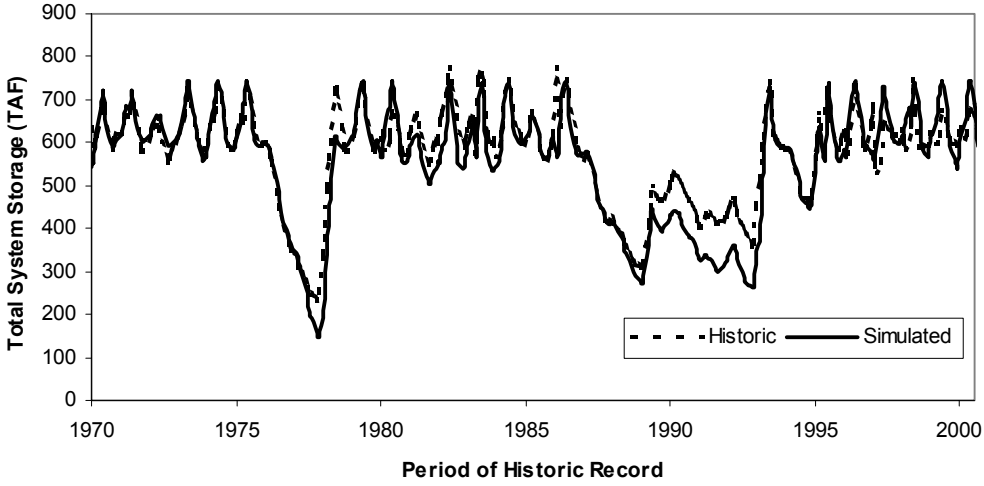


Figure 3.1.2.1.1-1 EBMUD Total System Storage – 2002 Verification Analysis

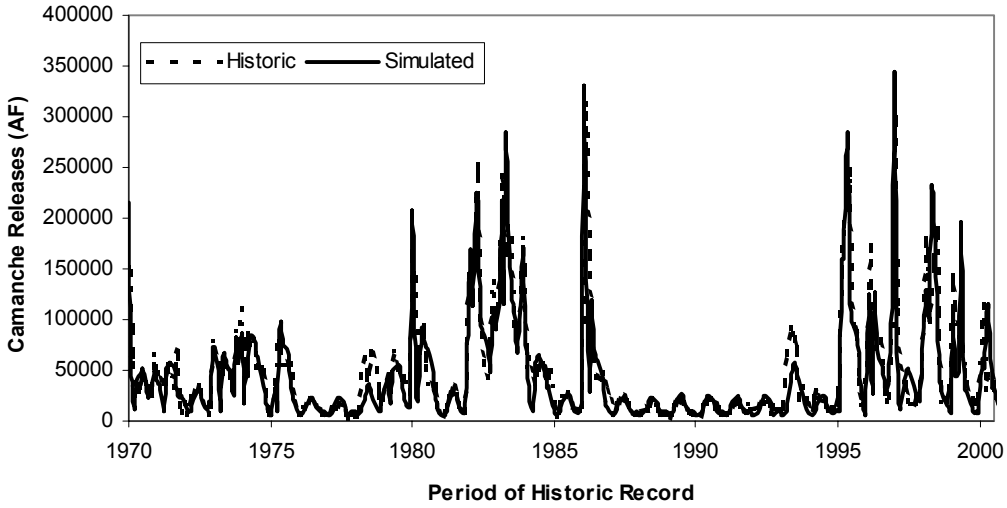
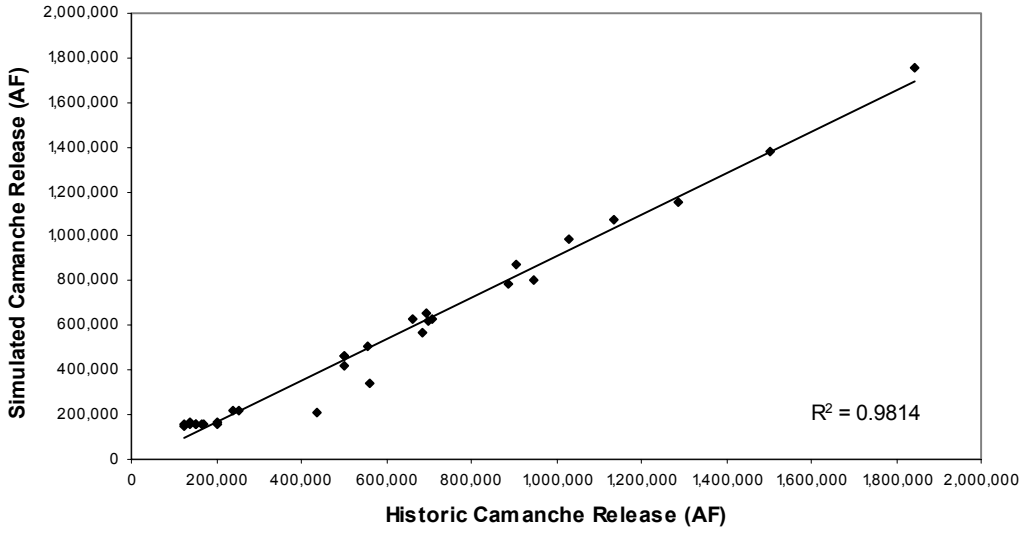


Figure 3.1.2.1.1-2 Total Releases from Camanche Reservoir

The graphics display a high correlation between historical operations and EBMUDSIM output according to the verification settings. For example, Figure 3.1.2.1.1-3 shows a correlation value (r^2) of 0.9814 for total annual Camanche release. This study verifies that EBMUDSIM can appropriately simulate Mokelumne River flows.

Figure 3.1.2.1.1-3 Annual Total Camanche Releases – Regression Analysis



3.1.2.2 Application to FRWP Modeling

EBMUDSIM studies were prepared for each of the FRWA modeling scenarios described in Section 2.6. Table 3.1.2.2-1 is a key to the EBMUDSIM studies prepared for the FRWP EIR/EIS. The following discussion addresses the assumptions and procedures applied to each of these EBMUDSIM studies.

Table 3.1.2.2-1 FRWP EBMUDSIM studies

Study	Existing Condition	Future Condition
Alternative 1 (No Action)	Study 6203	Study 6257
Alternatives 2-5 (Joint Project)	Study 6296	Study 6292
Alternative 6 (Enlarged Pardee)	Study 6322	Study 6321

3.1.2.2.1 Alternative 1

The assumptions for the Alternative 1 studies are identical to those made for the verification study except for the following:

1) The simulation period is from 1921-1995: This simulates the implications of Alternative 1 over a wide range of hydrologic conditions (including the CVP drought planning sequence – 1928 to 1934) and corresponds to the state-wide hydrologic study period standard
2) Inflow to Pardee Reservoir in WY 1978 is changed to 185 TAF, consistent with the Drought Planning Sequence hydrology shown in Figure 3.1.2.1-2.
3) EBMUD demand does not change for the Alternative 1 existing condition study; however, for the Alternative 1 future condition study, EBMUD demand is increased to 228 MGD, EBMUD's project 2020 demand.

4) Woodbridge Irrigation District (WID) diversions are set to present/future contractual values: 60 TAF during years in which Pardee inflow is greater than or equal to 375 TAF, and 39 TAF when runoff volume is less than 375 TAF.
5) Camanche Reservoir releases for fishery and instream benefits are scheduled according to the Joint Settlement Agreement (JSA), adopted November 27, 1998. These requirements are describe in Section 3.1.1.3.4, under the discussion of regulatory standards for the Mokelumne River. In addition, Table 3.1.2.2.1-1 contains release volumes and corresponding triggers that summarize the action specified in the JSA.

Table 3.1.2.2.1-1 Joint Settlement Agreement Fish Flow Schedule

Joint Settlement Agreement Camanche Release Requirements for the Lower Mokelumne River (TAF)															
Year Type	Storage Trigger (TAF)	Oct	Nov	Dec	Jan	Feb	Mar	Runoff Trigger (TAF)	Apr	May	Jun	Jul	Aug	Sep	Total AF
normal	Max	20.0	19.3	20.0	20.0	18.2	20.0	≥ 890	19.3	20.0	19.3	6.1	6.1	6.0	194
below Nor	> 400	15.4	14.9	15.4	15.4	14.0	15.4	> 500	14.9	15.4	14.9	6.1	6.1	6.0	154
dry	> 270	13.5	13.1	13.5	13.5	12.3	13.5	> 300	13.1	13.5	6.0	6.1	6.1	6.0	130
critical	< 270	7.1	7.7	8.0	8.0	7.3	8.0	< 300	7.7	6.1	6.0	6.1	6.1	6.0	84

Notes: 1. Storage trigger is based on combined volume in Pardee and Camanche Reservoirs
2. Runoff trigger is based on unimpaired runoff from the Mokelumne River watershed

The gainsharing provision of the JSA is incorporated in EBMUDSIM by increasing dead storage in EBMUD's Mokelumne River reservoirs by 20,000 acre-feet. This reserves this volume which can be released at the discretion of CDFG and USFWS.

3.1.2.2.2 Alternatives 2-5

EBMUDSIM studies for Alternatives 2-5 simulate deliveries of Sacramento River water from the Freeport Regional Water Project to the Mokelumne Aqueducts. As the model performs its monthly water balance, the values from the delivery schedule fill the Mokelumne aqueduct capacity while reducing Pardee releases to the aqueducts by a commensurate amount.

FRWP deliveries of Sacramento River water to EBMUD are conditioned by the following constraints:

- EBMUD's March 1 projection of End-of-September Total System Storage (TSS) must be less than 500 TAF to allow EBMUD to take delivery of Freeport water according to its CVP contract.
- Under its CVP Contract, deliveries to EBMUD cannot exceed 165 TAF in any three consecutive years that TSS forecasts remain below 500 TAF.
- Under its CVP Contract, annual deliveries to EBMUD are subject to the same shortage conditions as other CVP Contractors. The allocation reduction percentage is applied to the contractual 133 TAF maximum annual diversion.
- The capacity of the Freeport delivery system to EBMUD is 100 MGD. This allows a maximum annual delivery of 112 TAF if water is delivered for all twelve months of the year.
- Freeport deliveries are curtailed whenever EBMUD's Mokelumne storage becomes filled to maximum allowable levels.

In the FRWP modeling studies, it was assumed that EBMUD would take delivery of Sacramento River water as early as allowable under the provisions of its amendatory CVP water service

contract and at the maximum rate possible utilizing its allocated FRWA capacity (100 mgd). In those years when end-of-September TSS is less than 500 TAF without the project (Alternative 1), it was assumed that FRWA deliveries to EBMUD would begin on March 1. Deliveries would continue continuously at a rate of 100 mgd until one of the following conditions occurred:

- EBMUD's annual allocation of CVP water is reached. This volume of water is the contract amount (133 TAF) times the CVP M&I allocation applied to that year (as determined by CALSIM II).
- EBMUD's CVP deliveries reach 165 TAF in three consecutive years when EBMUD may take CVP water.
- EBMUD reservoirs are filled to the point where flood control releases would be necessary.

These EBMUD diversion operating rules, which place the supplemental water supply in EBMUD reservoirs as early as possible, were used for the FRWP impact modeling since they provide the District with the greatest drought relief reliability. All FWWA deliveries to EBMUD would be placed in the Mokelumne Agueducts and delivered to the East Bay.

One provision in the JSA requires a portion of any additional water supply (up to 20 TAF) to be dedicated to increased instream flows to be released as requested by the Resource Agencies. This study does not attempt to model the additional flow since the water is to be released at the discretion of the fisheries agencies. However, the Alternatives 2-5 studies do account for the storage necessary for this volume of water by increasing Pardee Reservoir dead storage by 20 TAF.

To assess EBMUD's full use of FRWP, EBMUD demand is set to projected 2020 level, 228 MGD, for both the existing condition study and the future condition study. This conservative assumption leads to lower flows down the lower Mokelumne River in the existing condition study at times when EBMUD is not taking delivery of Sacramento River water, because higher than current deliveries are made to EBMUD customers.

3.1.2.2.2.1 EBMUDSIM Interaction with CALSIM II

The EBMUDSIM / CALSIM II interaction is displayed schematically in Figure 3.1.2.2.2.1-1. Conceptually, it is an iterative process of matching EBMUD FRWP delivery needs to Central Valley Project (CVP) operations. The interaction begins with an Alternative 1 EBMUDSIM run, from which the "Flow into Delta" output time series is used as CALSIM II input for the Mokelumne system Delta inflow. An initial Alternative 1 CALSIM II run is executed, and CVP North of Delta M&I Allocations output is returned to EBMUD.

Iteration steps:

1) The future condition Alternative 1 EBMUDSIM study is used to determine when EBMUD End-of-September Storage is less than 500 TAF.
2) An EBMUDSIM run is prepared including deliveries from Freeport in those years when End-of-September Storage is less than 500 TAF.
3) The amount of water delivered to EBMUD is restricted by CVP delivery allocations (from the CALSIM II Alternative 1 study), the 165 TAF 3-year limit, physical capacity, and EBMUD's Mokelumne storage.
4) A revised "Flow into Delta" EBMUDSIM output time series is extracted.
5) CALSIM II is re-run using the revised Mokelumne inflows.
6) A revised CVP North-of-Delta M&I Allocations output is extracted from the CALSIM II study and returned to EBMUD to verify Freeport water availability.

Processing and iteration steps are repeated until CVP North-of-Delta M&I Allocations converge with EBMUD Freeport deliveries.

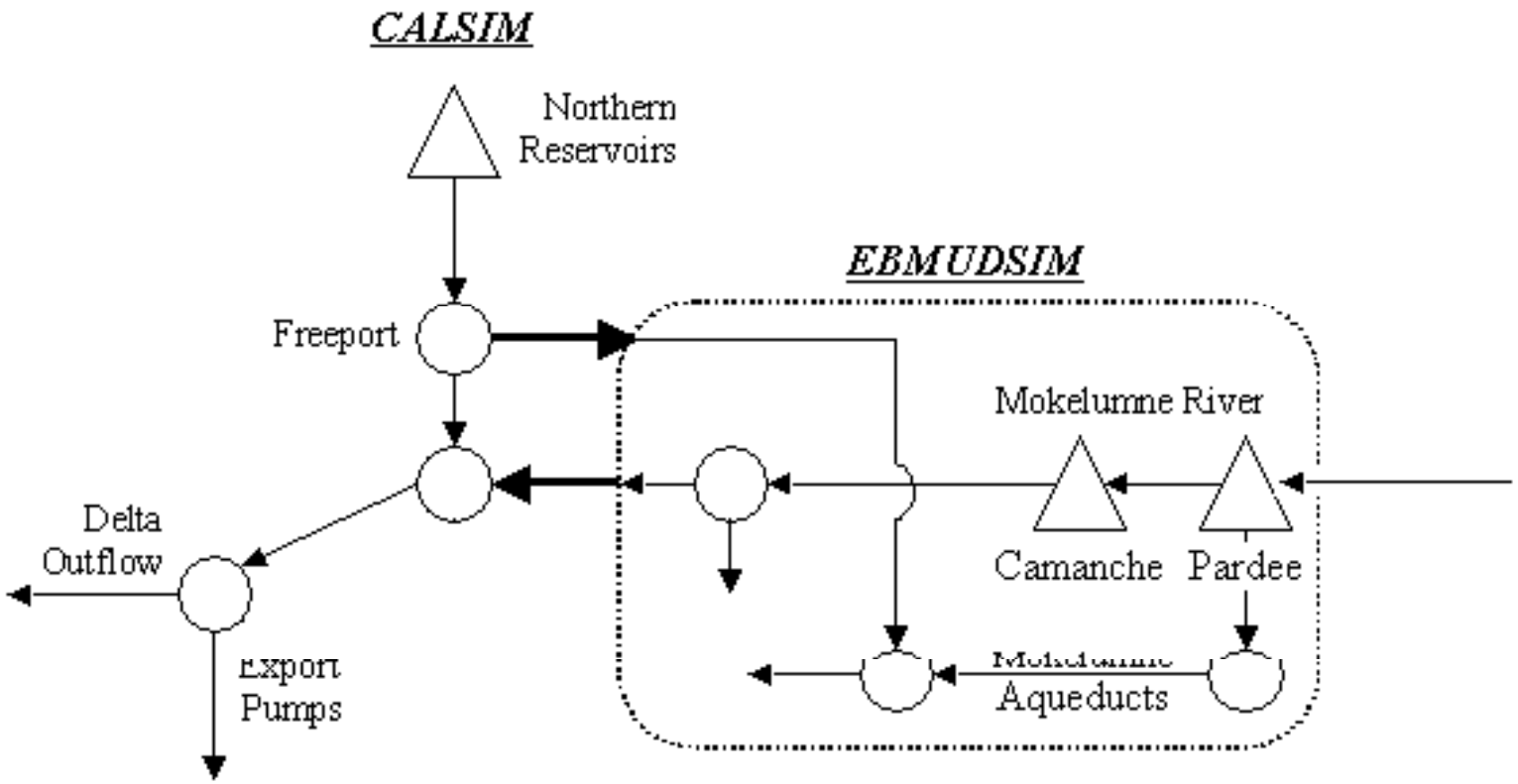


Figure 3.1.2.2.2.1-1 CALSIM / EBMUDSIM Interaction Schematic

3.1.2.2.3 Alternative 6

The goal for EBMUDSIM studies of Alternative 6 is to simulate the hydrologic conditions of the Mokelumne River system with increased storage capacity in Pardee Reservoir.

Listed below are the technical and physical assumptions that apply to EBMUDSIM simulations involving the downstream dam site and an enlarged Pardee Reservoir.

- The new elevation-area-capacity relationship for the enlarged Pardee reservoir is shown in Table 3.1.2.2.3-1.
- Target elevation for the enlarged Pardee Reservoir is set to 601 ft., year-round, while the spillway crest is set to 614 ft. Maintaining Pardee Reservoir elevation below 601 ft. protects the whitewater-rafting run from Electra Powerhouse to the Highway 49 Bridge. The storage space between the operating elevation of 601 ft. and the spillway crest of 614 ft. provides flood control space that can be transferred to Pardee Reservoir from Camanche Reservoir's flood control reservation. This allows more water to be stored in Camanche Reservoir, which is used to meet downstream release requirements, preserving Pardee Reservoir storage for East Bay delivery during dry years; however, note that this modeled flood control space is a year-round constraint and cannot be refilled beginning March 15, when flood control operations allow the reservoirs to be filled. Relative to the Alternative 1 studies, the Enlarged Pardee storage system has less effective refill space come March, and during wet years, the system tops off sooner. By May, higher flood control releases are required, which results in higher Mokelumne River flows during May, June, and sometimes during July of wet years.
- Sluice capacity of the new dam is assumed to be high enough to allow 601 ft. elevation to be maintained.
- The JSA gainsharing reservation applies to any supply improvement, including storage increase. Similar to the FRWP case (Alternatives 2-5), this water is modeled in Pardee Reservoir by increasing dead storage by 20 TAF. Therefore, this gainsharing volume is added to the revised dead storage volume for the enlarged reservoir.
- Two major operational decisions modeled in EBMUDSIM are based on existing storage thresholds: instream flow releases and customer delivery cutbacks. These constraints were adjusted for the purposes of the Alternative 6 EBMUDSIM studies, as follows:

    1) According to the JSA, Camanche Reservoir release requirements for the period from October – March depend on the storage in Pardee and Camanche Reservoirs on November 5. For the enlarged Pardee studies, values for these thresholds were revised. Instream release thresholds were altered until JSA fishery release year-type frequency were the same as for Alternatives 2-5. Table 3.1.2.2.3-2 displays the year types resulting for each alternative. Note that although there are some years where

    2) the year types differ between the two action alternatives, the frequency results at the bottom of the table are very similar. Table 3.1.2.2.3-3 displays the revised Pardee/Camanche storage thresholds necessary for Alternative 6 to produce the year-type schedule in Table 3.1.2.2.3-2

Table 3.1.2.2.3-1 Enlarged Pardee Elevation-Area-Capacity Table

ELEV(Ft)	AREA(Acres)	STORAGE(AF)	ELEV(Ft)	AREA(Acres)	STORAGE(AF)
380	259	13200	444	690	42320
381	264	13460	445	697	43020
382	270	13730	446	706	43720
383	274	14000	447	715	44430
384	279	14280	448	724	45150
385	283	14560	449	733	45880
386	289	14840	450	741	46620
387	294	15130	451	750	47370
388	299	15420	452	760	48120
389	304	15720	453	769	48880
390	310	16030	454	779	49650
391	314	16340	455	789	50430
392	320	16660	456	799	51230
393	325	16990	457	809	52040
394	331	17320	458	820	52850
395	336	17650	459	831	53680
396	342	17990	460	842	54520
397	347	18340	461	855	55360
398	354	18690	462	866	56220
399	359	19050	463	878	57090
400	365	19410	464	890	57970
401	372	19780	465	901	58860
402	379	20150	466	913	59770
403	386	20530	467	925	60700
404	392	20910	468	936	61630
405	399	21310	469	948	62570
406	406	21720	470	960	63530
407	412	22130	471	972	64490
408	418	22550	544	2094	176190
409	425	22970	545	2115	178290
410	432	23400	546	2131	180410
411	438	23830	547	2147	182550
412	445	24270	548	2163	184710
413	452	24720	549	2179	186880
414	459	25180	550	2200	189070
415	466	25640	551	2217	191280
416	474	26100	552	2234	193500
417	481	26570	553	2251	195750
418	489	27060	554	2268	198010
419	496	27560	555	2289	200280
420	503	28060	556	2306	202580
421	511	28570	557	2324	204890
422	519	29090	558	2341	207230
423	525	29610	559	2359	209580
424	533	30140	560	2378	211940
425	541	30680	561	2396	214330
426	549	31220	562	2413	216730
427	556	31770	563	2429	219150
428	563	32330	564	2446	221590
429	570	32890	565	2484	224040
430	578	33460	567.65	2537	230690
431	586	34050	570	2584	236710
432	592	34640	575	2678	249870
433	600	35240	580	2766	263490
434	608	35850	585	2866	277570
435	616	36460	590	2959	292130
436	623	37080	595	3048	307150
437	631	37710	600	3155	322650
438	639	38340	605	3290	338760
439	648	38990	610	3395	355480
440	655	39630	615	3506	372730
441	664	40290	620	3628	390570
442	672	40960	625	3765	409050
443	681	41630	630	3891	428190

Table 3.1.2.2.3-2 JSA Fishery Release Year-type Comparison*

	October			April		
Water Year	Alternative 1	Alternatives 2-5	Alternative 6	Alternative 1	Alternatives 2-5	Alternative 6
1922	Norm	Norm	Norm	Norm	Norm	Norm
1923	Norm	Norm	Norm	BNorm	BNorm	BNorm
1924	Norm	Norm	Norm	Crit	Crit	Crit
1925	Crit	Dry	Dry	BNorm	BNorm	BNorm
1926	Norm	Norm	Norm	Dry	Dry	Dry
1927	Dry	BNorm	Dry	Norm	Norm	Norm
1928	Norm	Norm	Norm	BNorm	BNorm	BNorm
1929	Norm	Norm	Norm	Dry	Dry	Dry
1930	Dry	Dry	Dry	Dry	Dry	Dry
1931	Dry	BNorm	Dry	Crit	Crit	Crit
1932	Crit	Crit	Crit	BNorm	BNorm	BNorm
1933	Dry	BNorm	Dry	Dry	Dry	Dry
1934	Dry	BNorm	Dry	Dry	Dry	Dry
1935	Crit	Dry	Dry	BNorm	BNorm	BNorm
1936	BNorm	Norm	Dry	Norm	Norm	Norm
1937	Norm	Norm	Norm	BNorm	BNorm	BNorm
1938	Norm	Norm	Norm	Norm	Norm	Norm
1939	Norm	Norm	Norm	Dry	Dry	Dry
1940	Dry	Dry	Dry	Norm	Norm	Norm
1941	Norm	Norm	Norm	BNorm	BNorm	BNorm
1942	Norm	Norm	Norm	Norm	Norm	Norm
1943	Norm	Norm	Norm	Norm	Norm	Norm
1944	Norm	Norm	Norm	Dry	Dry	Dry
1945	Dry	Dry	BNorm	BNorm	BNorm	BNorm
1946	Norm	Norm	Norm	BNorm	BNorm	BNorm
1947	Norm	Norm	Norm	Dry	Dry	Dry
1948	Dry	Dry	BNorm	BNorm	BNorm	BNorm
1949	BNorm	BNorm	BNorm	BNorm	BNorm	BNorm
1950	BNorm	BNorm	BNorm	BNorm	BNorm	BNorm
1951	Norm	Norm	Norm	Norm	Norm	Norm
1952	Norm	Norm	Norm	Norm	Norm	Norm
1953	Norm	Norm	Norm	BNorm	BNorm	BNorm
1954	Norm	Norm	Norm	BNorm	BNorm	BNorm
1955	BNorm	BNorm	Norm	Dry	Dry	Dry
1956	Dry	Dry	BNorm	Norm	Norm	Norm
1957	Norm	Norm	Norm	BNorm	BNorm	BNorm
1958	Norm	Norm	Norm	Norm	Norm	Norm
1959	Norm	Norm	Norm	Dry	Dry	Dry
1960	Dry	Dry	Dry	Dry	Dry	Dry
1961	Dry	Dry	Dry	Crit	Crit	Crit
1962	Crit	Crit	Dry	BNorm	BNorm	BNorm
1963	Dry	BNorm	Dry	BNorm	BNorm	BNorm
1964	Norm	Norm	Norm	Dry	Dry	Dry
1965	Dry	Dry	BNorm	Norm	Norm	Norm
1966	Norm	Norm	Norm	Dry	Dry	Dry
1967	Dry	Dry	BNorm	Norm	Norm	Norm
1968	Norm	Norm	Norm	Dry	Dry	Dry
1969	Dry	BNorm	BNorm	Norm	Norm	Norm
1970	Norm	Norm	Norm	Norm	Norm	Norm
1971	Norm	Norm	Norm	BNorm	BNorm	BNorm
1972	Norm	Norm	Norm	BNorm	BNorm	BNorm
1973	BNorm	BNorm	Norm	BNorm	BNorm	BNorm
1974	Norm	Norm	Norm	Norm	Norm	Norm
1975	Norm	Norm	Norm	BNorm	BNorm	BNorm
1976	Norm	Norm	Norm	Crit	Crit	Crit
1977	Crit	Dry	Dry	Crit	Crit	Crit
1978	Crit	Crit	Crit	Crit	Crit	Crit
1979	Crit	Crit	Crit	Crit	BNorm	BNorm
1980	Crit	Crit	Crit	Norm	Norm	Norm
1981	Norm	Norm	Norm	Dry	Dry	Dry
1982	Dry	BNorm	BNorm	Norm	Norm	Norm
1983	Norm	Norm	Norm	Norm	Norm	Norm
1984	Norm	Norm	Norm	Norm	Norm	Norm
1985	Norm	Norm	Norm	Dry	Dry	Dry
1986	Dry	Dry	BNorm	Norm	Norm	Norm
1987	Norm	Norm	Norm	Crit	Crit	Crit
1988	Dry	Dry	Dry	Crit	Crit	Crit
1989	Crit	Crit	Crit	BNorm	BNorm	BNorm
1990	Crit	Dry	Dry	Dry	Dry	Dry
1991	Crit	Dry	Crit	Crit	Dry	Crit
1992	Crit	Crit	Crit	Crit	Dry	Crit
1993	Crit	Crit	Crit	Norm	Norm	Norm
1994	Norm	Norm	BNorm	Crit	Crit	Crit
1995	Dry	Dry	Dry	Norm	Norm	Norm
Year-Type Counts						
Norm	37	38	38	23	23	23
Bnorm	5	11	11	22	23	23
Dry	19	17	17	17	19	17
Crit	13	8	8	12	9	11

- Highlighted boxes denote difference in year type between Freeport and enlarged Pardee cases
- Though individual years differ, the long-term statistics match as close as possible

Table 3.1.2.2.3-3 Pardee/Camanche Storage Thresholds for JSA Fishery Release

	PCS Thresholds (TAF)		
Scenario	Maximum	BNorm if >	Dry if >
Alternative 1	Flood	400	270
Alternatives 2-5	Flood	400	270
Alternative 6	Flood - 57	500	280

3) EBMUD's current Demand Management Program is implemented when existing End-of-September total system storage falls below 500 TAF. This threshold does not apply to added storage, and must be adjusted to simulate appropriate drought response with the additional storage. Therefore, for the Alternative 6 studies, customer cutback thresholds were altered so that the customer cutbacks match, as nearly as possible, those occurring with the FRWP. Table 3.1.2.2.3-4 compares the resulting customer cutbacks and their frequencies. Table 3.1.2.2.3-5 displays the revised total system storage thresholds necessary for the enlarged Pardee scenario to operate with the resulting customer cutbacks of Table 3.1.2.2.3-4.

Table 3.1.2.2.3-4 Customer Cutback Frequency and Severity Comparison

Water Year	Alternative 1	Alternatives 2-5	Alternative 6
1924	9.3	7.3	1.9
1926	2.8		
1929	3.9		
1930	15.2		
1931	25.0	10.2	10.8
1932	0.4		
1933	12.0		3.0
1934	19.4	2.9	18.6
1939	4.0		
1947	0.2	0.2	
1959	4.2		
1960	17.4		1.3
1961	24.9	9.7	21.0
1962	9.1		5.1
1964	2.2		
1968	0.2		
1976	9.1	6.5	1.1
1977	25.0	25.0	25.0
1978	66.1	29.0	33.5
1979	25.0	20.5	25.0
1981	3.3		
1987	8.2	3.8	
1988	25.0	19.2	10.9
1989	22.0	14.8	18.6
1990	23.9	16.2	23.1
1991	25.0	20.7	25.0
1992	25.0	21.8	25.0
1994	7.9	2.7	3.0
	Summary		
# Cutback Years	28	16	17
Average Cutback %	14.8	13.2	14.8
Avg. Delivery (MGD)	194	198	194

Table 3.1.2.2.3-5 Total System Storage Thresholds for Customer Cutback Implementation

Scenario	TSS Thresholds (TAF)		
Alternative 1	300	450	500
Alternatives 2-5	300	450	500
Alternative 6	300	500	550

As in the EBMUDSIM studies for Alternatives 2-5, EBMUD demand is set to 228 MGD for both the existing condition study and the future condition study. Similarly, this conservative assumption results in lower flows in the lower Mokelumne River in the existing condition study.

3.1.2.2.3.1 EBMUDSIM Interaction with CALSIM II

Interaction with CALSIM II is much simpler for Alternative 6 than for Alternatives 2-5, since EBMUD does not take delivery of CVP water. The EBMUDSIM run for Alternative 6 is executed, and the Mokelumne River "Flow into Delta" output is used as a time-series input in the corresponding Alternative 6 CALSIM II study.

3.1.3 Mokelumne Reservoirs Daily Model

While all other models described in this appendix utilized a monthly time step, a model with a finer time step was developed to refine the evaluation of Alternative 6. The Mokelumne Reservoirs Daily Model was used principally to assess how the water surface elevation in an enlarged Pardee Reservoir might vary over the course of a month, thereby potentially affecting use of the Mokelumne River as it enters the reservoir for whitewater recreation.

This model was also used to test the feasibility of enlarging EBMUD's Camanche Reservoir.

This section describes the Mokelumne Reservoirs Daily Model and it application for the FRWP environmental documentation. Additionally simulation results are described in this section.

3.1.3.1 Model Description

A daily simulation model of Camanche and Pardee reservoirs was developed to assist in evaluation of potential environmental impacts associated with water management operations of the existing and enlarged EBMUD reservoirs located on the Mokelumne River. The historic period of 1952 to 2001 was selected for the model period to allow a wide range of historical runoff and flood flow patterns to be simulated.

The spreadsheet model uses the historical inflows for a selected year to simulate the possible operations of the existing reservoirs with specified operation rules for flood control, water supply, and hydropower operations. The model can be used to understand the historical operations for a selected year, or evaluate the changes that might occur with slightly different operating conditions. The effects of different initial storage, different flood control storage and release rules, different hydropower capacity or seasonal scheduling rules, different water supply demands, or different downstream releases for fish benefits and local water supply can be simulated. Only the basic effects from enlarged Pardee Reservoir operations were simulated for this EIR/EIS document. The review of the historical operations for a sequence of years provided a solid basis for evaluating and assessing potential environmental effects associated with the enlarged Pardee surface elevation following major storm inflows and during the seasonal snowmelt inflow period that usually peaks in May and June. Potential effects on rafting opportunities and effects on vegetation from inundation were evaluated with the model. Changes in the flood control storage allocation between Camanche and enlarged Pardee Reservoir were included in the model simulations.

3.1.3.2 Modeling Assumptions

3.1.3.2.1 Historical Daily Inflow to Pardee Reservoir

Table 3.1.3.2.1-1 gives a summary of the annual and April-July runoff, as well as the peak daily inflow as measured at the Mokelumne Hill USGS stream flow gage. The effects of upstream storage on the measured flows have been removed in the "full natural" flow estimates calculated by DWR. The period of 1952 to 2001 provides a wide range of possible inflow sequences, with both major storm events and drought sequences to choose from. Model results from an average runoff year (2000) and a dry runoff year (1994) are shown as examples of the historical reservoir operations and demonstrate the ability of the daily model to match the major features of the historical reservoir operations for these two representative years.

Table 3.1.3.2.1-1 Summary of Pardee Reservoir Inflows for 1952-2001

Year	Apr-July Inflow (TAF)	Jan-Dec Inflow (TAF)	Jan-Sep Inflow (TAF)	Water Year Inflow (TAF)	Max Daily Inflow (cfs)	5-day sum Inflow (AF)
1952	817	1,268	1,150	1,275	7,350	34,960
1953	313	646	531	649	3,240	13,880
1954	231	542	433	548	2,220	9,270
1955	161	544	318	427	21,700	51,160
1956	533	1,099	973	1,200	6,850	26,000
1957	294	603	480	606	5,190	21,850
1958	610	1,022	914	1,037	6,820	29,890
1959	108	382	291	399	1,890	7,420
1960	169	403	312	403	3,880	9,545
1961	98	276	210	301	710	3,083
1962	322	628	516	582	4,060	15,560
1963	496	863	744	856	17,000	30,770
1964	131	593	314	433	22,000	65,280
1965	459	1,036	881	1,160	6,730	22,710
1966	153	467	326	481	3,580	10,210
1967	644	1,055	940	1,081	6,260	27,240
1968	132	435	321	436	1,720	7,290
1969	714	1,311	1,173	1,287	13,500	35,090
1970	342	912	754	892	9,050	28,430
1971	321	730	617	775	6,380	16,350
1972	193	497	378	492	2,330	9,710
1973	357	821	657	776	5,420	22,080
1974	447	916	821	985	5,000	22,480
1975	423	792	670	765	5,620	23,840
1976	66	186	155	277	666	3,105
1977	62	144	119	150	955	3,782
1978	480	907	808	834	5,120	24,480
1979	331	696	578	677	3,520	14,920
1980	466	1,073	968	1,086	13,600	42,450
1981	135	464	303	408	6,620	14,750
1982	784	1,563	1,317	1,477	17,700	40,980
1983	925	1,905	1,566	1,815	9,810	36,620
1984	389	895	769	1,116	4,380	19,480
1985	152	441	329	455	1,250	5,860
1986	490	1,181	1,077	1,190	22,700	85,100
1987	91	261	218	323	1,050	3,246
1988	95	228	190	233	677	2,776
1989	288	533	441	479	3,250	14,060
1990	122	316	266	359	773	3,605
1991	131	317	223	273	1,250	5,770
1992	91	286	229	324	1,030	4,003
1993	503	962	861	919	5,620	23,980
1994	89	276	200	302	813	3,447
1995	893	1,492	1,375	1,452	11,400	35,830
1996	501	1,088	864	981	18,100	44,050
1997	357	1,093	988	1,213	31,300	86,120
1998	696	1,244	1,116	1,221	7,040	29,260
1999	419	878	773	903	6,980	20,320
2000	325	726	623	728	5,310	18,620
2001	159	380	292	395	2,820	11,730

3.1.3.2.2 Camanche Reservoir Flood Control Operations

The Corps of Engineers regulations for flood control storage in Camanche Reservoir would remain the same, with a maximum of 200,000 acre-feet empty storage required from November 5 through March 15. The details of the flood control rules were extracted from the USACOE Water Control Manual (USACOE 1981). The majority of this flood control space has historically been provided in Camanche Reservoir, but more could be shifted to Pardee Reservoir once it is enlarged. The required flood control space for rainfall events can be reduced to a minimum of 130,000 acre-feet from November 5 to March 15 if the upstream PG&E reservoirs (Salt Springs and Lower Bear) have available empty storage space. The daily historical storage at Salt Springs is used in the model to approximate the available upstream storage space.

The rainfall storage space can be reduced beginning on March 15 depending on the projected snowmelt runoff and may be zero as early as May 31 if the April-July runoff forecast is very low (less than 100 TAF). However, years with high snowpack (more than 900 TAF runoff forecast from April 1 through July 31) require more flood control space to remain in Camanche or Pardee through July 31. No flood control space is required from July 31 and September 15 (Chart A-12 in Water Control Manual). The rainfall storage space reservation begins on September 15 and increases to a minimum of 130,000 acre-feet and a maximum of 200,00 acre-feet on November 5. The proper simulation of the required flood control space in Pardee and Camanche Reservoirs therefore depends on accurate records of upstream storage in Salt Springs and Lower Bear Reservoirs. Historic Salt Springs storage is available since 1932. The maximum capacity in Salt Springs is about 150,000 acre-feet, although only 52,500 af of flood control storage is transferable to the Camanche flood storage. Lower Bear has a capacity of about 50,000 af, although only 17,500 af of flood control space is transferable to the Camanche flood storage.

3.1.3.2.3 Reservoir Geometry

Camanche and Pardee geometry data is calculated from simple equations that represent the volume and surface area as a function of elevation. This geometry curve was estimated from the elevation-area-volume tables calculated from the topographic survey maps of the original reservoir. The volume is the integral of the volume, so the two equations for Camanche geometry are:

Volume (af) = 1.95 * (Elev-100) ^ 2.5

Area (acre) = 4.88 * (Elev-100) ^1.5

The spillway capacity for Camanche and Pardee reservoirs are also estimated from simple equations of elevation. The daily storage elevation and spillway capacity are directly related to the reservoir storage with these equations. Table 3.1.3.2.3-1 provides a summary of the geometry data for Camanche Reservoir and Tables 3.1.3.2.3-2 and 3.1.3.2.3-3 contain the corresponding data for the existing and enlarged Pardee Reservoir, respectively.

Table 3.1.3.2.3-1. Summary of Camanche Reservoir Geometry Data

Water Surface Elevation (feet)	Actual Reservoir Volume (af)	Model Reservoir Volume (af)	Actual Reservoir Area (acres)	Model Reservoir Area (acres)	Actual Spillway Capacity (cfs)	Model Spillway Capacity (cfs)
245					41000	43921
244						37172
243						30809
242						24858
241						19348
240	451,480	452,225	7,751	8,075	13000	14319
239	443,760	444,193	7,688	7,989	9000	9822
238	436,072	436,247	7,626	7,903	5500	5929
237	428,446	428,387	7,563	7,817	3000	2756
236	420,883	420,612	7,500	7,732	500	530
235	413,383	412,923	7,439	7,647	0	0
234	405,944	405,319	7,374	7,562		
233	398,570	397,799	7,304	7,477		
232	391,266	390,364	7,235	7,393		
231	384,031	383,012	7,168	7,309		
230	376,863	375,745	7,101	7,226		
229	369,762	368,561	7,035	7,143		
228	362,727	361,459	6,969	7,060		
227	355,758	354,441	6,905	6,977		
226	348,853	347,505	6,843	6,895		
225	342,010	340,651	6,781	6,813		
220	308,744	307,601	6,459	6,408		
215	277,111	276,554	6,123	6,012		
210	247,231	247,466	5,746	5,624		
205	219,265	220,297	5,368	5,245		
200	193,176	195,000	4,996	4,875		
195	168,979	171,531	4,609	4,514		
190	146,703	149,845	4,231	4,162		
185	126,296	129,892	3,846	3,820		
180	107,887	111,625	3,434	3,488		
175	91,528	94,992	3,023	3,166		
150	36,555	34,471	1,542	1,724		
125	8,990	6,094	663	609		
100	224	0	45	0		

Table 3.1.3.2.3-2 Summary of Existing Pardee Reservoir Geometry Data

Water Surface Elevation (feet)	Actual Reservoir Volume (af)	Model Reservoir Volume (af)	Actual Reservoir Area (acres)	Model Reservoir Area (acres)	Actual Spillway Capacity (cfs)	Model Spillway Capacity (cfs)
625		333,003		2,766		
620		319,351		2,695		
617		311,331		2,652		
614	375,000	303,440	3,500	2,609		
610		293,116		2,553		
605		280,525		2,483		
601		270,702		2,428		
600	325,000	268,281	3,175	2,415		
595		256,379		2,347		
590		244,815		2,279		
585		233,584		2,213		
580		222,684		2,147	130,000	129,413
575		212,110		2,083	56,000	59,171
570	205,000	201,857	2,500	2,019	9,000	10,464
568	198,000	197,248	2,250	1,989	0	0
565		191,923		1,955		
560		182,302		1,893		
555		172,990		1,832		
550	160,000	163,984	1,950	1,771		
545		155,278		1,711		
540		146,870		1,652		
535		138,754		1,594		
530		130,927		1,537		
525	120,000	123,383	1,600	1,481		
520		116,119		1,425		
515		109,131		1,370		
510		102,413		1,317		
505		95,962		1,264		
500	80,000	89,773	1,250	1,212		
475	35,000	41,287	650	743		
450	25,000	25,236	400	545		
425	20,000	13,815	300	373		
400	15,000	6,354	225	229		
375	10,000	2,126	150	115		
350	5,000	327	100	35		
325		0		0		

Table 3.1.3.2.3-3 Summary of Enlarged Pardee Reservoir Geometry Data

Water Surface Elevation (feet)	Model Reservoir Area (acres)	Model Reservoir Volume (af)	Model Service Spillway Capacity (cfs)	Model Spillway Capacity (cfs)
625	3,359	404,279	35,138	171,947
620	3,261	386,504	26,454	153,600
617	3,203	376,089	21,653	142,928
614	3,146	365,860	17,183	132,514
610	3,070	352,507	11,786	119,045
605	2,977	336,271	6,075	102,900
601	2,903	323,640	2,516	90,561
600	2,885	320,532	1,800	87,559
595	2,794	305,283	0	73,066
590	2,705	290,518		59,476
585	2,617	276,229		46,851
580	2,530	262,408		35,273
575	2,445	249,049		24,846
570	2,361	236,143		15,715
568	2,323	230,356		12,006
565	2,279	223,683		8,100
560	2,198	211,662		2,400
555	2,118	200,072		0
550	2,040	188,906		
545	1,963	178,156		
540	1,888	167,815		
535	1,814	157,876		
530	1,741	148,330		
525	1,670	139,171		
520	1,600	130,390		
515	1,532	121,981		
510	1,465	113,934		
505	1,399	106,244		
500	1,335	98,902		
475	1,036	67,147		
450	773	42,942		
425	547	25,308		
400	358	13,250		
375	207	5,753		
350	96	1,775		
325	26	238		
300	0	0		

3.1.3.2.4 Enlarged Pardee Reservoir

Pardee Reservoir has a maximum storage of 198,000 af at the existing spillway elevation of 567.7 feet. The spillway capacity increases as the storage elevation increases above 567.7 feet. Pardee storage must therefore be surcharged above the 198,000 af value to increase the spillway capacity. Pardee Reservoir would be enlarged with a new dam that would increase the storage at the existing spillway elevation of 567.7 feet to 230,000 af and provide a new maximum storage elevation of 614 feet with a storage capacity of 370,000 af (EBMUD 1998). Camanche Reservoir would remain unchanged with the existing storage capacity of 417,000 af at the spillway crest elevation of 235.5 feet. Camanche Dam has low-level outlets with a capacity of about 5,000 cfs that is used for flood control releases when the elevation is below the 235.5 feet spillway crest. The maximum flood protection release from Camanche is 5,000 cfs, with a 3,000 cfs maximum used to avoid downstream flooding damages. The combined storage of Camanche and Pardee Reservoirs will therefore increase from about 615 TAF to 787 TAF (172 TAF increase).

3.1.3.2.5 Water Supply Yield

Additional water supply yield from the enlarged Pardee Reservoir would be achieved from the much greater total storage that will be available in Pardee and Camanche (172 TAF more than existing). In years with a substantial snowpack, the flood control reservation is extended for longer, but the inflow will likely be sufficient to fill the reservoirs to summer capacity. Pardee will remain filled at a year-round elevation of 601 feet elevation (323,000 af), leaving 42,000 af of flood control space below the top of spillway gates at elevation 614 feet. Camanche Reservoir can be completely filled as the required flood control space is reduced to zero earlier than without the increment of flood control space provided by the enlarged Pardee. This will allow Camanche storage to be slightly higher in some moderate runoff years. These normal and above normal water years already provide sufficient water supply from the existing storage, and a water supply increment from the expanded Pardee Reservoir will not be needed. However, in years with more limited snowmelt, the additional Pardee Reservoir water supply storage of 125,000 af plus the increment of water supply storage in Camanche (maximum potential of 42,000 af) will provide the increment of water supply yield that allows an enlarged Pardee Reservoir to be a potential alternative to the Freeport diversion project.

A portion of the flood control space would transferred to the enlarged Pardee Reservoir, because the normal operating level for Pardee Reservoir will be 601 feet (leaving a flood control storage space of 42,000 af between 601 feet and 614 feet). The higher combined Camanche and Pardee storage can be drawn down further than the existing reservoirs and a water supply increment can be provided to the EBMUD aqueduct while still meeting all downstream water rights and fish flow requirements in the Joint Settlement Agreement (JSA). The daily reservoir operations model was used to demonstrate this general water supply yield during the 1976-1978 drought sequence and the 1987-1988 low runoff conditions.

Enlarging Camanche Reservoir would not have quite the same advantages as enlarging Pardee Reservoir because the water supply (taken from Pardee Reservoir) would still become limiting during a drought sequence. Only if some of the water supply could be taken from Camanche Reservoir would an enlarged Camanche Reservoir provide an alternative to the Freeport diversion project.

3.1.3.3 Application of Daily Reservoir Operations Model

The daily simulation model for Pardee and Camanche reservoirs was developed to evaluate the potential environmental effects from factors associated with alternative operations of EBMUD's Pardee and Camanche reservoirs. One potential impact of enlarging Pardee Reservoir would be reduced recreational rafting opportunities in the Mokelumne River upstream from the reservoir. Maintaining the water surface elevation in an enlarged Pardee Reservoir above elevation 601 feet during the snowmelt runoff period would restrict rafting in the river reach between Electra powerhouse and the Highway 49 bridge. The daily model was used to investigate the potential operations of Pardee and Camanche reservoirs that would allow storage in an enlarged Pardee Reservoir to be lowered to less than 601 feet by the end of May or June to provide full rafting opportunities between Electra and Highway 49. This may be a difficult target to achieve in years with substantial snowmelt runoff if only hydropower releases are used to lower the Pardee reservoir level. However this will be easy to achieve if the service spillway is used in addition to the hydropower releases from an enlarged Pardee Reservoir.

The model used historical Pardee inflow to simulate operations of Pardee and Camanche reservoirs with:

(1) existing Corps of Engineers flood control regulations with historic Salt Springs storage adjustments,

(2) current Camanche Reservoir releases for fish requirements (Joint Settlement Agreement) and downstream water users,

(3) future anticipated EBMUD average water supply demands of 228 mgd (350 cfs or 255 TAF),

(4) specified Pardee Reservoir target elevation of 601 feet that maintains some of the required flood control space in Pardee Reservoir and provides storage for peak snowmelt runoff, and

(5) existing hydropower release capacity at Pardee (1500 cfs) and Camanche (1250 cfs).

The modeling began with a simulation of the existing reservoirs (with comparison to historical operations) to verify that the model functions properly. Next an expanded Pardee Reservoir alternative was simulated for a selected years between 1952 and 2001. Two example years will be shown to illustrate the model capabilities. Calendar year 2000 was very close to average runoff for the entire year (742 TAF, 105% of average) and for the April to July snowmelt period (442 TAF, 98% of average). Calendar year 1994 was a dry year with only 190 TAF April-July runoff (42% of average) and 270 TAF calendar year runoff (38% of average). The April-July Pardee inflow is generally less than the natural runoff because of upstream storage in Salt Springs and Lower Bear Reservoirs.

3.1.3.4 Simulation Results

3.1.3.4.1 Average Runoff Results (Year 2000)

Figure 3.1.3.4.1-1 shows the calendar year 2000 historical inflow to Pardee Reservoir measured at the USGS gage at Mokelumne Hill (Highway 49 Bridge) and compared to the full natural runoff that is calculated to remove the influence of upstream storage and diversions. Considerable runoff in April and early May was stored in Salt Springs and Lower Bear

Reservoirs, but inflow to Pardee peaked at 4,000 cfs in late May and declined to 1,000 cfs by the middle of June.

Figure 3.1.3.4.1-2 shows the range of monthly average inflow for the 1952-2001 period. The median inflow for May and June is about 1,850 cfs. Inflows of greater than the May and June median will cause Pardee Reservoir storage to increase because the existing outflow capacity for EBMUD diversions and hydropower releases is about 1,600 cfs.

The maximum Pardee power release is specified as 1,250 cfs with a head of about 325 feet. The EBMUD aqueduct diversion is specified as monthly values of about 350 cfs. Releases higher than this combined total of 1,600 cfs are assumed to be made only when the existing spillway elevation of 567.7 feet or the enlarged Pardee target water supply elevation of 601 feet is exceeded. The simulated target storage elevation for the existing Pardee Reservoir was assumed to be 550 feet from November 1until March 15, and to rise to 565 feet from April 15 through October 1.

The power releases increase to the combined turbine capacity of 1,250 cfs as the water surface elevation rises above the target, and the outflow can then increase to the existing Pardee Reservoir low-level outlets combined capacity of about 3,300 cfs. As the water surface exceeds the spillway elevation even with full power and outlets open, the outflow will increase with the spillway capacity. The existing spillway capacity is about 3,000 cfs with a 1-foot head (elevation 568.7 feet) and is about 8,500 cfs with a 2-foot head.

The target storage elevation for the enlarged Pardee Reservoir was assumed to be 590 feet year-round. This provides storage for peak runoff and helps maintain the storage elevation below 601 feet to preserve rafting opportunities during the early summer. The enlarged Pardee Reservoir power release is assumed to be 1,200 cfs, representing flow through 2-15 MW turbine-generators with a head of about 350 feet. The proposed service spillway gate will have a crest elevation of 596 feet, and have a capacity of 2,500 cfs at an elevation of 601 feet. This service spillway takes the place of the low-level outlets in the existing Pardee dam, and will help maintain the 601 feet target elevation during the whitewater recreation season in the early summer (end of snowmelt runoff). The combined outflow capacity at elevation 601 will therefore be about 3,700 cfs.

Figures 3.1.3.4.1-3 indicates that the daily model reproduces many of the features of the historical Pardee Reservoir operations for year 2000. The historical Pardee Reservoir storage was maintained higher than the model target during the winter months, but the power releases and spillway releases were very similar (Figure 3.1.3.4.1-4). Figure 3.1.3.4.1-5 indicates that the calculated Camanche Reservoir flood control storage was very similar to the official Corps of Engineers values (from CDEC). The historical Camanche Reservoir storage was maintained below the flood control level throughout the summer. The simulated Camanche Reservoir storage followed the flood control curve and was about 50 TAF higher than the historical storage during the summer. The simulated storage decreased following the flood control curve starting on September 15 and so the simulated Camanche Reservoir releases were higher than historical during the fall draw-down period.

Figure 3.1.3.4.1-1 Historical Range of Monthly Pardee Reservoir Inflow (cfs)

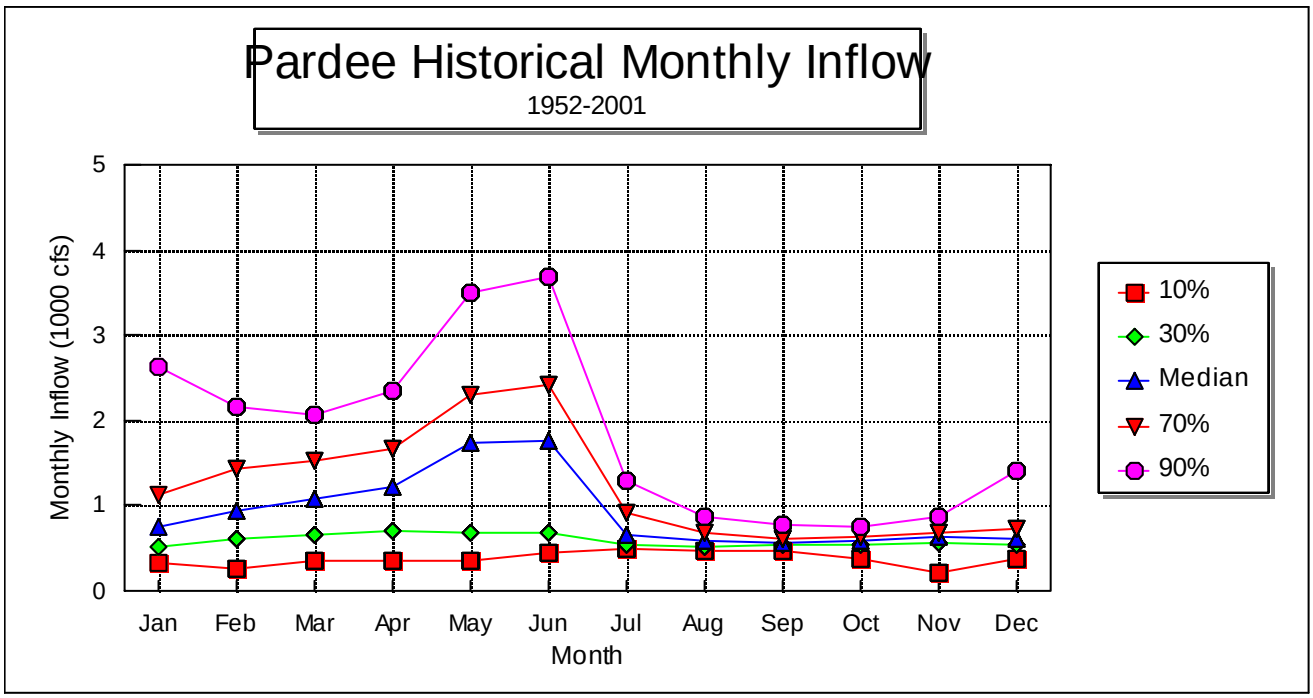


Figure 3.1.3.4.1-2 Pardee Reservoir Inflow for 2000

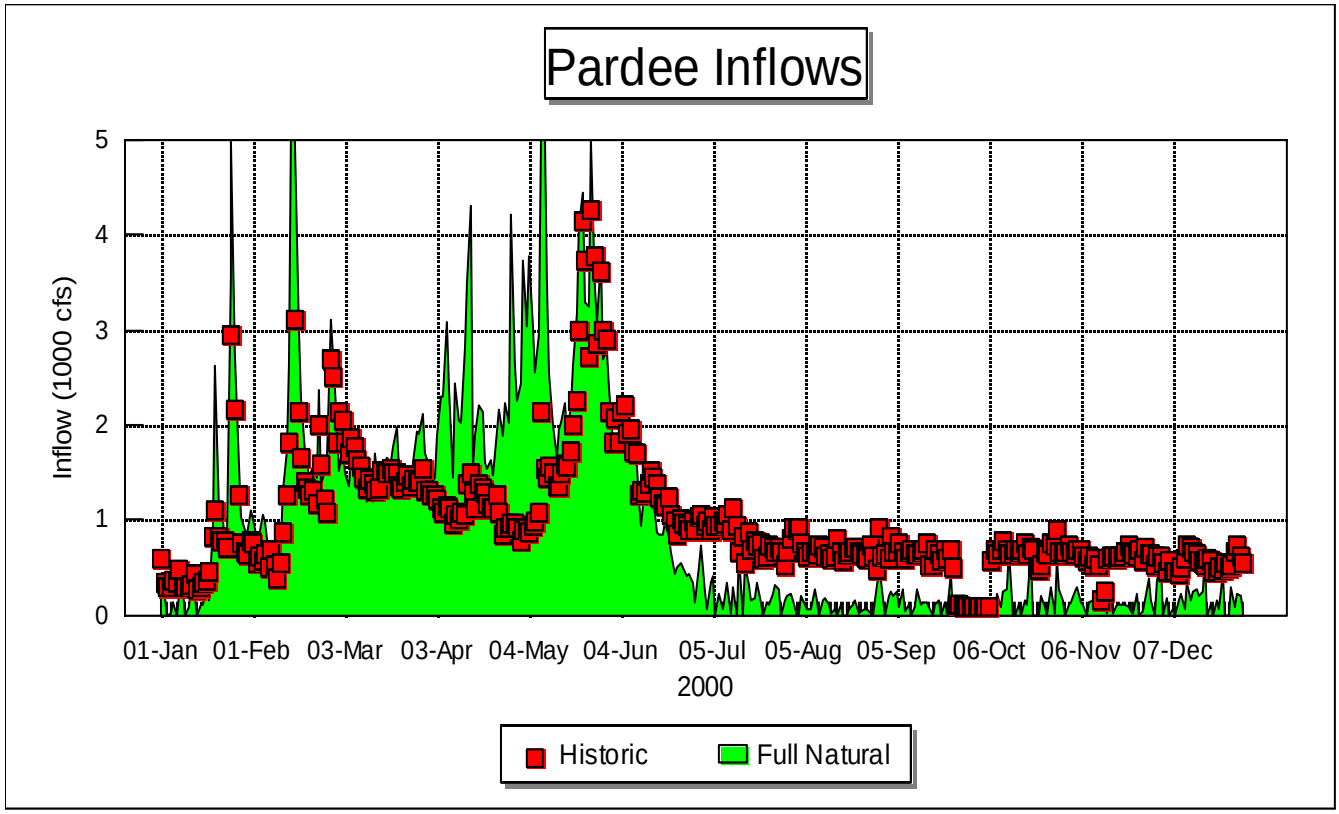
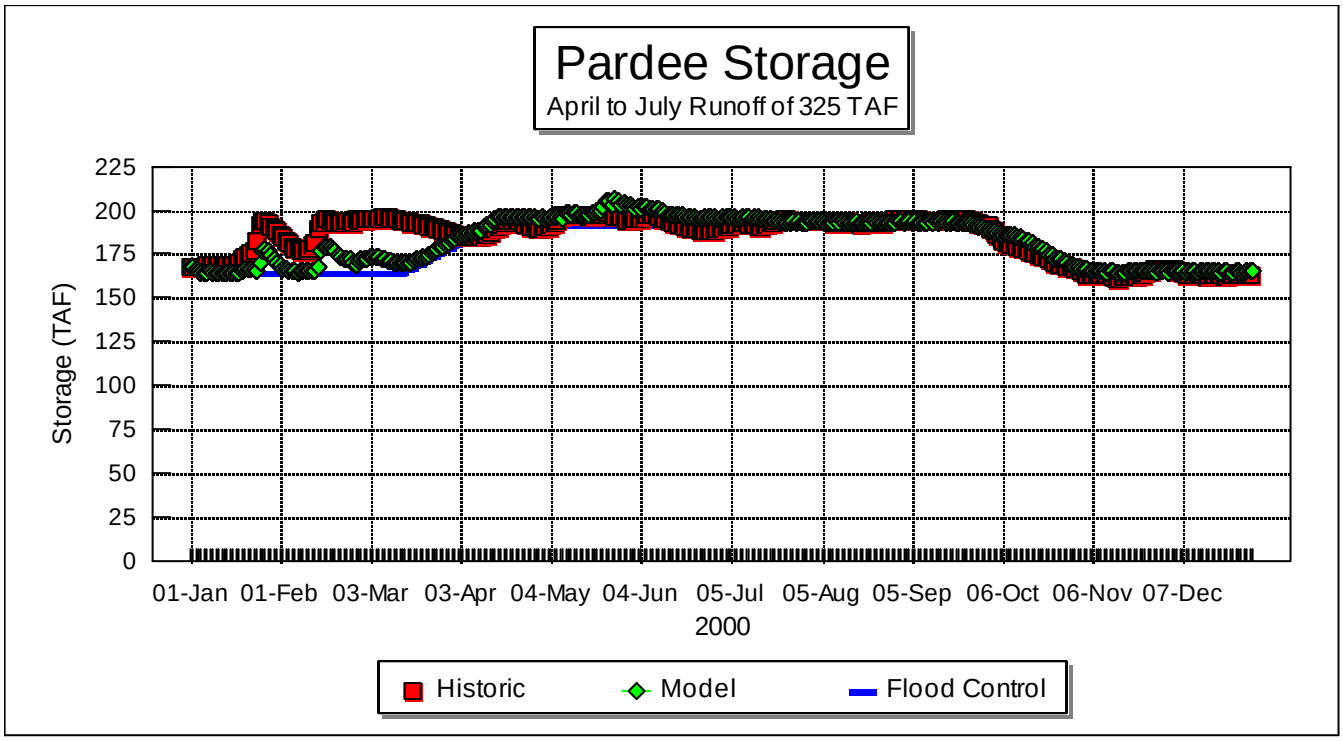


Figure 3.1.3.4.1-6 compares the simulated enlarged Pardee with the simulated existing Pardee for the year 2000 inflows. The initial enlarged Pardee Reservoir storage was assumed to be 100 TAF higher with the enlarged Pardee Reservoir. The high runoff in early June caused the storage to rise from 590 feet to about 601 feet for a two-week period. Full rafting opportunities from Electra to Highway 49 were therefore provided with this average runoff year simulation of enlarged Pardee Reservoir.

Figure 3.1.3.4.1-7 shows that although the flood control level in Camanche Reservoir was raised because of the enlarged Pardee Reservoir flood control storage space, Camanche Reservoir storage was at maximum capacity in the early summer for both simulated cases. Camanche Reservoir storage was slightly higher than the existing simulation because more of the required flood control storage space was provided in the enlarged Pardee Reservoir. Figure 7 indicates that the Camanche Reservoir releases were shifted slightly with the enlarged Pardee Reservoir simulation, but both cases included power releases and flood control releases above the minimum required downstream flows (JSA). Releases in October to provide flood control storage space were greater for the existing Pardee simulation.

Figure 3.1.3.4.1-3 Simulated Pardee Reservoir Storage and Elevation for 2000



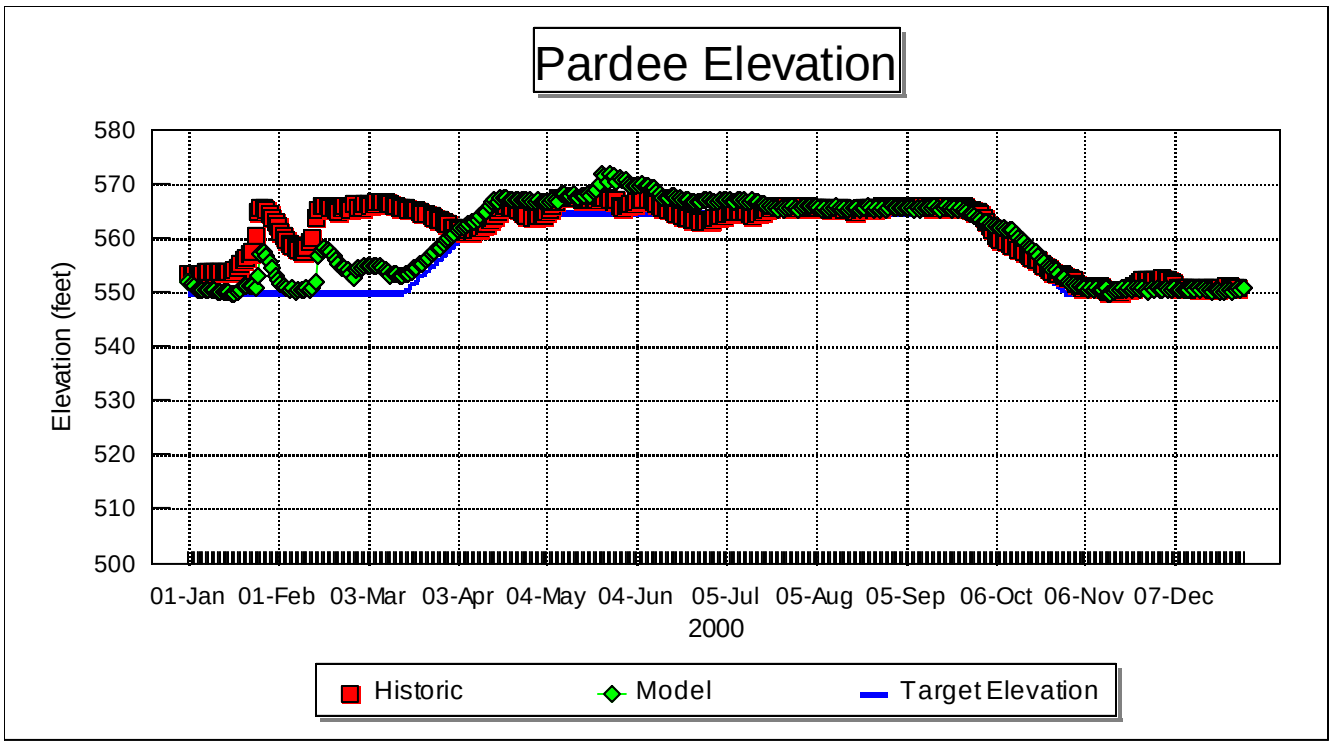


Figure 3.1.3.4.1-4 Simulated EBMUD Diversions and Pardee Reservoir Releases for 2000

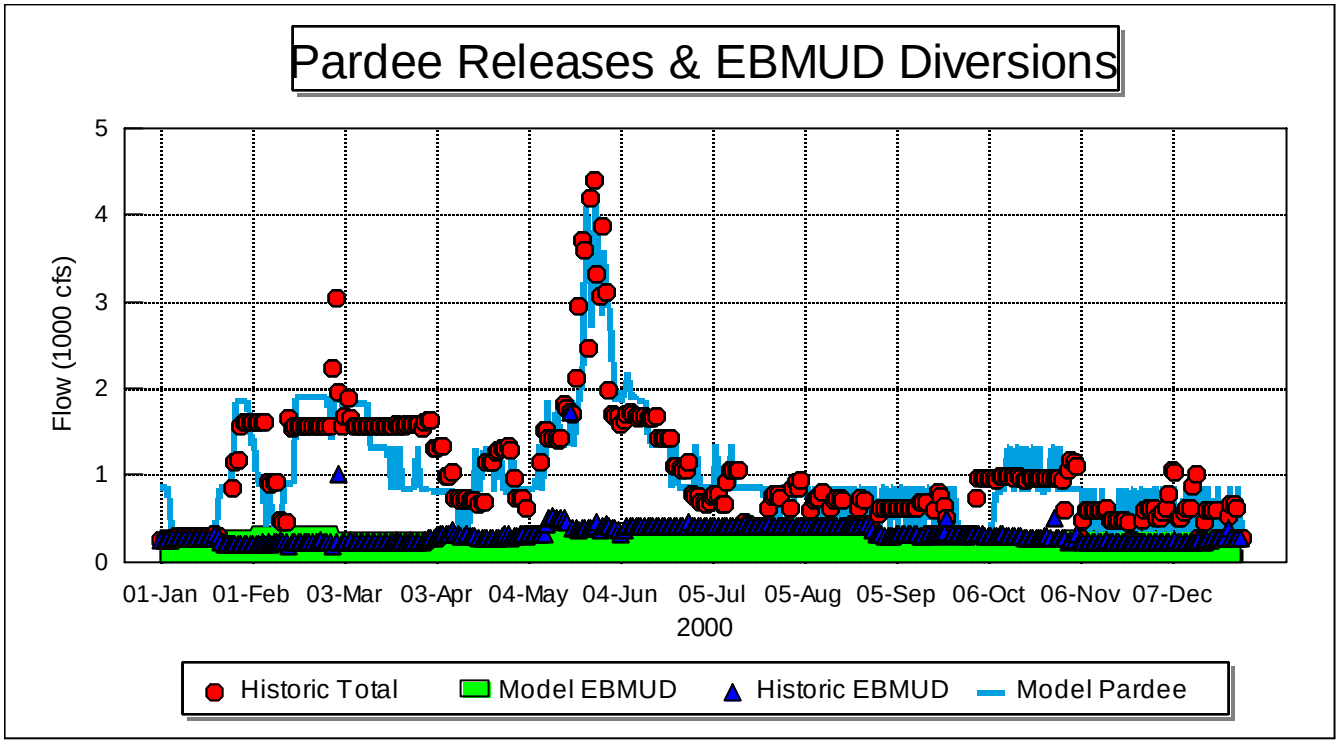
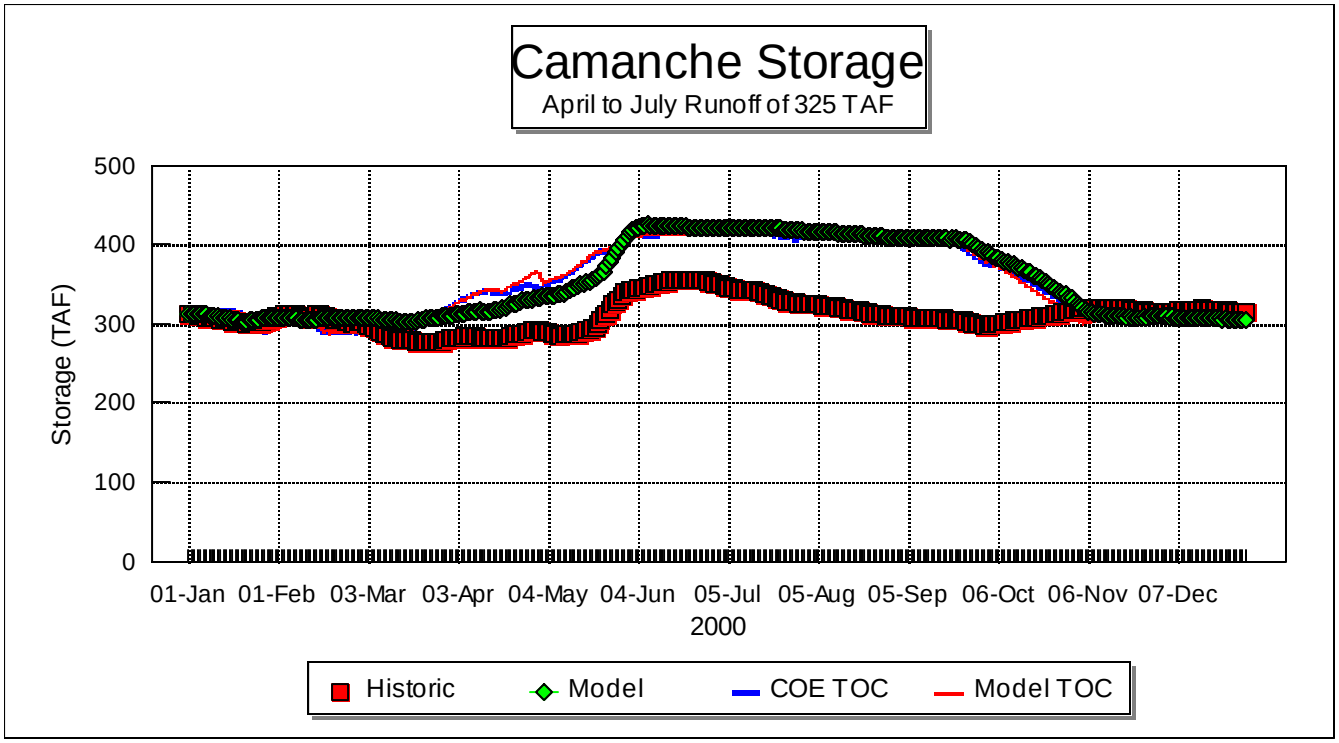


Figure 3.1.3.4.1-5 Simulated Camanche Reservoir Storage and Elevation for 2000



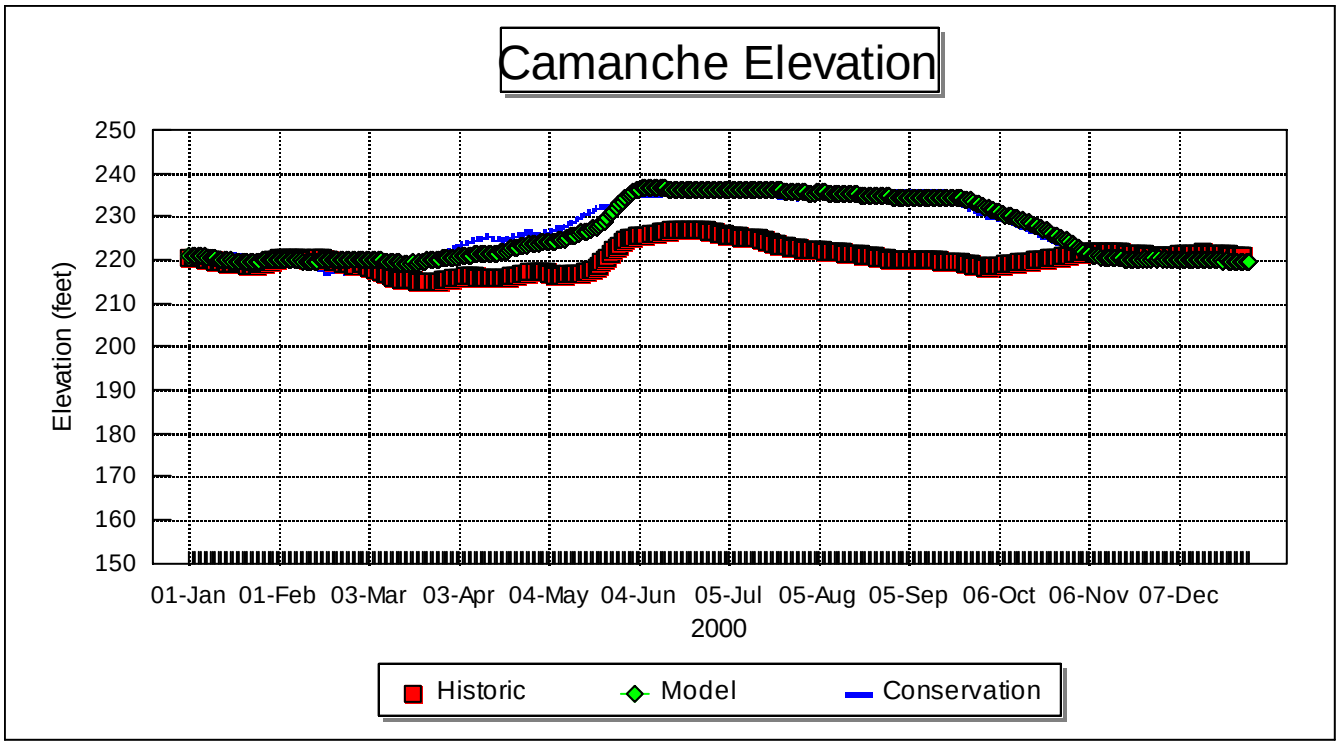
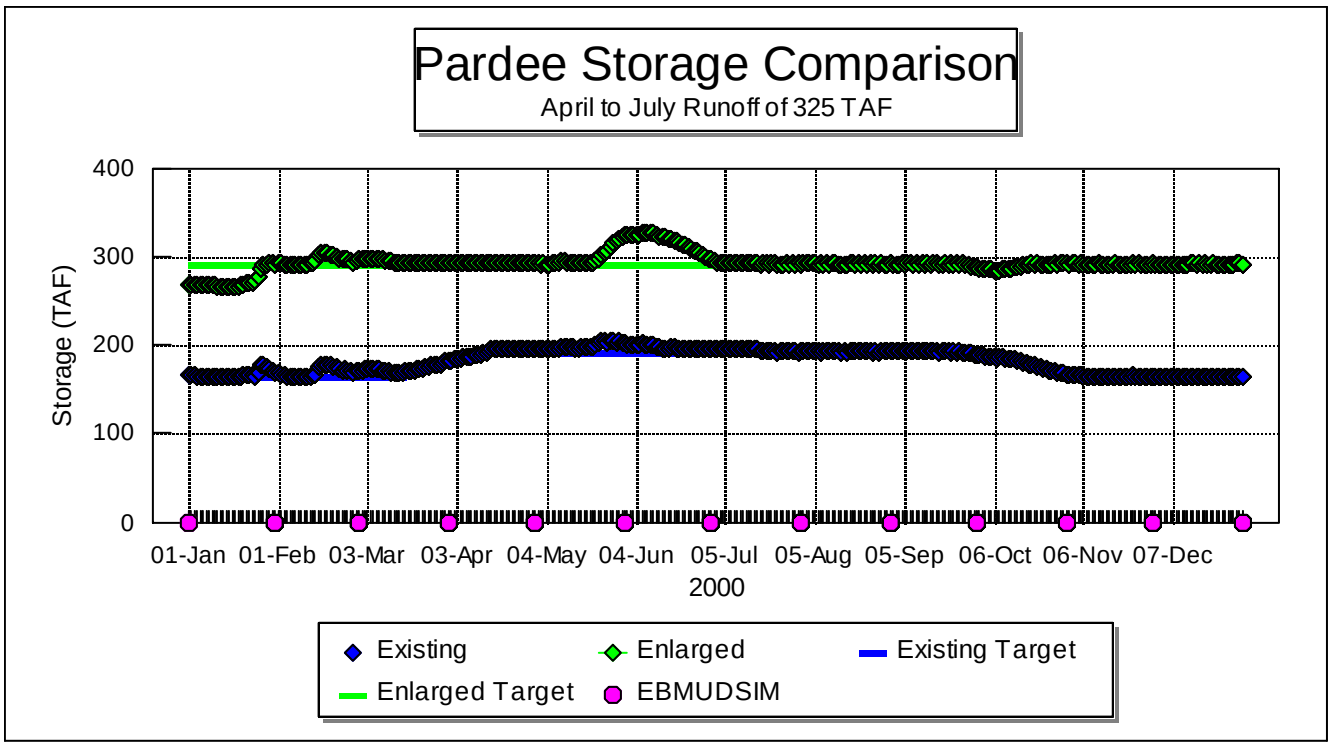


Figure 3.1.3.4.1-6 Comparison of Enlarged Pardee Reservoir Storage and Elevation for 2000



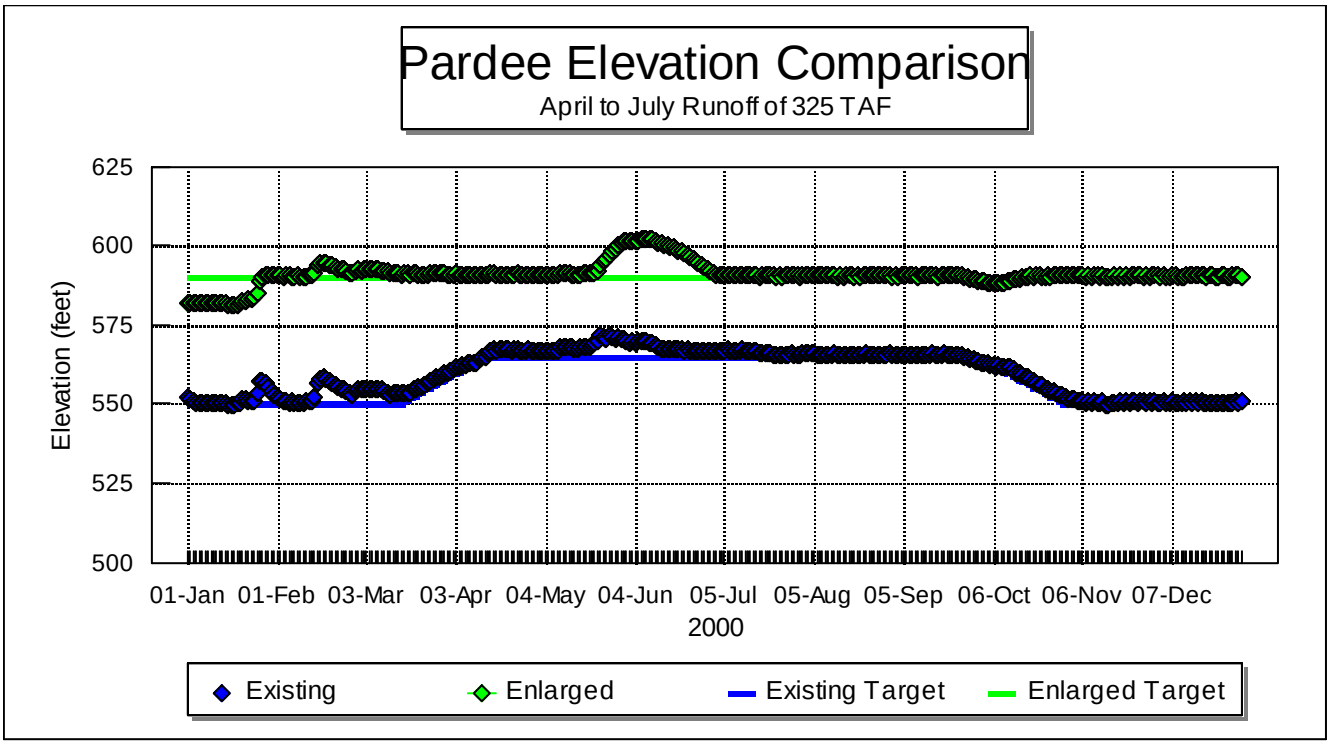
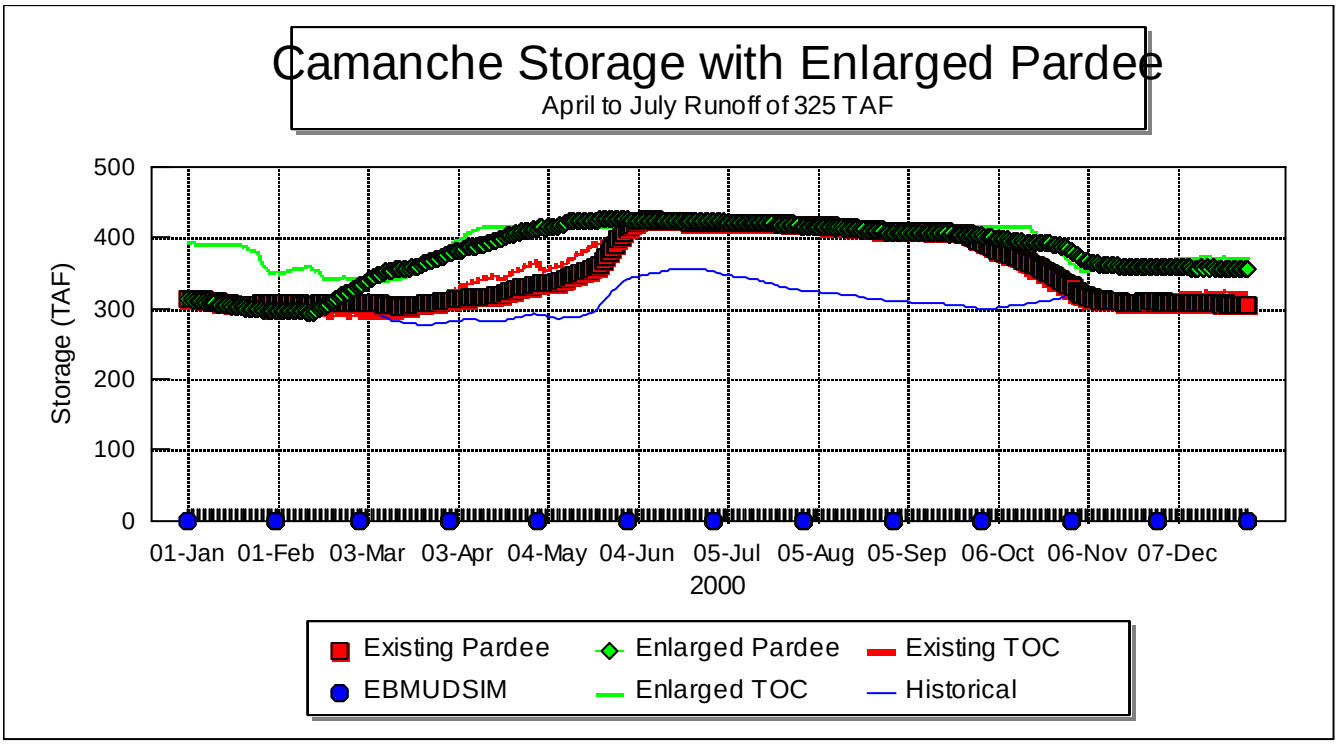


Figure 3.1.3.4.1-7 Comparison of Simulated Camanche Storage and Releases for Existing Pardee and Enlarged Pardee for 2000



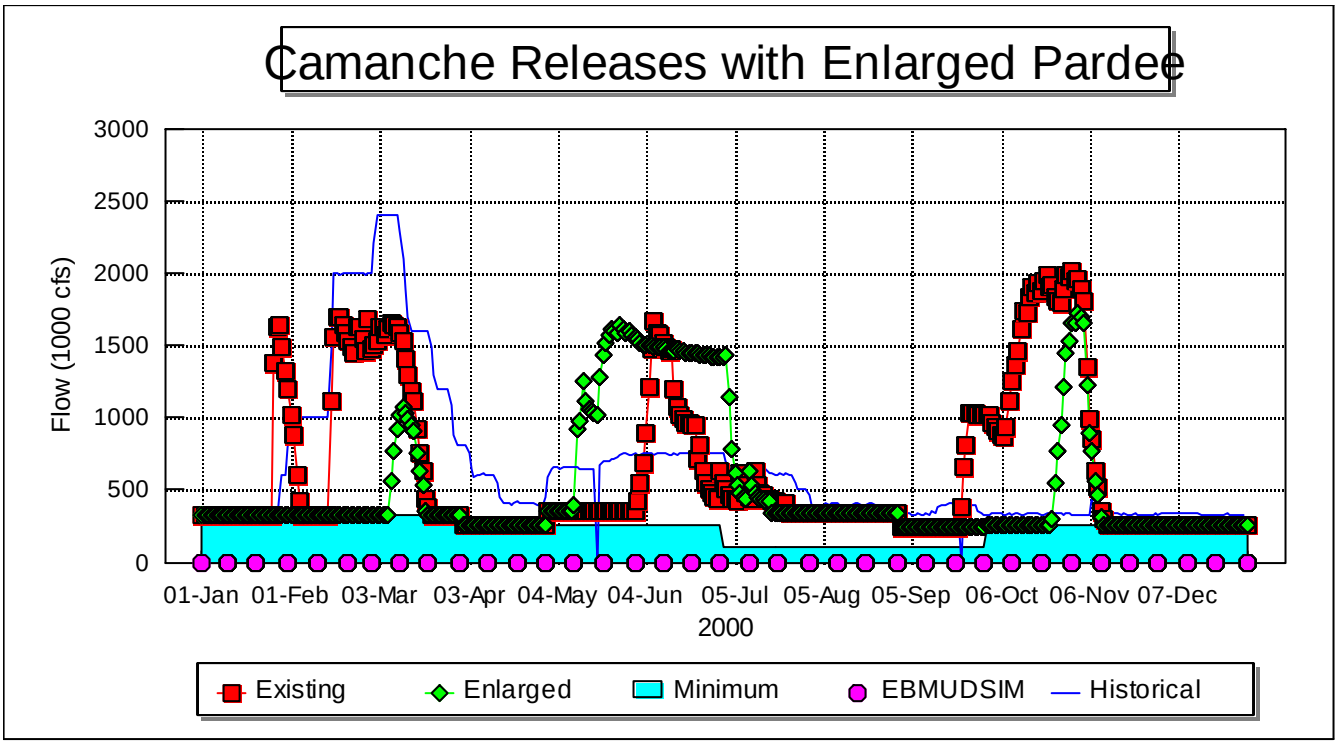
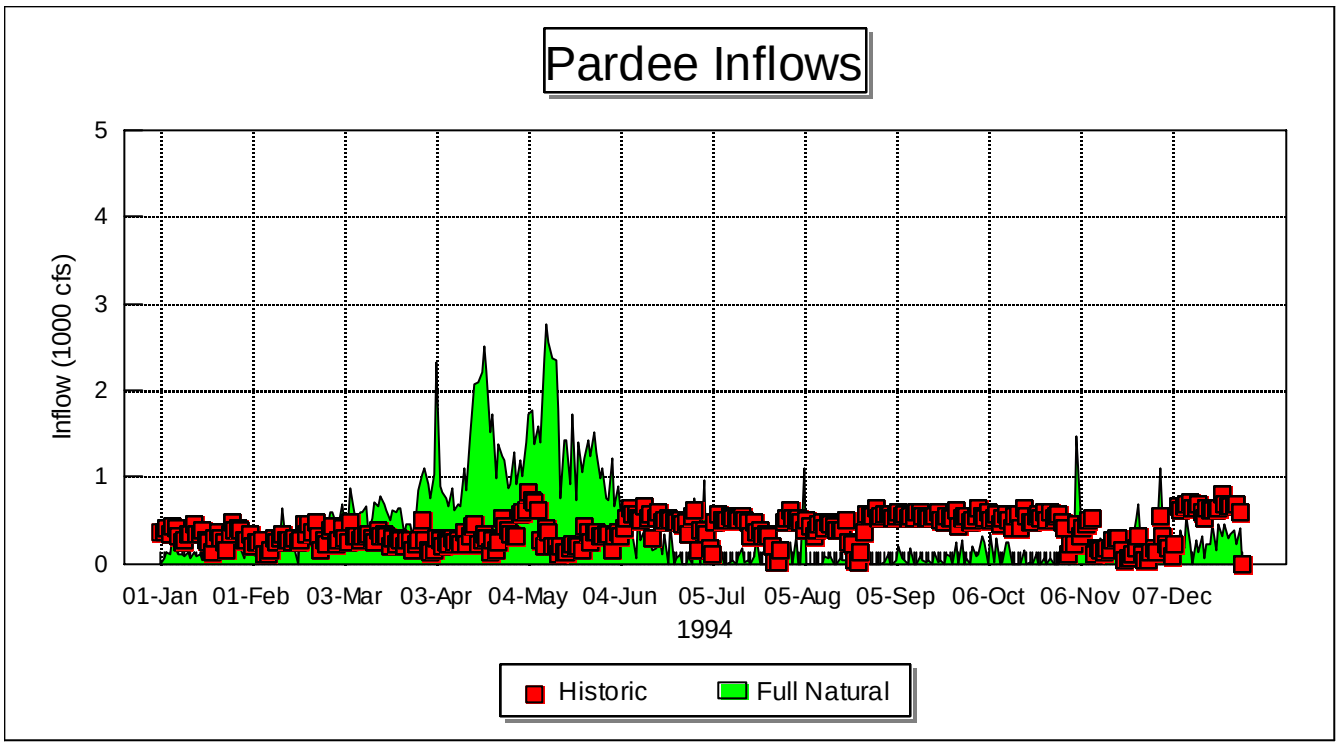
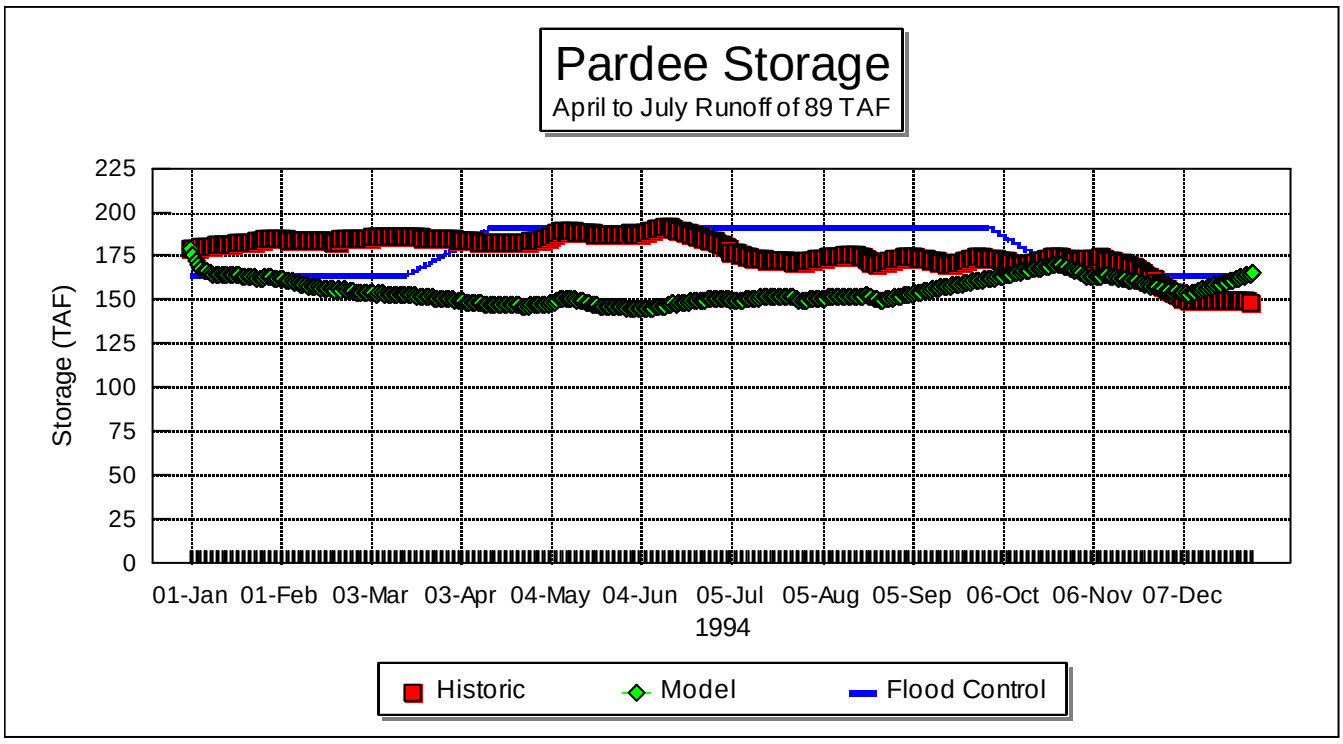


Figure 3.1.3.4.2-1 Pardee Inflow and Simulated Exisiting Pardee Storage for 1994





3.1.3.4.2 Dry Runoff Results (Year 1994)

Figure 3.1.3.4.2-1 shows calendar year 1994 inflows to Pardee Reservoir and simulated and historical Pardee Reservoir storage. The annual inflow was only 276 TAF and the April-July inflow was only 90 TAF. Inflow was about 500 cfs throughout the summer period. The Pardee Reservoir storage was relatively constant in 1994 with the inflows just supplying the EBMUD diversions and evaporation. The simulated Pardee Reservoir storage was lower because the assumed target storage was lower in the winter. The snowmelt runoff was not large enough to fill the upstream PG&E reservoirs and produce an inflow of greater than the EBMUD simulated water supply diversions, so the Pardee Reservoir storage did not increase in May or June.

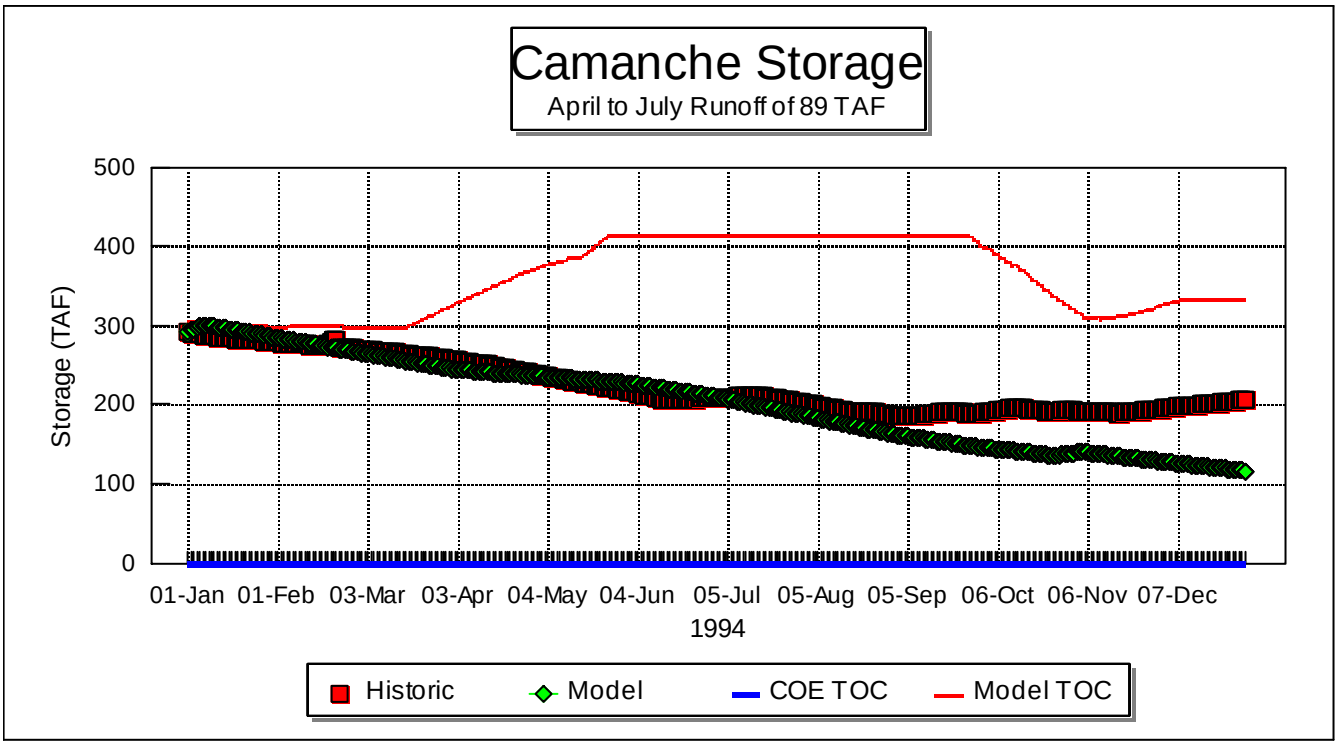
Figure 3.1.3.4.2-2 shows the simulated Camanche Reservoir storage and releases for 1994. The comparison with historical operations suggests that the daily model is reproducing the major Camanche Reservoir operations for 1994. The simulated storage decreased more than historical in the fall because of higher simulated releases in August and September, and lower simulated releases from Pardee Reservoir in December. Simulated releases in the winter were higher than historical because the previous year storage was above normal, requiring a release of 325 cfs from January through March, under the terms of the JSA fish flows.

Figure 3.1.3.4.2-3 shows the comparison of simulated elevation and storage for the existing Pardee and the enlarged Pardee for 1994. The initial storage is the historical 1994 value for the existing Pardee simulation and is assumed to be 100 TAF more for the enlarged Pardee simulation. Simulated enlarged Pardee Reservoir storage slowly dips during the summer to satisfy the EBMUD diversions and evaporation, and then refills slightly in the fall. The monthly simulation of the enlarged Pardee storage from the EBMUDSIM model (Case 6314) for 1994 starts a little higher than the daily model, with a target elevation of 601 (storage of 323 TAF), but follows the same nearly constant pattern throughout the year. Full rafting opportunities (with a flow of about 500 cfs) were provided for the entire summer period of 1994.

Figure 3.1.3.4.2-4 shows the simulated Camanche storage and releases for the existing and enlarged Pardee cases. Camanche releases were the same, but the storage declined slightly more for the enlarged Pardee because releases from Pardee Reservoir were slightly less in the fall (no flood control drawdown simulated for the enlarged Pardee). The monthly EBMUDSIM model results were similar for the enlarged Pardee case for 1994. The ability to compare the daily model results with the EBMUDSIM results for a selected year provides increased confidence in the long-term results from the monthly model.

Additional simulations assuming an enlarged Pardee Reservoir target elevation of 601 feet with operation of the service spillway in addition to the hydropower releases indicates that the rafting season can be fully protected. The enlarged Pardee Reservoir elevation can be maintained at 601 feet whenever the inflow is less than the assumed maximum raftable flow of 3,000 cfs. The service spillway capacity is designed to be 2,500 cfs at elevation 601, and the EBMUD diversions of about 300 cfs and the hydropower releases of 1,200 cfs will allow any elevation surcharge above 601 feet to be quickly reduced.

Figure 3.1.3.4.2-2 Simulated and Historic Camanche Reservoir Storage and Release for 1994



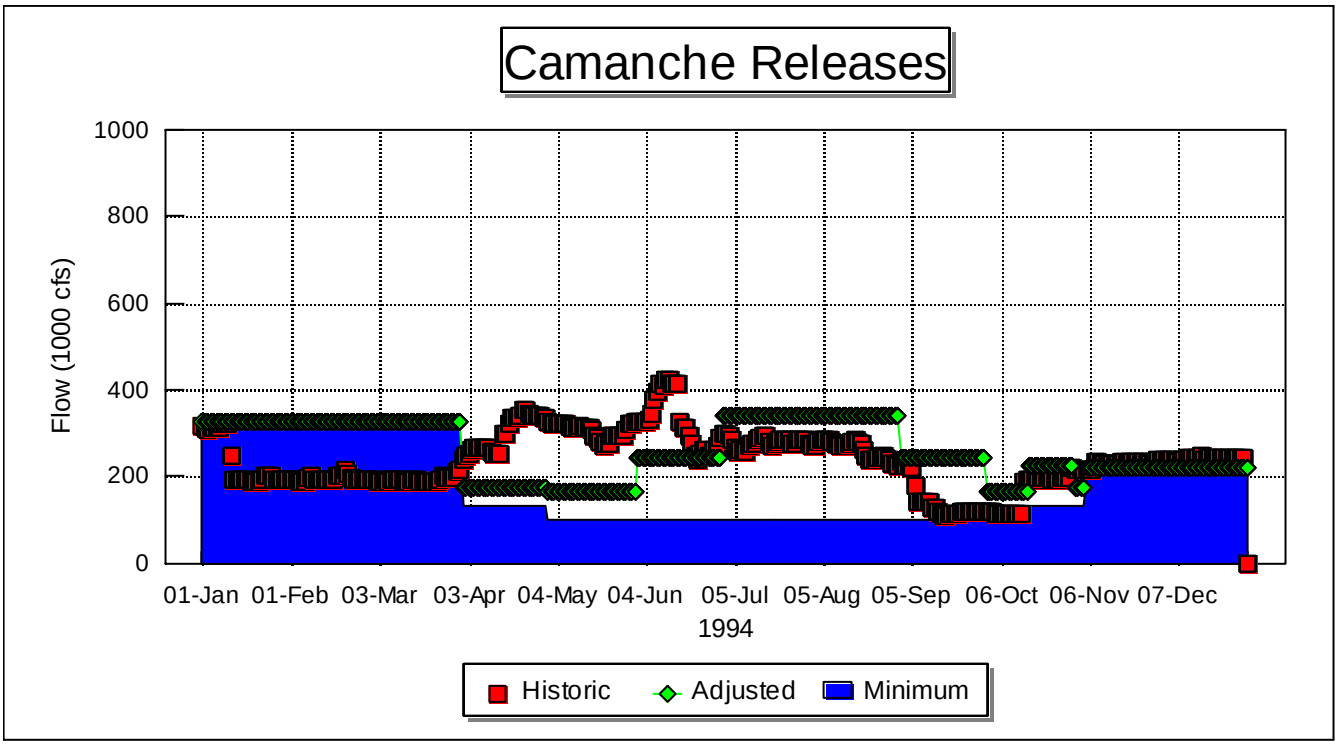
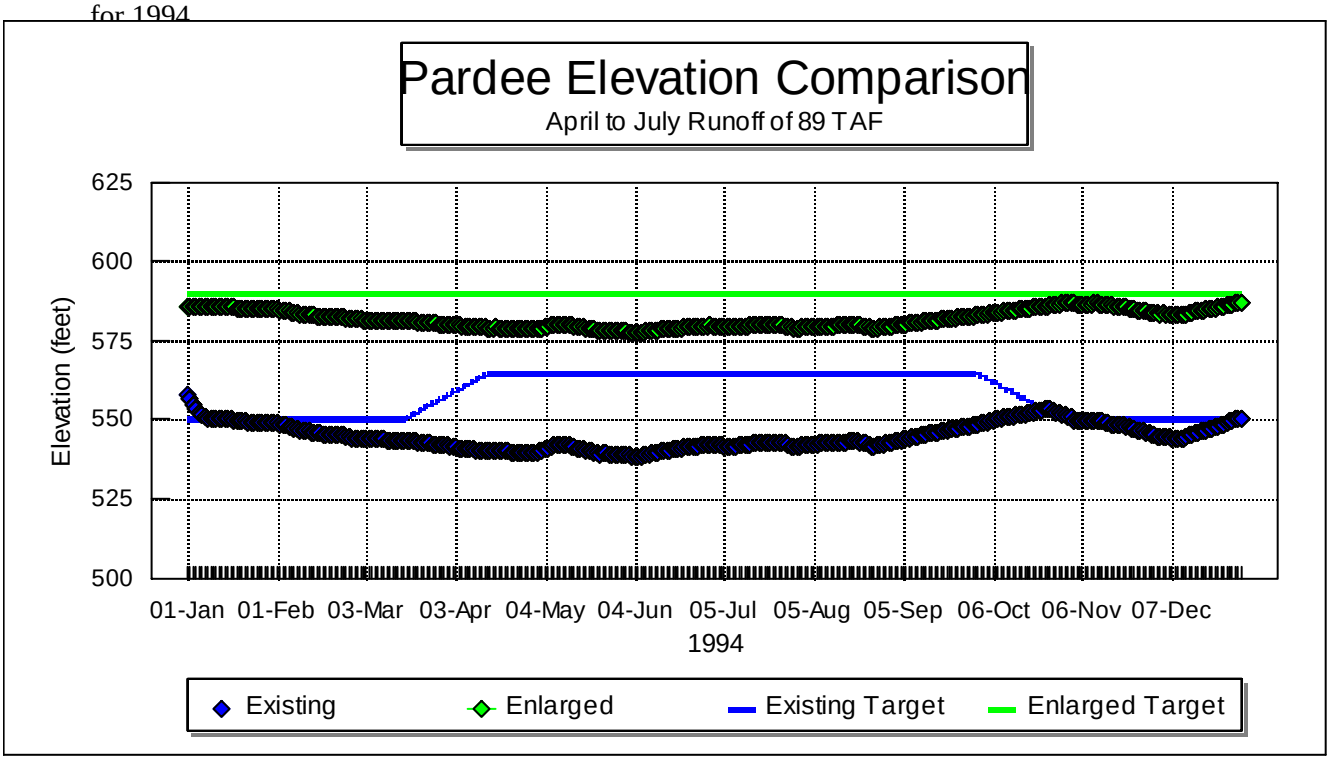


Figure 3.1.3.4.2-3 Comparison of Simulated Existing and Enlarged Pardee Elevation and Storage for 1994



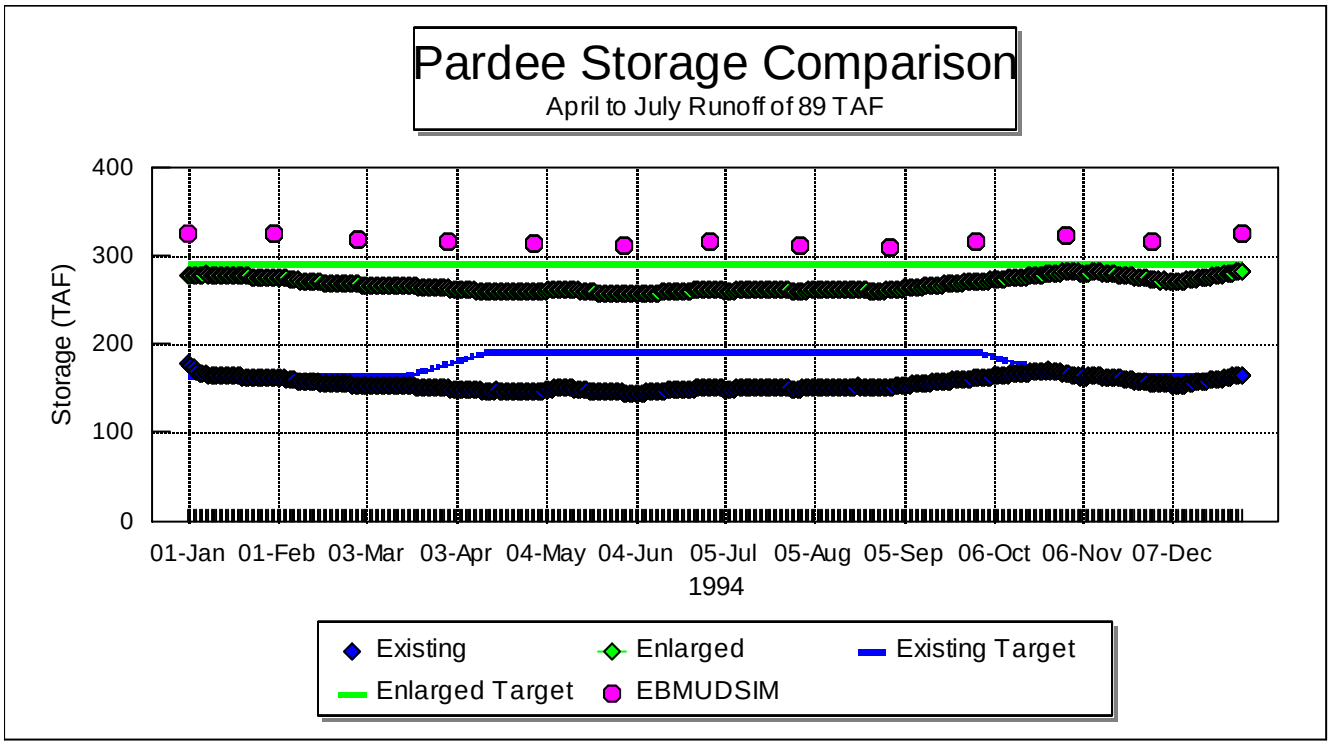
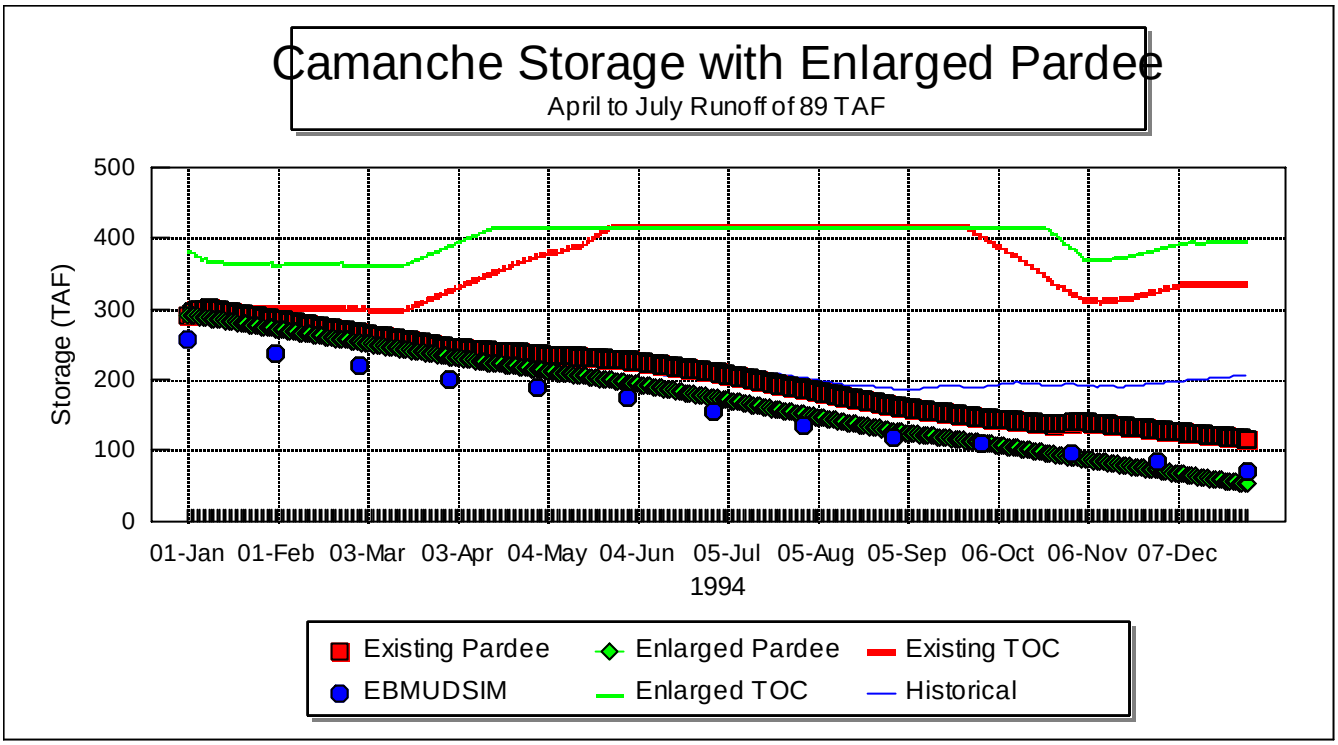
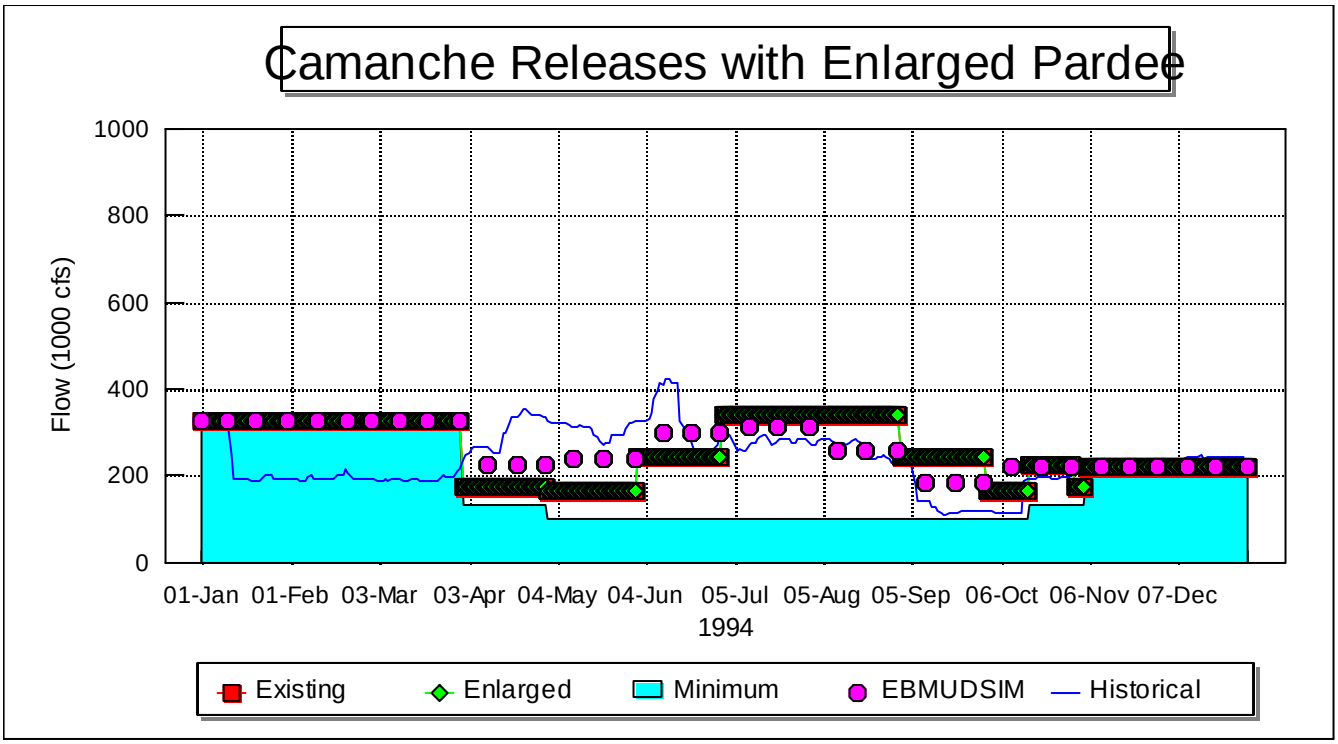


Figure 3.1.3.4.2-4. Simulated Camanche Storage and Releases for Existing Pardee and Enlarged Pardee for 1994





3.1.3.4.3 Conclusions

These example results from 1994 and 2000 illustrate the daily model capability to accurately simulate effects from an enlarged Pardee Reservoir. The daily model can be used to review historical operations and simulate recent year of operations (1996-2002) that are not yet included in the monthly EBMUDSIM model. The operational rules that are assumed for these initial simulations appear to match the EBMUDSIM monthly model results

A simulation of operations was prepared to evaluate potential effects of the enlarged Pardee on rafting opportunities. The results of this simulation are shown in tables 3.1.3.4.3 - 1 and indicate that there are some days where reservoir elevations exceed 601 feet but do not exceed 603 feet. These results were also used to evaluate potential effects on vegetation.

3.1.3.5 References

US Army Corps of Engineers, Sacramento District 1981. Camanche Dam and Reservoir Mokelumne River, California Water Control Manual

EBMUD 1996. Joint Settlement Agreement for Lower Mokelumne River Project.

EBMUD 1998. Pardee Reservoir Enlargement Project Preliminary Design Report. Volume 4. Conceptual Design Report. Prepared by HCG.

Table 3.1.3.4.3-1. Potential Effects of Enlarged Pardee on Rafting Opportunities

Baseline Rafting Days (Daily average flow between 500 cfs and 3,000 cfs)

Year	April	May	June	July	August	September
1980	30	26	18	28	28	28
1981	22	19	23	19	12	22
1982	7	0	18	31	31	29
1983	27	18	0	16	31	30
1984	30	20	27	31	31	29
1985	30	16	13	18	24	25
1986	30	14	27	29	29	27
1987	6	2	6	18	22	14
1988	5	7	10	11	6	2
1989	30	29	27	30	23	22
1990	8	20	25	26	22	16
1991	11	12	25	25	14	18
1992	5	0	5	20	13	0
1993	30	17	14	25	30	18
1994	1	7	14	7	9	27
1995	22	9	0	19	29	25
1996	30	19	24	28	28	21
1997	30	23	29	28	29	28
1998	30	26	2	21	31	29
1999	30	29	19	31	28	29
2000	30	24	30	31	30	24
2001	29	13	21	26	21	7
2002	25	14	28	6	4	9

Lost Rafting Days from inundation above elevation 603'

Year	April	May	June	July	August	September
1980	0	0	0	0	0	0
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	0	0	0	0	0	0
1984	0	0	0	0	0	0
1985	0	0	0	0	0	0
1986	0	0	0	0	0	0
1987	0	0	0	0	0	0
1988	0	0	0	0	0	0
1989	0	0	0	0	0	0
1990	0	0	0	0	0	0
1991	0	0	0	0	0	0
1992	0	0	0	0	0	0
1993	0	0	0	0	0	0
1994	0	0	0	0	0	0
1995	0	0	0	0	0	0
1996	0	0	0	0	0	0
1997	0	0	0	0	0	0
1998	0	0	0	0	0	0
1999	0	0	0	0	0	0
2000	0	0	0	0	0	0
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0

Lost Rafting Days from inundation above elevation 601'

Year	April	May	June	July	August	September
1980	0	5	11	2	0	0
1981	0	0	0	0	0	0
1982	7	0	16	1	0	0
1983	13	17	0	5	0	0
1984	0	0	5	0	0	0
1985	0	0	0	0	0	0
1986	10	7	10	0	0	0
1987	0	0	0	0	0	0
1988	0	0	0	0	0	0
1989	0	2	0	0	0	0
1990	0	0	0	0	0	0
1991	0	0	0	0	0	0
1992	0	0	0	0	0	0
1993	1	5	9	0	0	0
1994	0	0	0	0	0	0
1995	13	9	0	6	0	0
1996	4	11	5	0	0	0
1997	2	7	2	0	0	0
1998	9	25	2	2	0	0
1999	0	8	10	0	0	0
2000	0	4	0	0	0	0
2001	0	2	0	0	0	0
2002	0	0	0	0	0	0

3.1.4 SCWA Water Allocation Model

The schedule of surface water diversions for Sacramento County Water Agency (SCWA) was determined using a computer model of SCWA's water system operations. The model was run for the Alternatives 2-5 and Alternative 6 modeling scenarios and for the scenarios evaluated in the Groundwater Storage appendix. The results of the SCWA operations modeling were used as input for the CALSIM II modeling.

3.1.4.1 Model Description

A computerized operations model was developed for SCWA's Zone 40 that compares available surface water and ground water supplies with demand and capacity on an hourly basis, and assigns water supplies to accommodate the demands. The model allows for the management of surface and ground water by balancing the two within existing and proposed institutional and physical constraints. The model takes into account:

- The institutional constraint that only an average of 40,900 AF of groundwater is available from the Central Sacramento Ground Water Basin on a long term average basis for use by SCWA.
- The institutional constraint that Public Law 101-514 ("Fazio water") requires SCWA to utilize to the extent practicable other water supplies before utilizing Fazio water.
- The physical constraint of the maximum capacity of 85 million gallons per day in the Freeport facilities for the SCWA
- The simulated physical constraints of hydrology.

In the model, surface water is balanced with ground water such that SCWA does not exceed an average of 40,900 acre feet per year over the simulated 72 years of historical hydrology. The model allows the user to set priorities for each source of surface water supply. As discussed elsewhere in this document, the sources of surface water are the CVP contract supplies (collectively known as the Fazio water and the SMUD assignment), appropriated water, and "other" water.

The combination of surface water diversion, treatment, and groundwater production capacity are used to meet the maximum day demands for the SCWA. Storage in the distribution system provides for peak hour demands. For each hourly demand increment, the model simulates the availability of surface water supplies based on historical hydrologic conditions utilized in the CALSIM II modeling, keeping the demands and facility capacities constant.

3.1.4.2 Assumptions

3.1.4.2.1 SCWA Demand

SCWA's potable water demand was assumed to be 109.5 TAF/yr in all years, reflecting build-out demand in Zone 40. This demand is to be met by a mixture of surface and groundwater supplies. The SCWA model takes into consideration both seasonal and diurnal variations in demand. In addition, the model adjusts demands to account for a guaranteed dry-year supply to SMUD[1].

[1] The SMUD CVP assigmemt to SCWA requires that up to 10 TAF/yr of Zone 40 water will be transferred to SMUD in the dry years.

3.1.4.2.2 Surface Water Facilities

Surface water treatment and delivery to Zone 40 is comprised of up to 11 MGD of the City of Sacramento's Sacramento River Water Treatment Plant intake and treatment capacity and the 85-MGD-capacity SCWA Water Treatment Plant (WTP). It was assumed that SCWA WTP capacity is reduced by 20 percent during the wet months of wet years, to accommodate for high turbidity in the Sacramento River and scheduled maintenance. SCWA's diversion capacity at the Freeport intake is 85 MGD.

3.1.4.2.3 Groundwater Facilities

Groundwater extraction capacity is assumed to be sized sufficient to provide some redundancy during maximum day demands in the event that little or no surface water is available in dry and critical years.

3.1.4.2.4 Surface Water Supply

Sources of surface water include the following:

- two CVP water supply contracts: Fazio (15 TAF/year), and the SMUD assignment (30 TAF/year);
- appropriative rights to natural flows that are available when excess water conditions exist. Excess water conditions exist when releases from upstream reservoirs plus unregulated flow exceed existing legal uses of water in the Sacramento Basin, including water required to meet Sacramento-San Joaquin Delta water quality standards, plus exports. This source of water is referred to as "Excess Water"; and
- water right transfers or an additional appropriation of water, referred to as "Other Water".

A detailed discussion of SCWA's surface water supplies is contained in Chapter 2 of the DEIR/EIS.

The timing and amount of surface water available from each source is based on estimates of their reliable yield, as determined by CALSIM II modeling. CVP sources are assumed to be subject to deficiencies based on hydrologic conditions evaluated under CALSIM. Other Water supplies are considered to be the most reliable of supplies, but for the purposes of the modeling, available CVP water and Excess Water are utilized first.

3.1.4.2.5 Groundwater Supply

Underlying all operations scenarios is the assumption that SCWA will have access to a long-term average of 40,900 AF/year of groundwater. This value is based on calculations made during the Water Forum process and is consistent with the Water Forum Agreement. In years when sufficient surface water is available, groundwater can be "banked" as in-lieu storage for use during dry years. The sustainable yield objectives of the groundwater basin are met when the average long-term yield over the modeled 72-year hydrologic period does not exceed 40,900 AF/year.

3.1.4.3 Application to FRWA modeling

Determining the availability of surface water supplies for SCWA required an iterative approach based on incremental findings from SCWA's operation model and CALSIM II.

The process involved the following steps:

Step 1. CALSIM II was run using a standard municipal pattern of SCWA's CVP water deliveries. CALSIM results are passed to SCWA's operation model and include CVP deficiency amounts and a first estimate of the availability of Excess Water.

Step 2. SCWA's operation model was then run based on availability of CVP water and Excess Water assuming perfect foresight on the use of Excess Water (i.e., Excess water is used first whenever available). A more generalized CVP diversion schedule for SCWA was then post-processed to account for SCWA not having perfect foresight in the use of Excess Water and not having the ability to make month to month adjustments in CVP water deliveries. Post-processing included grouping and averaging CVP deliveries for up to four or more water year-type categories, assuming that SCWA will set and be committed to a CVP diversion pattern consistent with the hydrologic conditions going into each contract year. In order to pass this information back to CALSIM II, the volume of CVP water deliveries were adjusted upward to not include CVP deficiencies, since CALSIM II applies the CVP deficiencies. The four CVP patterns ultimately used are shown in Figure 3.1.4.3-1.

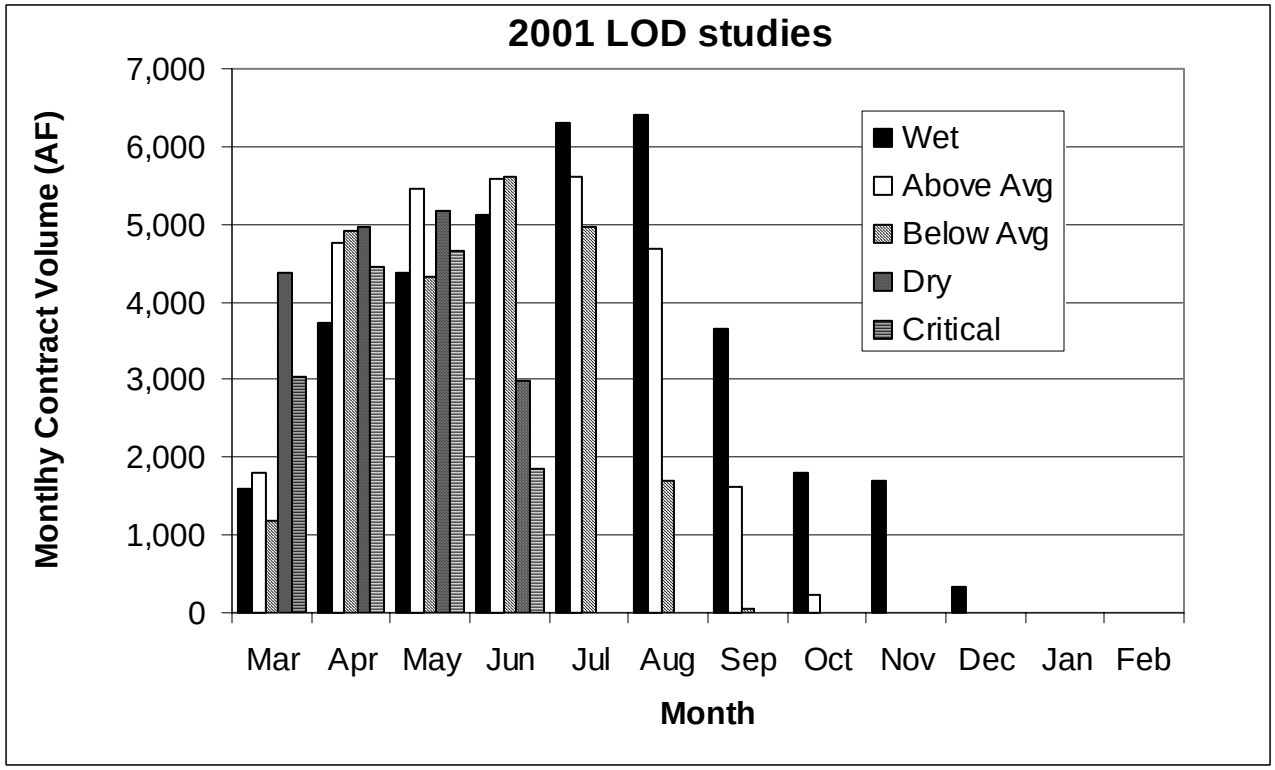
Step 3. CALSIM II was re-run with the updated SCWA's CVP water deliveries to produce a refined set of CVP water deliveries and availability of Excess Water. Using this data, SCWA evaluated in a spreadsheet the need for Other Water based on the CVP water deliveries, the availability of Excess Water, and projected use of groundwater. Since the availability of Other Water can be regulated on a month-to-month basis, a monthly time series of Other Water deliveries was provided back to CALSIM II.

Step 4. CALSIM II was run a final time to refine the availability of Excess Water based on the updated use of Other Water. SCWA's total surface water deliveries and diversion from the Freeport and Sacramento intakes are quantified.

The steps described above were completed for both existing (2001) and future (2020) conditions described in Section 2.5.2.

SCWA's total water supply allocation (including surface water by contract and type, and groundwater) for each alternative over the 72-year evaluation period is presented in Figures 3.1.4.3-2 through 3.1.4.3-3.

Figure 3.1.4.3-1. Assumed SCWA CVP Delivery Patterns Based on Hydrologic Year-Type



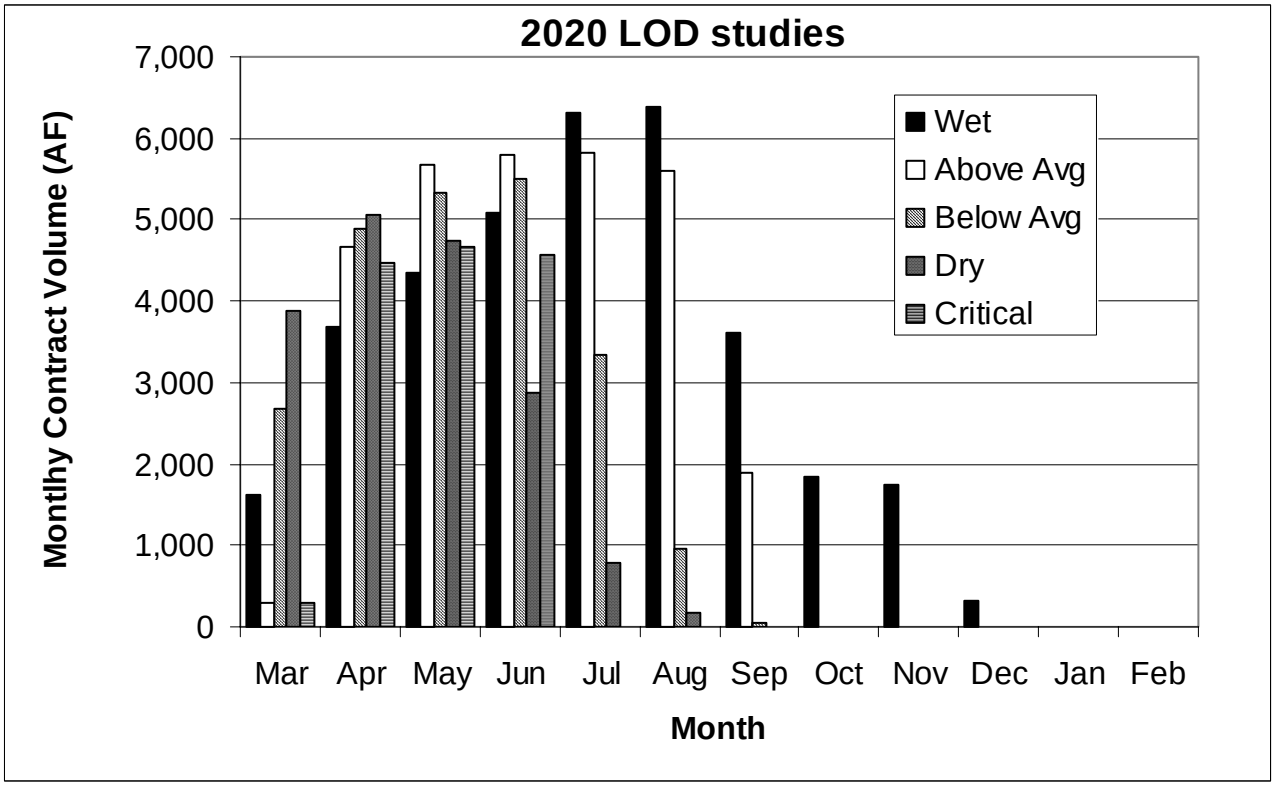


Figure 3.1.4.3-2. SCWA Water Supply Allocation Over 72-Year Evaluation Period, 2001 LOD Studies

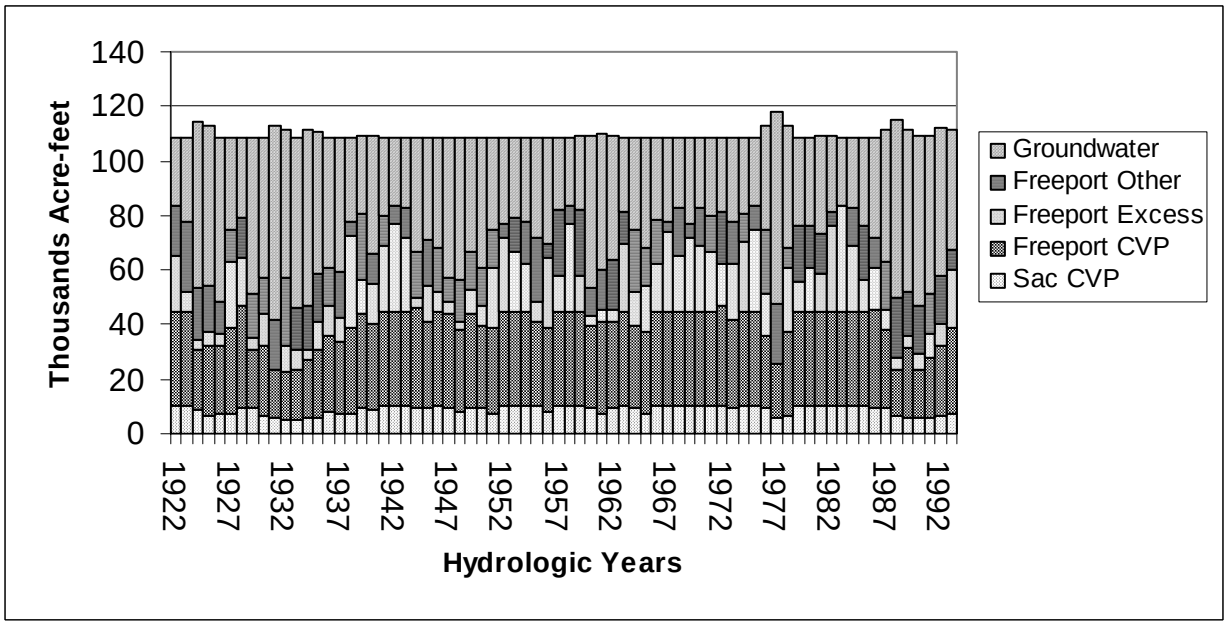
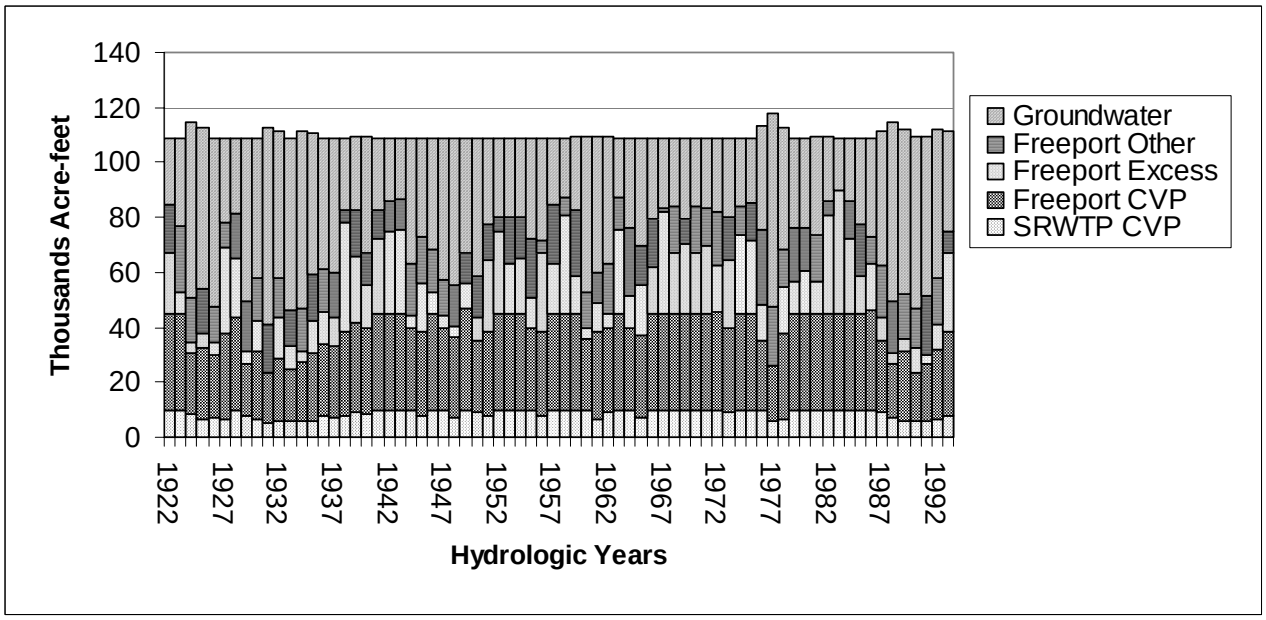


Figure 3.1.4.3-3. SCWA Water Supply Allocation Over 72-Year Evaluation Period, 2020 LOD Studies



3.2 MODELING ASSUMPTIONS

This section describes the project-specific assumptions used in the FRWP surface water and reservoir operations modeling analyses, including assumptions pertaining to the representation of EBMUD and SCWA in CALSIM, EBMUDSIM, and the SCWA Allocation models. Further details about the modeling alternatives are presented. Implementation of these assumptions is described in subsequent sections.

3.2.1 Project Participants: EBMUD and SCWA

3.2.1.1 EBMUD

As outlined in the Section 2.1.2, EBMUD is exploring several options for increasing the dry-year supply reliability of its water supply system and providing greater operational flexibility. The modeling evaluated two options for achieving these objectives: utilizing CVP contract water obtained from the Sacramento River at Freeport or enlarging Pardee Reservoir and modifying operation of its Mokelumne River system.

Under the first option, the Freeport diversion would allow EBMUD access CVP water in accordance with its CVP amendatory water service contract. Water diverted at Freeport (with a diversion capacity of 155 cfs dedicated to EBMUD) would be conveyed to the Folsom South Canal and then to the Mokelumne Aqueducts via the Folsom South Canal Connection.. The Amendatory Contract stipulates the conditions, incorporated in the CALSIM and EBMUDSIM modeling analyses, under which EBMUD is permitted to divert CVP water:

1. Deliveries only when EBMUD total system storage (TSS) is projected to fall below 500 TAF on October 1 without delivery of Sacramento River water.
2. Maximum annual delivery of 133 TAF (reduced according to the CVP North-of-Delta Municipal and Industrial (M&I) delivery allocation). This annual delivery is on a Contract Year (March-February) basis.
3. Maximum delivery of 165 TAF over three consecutive contract years when EBMUD may take delivery of CVP water

For the FRWP modeling, EBMUDSIM was used to generate a time series of CVP contract water diversions at Freeport. This time series became an input diversion requirement in CALSIM II, the model used to assess the effects of these diversions on the rest of the SWP/CVP system. In a process described in Sections 3.1.2.2 and 3.3, the CVP North-of-Delta M&I allocation results from a prior CALSIM II run were utilized within EBMUDSIM to generate EBMUD's diversion pattern at Freeport, i.e. the CVP allocations were already pre-applied in the EBMUD diversion pattern and were consequently treated as a system outflow in CALSIM II. The CVP allocations determine the maximum volume that EBMUD could divert in a given year, subject to the conditions of EBMUD's amendatory CVP contract. In the FRWP modeling, this volume was diverted at the intake capacity allocated to EBMUD (100 MGD), beginning in March, until the volume for that contract year was fully delivered. Table 3.2.1.1-1displays the EBMUD diversion pattern for the 2001 LOD Joint Project modeling study (Alternatives 2-5).

Table 3.2.1.1-1 CALSIM II Input for EBMUD Diversion Pattern @ Freeport (TAF) Alternatives 2-5 (2001 LOD)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Contract Year Total
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	69.2
1925	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	95.8
1927	9.5	9.2	9.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	79.8
1930	9.5	4.5	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	85.2
1931	9.5	9.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	69.2
1934	3.4	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	79.8
1935	9.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	112.1
1940	9.5	9.2	9.4	9.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	112.1
1960	9.5	9.2	9.4	9.5	8.7	9.5	9.2	9.5	9.2	9.5	5.8	0.0	52.9
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	112.1
1963	9.5	9.2	9.4	9.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	5.9	0.0	52.9
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	93.9
1969	9.5	9.2	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	85.1
1977	9.5	9.2	0.6	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	75.8
1978	9.5	0.5	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1979	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	85.1
1980	9.5	9.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	79.9
1982	9.5	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	105.1
1988	9.5	9.2	9.4	9.5	1.7	9.5	9.2	9.5	9.2	9.5	9.5	3.3	59.9
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	66.5
1991	0.7	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	83.8
1992	9.5	8.5	0.0	0.0	0.0	9.5	5.2	0.0	0.0	0.0	0.0	0.0	14.7
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average	2.0	1.5	0.8	0.6	0.4	2.8	2.6	2.6	2.6	2.6	2.5	2.2	23.3
Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	9.5	9.2	9.4	9.5	8.7	9.5	9.2	9.5	9.2	9.5	9.5	9.2	112.1

Under the second option, Pardee Reservoir on the Mokelumne River system would be enlarged from 190 TAF to 365 TAF, which would increase EBMUD's operational flexibility and increase dry year supply reliability. This option would eliminate the need for CVP contract water from the Sacramento River system, but would alter the flow of Mokelumne River water into the Delta. Assessment of the effects of altering the Mokelumne River inflow to the Delta is an integral function of the water quality modeling described in Section 4 of this appendix.

3.2.1.2 SCWA

For the FRWP modeling analyses, SCWA diverts surface water at two locations on the Sacramento River: (1) at the City of Sacramento water treatment facility downstream of the American River confluence, with a diversion of up to 11 MGD, and (2) at Freeport, with a diversion capacity of 85 MGD.

Through Public Law 101-514, passed in 1999, SCWA obtained a CVP contract for 15 TAF/yr. Water delivered under this contract is often called “Fazio” water. The current biological opinion allows SCWA to divert up to 7.2 TAF/yr from the Sacramento River at either the City of Sacramento’s Sacramento River Water Treatment Plant or a location near Freeport. In the FRWP DEIR/EIS, SCWA evaluates the effect of diverting its full entitlement of 15 TAF/yr of CVP contract water, up to 10 TAF/yr at the SCWA Sacramento River Water Treatment Plant and the remainder at Freeport. Furthermore, SCWA anticipates access to an additional 30 TAF/yr of CVP water that is reassigned from the Sacramento Municipal Utility District (SMUD), bringing SCWA's total CVP allotment to 45 TAF/yr.

SCWA appropriated “Excess Water” and "Other Water” is diverted to meet SCWA's projected potable water demand unmet by groundwater or CVP supplies. The modeling framework, described in Section 3.4 of this appendix, is designed to maximize the diversions of Excess Water and minimize the volume of "Other Water” needed to fulfill SCWA demands (see Table 3.2.1.2-1).

Table 3.2.1.2-1 SCWA Demand and Supply Sources

Demands and Supplies	Amount
"Build Out" Potable Water Demand (2030-2050 Level of Development, depending on rate of growth)	109.5 TAF/yr
Supplies:	
Groundwater (long-term sustainable yield)	41 TAF/yr
CVP contract water (full contract amount)	45 TAF/yr
“Excess Water” and "Other Water"	22 TAF/yr

CVP contractors are required to place CVP water deliveries on predictable annual patterns, but have considerable flexibility in how those patterns are arranged. SCWA’s water allocation model, described in Section 3.1.4, was used to generate SCWA’s CVP water delivery patterns for both the Sacramento River WTP diversion and the Freeport diversion. These patterns are a function of the year type, based upon the Sacramento 40-30-30 index, a categorization of hydrologic conditions in the Sacramento Valley for a given year. Typically, SCWA relies on CVP supplies in drier months to capitalize upon available Delta excess flows and available pumping capacity in wetter conditions. Tables 3.2.1.2-2 and 3.2.1.2-3 show the CVP supply pattern input to CALSIM II for both SCWA diversion points.

Unlike for EBMUD, whose CVP diversions were modeled in CALSIM II as a required outflow from the Sacramento River, SCWA’s CVP diversion pattern input to CALSIM II was subject to the same stipulations as other CVP contractors. SCWA's CVP contract is subject to CVP M&I allocation cuts of

up to 50%, depending on hydrologic conditions. EBMUD pre-processed these allocation deficiencies into the diversion time series at Freeport using EBMUDSIM; whereas SCWA input the full contract amount on a pattern that was based upon year-type criteria, allowing CALSIM to determine the actual SCWA diversions at the Sacramento River WTP and at Freeport. Thus the resulting SCWA CVP diversions listed in Tables 3.4.2-2 and 3.4.2-7 differ from the input values in Tables 3.2.1.2-2 and 3.2.1.2-3.

In the FRWP modeling, it was assumed that "Other" water is obtained through transfers or additional appropriated water, and is therefore not subject to CVP allocation cuts and does not need to be on a predictable pattern. In the FRWP modeling, SCWA used "Other" water to complete the balance of the needed surface water to meet its build-out demand. In an iterative process described in Sections 3.1.4.3 and 3.2, SCWA minimized the use of "Other" water by first allowing CALSIM II to divert all of the appropriated Delta Excess Water available. Table 3.2.1.2-4 displays the "Other" water time series utilized for the 2001 LOD Alternatives 2-5 simulation.

Unlike for EBMUD's FRWP diversions, return flows from SCWA diversions remain within the CALSIM II system and re-enter the Sacramento River downstream of the Freeport diversion. SCWA diversions are separated into indoor and outdoor use components, based upon estimated minimum winter indoor water use. All of the indoor use component, assumed to be 45% of the total diversion, returns to the Sacramento River. The outdoor use component represents landscaping and other outdoor uses. Of this amount, 28.5% percent is returned to the Sacramento River in CALSIM II in the same month it is diverted. Overall, 61% of SCWA's diversions are returned to the Sacramento River.

Finally, Diversion Requirement 70 in CALSIM II represents the diversion amount that the model is required to meet for Depletion Area 70 and includes SCWA demands met by the diversion at the Sacramento WTP. Depletion Area 70 covers the Sacramento Valley floor from Verona to Sacramento and includes most of the northern Sacramento area from Folsom Lake to the American River confluence with the Sacrament River. The Action alternatives utilize different SCWA CVP patterns, requiring that the Depletion Area 70 CALSIM inputs be updated accordingly.

Figure 3.2.1.2-1 is a schematic of the DSA 70 region of the CALSIM II model which shows the interactions of SCWA and EBMUD with other system components.

Table 3.2.1.2-3 CALSIM II Input for SCWA CVP Diversion Pattern @ Sacramento WTP (TAF) /Alternatives 2-5 (2001 LOD)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Contract Year Total
1922	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1923	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1924	1.0	0.9	0.7	0.5	0.5	1.2	1.4	1.7	1.7	1.6	1.6	0.7	10.0
1925	0.0	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1926	1.3	0.3	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1927	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1928	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	1.0	1.0	10.0
1929	1.0	1.0	0.8	0.5	0.1	1.2	1.4	1.7	1.7	1.6	1.6	0.7	10.0
1930	0.0	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1931	1.3	0.3	0.0	0.0	0.0	1.4	1.6	1.9	2.0	1.8	1.3	0.0	10.0
1932	0.0	0.0	0.0	0.0	0.0	1.4	1.6	1.9	2.0	1.8	1.3	0.0	10.0
1933	0.0	0.0	0.0	0.0	0.0	1.2	1.4	1.7	1.7	1.6	1.6	0.7	10.0
1934	0.0	0.0	0.0	0.0	0.0	1.2	1.4	1.7	1.7	1.6	1.6	0.7	10.0
1935	0.0	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1936	1.3	0.3	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1937	1.3	0.3	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1938	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1939	1.0	0.9	0.7	0.5	0.5	0.8	0.9	1.1	1.1	1.0	1.0	1.1	10.0
1940	1.2	1.2	0.5	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1941	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1942	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1943	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1944	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	1.0	1.0	10.0
1945	1.0	1.0	0.8	0.5	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1946	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1947	1.0	0.9	0.7	0.5	0.5	0.8	0.9	1.1	1.1	1.0	1.0	1.1	10.0
1948	1.2	1.2	0.5	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1949	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1950	1.0	0.9	0.7	0.5	0.5	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1951	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1952	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1953	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1954	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1955	1.0	0.9	0.7	0.5	0.5	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1956	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1957	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1958	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1959	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1960	1.0	0.9	0.7	0.5	0.5	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1961	1.3	0.3	0.0	0.0	0.0	0.7	0.9	1.0	1.0	1.0	1.0	1.0	10.0
1962	1.0	1.0	0.8	0.5	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1963	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1964	1.0	0.9	0.7	0.5	0.5	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1965	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1966	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1967	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1968	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1969	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1970	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1971	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1972	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	1.0	1.0	10.0
1973	1.0	1.0	0.8	0.5	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1974	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1975	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1976	1.0	0.9	0.7	0.5	0.5	1.1	1.3	1.5	1.5	1.4	1.4	1.6	10.0
1977	0.2	0.0	0.0	0.0	0.0	1.2	1.4	1.7	1.7	1.6	1.6	0.7	10.0
1978	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1979	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1980	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1981	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1982	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1983	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1984	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1985	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1986	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	1.0	1.0	10.0
1987	1.0	1.0	0.8	0.5	0.1	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1988	1.3	0.3	0.0	0.0	0.0	1.4	1.6	1.9	2.0	1.8	1.3	0.0	10.0
1989	0.0	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1990	1.3	0.3	0.0	0.0	0.0	1.4	1.6	1.9	2.0	1.8	1.3	0.0	10.0
1991	0.0	0.0	0.0	0.0	0.0	1.1	1.3	1.5	1.5	1.4	1.4	1.5	10.0
1992	0.2	0.0	0.0	0.0	0.0	0.9	1.1	1.3	1.3	1.2	1.2	1.3	10.0
1993	1.3	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
Average	0.9	0.7	0.5	0.3	0.3	0.8	1.0	1.2	1.2	1.1	1.1	1.0	10.0
Minimum	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	0.0	10.0
Maximum	1.3	1.2	0.8	0.5	0.5	1.4	1.6	1.9	2.0	1.8	1.6	1.6	10.0

Table 3.2.1.2-3 CALSIM II Input for SCWA CVP Diversion Pattern @ Freeport (TAF) Alternatives 2-5 (2001 LOD)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Contract Year Total
1922	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1923	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1924	1.8	1.7	0.3	0.0	0.0	8.8	9.9	10.4	6.0	0.0	0.0	0.0	35.0
1925	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1926	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1927	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1928	1.8	1.7	0.3	0.0	0.0	1.3	4.9	6.2	6.3	6.3	6.2	3.4	35.0
1929	0.5	0.0	0.0	0.0	0.0	8.8	9.9	10.4	6.0	0.0	0.0	0.0	35.0
1930	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1931	0.0	0.0	0.0	0.0	0.0	7.6	11.1	11.6	4.7	0.0	0.0	0.0	35.0
1932	0.0	0.0	0.0	0.0	0.0	7.6	11.1	11.6	4.7	0.0	0.0	0.0	35.0
1933	0.0	0.0	0.0	0.0	0.0	8.8	9.9	10.4	6.0	0.0	0.0	0.0	35.0
1934	0.0	0.0	0.0	0.0	0.0	8.8	9.9	10.4	6.0	0.0	0.0	0.0	35.0
1935	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1936	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1937	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1938	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1939	1.8	1.7	0.3	0.0	0.0	3.1	6.4	6.7	6.9	6.9	4.7	0.3	35.0
1940	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1941	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1942	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1943	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1944	1.8	1.7	0.3	0.0	0.0	1.3	4.9	6.2	6.3	6.3	6.2	3.4	35.0
1945	0.5	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1946	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1947	1.8	1.7	0.3	0.0	0.0	3.1	6.4	6.7	6.9	6.9	4.7	0.3	35.0
1948	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1949	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1950	1.8	1.7	0.3	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1951	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1952	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1953	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1954	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1955	1.8	1.7	0.3	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1956	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1957	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1958	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1959	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1960	1.8	1.7	0.3	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1961	0.0	0.0	0.0	0.0	0.0	1.3	4.9	6.2	6.3	6.3	6.2	3.4	35.0
1962	0.5	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1963	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1964	1.8	1.7	0.3	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1965	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1966	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1967	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1968	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1969	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1970	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1971	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1972	1.8	1.7	0.3	0.0	0.0	1.3	4.9	6.2	6.3	6.3	6.2	3.4	35.0
1973	0.5	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1974	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1975	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1976	1.8	1.7	0.3	0.0	0.0	0.6	8.8	5.7	9.3	8.4	2.2	0.0	35.0
1977	0.0	0.0	0.0	0.0	0.0	8.8	9.9	10.4	6.0	0.0	0.0	0.0	35.0
1978	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1979	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1980	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1981	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1982	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1983	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1984	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1985	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1986	1.8	1.7	0.3	0.0	0.0	1.3	4.9	6.2	6.3	6.3	6.2	3.4	35.0
1987	0.5	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1988	0.0	0.0	0.0	0.0	0.0	7.6	11.1	11.6	4.7	0.0	0.0	0.0	35.0
1989	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1990	0.0	0.0	0.0	0.0	0.0	7.6	11.1	11.6	4.7	0.0	0.0	0.0	35.0
1991	0.0	0.0	0.0	0.0	0.0	0.6	8.8	5.7	9.3	8.4	2.2	0.0	35.0
1992	0.0	0.0	0.0	0.0	0.0	2.9	6.5	7.4	8.0	7.0	3.0	0.2	35.0
1993	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
Average	1.1	1.0	0.2	0.0	0.0	2.6	5.4	6.0	5.9	5.7	4.8	2.3	35.0
Minimum	0.0	0.0	0.0	0.0	0.0	0.6	3.7	4.4	4.7	0.0	0.0	0.0	35.0
Maximum	1.8	1.7	0.3	0.0	0.0	8.8	11.2	11.6	9.4	8.4	6.4	3.6	35.0

Table 3.2.1.2-4 CALSIM II Input for SCWA "Other" Water Diversion Pattern @ Freeport (TAF) Alternatives 2-5 (2001 LOD)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Contract Year Total
1922	5.1	3.9	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	3.8	17.8
1923	5.1	3.9	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.3	16.0
1924	0.0	0.0	0.0	0.0	0.0	1.6	2.0	2.5	4.0	6.6	2.4	0.0	22.1
1925	0.6	0.8	0.8	0.8	0.0	3.0	1.4	1.7	1.6	1.8	3.6	0.5	13.6
1926	0.1	0.0	0.0	0.0	0.0	3.2	1.6	2.0	1.9	1.0	1.8	0.0	11.5
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	16.6
1928	5.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.5	1.6	3.8	13.9
1929	4.3	0.1	0.0	0.0	0.0	0.0	0.3	1.0	2.9	5.7	1.6	0.0	11.6
1930	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.7	1.6	2.4	3.6	2.7	13.3
1931	0.0	0.0	0.0	0.0	0.0	2.0	1.3	2.0	4.3	6.3	2.1	0.0	23.5
1932	0.4	0.5	0.0	0.0	4.7	1.5	0.7	1.5	5.1	5.7	4.1	1.0	19.7
1933	0.2	0.0	0.0	0.0	0.0	0.8	1.2	2.0	3.4	5.8	1.7	0.0	15.0
1934	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.5	3.9	6.1	3.2	0.8	18.2
1935	0.4	0.4	0.4	0.0	0.4	0.0	0.0	1.7	1.6	2.4	4.9	5.6	16.9
1936	0.7	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.1	2.0	3.9	4.1	13.4
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.6	2.4	5.2	5.6	18.7
1938	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	10.0
1939	0.0	3.8	0.0	0.0	3.6	3.1	0.7	1.4	1.6	1.6	3.0	5.3	16.8
1940	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	17.6
1941	4.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	8.8
1942	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	2.6
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	17.9
1944	4.8	1.6	0.0	0.0	0.0	3.9	1.6	1.5	1.6	1.1	0.2	0.0	10.3
1945	0.0	0.0	0.0	0.5	0.0	3.9	2.4	2.8	2.4	1.4	1.1	2.2	16.2
1946	0.0	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.2	15.9
1947	0.0	0.0	0.0	0.0	0.0	3.0	0.6	1.3	1.5	0.9	1.7	0.4	9.4
1948	0.0	0.0	0.0	0.0	0.0	4.6	3.5	0.0	2.4	1.4	1.2	2.5	17.0
1949	1.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.3	2.6	13.4
1950	0.5	0.0	0.0	0.0	0.0	3.1	1.4	1.7	1.6	1.6	3.6	0.3	13.3
1951	0.1	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	16.7
1952	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	6.6
1953	0.0	3.8	0.0	0.0	0.2	3.3	0.0	2.8	0.0	1.4	1.2	0.0	12.5
1954	3.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	18.0
1955	4.8	1.6	0.0	0.0	0.0	2.9	1.2	1.5	1.3	2.2	4.0	4.1	17.3
1956	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	0.0	15.5
1957	0.0	3.8	3.8	2.9	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.8	17.9
1958	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	10.2
1959	0.0	3.8	3.8	0.0	0.0	3.7	2.5	2.9	2.5	1.5	1.3	2.4	16.8
1960	0.0	0.0	0.0	0.0	0.0	3.6	1.4	1.7	1.4	0.8	1.2	0.0	10.0
1961	0.0	0.0	0.0	0.0	0.0	4.4	1.6	1.4	1.5	1.6	1.7	2.8	17.1
1962	1.3	0.2	0.0	0.6	0.0	3.7	2.4	2.8	2.4	1.4	1.0	2.2	15.8
1963	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.4	1.4	1.2	3.8	15.8
1964	0.0	0.0	3.8	0.0	0.0	3.0	1.4	1.7	1.6	2.4	4.0	4.8	19.0
1965	0.1	0.0	0.0	0.0	0.0	3.7	0.0	2.8	2.4	1.4	1.2	3.1	16.7
1966	2.2	0.0	0.0	0.0	0.0	3.5	0.0	2.8	2.4	1.4	1.2	2.3	17.3
1967	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1968	0.0	3.8	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	16.7
1969	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	2.6
1970	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	20.0
1971	2.6	0.0	0.0	0.0	3.6	0.0	2.4	0.0	2.4	1.4	1.2	0.0	16.2
1972	5.1	3.7	0.0	0.0	0.0	0.0	1.5	1.3	1.5	1.5	1.6	2.9	12.1
1973	1.7	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	16.7
1974	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	0.0	14.6
1975	0.0	3.8	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	8.8
1976	0.0	0.0	3.8	0.0	3.6	0.0	1.3	4.1	1.9	2.2	5.0	1.8	19.3
1977	0.5	0.6	0.6	0.6	0.6	1.1	1.4	2.0	4.1	6.5	2.9	0.8	21.3
1978	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	11.4
1979	4.8	1.6	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	16.0
1980	2.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	2.8	15.9
1981	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.5	1.5	1.3	3.7	14.8
1982	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	2.6
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.7	17.4
1985	3.1	0.0	0.0	0.4	0.0	3.5	2.4	2.8	2.4	1.4	1.1	2.2	15.8
1986	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.5	1.7	1.7	1.8	3.0	13.2
1987	1.7	0.0	0.1	0.0	0.0	0.0	1.4	1.7	1.5	2.4	4.2	4.2	16.8
1988	0.4	0.3	0.4	0.0	0.4	2.1	1.3	2.1	5.0	6.3	3.0	1.0	23.6
1989	0.6	0.6	0.6	0.6	0.6	0.0	1.4	1.7	1.6	2.4	3.6	2.9	13.5
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	5.1	5.8	4.2	0.0	18.0
1991	0.0	0.1	0.1	0.1	0.1	0.0	0.8	0.0	1.7	2.4	4.6	4.5	14.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.2	2.0	2.7	4.4	4.1	18.1
1993	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	3.8	22.9
Average	1.2	0.8	0.3	0.1	0.2	1.2	1.1	1.7	1.9	2.1	2.0	2.1	14.7
Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	5.1	3.9	3.8	3.1	4.7	4.6	3.5	4.1	5.1	6.6	5.2	5.6	23.6

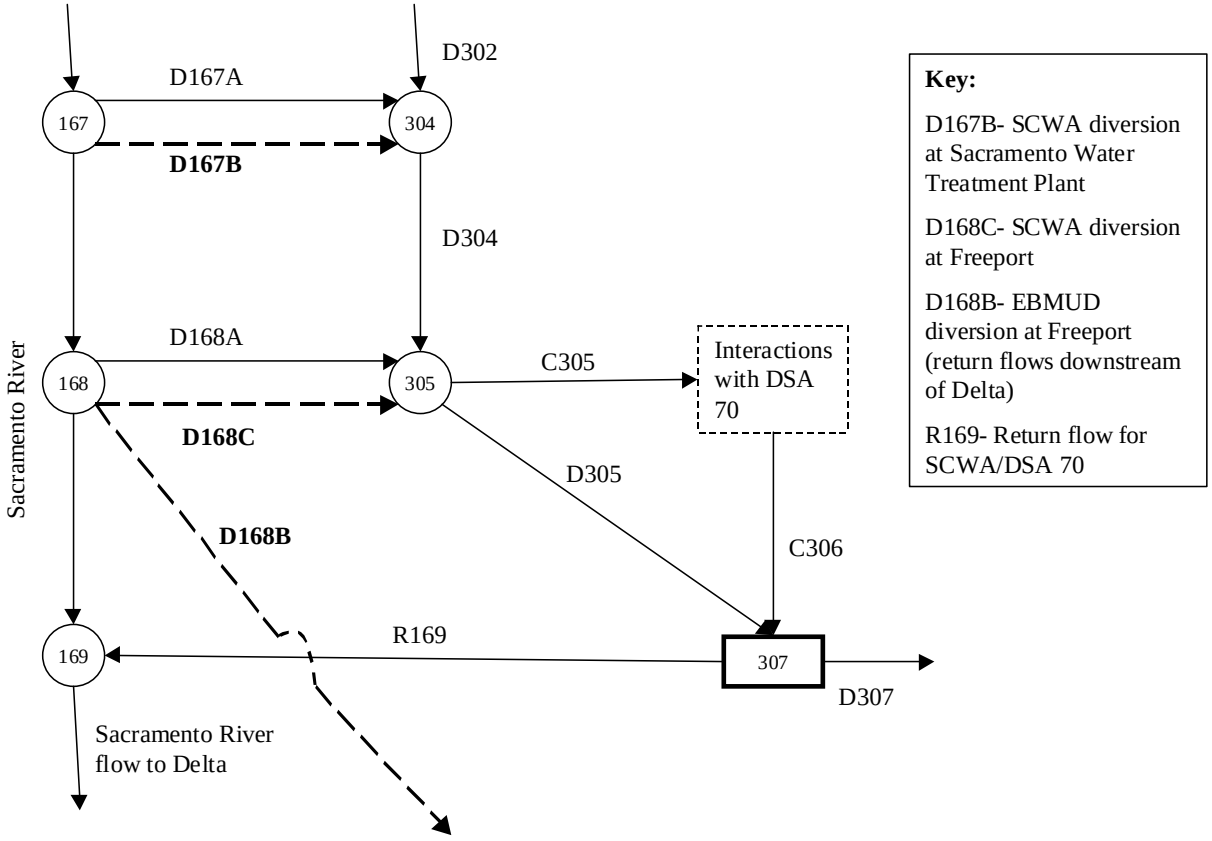


Figure 3.2.1.2-1. CALSIM II schematic of DSA 70 Region

3.2.2 Assumptions for alternatives

As outlined in the Section 2.6, three modeling scenarios were modeled at both 2001 and 2020 levels of development (LOD). Alternative 1 is the No Action alternative, providing a basis of comparison for the other two Action alternatives. Alternatives 2-5 use a joint project configuration where both EBMUD and SCWA divert water at Freeport. In Alternative 6, only SCWA diverts at Freeport, while EBMUD supplements its dry year supply by enlarging Pardee Reservoir and re-operating the Mokelumne River system. Tables 3.2.2-1 and 3.2.2-2 list specific assumptions for each alternative for 2001 and 2020 LOD, respectively.

Table 3.2.2-1 FRWP-Specific Assumptions for 2001 LOD

	Alternative 1 (No Action)	Alternatives 2-5 (Joint Project)	Alternative 6 (Enlarged Pardee)
EBMUD Study Name	Study # 6203 (Mokelumne River Delta inflow only to CALSIM II)	Study # 6296 (Mokelumne inflow and Freeport diversion pattern tp CALSIM II)	Study # 6322 (Mokelumne River Delta inflow to CALSIM II, no Freeport diversion)
SCWA Allocation Study Name	N/A	FRWP_2001_JP_031203_Diversions with SCWA Updates.xls	Same as for Alternatives 2-5
CALSIM Study Name	BSTCH_2001D10A_Base_031003	EBMUD_2001D10A_FRWP_JP_031603	EBMUD_2001D10A_FRWP_EP_031603
OCAP Equivalent Study	"Today"	No equivalent study	No equivalent study
EBMUD Demand Type per COA	N/A	In-Basin Use	N/A
SCWA Demand Type per COA	In-Basin Use	In-Basin Use	In-Basin Use
Total SCWA Allocation pattern	Identical pattern to SCWA diversion at Sacramento River WTP	Full "Build Out" demand level, 2030-2050 LOD, depending on growth rate	Full "Build Out" demand level, 2030-2050 LOD, depending on growth rate
SCWA Diversion input @ Sacramento River WTP	7.2 TAF/yr on pattern	10 TAF/yr on pattern	10 TAF/yr on pattern
SCWA Diversion @ Freeport	None	49.8 TAF/yr average; combination of CVP and "Other" water	Same as for Alternatives 2-5
EBMUD Diversion @Freeport	None	23.3 TAF/yr average, but pattern focuses on dry years;	None
EWA and (b)(2) action condition	Dynamic	Fixed to Alternative 1	Fixed to Alternative 1
Delta ANN salinity trigger condition	Dynamic	Fixed to Alternative 1	Fixed to Alternative 1
DR 70 Demand Pattern	N/A	Modified to reflect changes in SCWA Diversion @ Sacramento River WTP	Same as for Alternatives 2-5

Table 3.2.2-2 FRWP-Specific Assumptions for 2020 LOD

	Alternative 1 (No Action)	Alternatives 2-5 (Joint Project)	Alternative 6 (Enlarged Pardee)
EBMUD Study Name	Study # 6257 (Mokelumne River Delta inflow only to CALSIM II)	Study # 6292 (Mokelumne inflow and Freeport diversion pattern to CALSIM II)	Study # 6321 (Mokelumne River Delta inflow to CALSIM II, no Freeport diversion)
SCWA Allocation Study Name	N/A	FRWP_2020D09D_JP_030103_BU_Diversions with SCWA Updates.xls	Same as for Alternatives 2-5
CALSIM Study Name	BSTCH_2020D09D_Base_021003	EBMUD_2020D09D_FRWP_JP_030303	BMUD_2020D09D_FRWP_EP_030303
OCAP Equivalent Study	No equivalent study	Future D1641 circa 2000	No equivalent study
EBMUD Demand Type per COA	N/A	In-Basin Use	N/A
SCWA Demand Type per COA	In-Basin Use	In-Basin Use	In-Basin Use
Total SCWA Allocation pattern	Identical pattern to SCWA diversion at Sacramento River WTP	Full "Build Out" demand level, 2030-2050 LOD, depending on growth rate	Full "Build Out" demand level, 2030-2050 LOD, depending on growth rate
SCWA Diversion input @ Sacramento River WTP	7.2 TAF/yr on pattern	10 TAF/yr on pattern	Same as for Alternatives 2-5
SCWA Diversion @ Freeport	None	49.8 TAF/yr average; combination of CVP and "Other" water	Same as Alternatives 2-5
EBMUD Diversion @Freeport	None	23.3 TAF/yr average, but pattern focuses on dry years;	None
EWA and (b)(2) action condition	Dynamic	Fixed to Alternative 1	Fixed to Alternative 1
ANN salinity trigger condition	Dynamic	Fixed to Alternative 1	Fixed to Alternative 1
DR 70 Demand Pattern	N/A	Modified to reflect changes in SCWA Diversion @ Sacramento River WTP	Same as for Alternatives 2-5

The CALSIM II model, as described in Section 3.1.1, dynamically implements environmental programs and regulations, such as the CALFED Environmental Water Account and Central Valley Improvement Project (CVPIA) 3406 (b)(2) programs, and the Water Quality Control Plan (State Water Resources Control Board Decision 1641). Implementation of these programs in CALSIM II includes the use of thresholds and step functions which trigger largely varying environmental "actions" with even small changes in project operations. Accurately portraying the operational decisions for actual environmental actions that are more continuous and gradual is difficult in a monthly time-step model. Due to the relatively small volumes of water diverted in the FRWP alternatives in comparison to total system

volume, and because these large fluctuations in environmental actions in CALSIM II at times mask the true impact of the proposed project on system-wide operations, the timing of certain environmental actions in the Alternatives 2-6 were "fixed" to be the same as those in Alternative 1. Fixing the environmental actions forces the condition of the action ("on" or "off") to be the same in all alternatives, though the magnitudes of the actions themselves were allowed to remain dynamic. These fixed actions essentially isolate the impacts of the Freeport Project on the CVP and SWP systems from effects of crossing environmentally-driven operations thresholds.

The following environmental actions have been fixed in the Alternatives 2-5 and Alternative 6 studies to be the same as in Alternative 1 study:

- CVPIA 3406 (b)(2) action triggers
- EWA action triggers
- Contra Costa choride standard
- X2 Roe Island trigger
- Delta salinity controls at:
    1. Emmaton
    2. Jersey Point
    3. Collinsville
    4. Antioch
    5. Chipps Island
    6. Contra Costa Canal

The (b)(2) and EWA action triggers were equated across all alternatives for a given level of development, but the magnitudes of the actions themselves were allowed to vary. Unlike the other environmental actions in the above list which are driven by conditions within the Delta, (b)(2) and EWA actions are determined in CALSIM II on a system-wide basis. Further discussion of these programs and actions can be found in the Long-Term Central Valley Project Operations Criteria and Plan (Preliminary Working Draft, June 2003). . An explanation of the EWA program is also included in Section 3.1.1 of this appendix, since the interaction between EWA and CVP/SWP operations is important in interpreting model results.

The CALSIM II studies for each of the FRWP alternatives assume that, for the purposes of the Coordinated Operations Agreement (COA), CVP deliveries to EBMUD and SCWA are both Sacramento River inbasin uses. The results of a side-bar study in which EBMUD's Freeport diversions are instead considered as a Delta export are presented in Section 3.4.10.

3.3 MODEL INTEGRATION

Other sections of this appendix outline the specific aspects of the FRWP, as well as its broader context in relation to the CVP and SWP water supply systems, the assumptions incorporated into the impact analysis modeling, and descriptions of the modeling tools used. This section describes how these various tools interacted to provide a cohesive framework for assessing the effects of the FRWP on other CVP/SWP contractors, Delta water quality and environmental considerations. The interactions between the models used in the FRWP analysis are displayed in a general sense in Figure 2-1.

The modeling analysis for the FRWP consisted of two phases. In the first phase (the subject of Section 3), CALSIM, EBMUDSIM, and the SCWA Water Allocation Model collectively simulated FRWP, SWP, and CVP operations. In the second phase (the subject of Sections 4 and 5), results from the CALSIM II studies served as inputs for a suite of Delta water quality, temperature, and salmon mortality models.

CALSIM II, EBMUDSIM, and the SCWA Water Allocation Model each use differing platforms and algorithms. Since there is no existing interface between the models, an iterative method was applied where each model was run separately, selected data was manually exchanged between the models, and studies were re-simulated. This iterative process continued until the results of two specific data sets, CVP North-of-Delta M&I allocations and SCWA appropriated Excess Water diversions, converged with estimates. Figure 3.3-1, provides a conceptual schematic of this iterative methodology. The modeling stages for the first phase of FRWP modeling are outlined in the following steps:

1) *EBMUDSIM Alternative 1 study*

- EBMUDSIM calculates Mokelumne River flows into the Delta under No Action conditions.

2) *CALSIM II Alternative 1 study*

- Input data:
  1. Mokelumne River flows from the EBMUDSIM Alternative 1 study are directly input into the CALSIM II Alternative 1 study as an inflow into the Delta.
  2. A baseline SCWA CVP diversion schedule averaging 7.2 TAF/yr is assumed, diverted at the intake of the existing Sacramento River Water Treatment Plant**.**

3) *EBMUDSIM action alternative study/ SCWA Water Allocation Model action alternative study (first iteration)*

- Input data:
  1. CVP North-of-Delta (NOD) Municipal and Industrial (M&I) allocations from CALSIM II Alternative 1.
  2. SCWA appropriated Excess Water diversion estimated from CALSIM II Alternative 1 (SCWA Water Allocation Model only).
- CVP NOD M&I allocations are multipliers calculated within CALSIM II based upon system conditions. These multipliers determine the allocation of CVP contract water that is available in a given year to CVP M&I contractors.
- The CALSIM II Alternative 1 CVP M&I allocations are used as an initial approximation of the Alternatives 2-5 CVP M&I allocations and are input into EBMUDSIM.
- An estimate of Delta Excess Water available for SCWA to appropriate is based on either CALSIM II Alternative 1 results or an interim CALSIM II Alternatives 2-5 iteration that includes only Excess Water diversions for SCWA. Based upon estimated available SCWA Excess Water and CVP NOD M&I allocations, the SCWA Water Allocation Model generates CVP patterns for

the SCWA diversions at the Sacramento River WTP and Freeport that maximize the use of available Delta Excess Water.

4) CALSIM action alternative study (iterate as needed)

- Input data:
  1. Mokelumne Delta inflow from EBMUDSIM
  2. EBMUD diversion pattern from EBMUDSIM
  3. SCWA estimated diverted Excess Water from the SCWA Water Allocation Model
  4. SCWA CVP diversion schedule from the SCWA Water Allocation Model
  5. SCWA "Other" water diversion schedule from the SCWA Water Allocation Model
- SCWA Excess Water and CVP M&I allocation results are compared to a previous iteration. Significant variations in CVP M&I values necessitate an update of the CVP diversion schedules for EBMUD and SCWA. Significant variation of the simulated SCWA Excess Water diversions from previous estimates requires re-calculation of the SCWA CVP and/or SCWA "Other" water components.
- Initial iterations between CALSIM II and EBMUDSIM/SCWA Water Allocation Model may use only one or two of SCWA's three water supply components. For example, performing the study initially with only SCWA Excess Water diversions provides a more accurate estimate of divertable Excess Water for SCWA in calculating SCWA CVP and "Other" water diversion schedules in subsequent iterations.

5) EBMUDSIM and/or SCWA Water Allocation Model (subsequent iterations, if needed)

- Input data:
  1. CVP NOD M&I allocation from preceding CALSIM action alternative
  2. SCWA Appropriated Excess Water diversions from preceding CALSIM action alternative
- Either EBMUDSIM or the SCWA Water Allocation Model may be used to re-generate CALSIM II inputs as needed.

The action alternative studies are complete once the simulated SCWA Excess Water diversions and CVP M&I values results from the CALSIM II iteration converge with the values assumed in generating the CALSIM II inputs from EBMUDSIM and SCWA Water Allocation Model. Convergence was generally achieved when the difference in CVP M&I allocations differed by less then one percent

The Alternative 6 study follows the same methodology as the Alternatives 2-5 study. CVP M&I values change only slightly between the two alternatives, allowing the SCWA diversion schedules to remain unchanged in Alternative 6 from those utilized in Alternatives 2-5. EBMUD diversions at Freeport are removed in CALSIM II in Alternative 6, and revised Mokelumne River inflows are generated by EBMUDSIM.

Upon completion of the first phase of modeling, CALSIM II results from each alternative are translated into input for the Delta water quality and temperature models. Details of this process are described in Sections 4 and 5 of this appendix.

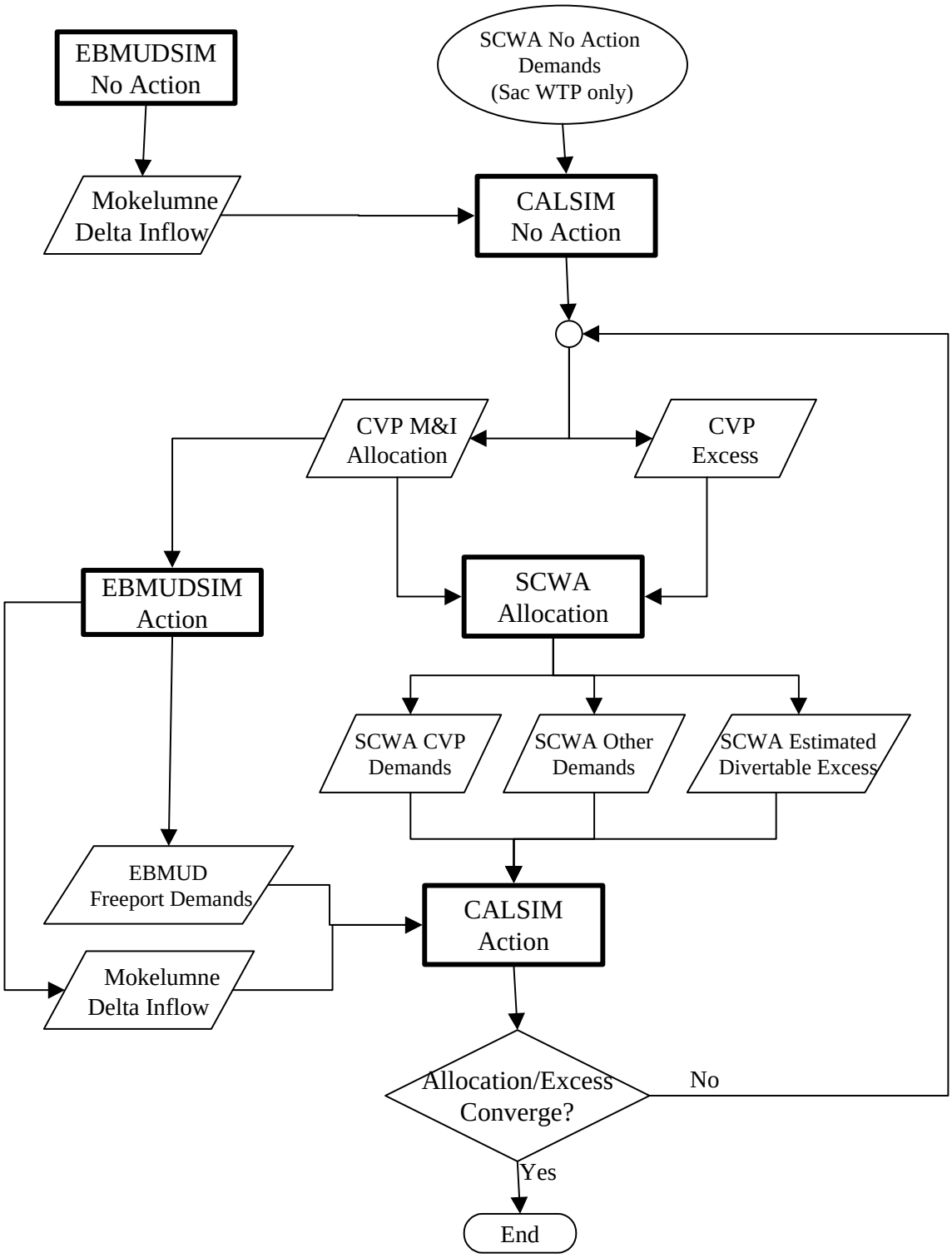


Figure 3.3-1. Model Iteration Formulation

3.4 SIMULATION RESULTS FOR 2001 LOD

This section provides detailed results from the CALSIM II analyses of the FRWP Action alternatives in comparison to the Alternative 1 (No Action) study at a 2001 Level of Development. Results are displayed in both contract year and water year formats where appropriate, and are typically presented in both exceedence and time series formats. Comparative analyses are emphasized, but absolute data is provided in some instances. Although CALSIM II modeling extended through Water Year 1994, the averages are based on WY 1922-1993 since WY 1994 did not include a full contract year. Results for the dry periods of WY 1928-1934 and WY 1987-1992 are also included, since impacts from the FRWP could potentially be the greatest in these periods. The sections below provide simulated Freeport Project diversions, reservoir storage, river flow, Delta flow, Delta export, CVP delivery, and SWP delivery data.

Section 3.4.10 presents results for a side-bar study that shows the sensitivity of the modeling results to the assumption that CVP deliveries to EBMUD are a Sacramento Valley inbasin use.

3.4.1 Summary Results

Several types of figures are provided in this section to give an overview of the hydrologic modeling results. The emphasis is on the incremental effect of Alternatives 2-5 (Joint Project) compared with Alternative 1 (No-Action), although some comparisons with Alternative 6 are also included. Four periods are evaluated: the full simulation period (WY 1922-1993) and three dry periods (WY 1928-1934, WY 1976-1977, and WY 1987-1992).

Figures 3.4.1-1 through 3.4.1-4 show the average change in simulated flows at several key locations and compare these values with the base values in Alternative 1. These figures only show the incremental change associated with Alternatives 2-5

Figures 3.4.1-5 through 3.4.1-8 show the average change in simulated carryover storage (end of September) for key North-of-the-Delta CVP and SWP reservoirs, as well as Delta exports to the south. For comparison, base values in Alternative 1 are also shown. This set of figures only shows the incremental change associated with Alternatives 2-5

The percentage of the Alternative 1 (No-Action) values for selected parameters are displayed for the action alternatives in Figures 3.4.1-9 through 3.4.1-12. This highlights the relative magnitude of the potential change associated with the FRWP alternatives, as simulated in the modeling.

The last set of figures in this section, Figures 3.4.1-13 through 3.4.1-16, plots selected CVP and SWP parameters expressed as a percentage of the maximum value in Alternative 1. This shows the general state of the CVP during each period, as well as the difference between the FRWP alternatives. For example, over the entire simulation period, CVP North-of-the Delta carryover storage is approximately 75% of the maximum in any year. However, during the dry year period of 1928-1934, CVP North-of-the-Delta storage is closer to 40% of the maximum in any year of the Alternative 1 simulation.

Figure Figure 3.4.1-1 Average Change in Simulated Flows, Alternatives 2-5, 2001 LOD (Average of All Years)

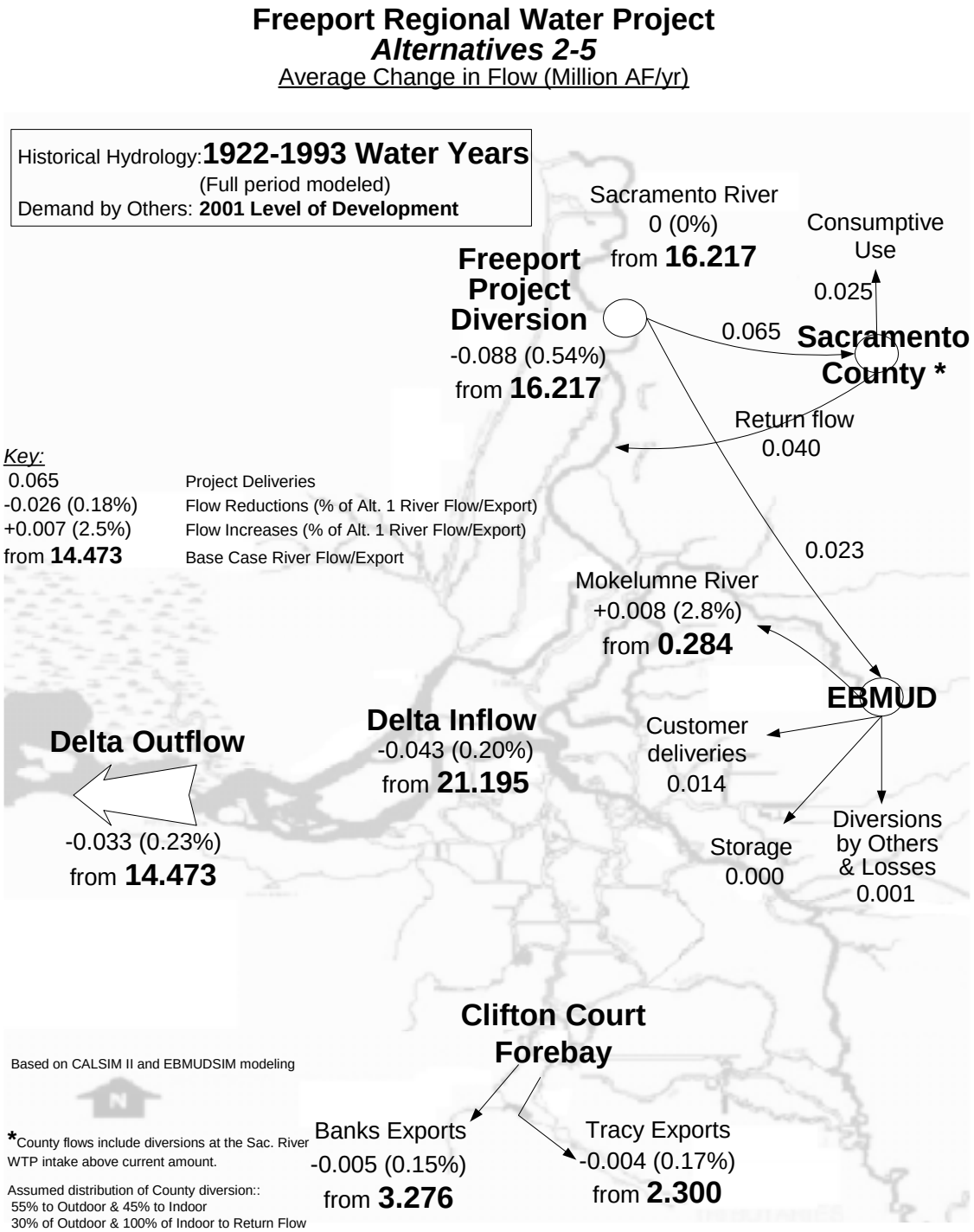


Figure 3.4.1-2 Average Change in Simulated Flows, Alternatives 2-5, 2001 LOD (Dry Period WY 1928-1934)

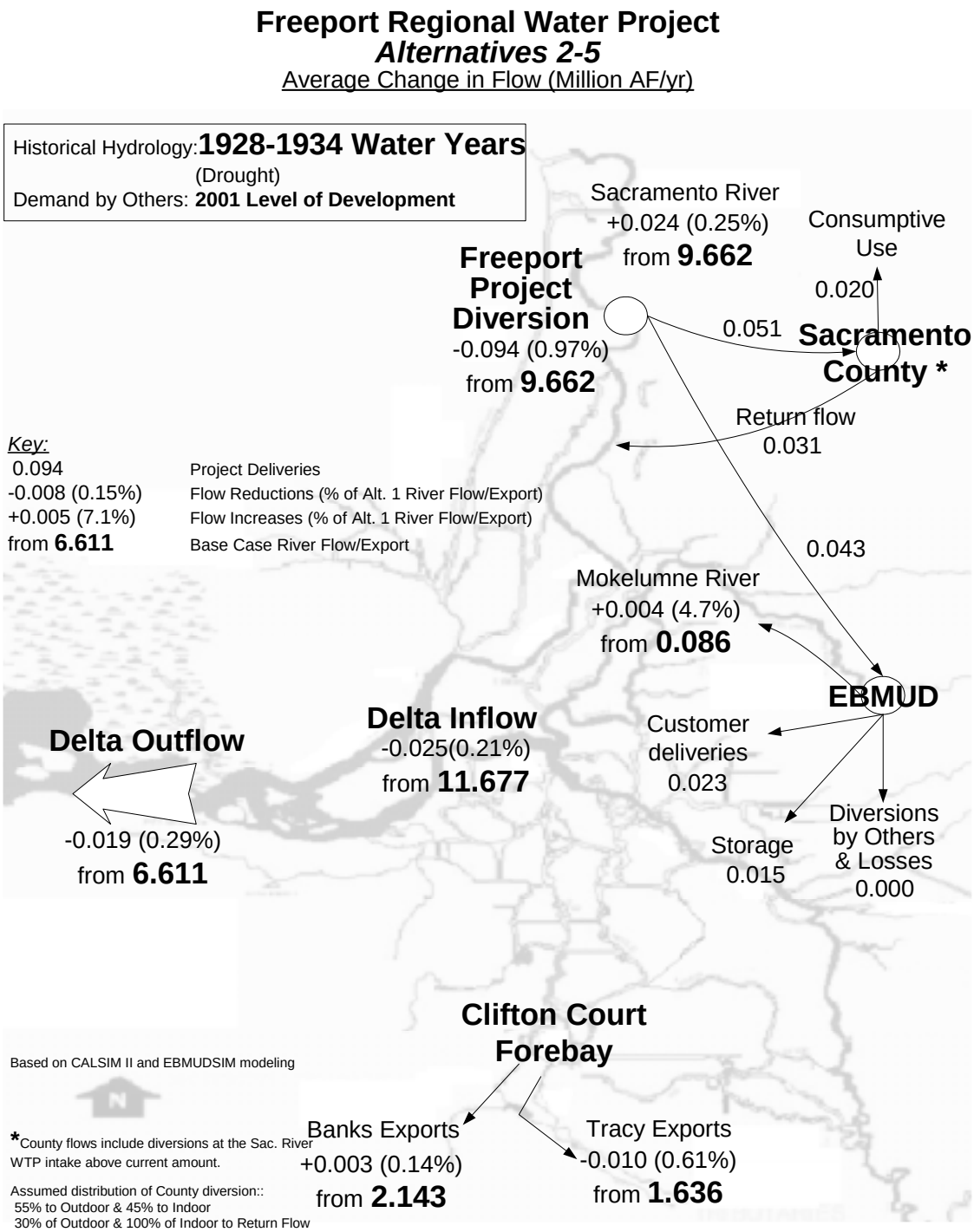


Figure 3.4.1-3 Average Change in Simulated Flows, Alternatives 2-5, 2001 LOD (Dry Period WY 1976-1977)

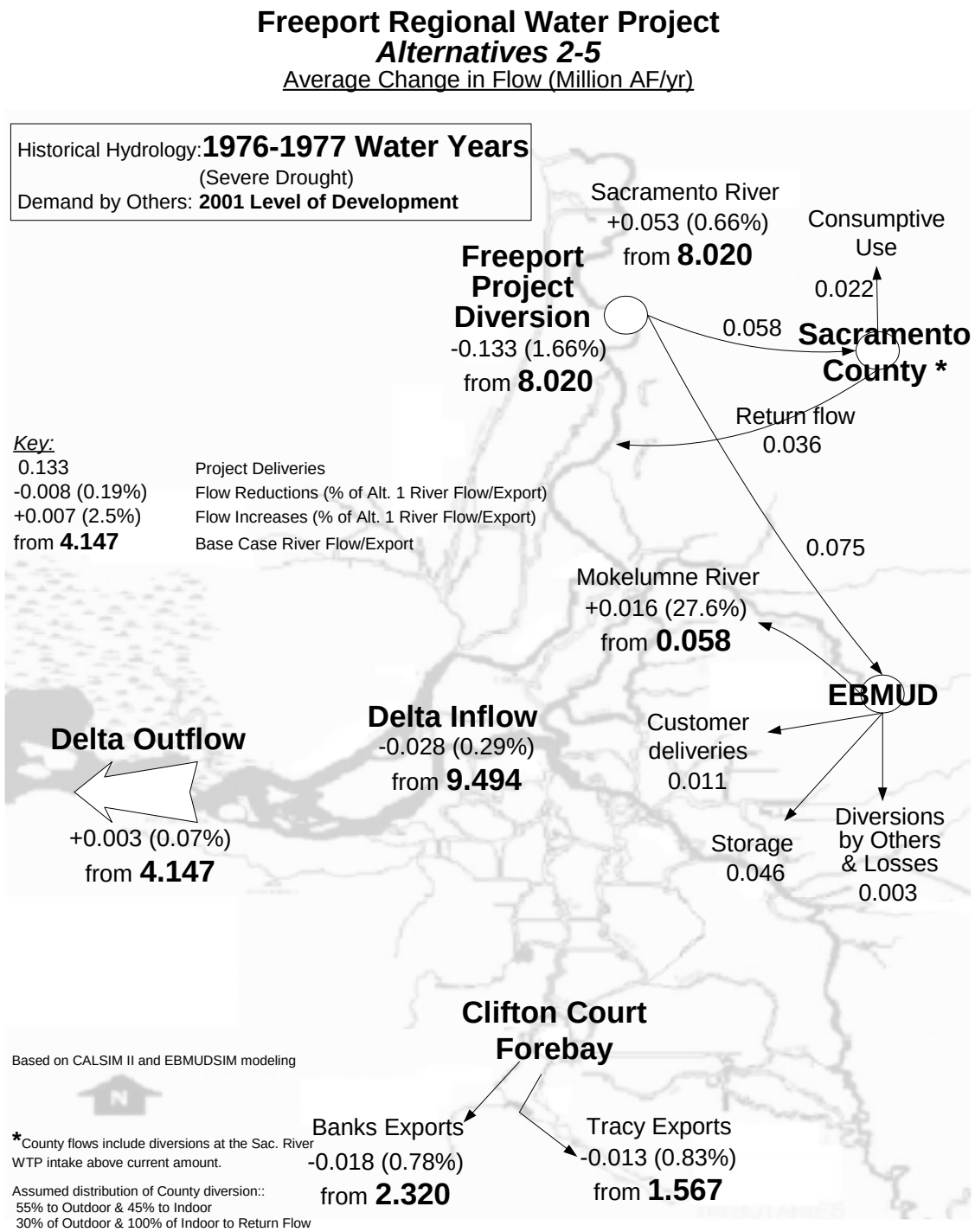


Figure 3.4.1-4 Average Change in Simulated Flows, Alternatives 2-5, 2001 LOD (Dry Period WY 1987-1992)

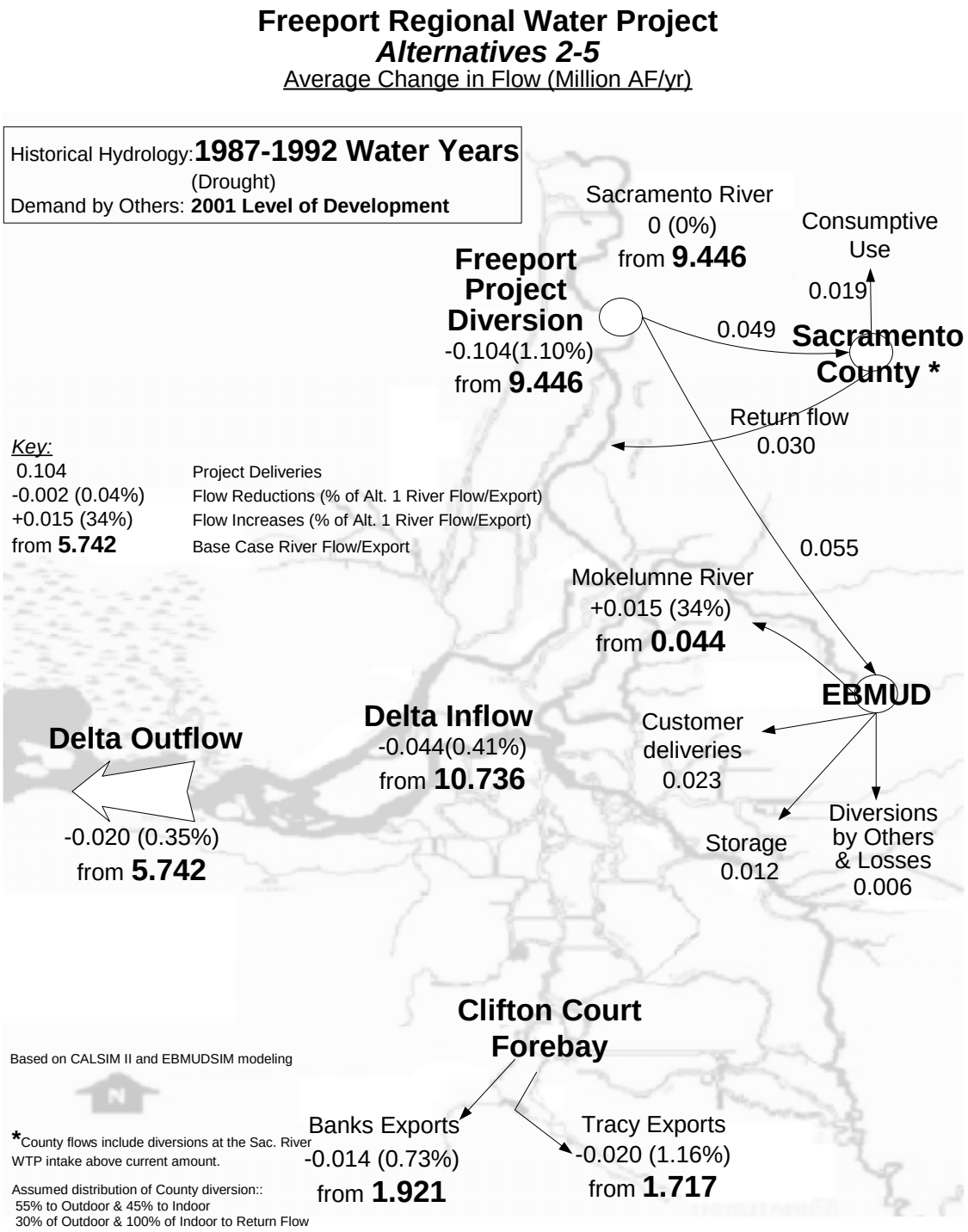


Figure 3.4.1-5 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2001 LOD (Average of All Years)

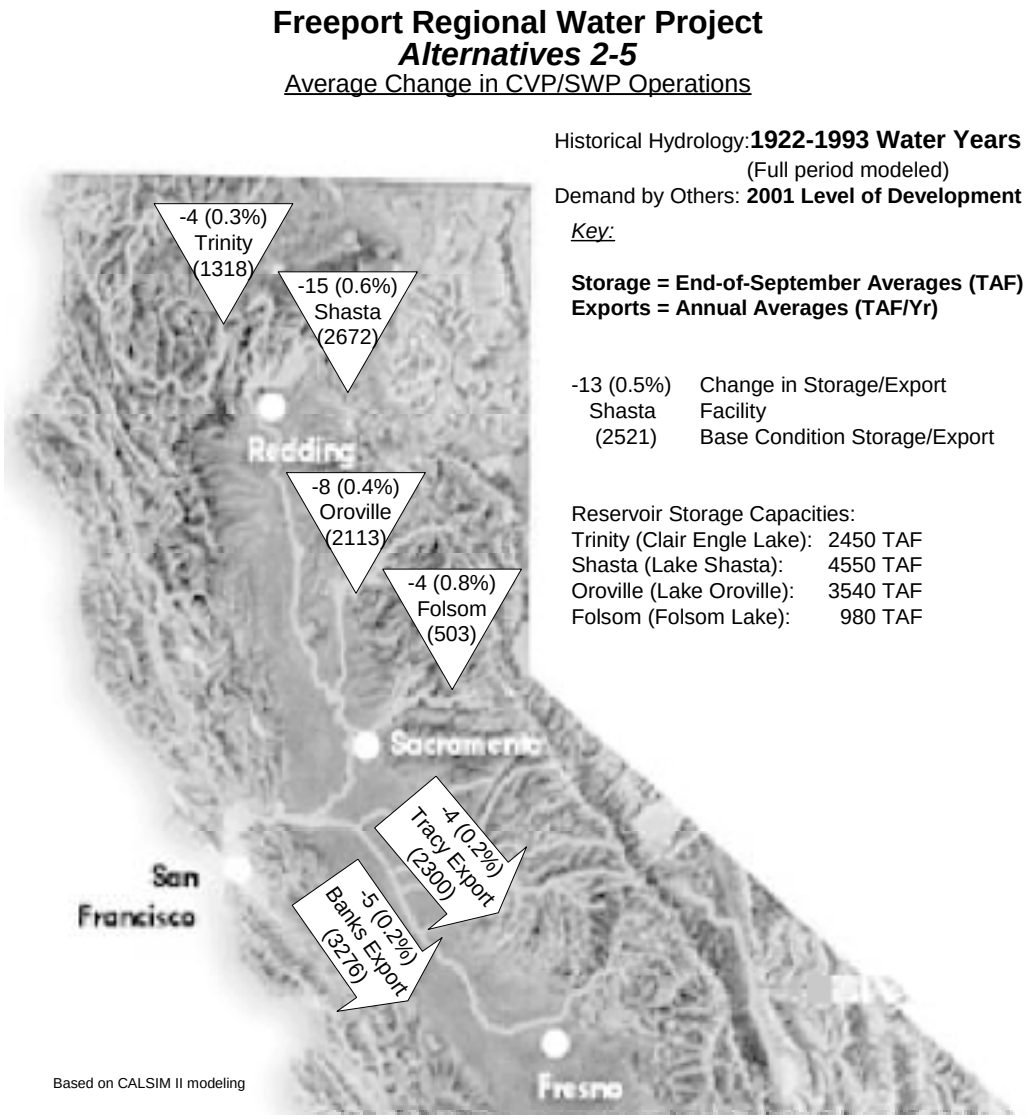


Figure 3.4.1-6 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2001 LOD (Dry Period WY 1928-1934)

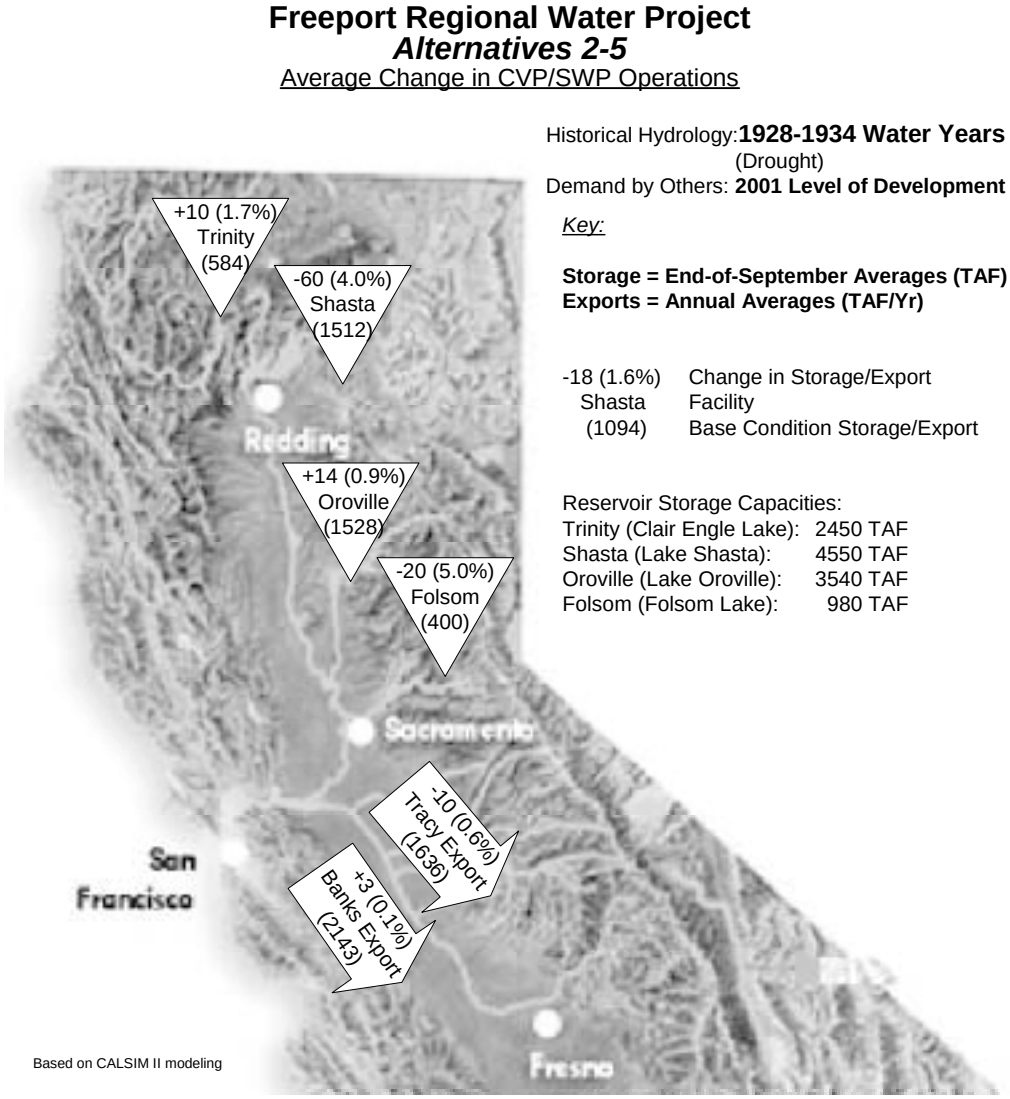


Figure 3.4.1-7 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2001 LOD (Dry Period WY 1976-1977)

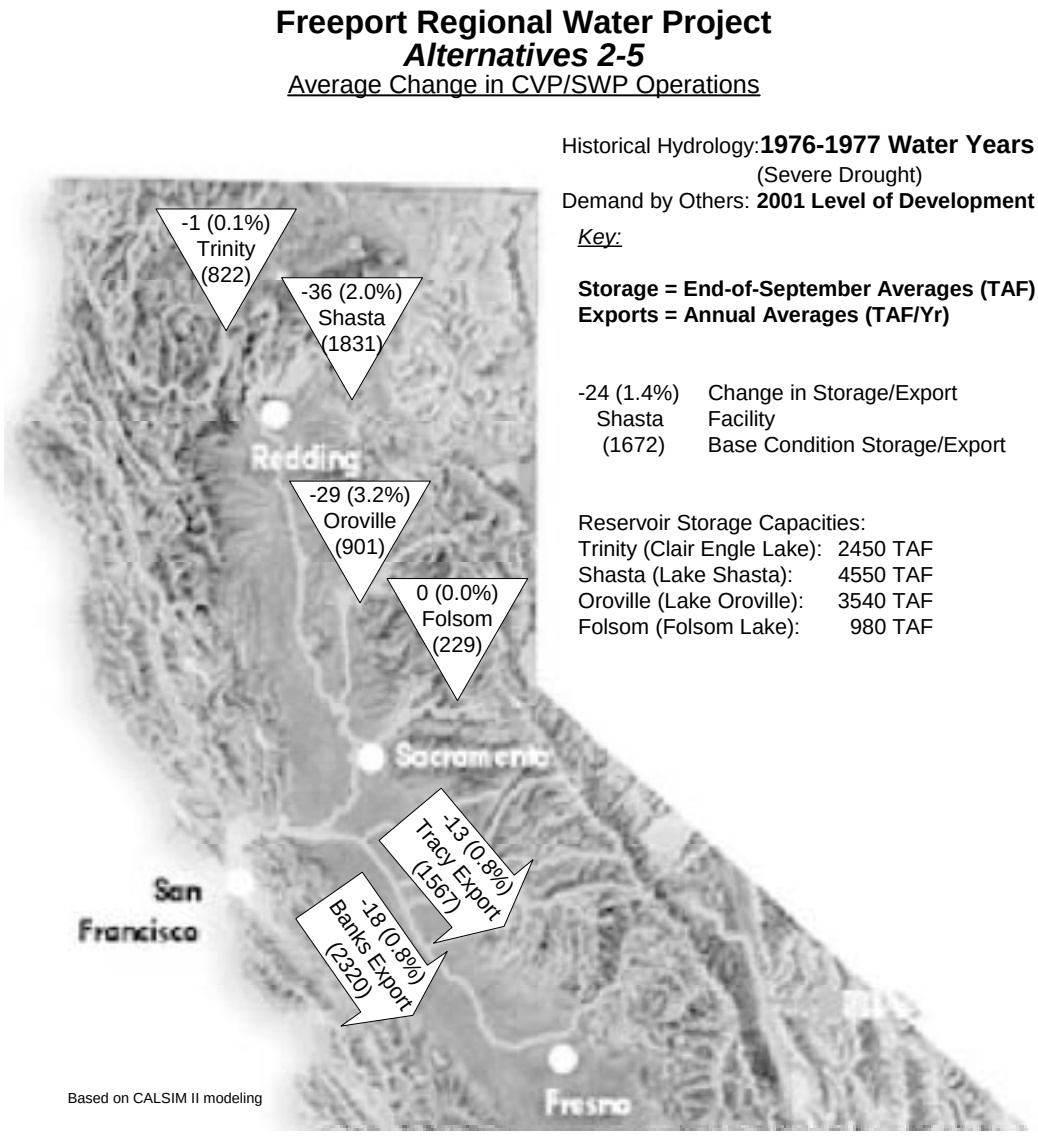


Figure 3.4.1-8 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2001 LOD (Dry Period WY 1987-1992)

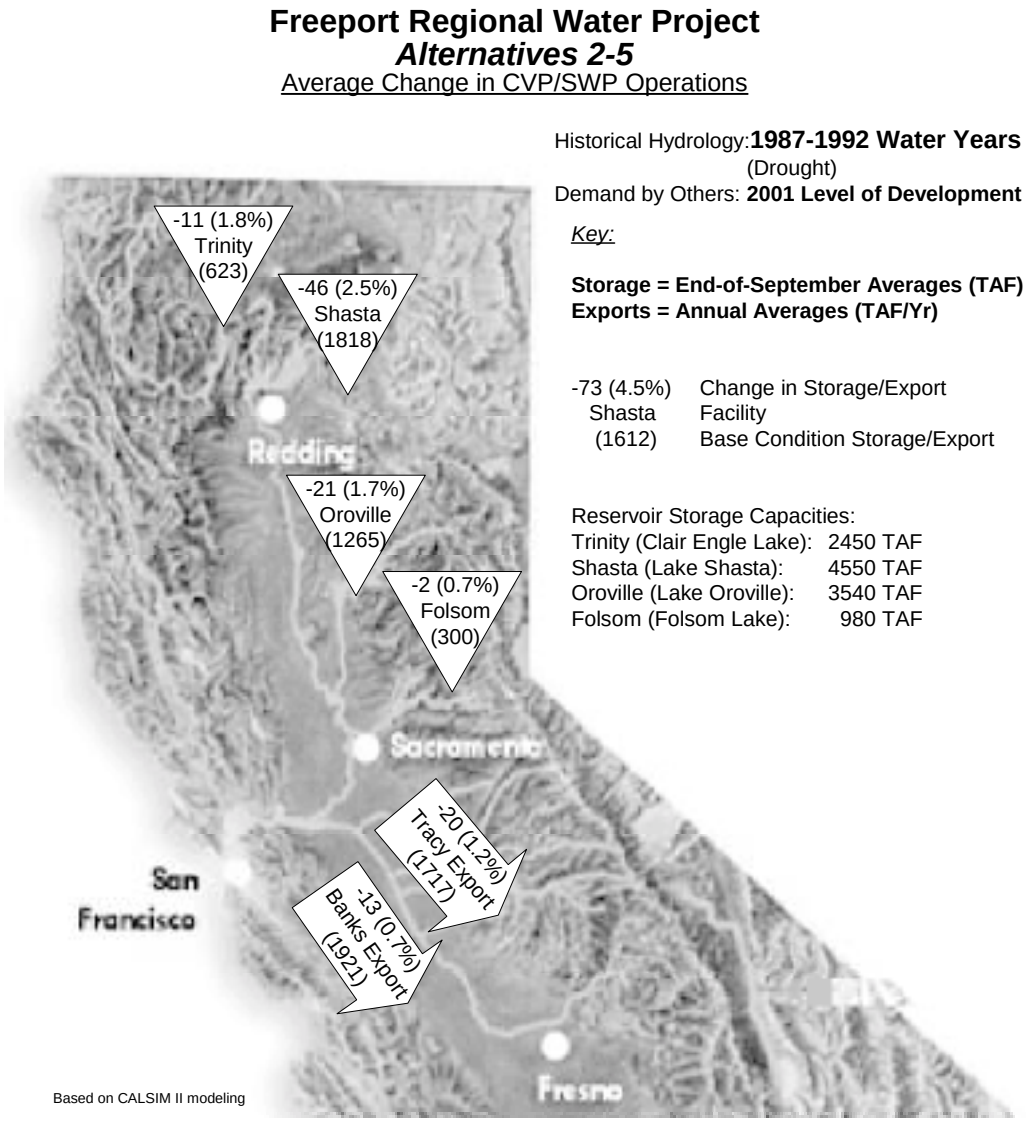


Figure 3.4.1-9 Comparison of Alternatives for Selected Parameters, 2001 LOD (Average of All Years)

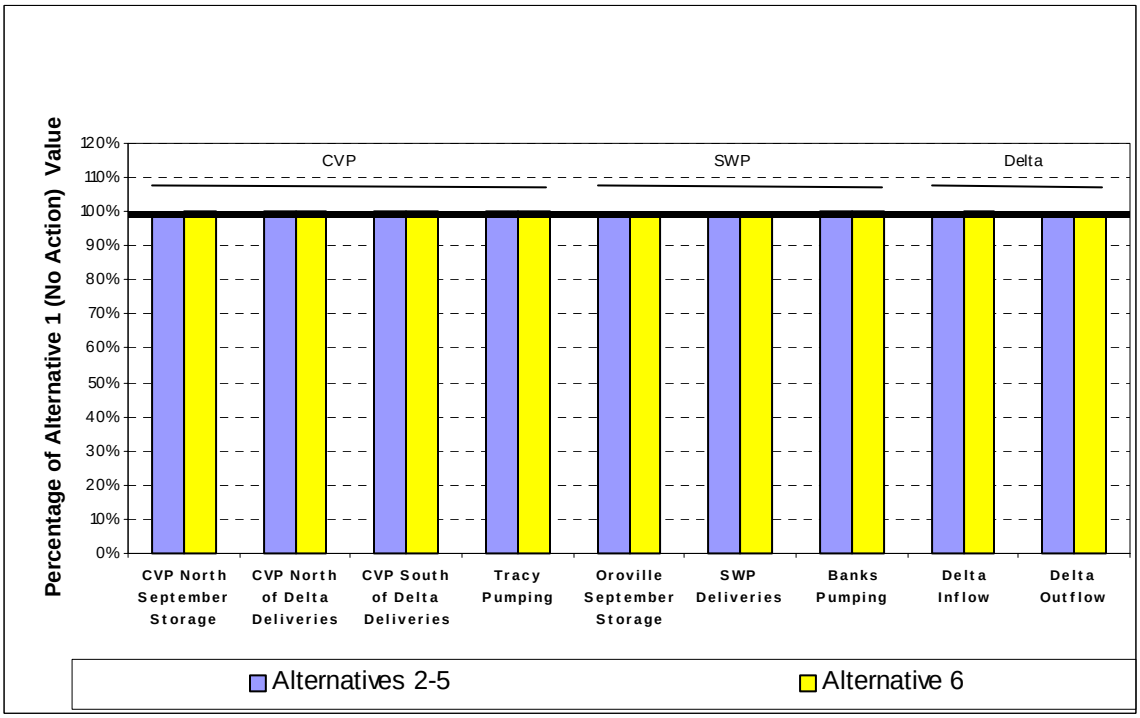


Figure 3.4.1-10 Comparison of Alternatives for Selected Parameters, 2001 LOD (Dry Period WY 1928-1934)

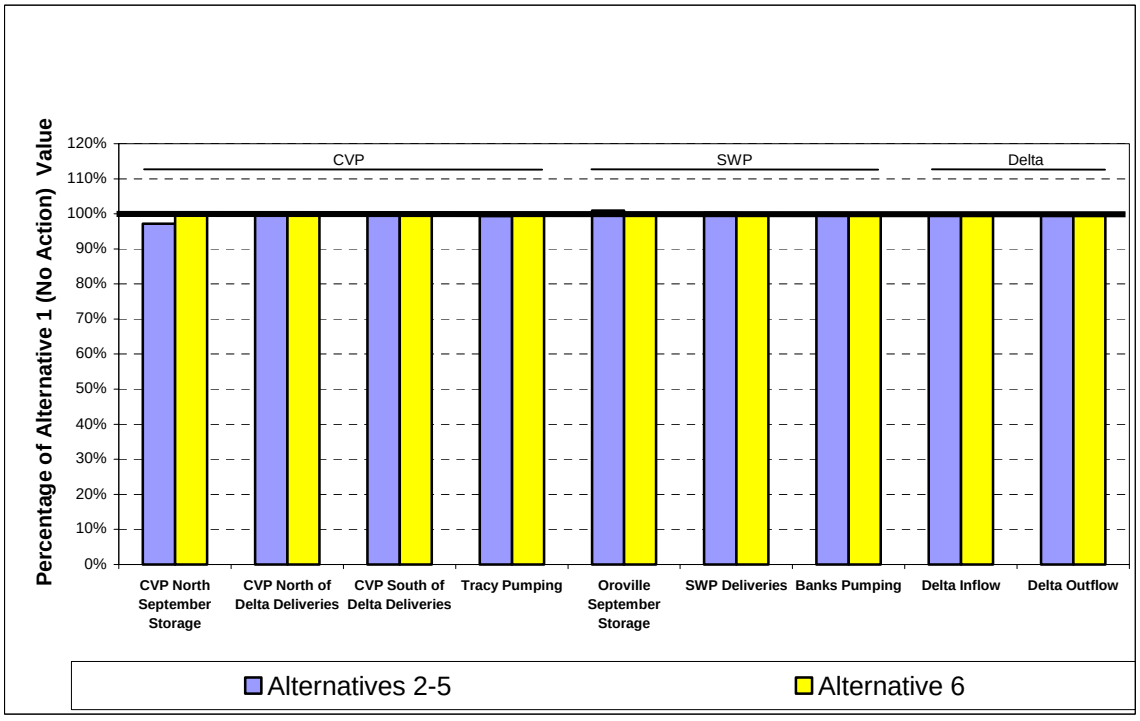


Figure 3.4.1-11 Comparison of Alternatives for Selected Parameters, 2001 LOD (Dry Period WY 1976-1977)

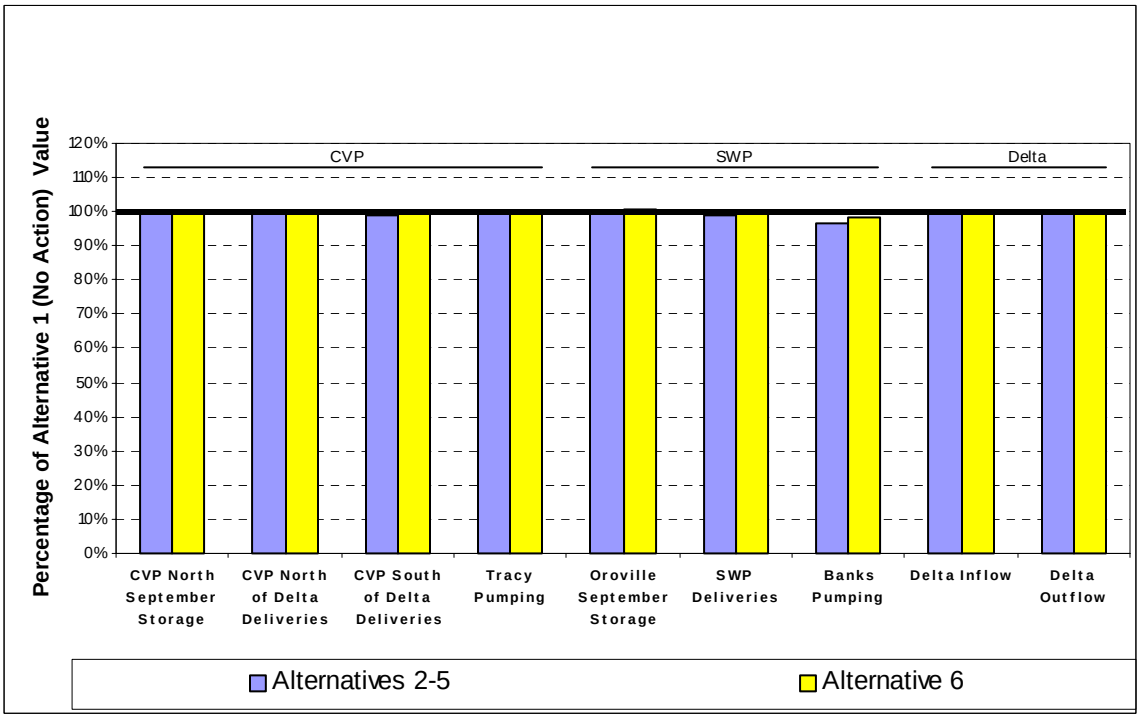


Figure 3.4.1-12 Comparison of Alternatives for Selected Parameters, 2001 LOD (Dry Period WY 1987-1992)

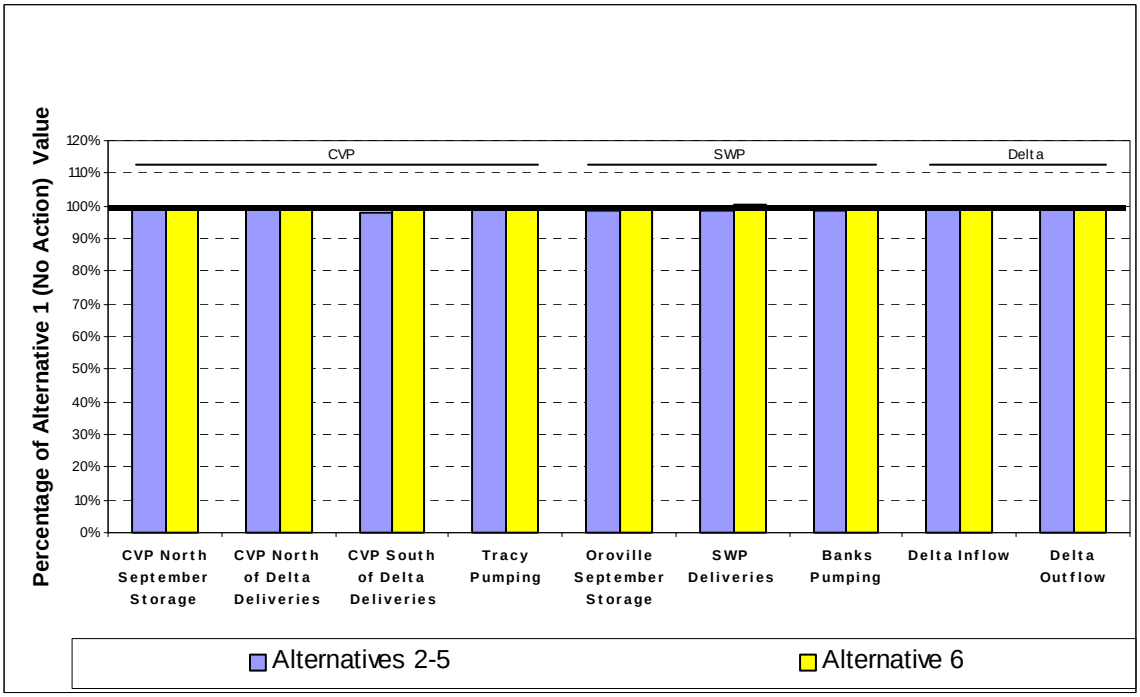


Figure 3.4.1-13 Comparison of Alternatives for Selected CVP and SWP Parameters, 2001 LOD (Average of All Years)

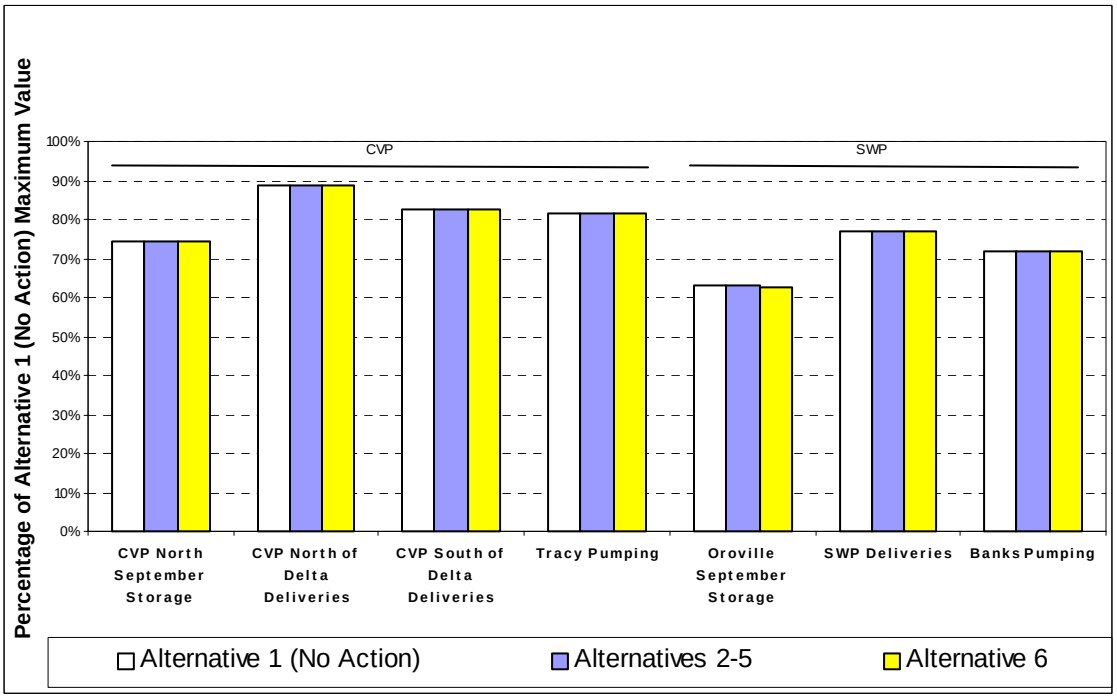


Figure 3.4.1-14 Comparison of Alternatives for Selected CVP and SWP Parameters, 2001 LOD (Dry Period WY 1928-1934)

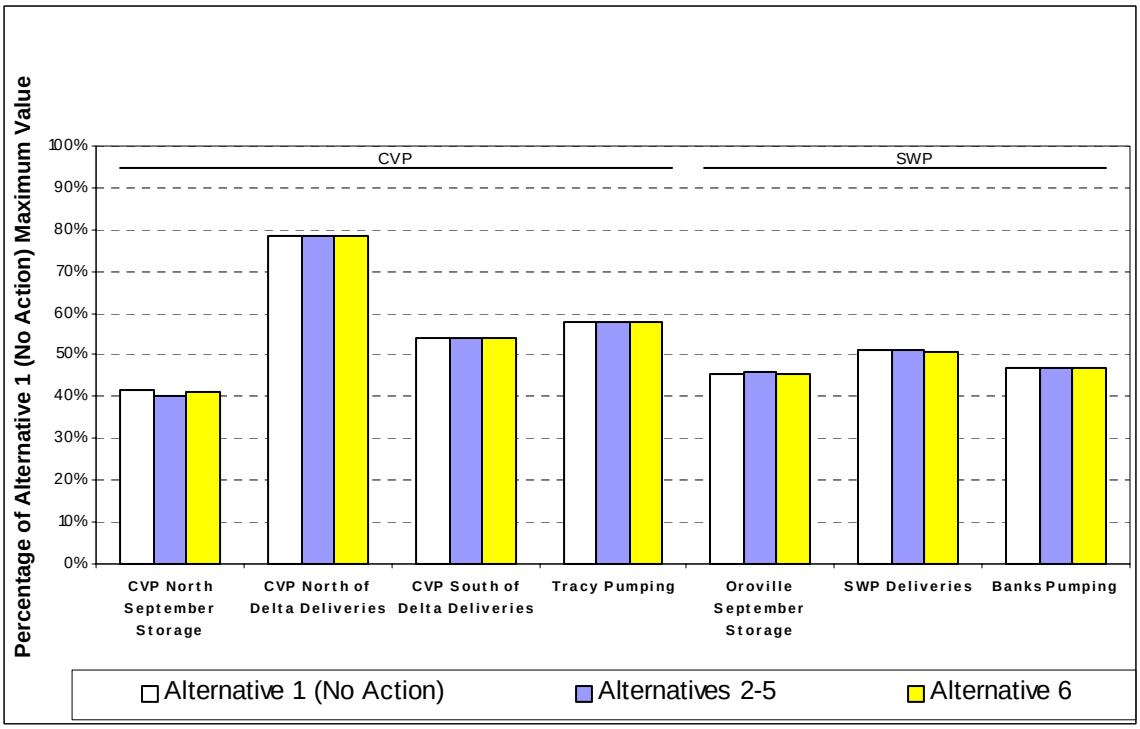


Figure 3.4.1-15 Comparison of Alternatives for Selected CVP and SWP Parameters, 2001 LOD (Dry Period WY 1976-1977)

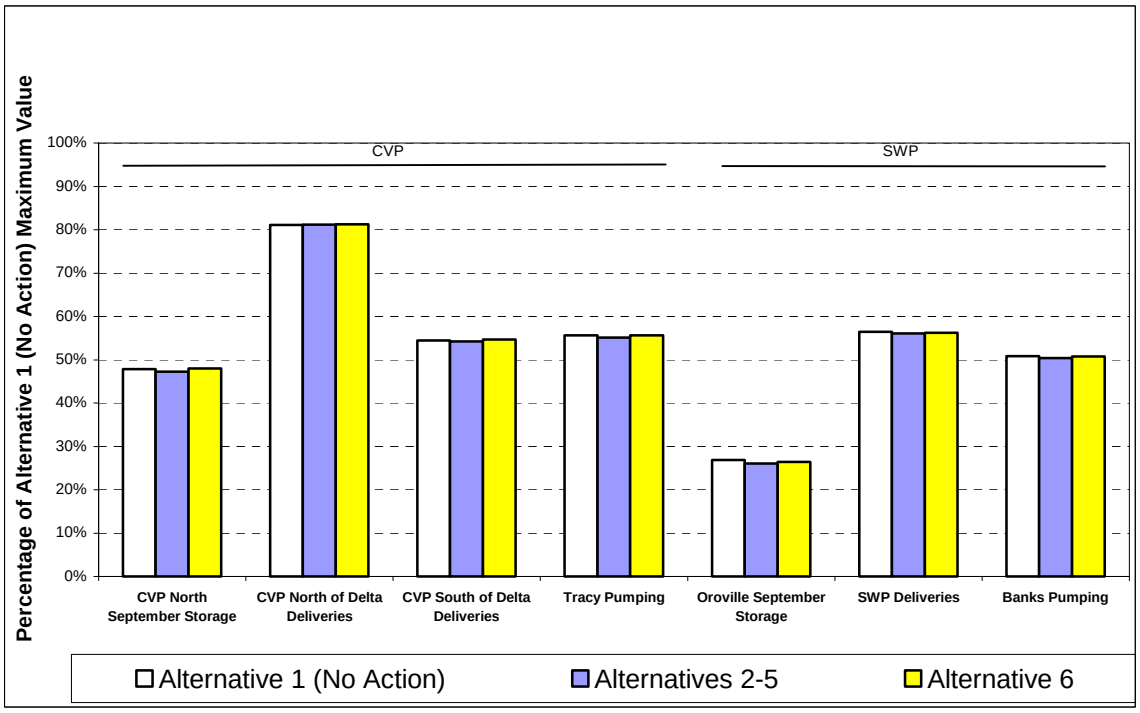
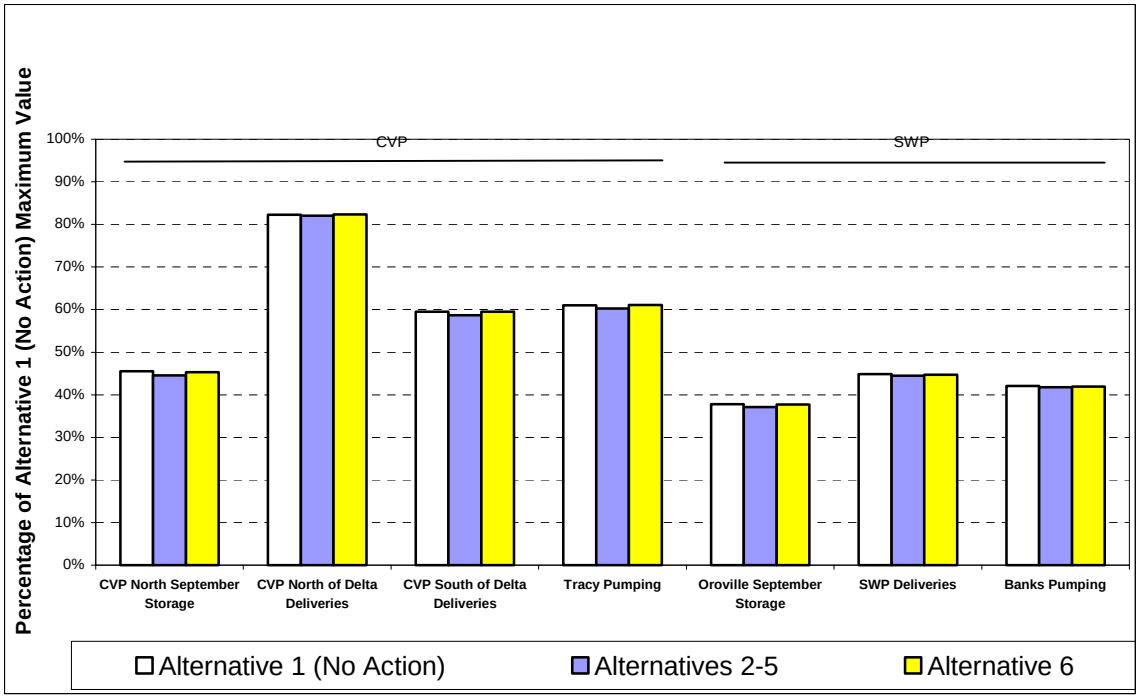


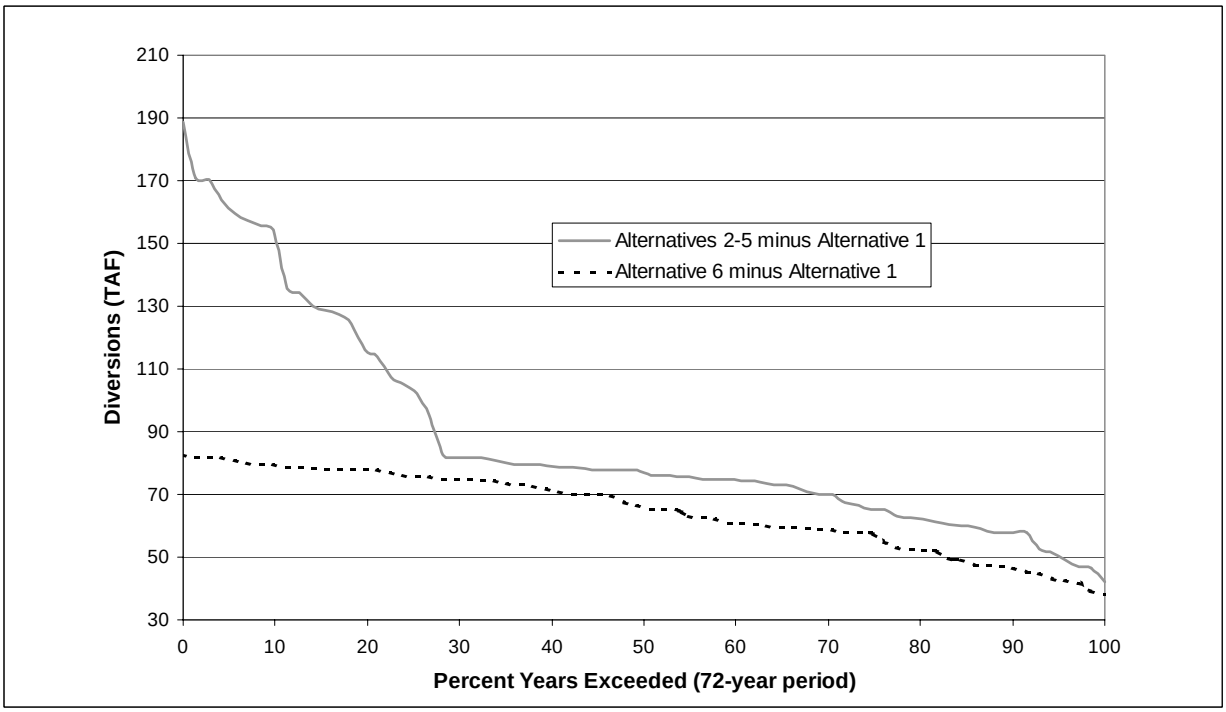
Figure 3.4.1-16 Comparison of Alternatives for Selected CVP and SWP Parameters, 2001 LOD (Dry Period WY 1987-1992)



3.4.2 Freeport Project Diversions

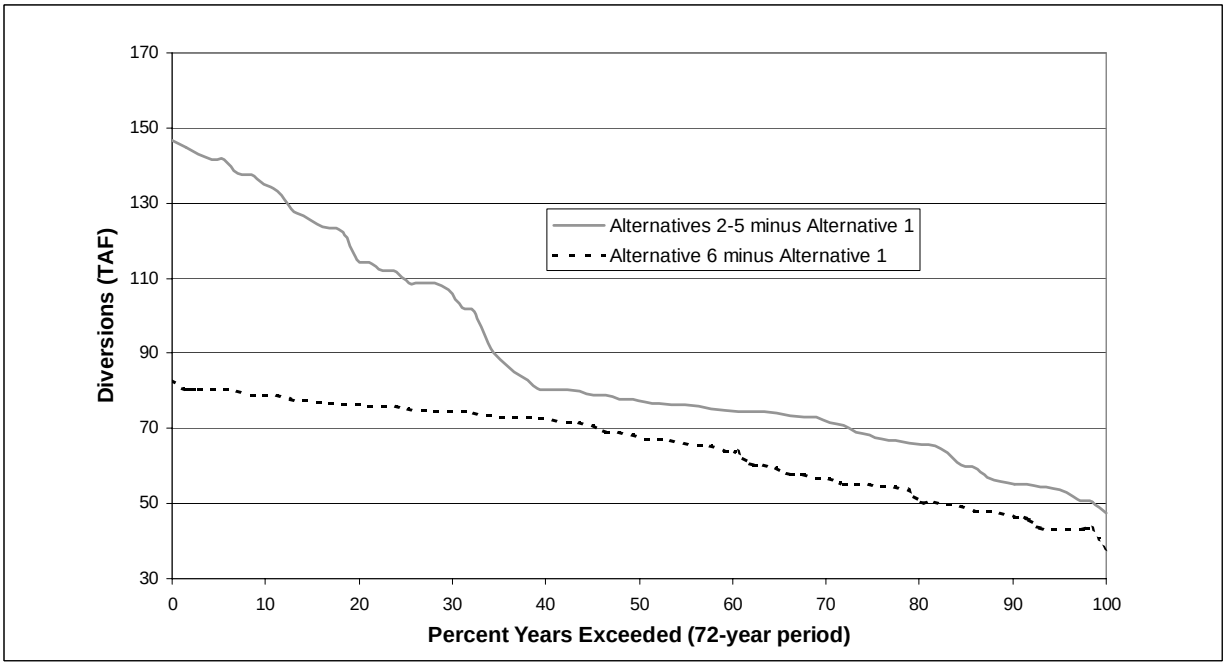
Figures 3.4.2-1 and 3.4.2-2 display annual exceedence data for the combined FRWP, including EBMUD diversions at Freeport, SCWA diversions at Freeport, and SCWA diversions at the Sacramento River Water Treatment Plant. In Alternative 1, SCWA diverts some water at the intake to the City of Sacramento's Water Treatment Plant. Total project diversions shown in Figures 3.4.2-1 through 3.4.2-8 and Tables 3.4.2-1 through 3.4.2-2 refer to the incremental increase in SCWA diversions combined with EBMUD diversions at Freeport. Data for each individual FRWP component of the FRWP total project diversions are presented in the following parts of this section. Figures in this section are provided for both Contract Year (March – February) and Water Year (October – September) diversions.

Figure 3.4.2-1. Exceedence for Simulated Annual Total Project Diversions, 2001 LOD (Contract Year)



* Alternative 1 diversions consist of only SCWA diversions at Sacramento River WTP

Figure 3.4.2-2. Exceedence for Simulated Annual Total Project Diversions, 2001 LOD (Water Year)



Figures 3.4.2-3 and 3.4.2-4 are stacked bar charts that show the differences in deliveries between the Action alternatives and Alternative 1 for each of the FRWP diversions. There are no EBMUD diversions at Freeport in Alternative 6, as is reflected in the chart. Figures 3.4.2-5 and 3.4.2-6 show the same data in water year format.

Figure 3.4.2-3. Simulated Annual Total Project Diversions, 2001 LOD (Contract Year) Alternatives 2-5 minus Alternative 1

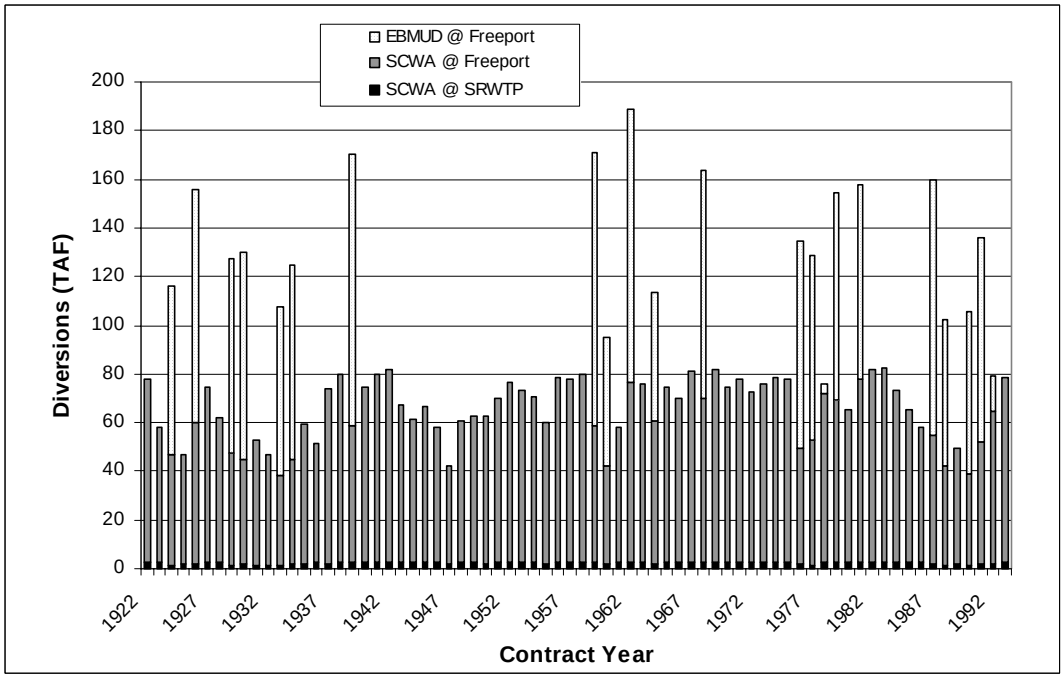


Figure 3.4.2-4. Simulated Annual Total Project Diversions, 2001 LOD (Contract Year) Alternative 6 minus Alternative 1

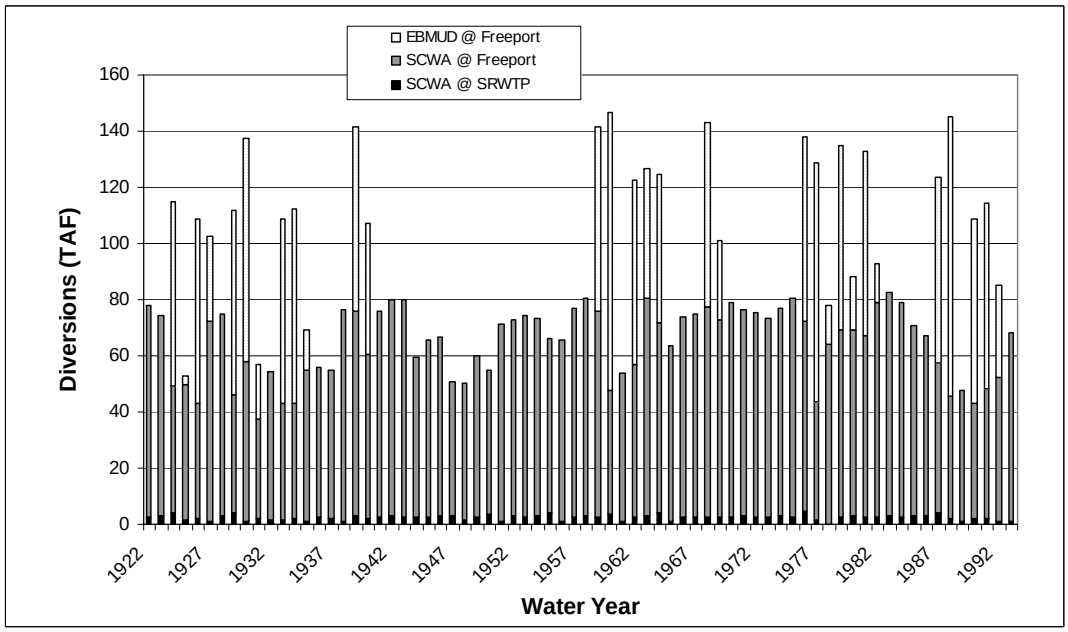


Figure 3.4.2-5. Simulated Annual Total Project Diversions, 2001 LOD (Water Year) Alternatives 2-5 minus Alternative 1

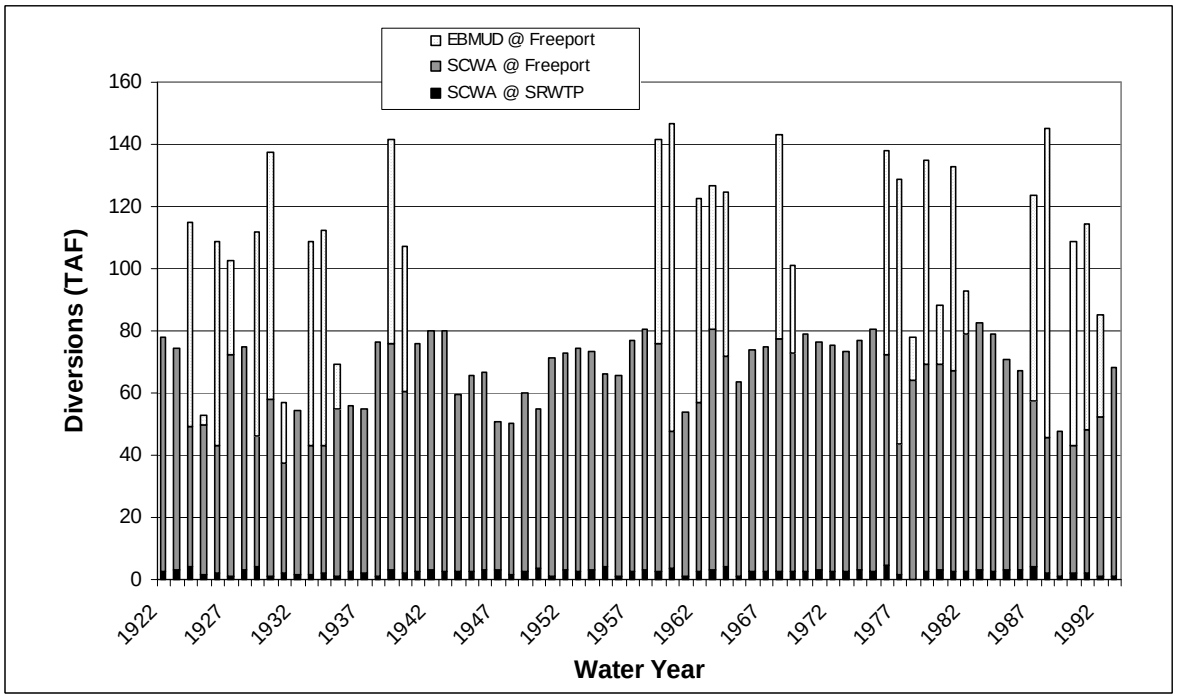


Figure 3.4.2-6. Simulated Annual Total Project Diversions, 2001 LOD (Water Year) Alternative 6 minus Alternative 1

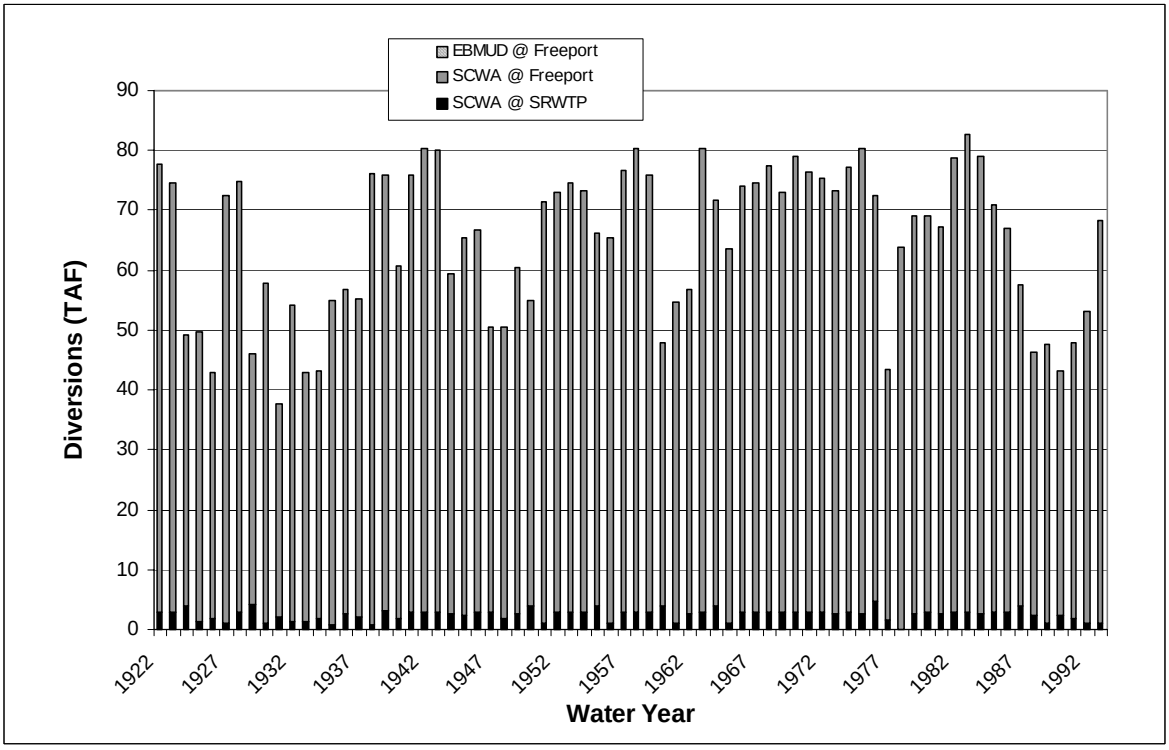


Figure 3.4.2-7. Simulated Monthly Total Project Diversions, 2001 LOD (Dry Period WY 1928-1934)

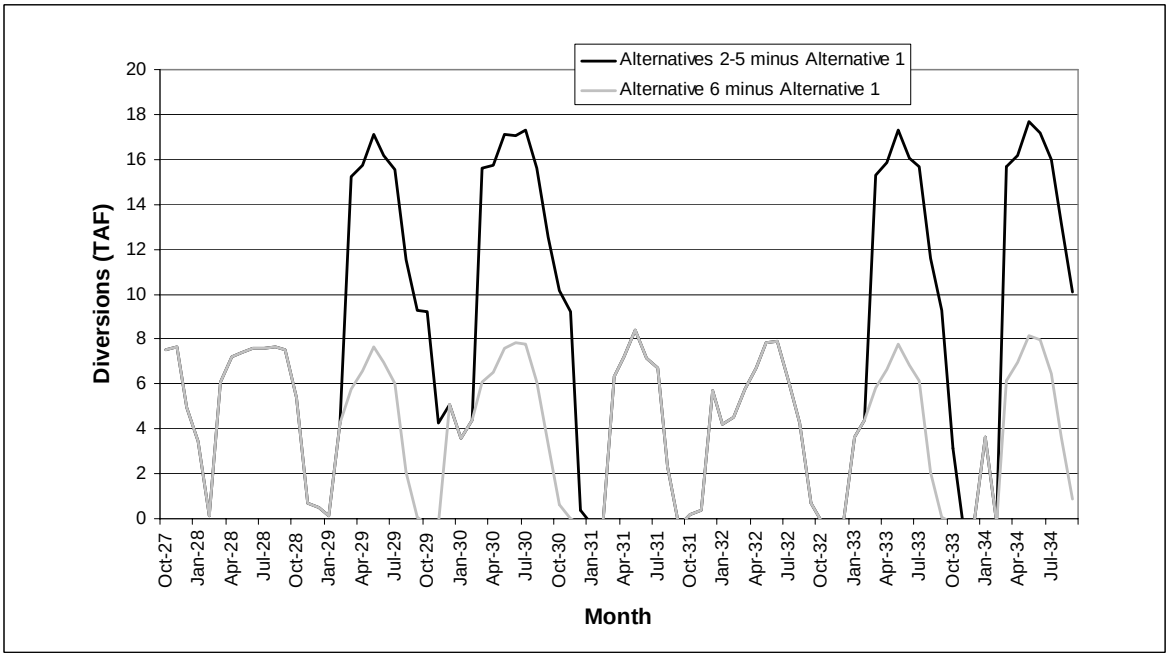


Figure 3.4.2-8. Simulated Monthly Total Project Diversions, 2001 LOD (Dry Period WY 1987-1992)

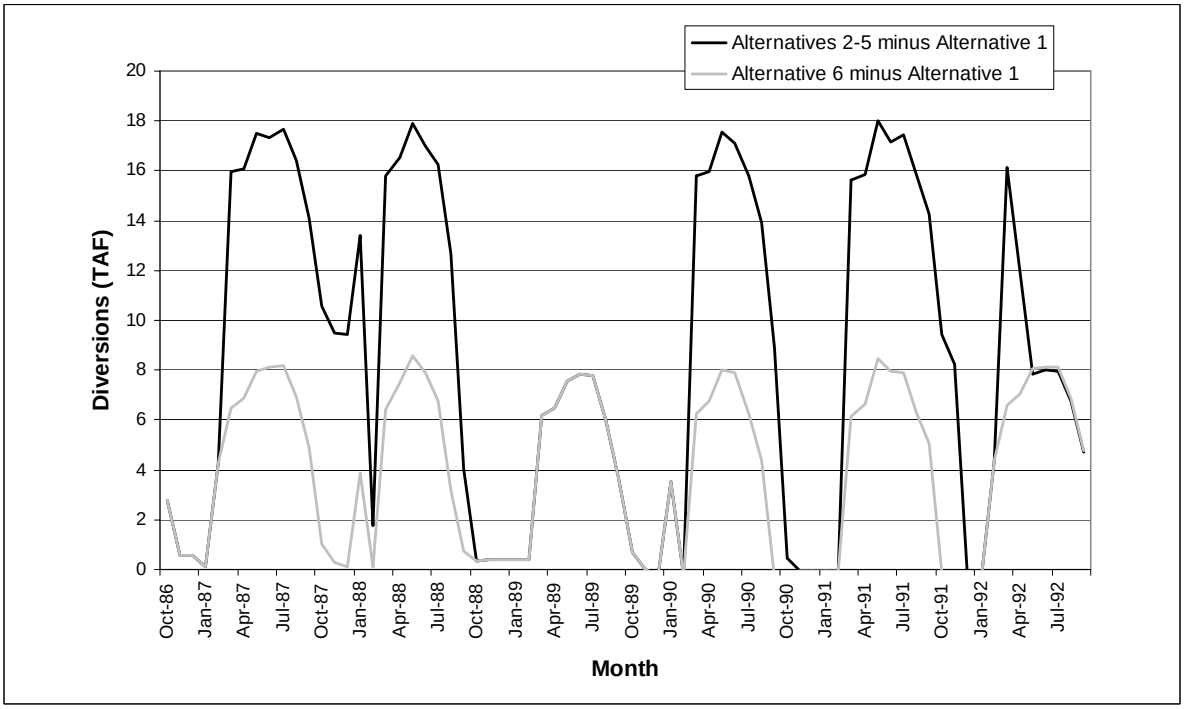


Table 3.4.2-1. Simulated Total Project Diversions (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

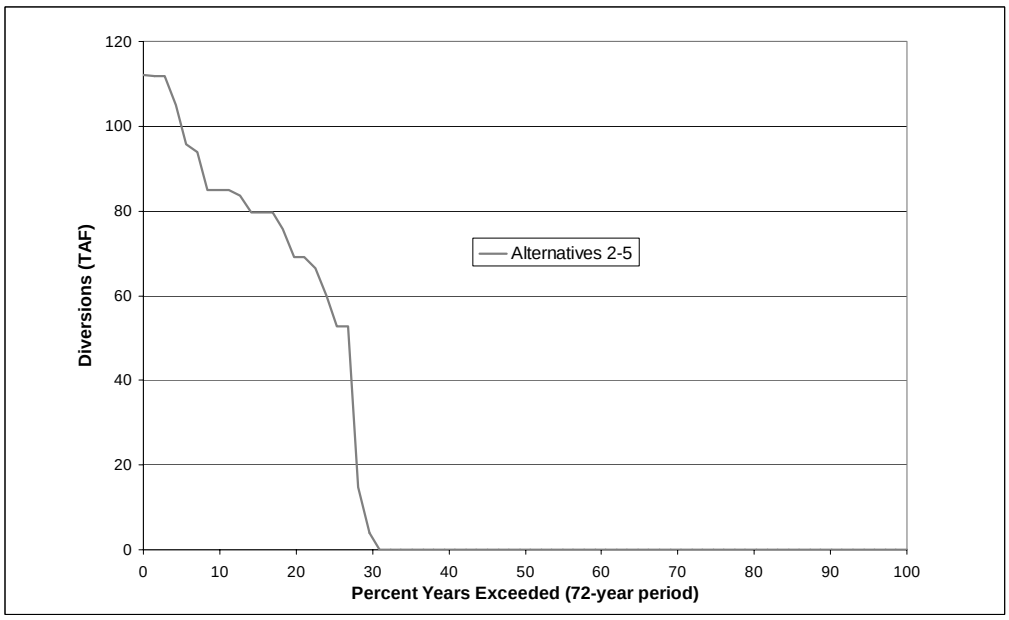
YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.5	6.2	5.0	3.4	4.3	6.0	6.2	8.3	7.8	7.6	7.6	7.8	77.7
1923	7.5	6.2	5.0	3.4	4.3	5.4	6.5	7.3	7.5	7.6	7.6	6.4	74.6
1924	2.3	2.3	0.7	0.1	4.3	16.1	16.6	17.9	16.7	16.4	12.3	9.3	115.0
1925	3.8	0.6	0.6	0.6	5.2	5.6	6.5	7.6	7.8	7.2	6.0	1.2	53.0
1926	0.7	0.0	-0.2	-0.2	4.3	15.1	15.9	17.1	17.0	15.7	13.6	9.7	108.7
1927	10.2	17.0	14.4	5.4	4.3	6.0	7.2	7.3	7.5	7.6	7.6	7.8	102.4
1928	7.5	7.7	5.0	3.4	0.2	6.1	7.2	7.4	7.6	7.6	7.7	7.5	74.8
1929	5.4	0.7	0.5	0.1	4.3	15.3	15.8	17.1	16.2	15.6	11.6	9.3	111.6
1930	9.2	4.2	5.1	3.6	4.4	15.6	15.8	17.1	17.0	17.3	15.6	12.6	137.5
1931	10.1	9.2	0.4	-0.2	-0.2	6.3	7.2	8.4	7.1	6.7	2.3	-0.3	57.0
1932	0.2	0.4	5.7	4.2	4.5	5.8	6.7	7.8	7.9	6.2	4.3	0.7	54.3
1933	-0.1	-0.2	-0.2	3.6	4.4	15.3	15.8	17.3	16.1	15.6	11.6	9.3	108.6
1934	3.2	-0.2	-0.2	3.6	-0.2	15.7	16.2	17.7	17.2	16.0	13.2	10.1	112.1
1935	9.6	4.7	0.2	4.0	0.2	6.2	7.7	7.5	7.8	7.8	7.4	6.1	69.0
1936	1.4	0.0	-0.2	3.5	4.3	6.1	6.5	7.6	7.8	7.7	6.6	4.8	56.1
1937	0.7	0.0	-0.3	-0.3	4.3	6.1	7.4	7.6	7.8	7.8	7.7	6.3	55.1
1938	2.8	7.8	5.0	3.5	4.3	6.0	7.2	8.2	7.8	7.6	7.6	8.2	76.2
1939	8.7	6.1	5.0	3.4	3.8	15.2	15.7	17.2	17.0	17.3	16.8	15.2	141.4
1940	10.3	9.9	9.5	13.1	13.1	6.0	7.2	7.3	7.5	7.6	7.6	7.8	107.0
1941	7.0	3.7	5.0	3.4	4.3	6.0	7.5	8.3	7.5	7.6	7.6	8.0	75.8
1942	8.7	6.1	5.0	3.4	4.3	6.0	7.5	8.3	7.8	7.6	7.6	8.0	80.2
1943	8.6	7.7	5.0	3.4	4.3	6.0	7.3	7.3	7.5	7.6	7.6	7.8	80.1
1944	7.1	3.8	0.7	0.1	4.3	5.5	6.3	7.4	7.6	7.0	6.1	3.6	59.6
1945	1.1	7.7	3.9	0.6	4.3	5.5	6.2	7.3	7.6	7.6	7.5	6.2	65.6
1946	2.5	7.7	5.0	3.4	0.2	5.5	6.2	7.4	7.5	7.6	7.7	6.3	66.8
1947	2.3	2.3	0.7	0.1	4.3	5.6	6.4	7.4	7.7	7.1	6.0	1.1	51.0
1948	0.7	0.7	0.1	-0.3	-0.3	5.6	6.6	8.3	7.5	7.6	7.6	6.3	50.5
1949	3.8	2.3	0.7	0.1	4.3	6.1	6.2	7.3	7.5	7.6	7.7	6.6	60.2
1950	2.8	2.3	0.7	3.4	4.3	5.6	6.5	7.6	7.8	7.0	6.0	1.0	55.0
1951	0.8	7.8	5.0	3.5	4.3	6.0	6.2	7.4	7.5	7.6	7.7	7.7	71.4
1952	5.3	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.6	7.7	8.2	73.0
1953	8.6	6.1	5.0	3.4	0.4	5.1	7.2	7.3	7.9	7.6	7.7	8.2	74.6
1954	6.2	7.7	0.7	3.4	4.3	6.0	7.3	7.3	7.5	7.6	7.6	7.8	73.4
1955	7.1	3.9	5.0	3.4	0.2	5.5	6.5	7.6	7.8	7.8	6.6	4.8	66.1
1956	0.7	0.0	5.0	3.5	4.3	5.9	6.3	8.3	7.8	7.6	7.7	8.3	65.4
1957	8.7	6.0	4.5	3.1	4.3	6.0	6.3	7.4	7.5	7.6	7.6	7.7	76.7
1958	8.7	6.2	5.0	3.4	4.3	6.0	7.5	8.2	7.8	7.6	7.6	8.1	80.4
1959	8.6	6.0	4.5	3.4	4.3	15.1	15.5	16.9	16.9	17.2	17.3	15.8	141.5
1960	11.8	11.4	10.1	9.7	13.1	15.2	15.7	17.1	16.9	15.7	9.5	0.7	146.8
1961	0.6	0.0	-0.2	-0.2	4.3	5.7	6.5	7.5	7.7	7.7	7.8	6.5	53.9
1962	2.4	0.8	0.5	0.8	4.4	15.0	15.4	16.8	16.7	17.1	17.0	15.4	122.3
1963	18.3	16.9	14.3	13.0	12.8	5.2	7.4	8.2	7.5	7.6	7.6	7.6	126.5
1964	8.7	7.7	4.5	3.4	0.2	15.1	15.6	17.1	17.1	17.3	12.5	5.5	124.6
1965	0.7	0.0	5.0	3.5	4.3	5.2	7.4	7.3	7.5	7.6	7.7	7.1	63.5
1966	4.5	7.7	5.0	3.4	4.3	5.4	7.1	7.3	7.6	7.6	7.7	6.3	73.9
1967	2.3	6.0	5.0	3.4	4.3	6.0	7.5	8.1	7.9	8.0	8.0	8.1	74.7
1968	8.6	6.1	5.0	3.4	4.3	15.5	15.4	16.8	16.8	17.1	17.2	16.9	143.0
1969	14.7	11.5	14.3	3.4	4.3	6.0	7.2	8.2	7.9	7.6	7.7	8.2	101.0
1970	8.7	7.7	5.0	3.4	4.3	6.0	6.1	7.3	7.6	7.6	7.7	7.6	78.9
1971	5.0	7.7	5.0	3.4	3.8	6.0	6.2	8.3	7.6	7.6	7.7	8.2	76.4
1972	7.4	6.0	5.0	3.4	4.3	5.9	6.3	7.4	7.6	7.6	7.7	6.7	75.3
1973	2.9	7.7	5.0	3.5	4.3	6.0	6.2	7.3	7.5	7.6	7.6	7.7	73.2
1974	5.3	7.7	5.0	3.4	4.3	6.0	7.2	7.2	7.5	7.6	7.6	8.2	77.1
1975	8.7	6.1	5.0	3.2	4.3	6.0	7.2	8.2	7.8	7.6	8.1	8.2	80.3
1976	8.7	7.7	4.5	0.1	3.8	16.2	16.4	17.7	17.4	17.5	16.3	11.6	138.0
1977	9.8	9.6	1.0	0.4	0.4	16.0	16.6	18.0	17.2	16.4	12.9	10.1	128.5
1978	10.0	1.1	0.6	4.4	5.2	10.1	7.4	8.2	7.5	7.6	7.6	8.2	77.9
1979	7.1	3.9	0.7	3.4	4.3	15.5	15.5	16.8	16.7	17.1	17.1	16.7	134.9
1980	14.4	11.5	5.5	3.4	4.3	6.0	6.3	7.3	7.5	7.6	7.7	6.9	88.4
1981	5.2	2.2	0.7	3.4	4.3	15.6	16.5	16.9	16.8	17.2	17.2	17.0	133.0
1982	14.9	12.3	5.1	3.6	4.4	6.0	7.5	8.1	7.8	7.6	7.6	8.0	92.9
1983	8.7	7.7	5.0	3.4	4.3	6.0	7.5	8.2	7.8	8.0	8.0	8.1	82.8
1984	8.6	7.7	5.0	3.4	4.3	5.9	6.2	7.3	7.6	7.6	7.7	7.8	79.0
1985	5.5	7.7	5.0	0.5	4.3	5.5	6.2	7.3	7.5	7.6	7.6	6.3	71.0
1986	2.4	2.3	5.0	3.4	4.3	6.1	6.4	7.5	7.7	7.7	7.7	6.6	67.0
1987	2.8	0.6	0.5	0.1	4.3	16.0	16.1	17.5	17.3	17.7	16.4	14.1	123.3
1988	10.6	9.5	9.5	13.4	1.8	15.8	16.5	17.9	17.0	16.2	12.7	4.0	144.9
1989	0.3	0.4	0.4	0.4	0.4	6.2	6.5	7.5	7.8	7.8	6.0	3.7	47.5
1990	0.7	0.0	-0.2	3.5	-0.2	15.8	16.0	17.5	17.1	15.8	13.9	8.9	108.8
1991	0.5	-0.1	-0.1	-0.1	-0.1	15.6	15.8	18.0	17.2	17.4	15.8	14.2	114.4
1992	9.4	8.2	-0.2	-0.2	4.4	16.1	12.0	7.8	8.0	7.9	6.8	4.7	85.0
1993	1.2	0.3	5.5	4.0	4.8	6.0	7.2	8.3	7.9	7.6	7.6	7.8	68.2
AVG:	6.0	5.2	3.8	3.1	3.9	8.7	9.4	10.4	10.2	10.1	9.3	7.8	88.0
MIN:	-0.1	-0.2	-0.3	-0.3	-0.3	5.1	6.1	7.2	7.1	6.2	2.3	-0.3	47.5
MAX:	18.3	17.0	14.4	13.4	13.1	16.2	16.6	18.0	17.4	17.7	17.3	17.0	146.8

Table 3.4.2-2. Simulated Total Project Diversions (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.5	6.2	5.0	3.4	4.3	6.0	6.2	8.3	7.8	7.6	7.6	7.8	77.7
1923	7.5	6.2	5.0	3.4	4.3	5.4	6.5	7.3	7.5	7.6	7.6	6.4	74.6
1924	2.3	2.3	0.7	0.1	4.3	6.6	7.4	8.4	7.5	6.9	2.8	0.1	49.3
1925	0.5	0.6	0.6	0.6	5.2	5.6	6.5	7.6	7.8	7.2	6.0	1.2	49.6
1926	0.7	0.0	-0.2	-0.2	4.3	5.5	6.7	7.5	7.8	6.2	4.1	0.5	42.9
1927	0.6	7.8	5.1	3.5	4.3	6.0	7.2	7.3	7.5	7.6	7.6	7.8	72.4
1928	7.5	7.7	5.0	3.4	0.2	6.1	7.2	7.4	7.6	7.6	7.7	7.5	74.8
1929	5.4	0.7	0.5	0.1	4.3	5.7	6.6	7.6	6.9	6.0	2.0	0.1	46.0
1930	-0.3	-0.2	5.1	3.6	4.4	6.1	6.5	7.6	7.8	7.8	6.1	3.3	57.8
1931	0.6	0.0	-0.2	-0.2	-0.2	6.3	7.2	8.4	7.1	6.7	2.3	-0.3	37.6
1932	0.2	0.4	5.7	4.2	4.5	5.8	6.7	7.8	7.9	6.2	4.3	0.7	54.3
1933	-0.1	-0.2	-0.2	3.6	4.4	5.8	6.6	7.8	6.9	6.1	2.1	0.1	43.0
1934	-0.2	-0.2	-0.2	3.6	-0.2	6.1	7.0	8.1	8.0	6.4	3.6	0.9	43.1
1935	0.1	0.2	0.2	4.0	0.2	6.2	7.7	7.5	7.8	7.8	7.4	6.1	55.0
1936	1.4	0.0	-0.2	3.5	4.3	6.1	6.6	7.7	8.0	7.9	6.7	4.8	56.7
1937	0.7	0.0	-0.3	-0.3	4.3	6.1	7.4	7.6	7.8	7.8	7.7	6.3	55.1
1938	2.8	7.8	5.0	3.5	4.3	6.0	7.2	8.2	7.8	7.6	7.6	8.2	76.2
1939	8.7	6.1	5.0	3.4	3.8	5.7	6.5	7.7	7.8	7.8	7.3	6.0	75.8
1940	0.8	0.7	0.1	3.6	4.4	6.0	7.2	7.3	7.5	7.6	7.6	7.8	60.7
1941	7.0	3.7	5.0	3.4	4.3	6.0	7.5	8.3	7.5	7.6	7.6	8.0	75.8
1942	8.7	6.1	5.0	3.4	4.3	6.0	7.5	8.3	7.8	7.6	7.6	8.0	80.2
1943	8.6	7.7	5.0	3.4	4.3	6.0	7.3	7.3	7.5	7.6	7.6	7.8	80.1
1944	7.1	3.8	0.7	0.1	4.3	5.5	6.3	7.4	7.6	7.0	6.0	3.6	59.5
1945	1.1	7.7	3.9	0.6	4.3	5.5	6.2	7.3	7.6	7.6	7.5	6.2	65.5
1946	2.5	7.7	5.0	3.4	0.2	5.5	6.2	7.4	7.5	7.6	7.7	6.3	66.8
1947	2.3	2.3	0.7	0.1	4.3	5.6	6.3	7.4	7.6	7.0	5.9	1.1	50.6
1948	0.7	0.7	0.1	-0.3	-0.3	5.6	6.6	8.3	7.5	7.6	7.6	6.3	50.5
1949	3.8	2.3	0.7	0.1	4.3	6.1	6.2	7.4	7.6	7.6	7.7	6.6	60.4
1950	2.8	2.3	0.7	3.4	4.3	5.7	6.5	7.6	7.8	7.0	6.0	1.0	55.1
1951	0.8	7.8	5.0	3.5	4.3	6.0	6.2	7.4	7.5	7.6	7.7	7.7	71.4
1952	5.3	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.6	7.7	8.2	73.0
1953	8.6	6.1	5.0	3.4	0.4	5.1	7.2	7.3	7.9	7.6	7.7	8.2	74.6
1954	6.2	7.7	0.7	3.4	4.3	6.0	7.3	7.3	7.5	7.6	7.6	7.8	73.4
1955	7.1	3.9	5.0	3.4	0.2	5.5	6.5	7.6	7.8	7.8	6.6	4.8	66.2
1956	0.7	0.0	5.0	3.5	4.3	5.9	6.3	8.3	7.8	7.6	7.7	8.3	65.4
1957	8.7	6.0	4.5	3.1	4.3	6.0	6.3	7.4	7.5	7.6	7.6	7.7	76.7
1958	8.7	6.2	5.0	3.4	4.3	6.0	7.5	8.2	7.8	7.6	7.6	8.1	80.4
1959	8.6	6.0	4.5	3.4	4.3	5.6	6.3	7.4	7.7	7.7	7.8	6.6	75.9
1960	2.3	2.2	0.7	0.1	4.4	5.7	6.5	7.6	7.7	6.2	3.7	0.7	47.7
1961	0.6	0.0	-0.2	-0.2	4.3	5.7	6.6	7.7	7.9	7.9	7.9	6.6	54.6
1962	2.4	0.8	0.5	0.8	4.4	5.5	6.2	7.3	7.5	7.6	7.4	6.2	56.8
1963	8.7	7.7	5.0	3.4	4.3	5.2	7.4	8.2	7.5	7.6	7.6	7.6	80.3
1964	8.7	7.7	4.5	3.4	0.2	5.5	6.4	7.6	7.9	7.8	6.6	5.5	71.7
1965	0.7	0.0	5.0	3.5	4.3	5.2	7.4	7.3	7.5	7.6	7.7	7.1	63.6
1966	4.5	7.7	5.0	3.4	4.3	5.4	7.1	7.3	7.6	7.6	7.7	6.3	73.9
1967	2.3	6.0	5.0	3.4	4.3	6.0	7.5	8.1	7.9	8.0	8.0	8.1	74.7
1968	8.6	6.1	5.0	3.4	4.3	6.0	6.2	7.3	7.6	7.6	7.7	7.7	77.4
1969	5.2	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.6	7.7	8.2	72.9
1970	8.7	7.7	5.0	3.4	4.3	6.0	6.1	7.3	7.6	7.6	7.7	7.6	78.9
1971	5.0	7.7	5.0	3.4	3.8	6.0	6.2	8.3	7.6	7.6	7.7	8.2	76.4
1972	7.4	6.0	5.0	3.4	4.3	5.9	6.3	7.4	7.6	7.6	7.7	6.7	75.3
1973	2.9	7.7	5.0	3.5	4.3	6.0	6.2	7.3	7.5	7.6	7.6	7.7	73.2
1974	5.3	7.7	5.0	3.4	4.3	6.0	7.2	7.2	7.5	7.6	7.6	8.2	77.1
1975	8.7	6.1	5.0	3.2	4.3	6.0	7.2	8.2	7.8	7.6	8.1	8.2	80.3
1976	8.7	7.7	4.5	0.1	3.8	6.7	7.3	8.3	8.2	8.0	6.8	2.4	72.5
1977	0.3	0.4	0.4	0.4	0.4	6.5	7.4	8.5	8.0	6.9	3.4	0.9	43.5
1978	0.5	0.6	0.6	4.4	5.2	6.0	7.4	8.2	7.5	7.6	7.6	8.2	63.8
1979	7.1	3.9	0.7	3.4	4.3	6.0	6.3	7.3	7.5	7.6	7.6	7.5	69.2
1980	4.8	2.3	5.0	3.4	4.3	6.0	6.3	7.3	7.5	7.6	7.7	6.9	69.1
1981	5.2	2.2	0.7	3.4	4.3	6.1	7.3	7.4	7.6	7.7	7.7	7.8	67.4
1982	5.4	7.8	5.1	3.6	4.4	6.0	7.5	8.1	7.8	7.6	7.6	8.0	78.8
1983	8.7	7.7	5.0	3.4	4.3	6.0	7.5	8.2	7.8	8.0	8.0	8.1	82.8
1984	8.6	7.7	5.0	3.4	4.3	5.9	6.2	7.3	7.6	7.6	7.7	7.8	79.0
1985	5.5	7.7	5.0	0.5	4.3	5.5	6.2	7.3	7.5	7.6	7.6	6.3	71.0
1986	2.4	2.3	5.0	3.4	4.3	6.1	6.4	7.5	7.7	7.7	7.7	6.6	67.0
1987	2.8	0.6	0.5	0.1	4.3	6.5	6.9	8.0	8.1	8.2	6.9	4.9	57.7
1988	1.0	0.3	0.1	3.9	0.1	6.4	7.5	8.6	7.9	6.7	3.2	0.7	46.4
1989	0.3	0.4	0.4	0.4	0.4	6.2	6.5	7.5	7.8	7.8	6.0	3.7	47.5
1990	0.7	0.0	-0.2	3.5	-0.2	6.3	6.8	8.0	7.9	6.3	4.4	-0.3	43.1
1991	-0.2	-0.1	-0.1	-0.1	-0.1	6.1	6.6	8.5	7.9	7.9	6.3	5.0	48.0
1992	-0.1	-0.2	-0.2	-0.2	4.4	6.6	7.0	8.1	8.1	8.1	6.9	4.8	53.2
1993	1.2	0.3	5.5	4.0	4.8	6.0	7.2	8.3	7.9	7.6	7.6	7.8	68.2
AVG:	4.0	3.8	3.0	2.5	3.5	5.9	6.8	7.7	7.7	7.5	6.8	5.6	64.8
MIN:	-0.3	-0.2	-0.3	-0.3	-0.3	5.1	6.1	7.2	6.9	6.0	2.0	-0.3	37.6
MAX:	8.7	7.8	5.7	4.4	5.2	6.7	7.7	8.6	8.2	8.2	8.1	8.3	82.8

Figures 3.4.2-9 throught 3.4.2-14 display time series and exceedence data for deliveries to EBMUD on contract year and water bases, as well as dry period deliveries.

Figure 3.4.2-9 Exceedence for Simulated Annual Deliveries to EBMUD, 2001 LOD (Contract Year)



EBMUD deliveries occur in the FRWP only in Alternatives 2-5. In Alternative 6, EBMUD gains greater supply reliability through re-operation of the Mokelumne River system. The exceedence charts illustrate EBMUD's use of CVP water through the FRWP during dry periods.

Figure 3.4.2-10 Exceedence for Simulated Annual Deliveries to EBMUD, 2001 LOD (Water Year)

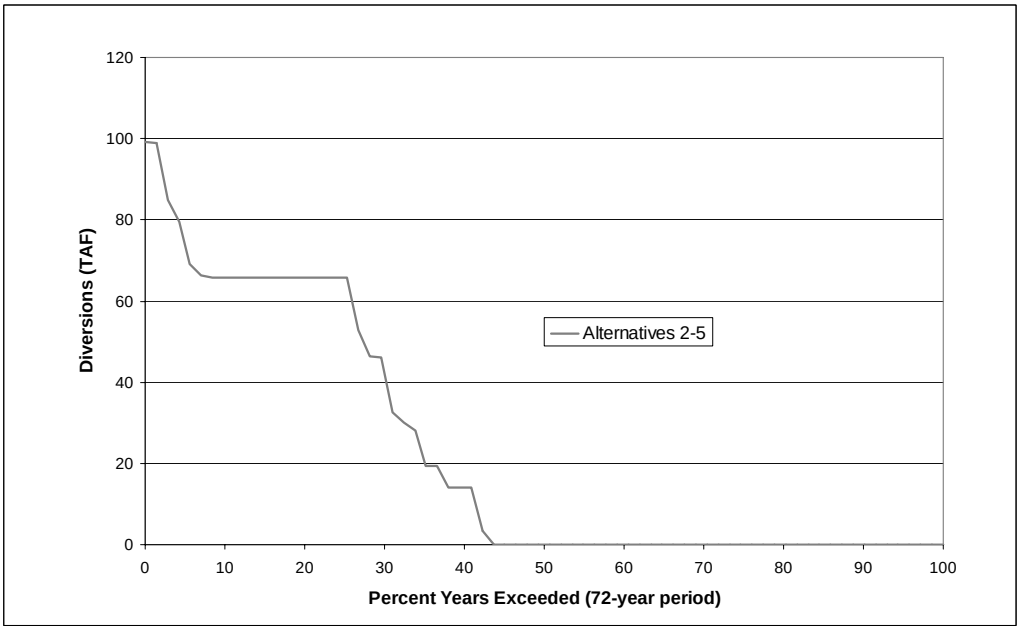


Figure 3.4.2-11 Simulated Annual Deliveries to EBMUD, 2001 LOD (Contract Year) Alternatives 2-5

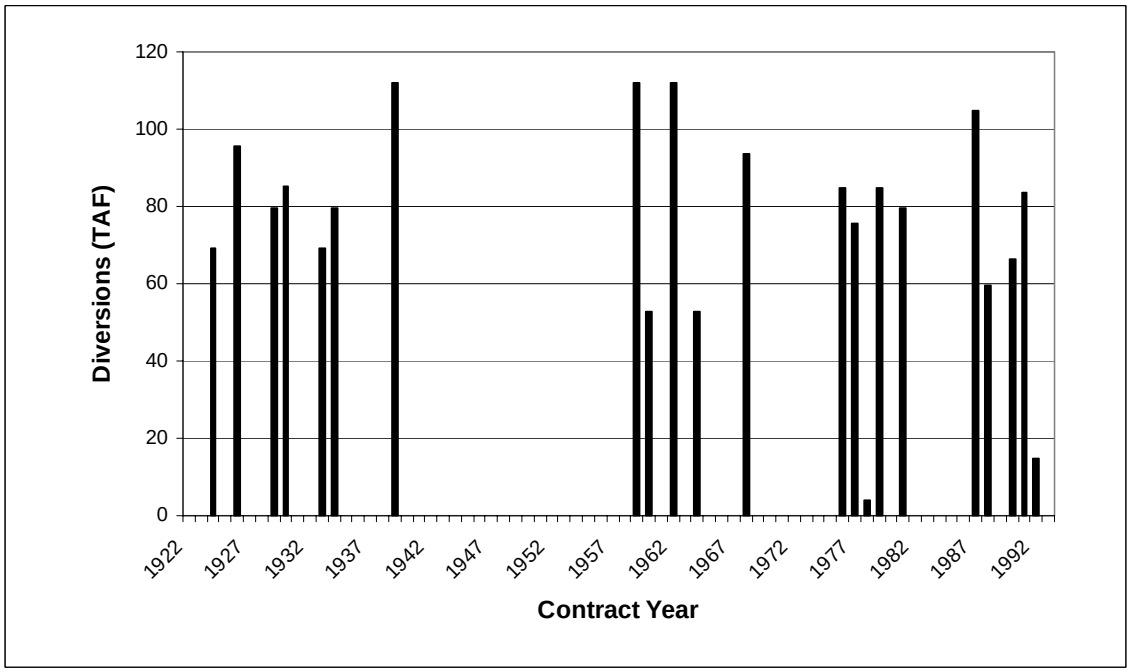


Figure 3.4.2-12 Simulated Annual Deliveries to EBMUD, 2001 LOD(Water Year) Alternatives 2-5

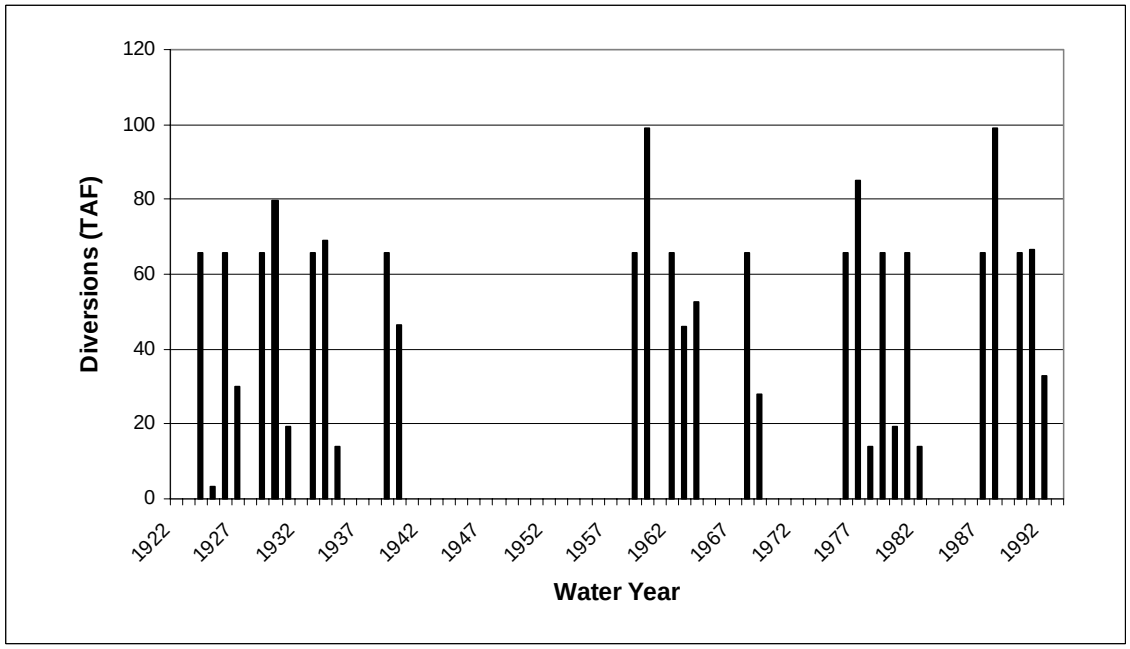


Figure 3.4.2-13 Simulated Monthly Deliveries to EBMUD, 2001 LOD (Dry Period WY 1928-1934)

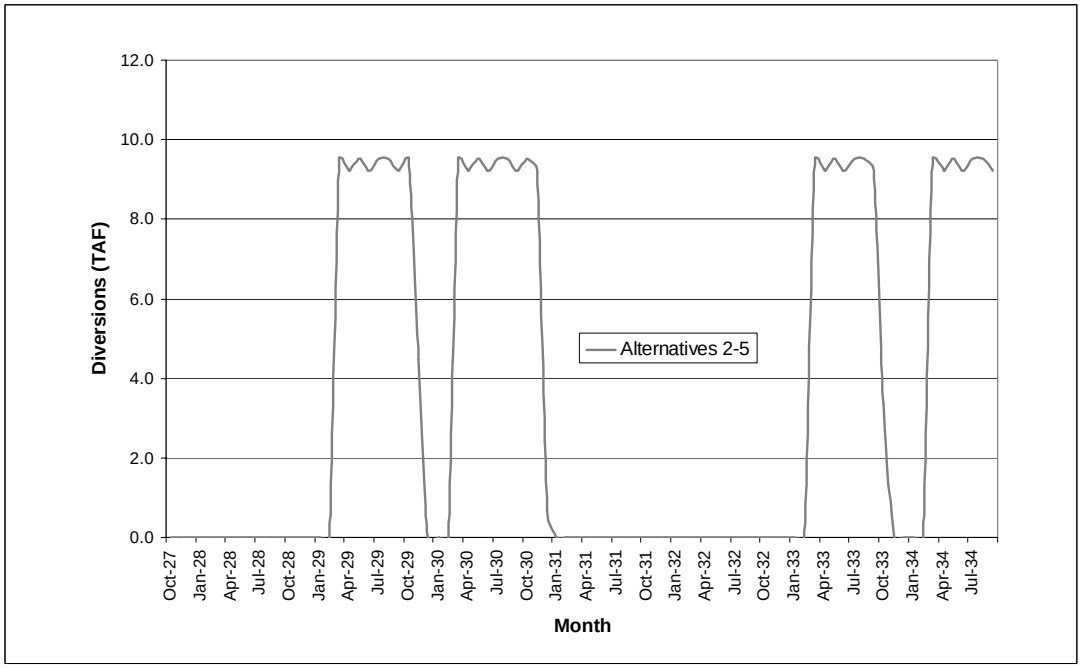


Figure 3.4.2-14 Simulated Monthly Deliveries to EBMUD, 2001 LOD (Dry Period WY 1987-1992)

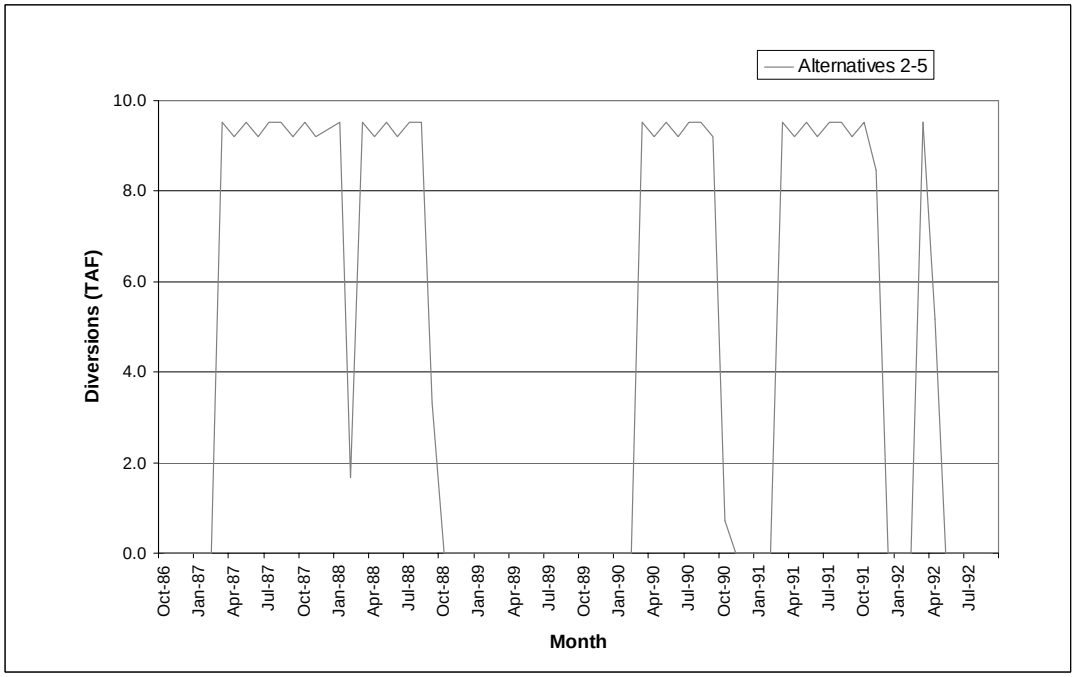


Table 3.4.2-3 provides the monthly-simulated EBMUD deliveries from the Alternatives 2-5 study. Tables 3.4.2-4 through 3.4.2-6 display total SCWA Diversions at Freeport and the Sacramento River Water Treatment Plant.

Table 3.4.2-3. Simulated EBMUD Diversions @ Freeport (TAF) Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1925	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
1926	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1927	9.5	9.2	9.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1930	9.5	4.5	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	79.7
1931	9.5	9.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1934	3.4	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	69.0
1935	9.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1940	9.5	9.2	9.4	9.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.3
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1960	9.5	9.2	9.4	9.5	8.7	9.5	9.2	9.5	9.2	9.5	5.8	0.0	99.1
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1963	9.5	9.2	9.4	9.5	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.2
1964	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	5.9	0.0	52.8
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1969	9.5	9.2	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1977	9.5	9.2	0.6	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	85.0
1978	9.5	0.5	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	14.1
1979	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1980	9.5	9.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3
1981	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1982	9.5	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1988	9.5	9.2	9.4	9.5	1.7	9.5	9.2	9.5	9.2	9.5	9.5	3.3	99.1
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1991	0.7	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	66.4
1992	9.5	8.5	0.0	0.0	0.0	9.5	5.2	0.0	0.0	0.0	0.0	0.0	32.7
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	2.0	1.5	0.8	0.6	0.4	2.8	2.6	2.6	2.6	2.6	2.5	2.2	23.2
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	9.5	9.2	9.4	9.5	8.7	9.5	9.2	9.5	9.2	9.5	9.5	9.2	99.1

Table 3.4.2-4. Simulated SCWA Total Diversions (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.3
1923	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.9	1.0	1.0	0.9	0.6	7.1
1924	0.4	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.4	0.3	4.7
1925	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.5	4.9
1926	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.7	0.7	0.7	0.5	5.3
1927	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.9	1.0	1.0	0.9	0.6	6.7
1928	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.0
1929	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.6	0.5	0.4	5.0
1930	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.8	0.8	0.7	0.5	5.2
1931	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.4	0.5	0.5	0.3	4.1
1932	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.4	0.3	3.6
1933	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.3	3.7
1934	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.6	0.6	0.5	0.4	4.2
1935	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.8	0.7	0.7	0.6	5.0
1936	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.7	0.8	0.7	0.5	5.5
1937	0.4	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.7	0.8	0.7	0.5	5.5
1938	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.8	1.0	1.0	1.0	0.6	6.8
1939	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.7	0.9	0.9	0.8	0.5	6.5
1940	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.0
1941	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.0	1.0	1.0	0.9	7.2
1942	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.0	1.0	1.0	0.8	7.1
1943	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1944	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	1.0	0.9	0.6	7.0
1945	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.1
1946	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1947	0.5	0.3	0.3	0.3	0.3	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.7
1948	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.7	1.0	1.0	1.0	0.9	6.6
1949	0.5	0.3	0.3	0.3	0.3	0.2	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1950	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.7	0.7	0.7	0.5	6.0
1951	0.2	0.2	0.2	0.2	0.2	0.4	0.9	0.8	1.0	1.0	0.9	0.6	6.8
1952	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.1
1953	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1954	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1955	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.8	0.8	0.7	0.4	6.0
1956	0.3	0.3	0.3	0.3	0.3	0.4	0.8	0.8	1.0	1.0	0.9	0.6	6.8
1957	0.4	0.4	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.0	0.7	7.2
1958	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.0	1.0	1.0	0.7	7.1
1959	0.5	0.4	0.3	0.3	0.3	0.4	0.8	0.9	1.0	1.0	0.9	0.5	7.2
1960	0.5	0.4	0.3	0.3	0.3	0.2	0.6	0.6	0.7	0.8	0.7	0.5	5.8
1961	0.4	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.0	1.0	0.9	0.6	6.7
1962	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.3
1963	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.8	7.1
1964	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.7	0.7	0.6	0.4	5.8
1965	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	0.9	0.6	6.5
1966	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	0.9	1.0	0.8	0.6	7.2
1967	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.2
1968	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1969	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1970	0.4	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1.0	0.9	0.6	7.2
1971	0.4	0.3	0.3	0.3	0.3	0.4	0.9	0.8	1.0	1.0	0.9	0.6	7.1
1972	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	1.0	1.0	0.9	0.5	7.1
1973	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.1
1974	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	0.9	0.9	0.6	7.1
1975	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1976	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.4	5.1
1977	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.5	0.6	0.5	0.3	4.3
1978	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	1.0	0.6	6.4
1979	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1980	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.6	7.0
1981	0.5	0.4	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	1.0	0.6	7.4
1982	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.0	1.0	1.0	1.0	0.8	7.2
1983	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.1
1984	0.5	0.3	0.3	0.3	0.3	0.4	0.9	0.9	0.9	1.0	0.8	0.6	7.3
1985	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1986	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	0.9	0.9	0.5	6.8
1987	0.4	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.8	0.8	0.7	0.5	6.0
1988	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.5	0.5	0.5	0.3	4.2
1989	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	0.7	0.7	0.4	5.0
1990	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.5	0.4	0.3	4.0
1991	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.6	0.6	0.6	0.4	4.3
1992	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.7	0.7	0.5	5.2
1993	0.3	0.3	0.2	0.2	0.2	0.3	0.8	0.8	0.9	1.0	0.9	0.6	6.7
AVG:	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.9	0.9	0.8	0.6	6.3
MIN:	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.3	3.6
MAX:	0.5	0.4	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	1.0	0.9	7.4

Table 3.4.2-5. Simulated SCWA Total Diversions (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.9	6.5	5.3	3.8	4.6	6.3	7.0	9.1	8.8	8.6	8.6	8.4	84.9
1923	7.9	6.5	5.3	3.8	4.6	5.8	7.0	8.2	8.5	8.6	8.6	6.9	81.7
1924	2.8	2.6	1.0	0.5	4.6	6.8	7.9	8.8	8.0	7.4	3.2	0.4	54.0
1925	0.6	0.8	0.8	0.8	5.4	5.9	7.1	8.2	8.6	7.9	6.8	1.7	54.5
1926	1.0	0.3	0.0	0.0	4.6	5.9	7.1	8.2	8.5	6.9	4.8	1.1	48.4
1927	0.9	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	79.1
1928	7.9	8.0	5.3	3.8	0.5	6.3	7.9	8.2	8.6	8.6	8.5	8.1	81.8
1929	5.8	1.0	0.8	0.4	4.6	5.9	7.0	8.2	7.5	6.6	2.6	0.4	50.9
1930	0.0	0.0	5.3	3.8	4.6	6.3	7.1	8.2	8.6	8.5	6.8	3.8	63.0
1931	1.0	0.3	0.0	0.0	0.0	6.5	7.6	8.8	7.6	7.2	2.8	0.0	41.7
1932	0.4	0.5	5.9	4.3	4.7	6.0	7.1	8.2	8.4	6.7	4.7	1.0	57.8
1933	0.2	0.0	0.0	3.8	4.6	6.0	7.1	8.2	7.4	6.6	2.5	0.4	46.7
1934	0.0	0.0	0.0	3.8	0.0	6.4	7.5	8.6	8.5	7.0	4.1	1.2	47.2
1935	0.4	0.4	0.4	4.2	0.4	6.3	7.9	8.2	8.6	8.5	8.1	6.7	60.1
1936	1.7	0.3	0.0	3.8	4.6	6.3	7.1	8.2	8.6	8.5	7.3	5.2	61.5
1937	1.0	0.3	0.0	0.0	4.6	6.3	7.9	8.2	8.6	8.5	8.4	6.7	60.6
1938	3.2	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	83.0
1939	9.1	6.4	5.3	3.8	4.1	6.0	7.2	8.4	8.7	8.7	8.1	6.6	82.3
1940	1.1	1.0	0.4	3.9	4.7	6.3	7.9	8.2	8.5	8.6	8.6	8.4	67.7
1941	7.5	4.0	5.3	3.8	4.6	6.3	7.9	9.1	8.5	8.6	8.6	8.8	83.0
1942	9.1	6.4	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	87.3
1943	9.1	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	87.3
1944	7.6	4.2	1.0	0.5	4.6	5.8	7.0	8.2	8.6	8.0	6.9	4.2	66.6
1945	1.5	8.0	4.3	0.9	4.6	5.8	7.0	8.2	8.5	8.6	8.5	6.8	72.7
1946	2.8	8.0	5.3	3.8	0.5	5.8	7.0	8.2	8.5	8.6	8.6	6.8	73.9
1947	2.8	2.6	1.0	0.5	4.6	5.9	7.1	8.2	8.6	8.0	6.8	1.7	57.6
1948	1.0	1.0	0.4	0.0	0.0	5.8	7.0	9.1	8.5	8.6	8.6	7.2	57.1
1949	4.2	2.6	1.0	0.5	4.6	6.3	7.0	8.2	8.5	8.6	8.6	7.2	67.3
1950	3.3	2.6	1.0	3.8	4.6	5.9	7.1	8.2	8.6	7.8	6.8	1.5	60.9
1951	1.0	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	78.1
1952	5.7	2.6	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	80.1
1953	9.1	6.4	5.3	3.8	0.7	5.6	7.9	8.2	8.8	8.6	8.6	8.8	81.8
1954	6.6	8.0	1.0	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	80.5
1955	7.6	4.2	5.3	3.8	0.5	5.9	7.1	8.2	8.6	8.5	7.3	5.2	72.2
1956	1.0	0.3	5.3	3.8	4.6	6.3	7.0	9.1	8.8	8.6	8.6	8.8	72.2
1957	9.1	6.4	4.8	3.4	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.4	83.9
1958	9.1	6.5	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	87.5
1959	9.1	6.4	4.8	3.8	4.6	6.0	7.1	8.3	8.6	8.7	8.7	7.0	83.1
1960	2.8	2.6	1.0	0.5	4.7	5.8	7.1	8.2	8.4	6.9	4.4	1.1	53.6
1961	1.0	0.3	0.0	0.0	4.6	5.9	7.2	8.4	8.7	8.7	8.7	7.1	60.6
1962	2.9	1.2	0.8	1.1	4.7	5.8	7.0	8.2	8.5	8.6	8.3	6.8	64.0
1963	9.1	8.0	5.3	3.8	4.6	5.6	7.9	9.1	8.5	8.6	8.6	8.4	87.4
1964	9.1	8.0	4.8	3.8	0.5	5.9	7.1	8.2	8.6	8.5	7.2	6.0	77.6
1965	1.0	0.3	5.3	3.8	4.6	5.5	7.9	8.2	8.5	8.6	8.6	7.8	70.0
1966	4.9	8.0	5.3	3.8	4.6	5.8	7.9	8.2	8.5	8.6	8.6	6.9	81.1
1967	2.8	6.3	5.3	3.8	4.6	6.3	7.9	9.1	8.8	9.0	9.0	8.8	81.8
1968	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	84.6
1969	5.7	2.6	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	80.1
1970	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.2	86.1
1971	5.4	8.0	5.3	3.8	4.1	6.3	7.0	9.1	8.5	8.6	8.6	8.8	83.5
1972	7.9	6.3	5.3	3.8	4.6	6.3	7.1	8.2	8.6	8.6	8.5	7.2	82.4
1973	3.2	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	80.3
1974	5.7	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.8	84.3
1975	9.1	6.4	5.3	3.6	4.6	6.3	7.9	9.1	8.8	8.6	9.0	8.8	87.6
1976	9.1	8.0	4.8	0.5	4.1	7.0	7.7	8.8	8.8	8.6	7.3	2.8	77.5
1977	0.6	0.6	0.6	0.6	0.6	6.8	7.9	8.9	8.5	7.4	3.8	1.3	47.8
1978	0.8	0.8	0.8	4.6	5.4	6.3	7.9	9.1	8.5	8.6	8.6	8.8	70.3
1979	7.6	4.2	1.0	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.1	76.5
1980	5.2	2.6	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	7.5	76.2
1981	5.7	2.6	1.0	3.8	4.6	6.4	8.0	8.3	8.6	8.7	8.7	8.4	74.7
1982	5.8	8.1	5.4	3.9	4.7	6.3	7.9	9.1	8.8	8.6	8.6	8.8	86.0
1983	9.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.8	9.0	9.0	8.8	89.8
1984	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.4	86.3
1985	5.9	8.0	5.3	0.9	4.6	5.8	7.0	8.2	8.5	8.6	8.5	6.8	78.1
1986	2.8	2.6	5.3	3.8	4.6	6.3	7.1	8.3	8.6	8.6	8.6	7.2	73.8
1987	3.2	0.9	0.9	0.4	4.6	6.7	7.5	8.7	8.9	9.0	7.6	5.4	63.7
1988	1.4	0.5	0.4	4.1	0.4	6.5	7.7	8.8	8.3	7.2	3.6	1.0	50.0
1989	0.6	0.6	0.6	0.6	0.6	6.3	7.1	8.2	8.6	8.5	6.8	4.0	52.5
1990	1.0	0.3	0.0	3.8	0.0	6.5	7.2	8.3	8.4	6.8	4.8	0.0	47.1
1991	0.0	0.1	0.1	0.1	0.1	6.3	7.1	9.0	8.6	8.5	6.9	5.4	52.3
1992	0.1	0.0	0.0	0.0	4.6	6.8	7.4	8.5	8.7	8.7	7.5	5.2	57.5
1993	1.5	0.5	5.8	4.3	5.1	6.3	7.9	9.1	8.8	8.6	8.6	8.4	74.9
AVG:	4.4	4.1	3.3	2.8	3.8	6.2	7.4	8.5	8.6	8.3	7.6	6.2	71.1
MIN:	0.0	0.0	0.0	0.0	0.0	5.5	7.0	8.2	7.4	6.6	2.5	0.0	41.7
MAX:	9.1	8.1	5.9	4.6	5.4	7.0	8.0	9.1	8.9	9.0	9.0	8.8	89.8

Table 3.4.2-6. Simulated SCWA Total Diversions (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.9	6.5	5.3	3.8	4.6	6.3	7.0	9.1	8.8	8.6	8.6	8.4	84.9
1923	7.9	6.5	5.3	3.8	4.6	5.8	7.0	8.2	8.5	8.6	8.6	6.9	81.7
1924	2.8	2.6	1.0	0.5	4.6	6.8	7.9	8.8	8.0	7.4	3.2	0.4	54.0
1925	0.6	0.8	0.8	0.8	5.4	5.9	7.1	8.2	8.6	7.9	6.8	1.7	54.5
1926	1.0	0.3	0.0	0.0	4.6	5.9	7.0	8.2	8.5	6.9	4.8	1.1	48.2
1927	0.9	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	79.1
1928	7.9	8.0	5.3	3.8	0.5	6.3	7.9	8.2	8.6	8.6	8.5	8.1	81.7
1929	5.8	1.0	0.8	0.4	4.6	5.9	7.0	8.2	7.5	6.6	2.6	0.4	50.9
1930	0.0	0.0	5.3	3.8	4.6	6.3	7.1	8.2	8.6	8.5	6.8	3.8	63.0
1931	1.0	0.3	0.0	0.0	0.0	6.5	7.6	8.8	7.6	7.2	2.8	0.0	41.7
1932	0.4	0.5	5.9	4.3	4.6	6.0	7.1	8.2	8.4	6.7	4.7	1.0	57.8
1933	0.2	0.0	0.0	3.8	4.6	6.0	7.1	8.2	7.4	6.6	2.5	0.4	46.7
1934	0.0	0.0	0.0	3.8	0.0	6.4	7.5	8.6	8.5	7.0	4.1	1.2	47.2
1935	0.4	0.4	0.4	4.2	0.4	6.3	7.9	8.2	8.6	8.5	8.1	6.7	60.1
1936	1.7	0.3	0.0	3.8	4.6	6.3	7.2	8.3	8.7	8.7	7.4	5.3	62.2
1937	1.0	0.3	0.0	0.0	4.6	6.3	7.9	8.2	8.6	8.5	8.4	6.7	60.6
1938	3.2	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	83.0
1939	9.1	6.4	5.3	3.8	4.1	6.0	7.2	8.4	8.7	8.7	8.1	6.6	82.4
1940	1.1	1.0	0.4	3.9	4.7	6.3	7.9	8.2	8.5	8.6	8.6	8.4	67.7
1941	7.5	4.0	5.3	3.8	4.6	6.3	7.9	9.1	8.5	8.6	8.6	8.8	83.0
1942	9.1	6.4	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	87.3
1943	9.1	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	87.3
1944	7.6	4.2	1.0	0.5	4.6	5.8	7.0	8.2	8.5	7.9	6.9	4.2	66.5
1945	1.5	8.0	4.2	0.9	4.6	5.8	7.0	8.2	8.5	8.6	8.5	6.8	72.7
1946	2.8	8.0	5.3	3.8	0.5	5.8	7.0	8.2	8.5	8.6	8.6	6.8	73.9
1947	2.8	2.6	1.0	0.5	4.6	5.9	7.0	8.1	8.5	7.9	6.8	1.6	57.3
1948	1.0	1.0	0.4	0.0	0.0	5.8	7.0	9.1	8.5	8.6	8.6	7.1	57.1
1949	4.2	2.6	1.0	0.5	4.6	6.3	7.0	8.2	8.5	8.6	8.6	7.2	67.5
1950	3.3	2.6	1.0	3.8	4.6	5.9	7.1	8.2	8.6	7.8	6.8	1.5	61.0
1951	1.0	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	78.1
1952	5.7	2.6	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	80.1
1953	9.1	6.4	5.3	3.8	0.7	5.6	7.9	8.2	8.8	8.6	8.6	8.8	81.8
1954	6.6	8.0	1.0	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.4	80.5
1955	7.6	4.2	5.3	3.8	0.5	5.9	7.1	8.2	8.6	8.5	7.3	5.2	72.2
1956	1.0	0.3	5.3	3.8	4.6	6.3	7.0	9.1	8.8	8.6	8.6	8.8	72.2
1957	9.1	6.4	4.8	3.4	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.4	83.9
1958	9.1	6.5	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	87.5
1959	9.1	6.4	4.8	3.8	4.6	6.0	7.1	8.3	8.6	8.7	8.7	7.0	83.1
1960	2.8	2.6	1.0	0.5	4.7	5.9	7.1	8.2	8.4	6.9	4.4	1.1	53.6
1961	1.0	0.3	0.0	0.0	4.6	5.9	7.3	8.5	8.8	8.9	8.8	7.2	61.3
1962	2.9	1.2	0.9	1.1	4.7	5.9	7.0	8.2	8.5	8.6	8.3	6.8	64.1
1963	9.1	8.0	5.3	3.8	4.6	5.6	7.9	9.1	8.5	8.6	8.6	8.4	87.4
1964	9.1	8.0	4.8	3.8	0.5	5.9	7.1	8.2	8.6	8.5	7.2	6.0	77.6
1965	1.0	0.3	5.3	3.8	4.6	5.5	7.9	8.2	8.5	8.6	8.6	7.8	70.0
1966	4.9	8.0	5.3	3.8	4.6	5.8	7.9	8.2	8.5	8.6	8.6	6.9	81.1
1967	2.8	6.3	5.3	3.8	4.6	6.3	7.9	9.1	8.8	9.0	9.0	8.8	81.8
1968	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	84.6
1969	5.7	2.6	5.3	3.8	4.6	6.3	7.9	9.1	8.8	8.6	8.6	8.8	80.1
1970	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.2	86.1
1971	5.4	8.0	5.3	3.8	4.1	6.3	7.0	9.1	8.5	8.6	8.6	8.8	83.5
1972	7.9	6.3	5.3	3.8	4.6	6.3	7.1	8.2	8.6	8.6	8.5	7.2	82.4
1973	3.2	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.3	80.3
1974	5.7	8.0	5.3	3.8	4.6	6.3	7.9	8.2	8.5	8.6	8.6	8.8	84.3
1975	9.1	6.4	5.3	3.6	4.6	6.3	7.9	9.1	8.8	8.6	9.0	8.8	87.6
1976	9.1	8.0	4.8	0.5	4.1	7.0	7.8	8.8	8.8	8.6	7.4	2.8	77.7
1977	0.6	0.6	0.6	0.6	0.6	6.8	7.9	8.9	8.6	7.4	3.8	1.3	47.8
1978	0.8	0.8	0.8	4.6	5.4	6.3	7.9	9.1	8.5	8.6	8.6	8.8	70.3
1979	7.6	4.2	1.0	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.1	76.5
1980	5.2	2.6	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	7.5	76.2
1981	5.7	2.6	1.0	3.8	4.6	6.4	8.0	8.3	8.6	8.7	8.7	8.4	74.7
1982	5.8	8.1	5.4	3.9	4.7	6.3	7.9	9.1	8.8	8.6	8.6	8.8	86.0
1983	9.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.8	9.0	9.0	8.8	89.8
1984	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.6	8.6	8.4	86.3
1985	5.9	8.0	5.3	0.9	4.6	5.8	7.0	8.2	8.5	8.6	8.5	6.8	78.1
1986	2.8	2.6	5.3	3.8	4.6	6.3	7.1	8.3	8.6	8.6	8.6	7.2	73.8
1987	3.2	0.9	0.9	0.4	4.6	6.7	7.5	8.7	8.9	9.0	7.6	5.4	63.7
1988	1.4	0.5	0.4	4.1	0.4	6.7	7.9	9.0	8.4	7.3	3.6	1.0	50.6
1989	0.6	0.6	0.6	0.6	0.6	6.3	7.1	8.2	8.6	8.5	6.8	4.0	52.5
1990	1.0	0.3	0.0	3.8	0.0	6.5	7.2	8.3	8.4	6.8	4.8	0.0	47.1
1991	0.0	0.1	0.1	0.1	0.1	6.3	7.1	9.0	8.6	8.5	6.9	5.4	52.3
1992	0.1	0.0	0.0	0.0	4.6	6.8	7.6	8.7	8.8	8.9	7.6	5.2	58.3
1993	1.5	0.6	5.8	4.3	5.1	6.3	7.9	9.1	8.8	8.6	8.6	8.4	74.9
AVG:	4.4	4.1	3.3	2.8	3.8	6.2	7.4	8.5	8.6	8.3	7.6	6.2	71.2
MIN:	0.0	0.0	0.0	0.0	0.0	5.5	7.0	8.1	7.4	6.6	2.5	0.0	41.7
MAX:	9.1	8.1	5.9	4.6	5.4	7.0	8.0	9.1	8.9	9.0	9.0	8.8	89.8

Figures 3.4.2-15 throught 3.4.2-20 display time series and exceedence data for deliveries to SCWA at the Sacramento River Water Treatment Plant on contract year and water bases, as well as dry period deliveries. Unlike the EBMUD or SCWA Freeport diversions, the SCWA diversion at the Sacramento River WTP occurs in all studies, though the volume increases under the Action alternatives.

Figure 3.4.2-15 Exceedence for Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Contract Year)

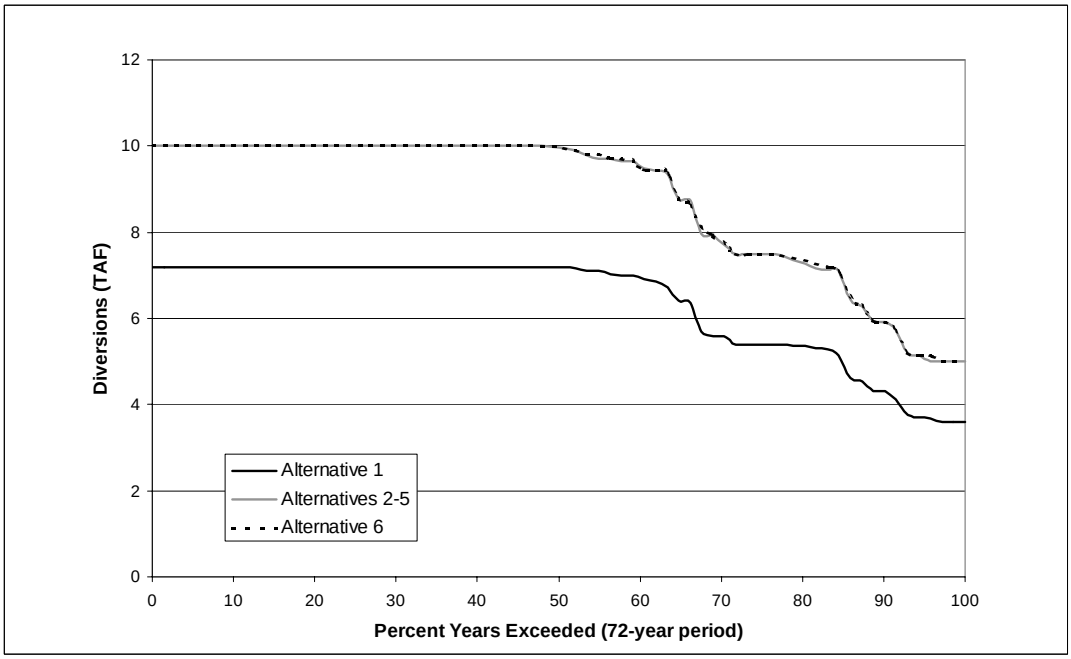


Figure 3.4.2-16 Exceedence for Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Water Year)

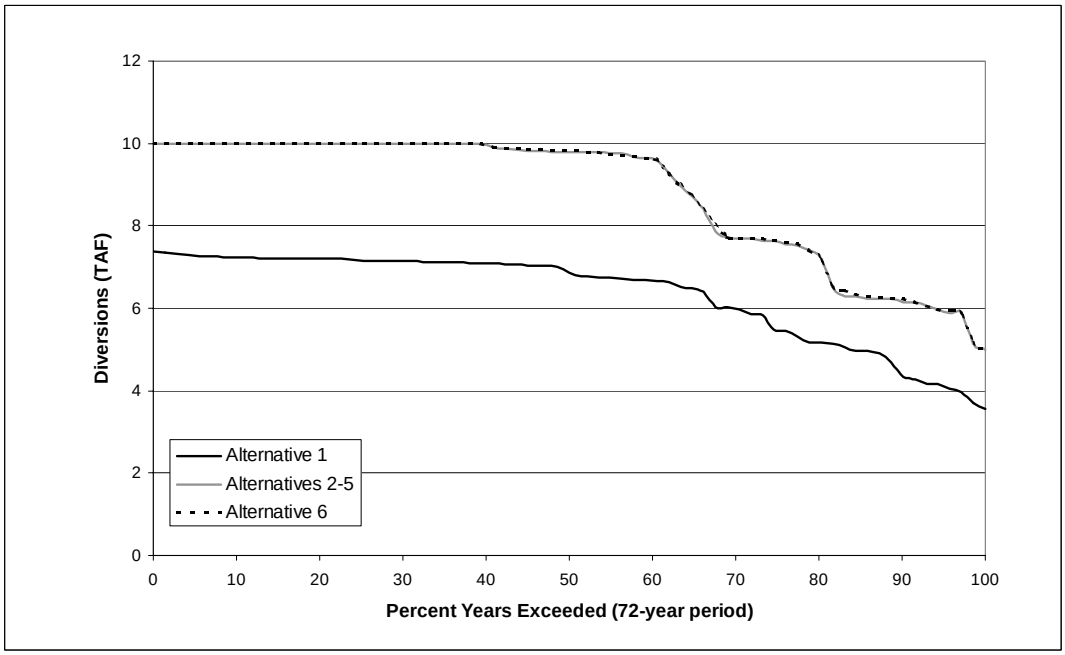


Figure 3.4.2-17 Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Contract Year)

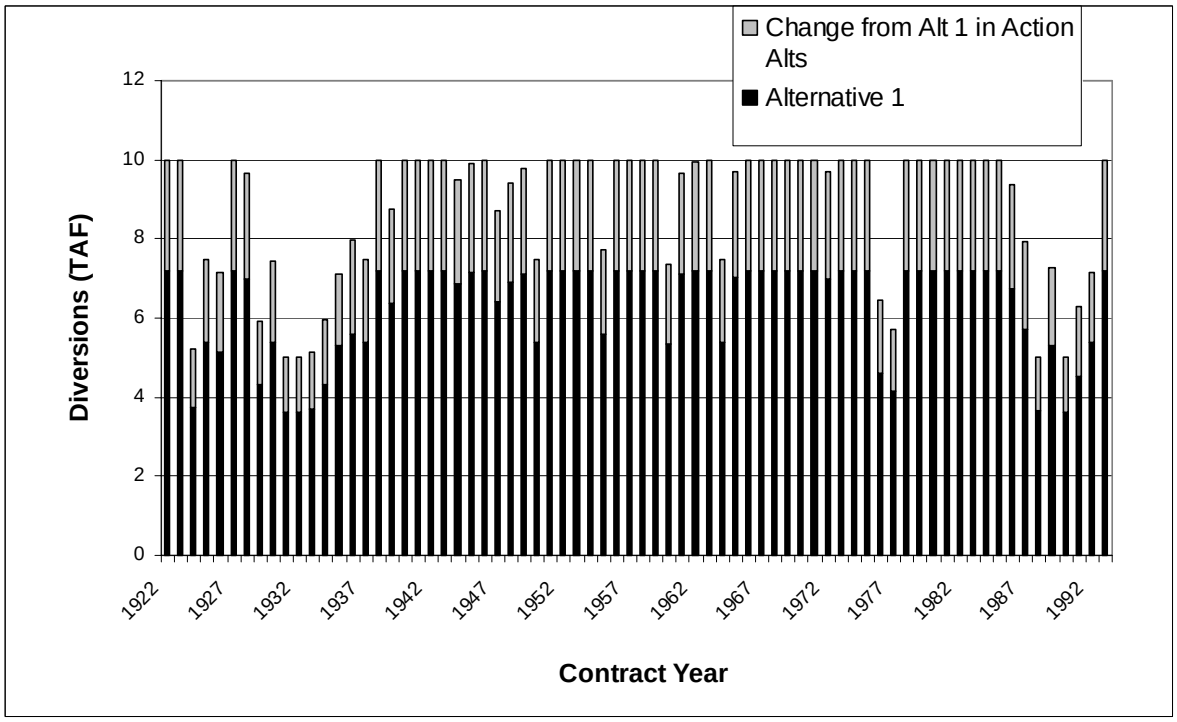


Figure 3.4.2-18 Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Water Year)

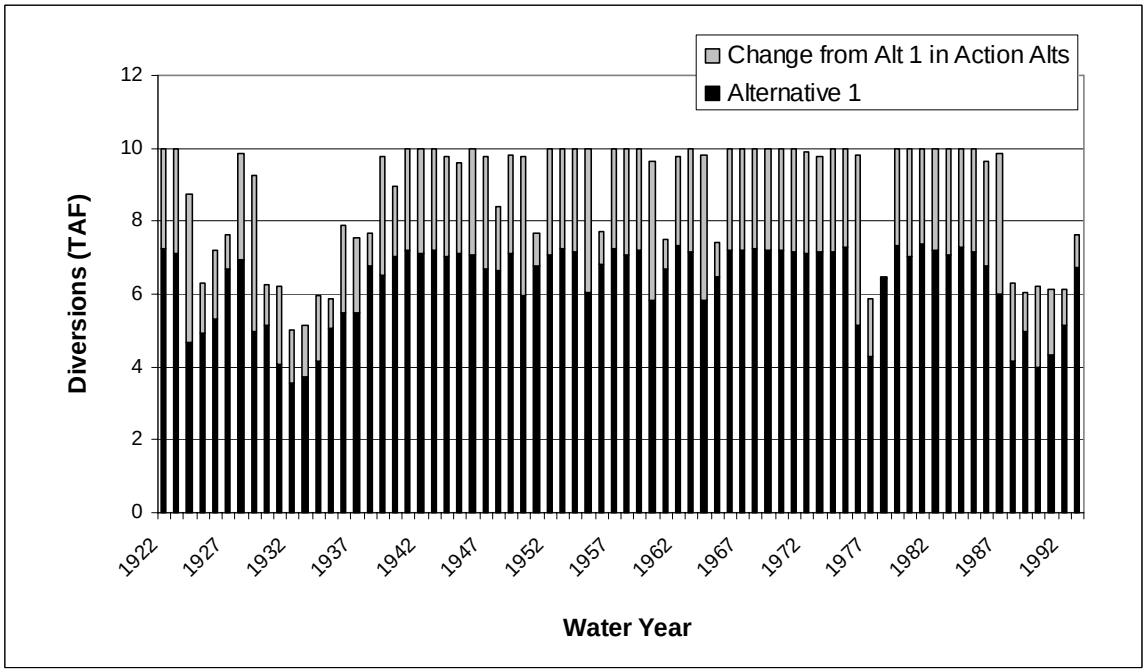


Figure 3.4.2-19 Simulated Monthly Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Dry Period WY 1928-1934)

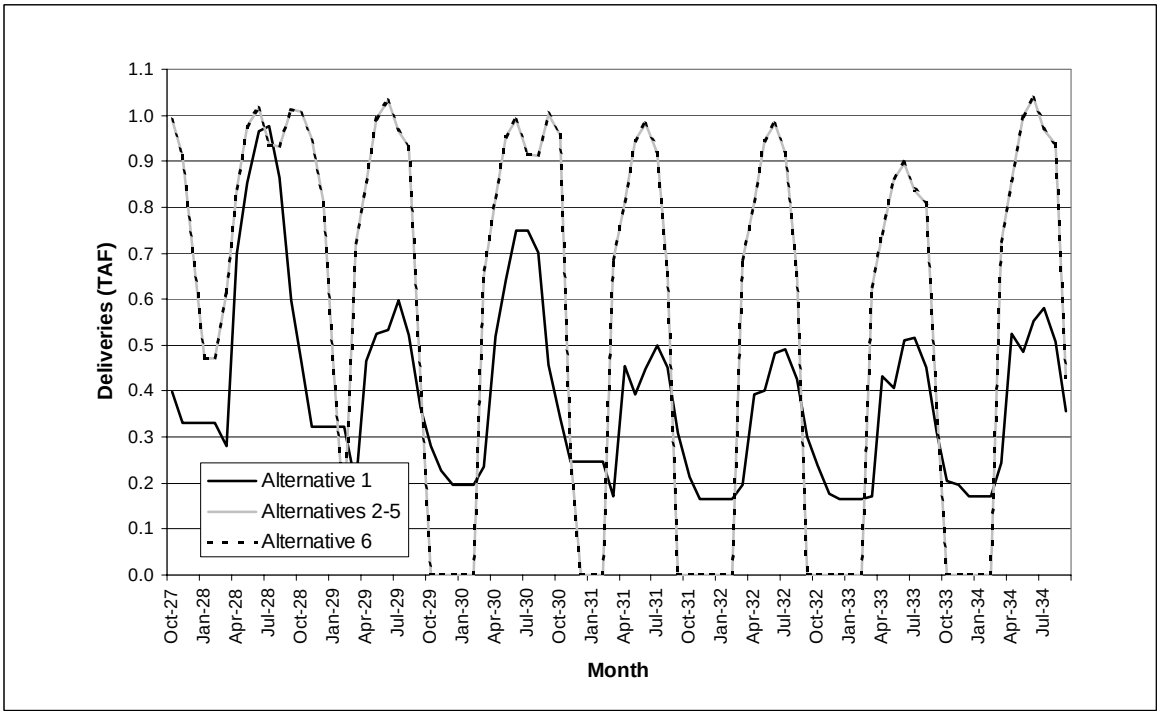


Figure 3.4.2-20 Simulated Monthly Deliveries to SCWA at Sacramento River Water Treatment Plant, 2001 LOD (Dry Period WY 1987-1992)

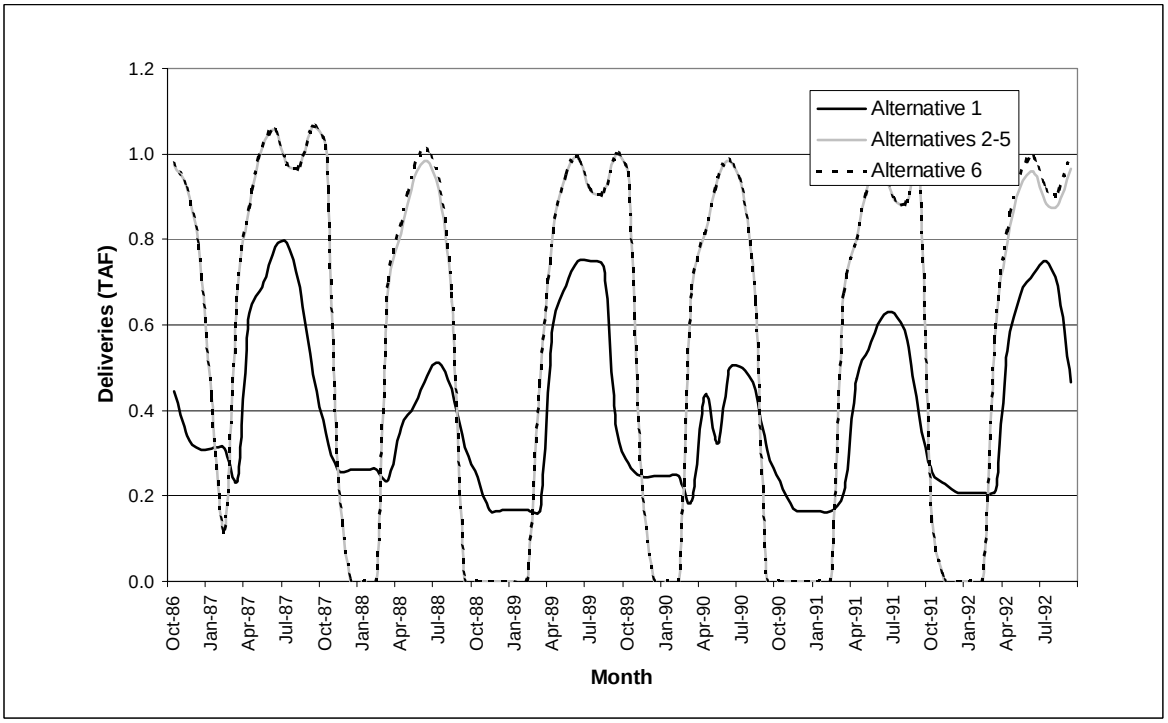


Table 3.4.2-7. Simulated SCWA CVP Diversions @ Sacramento River Water Treatment Plant (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.3
1923	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.9	1.0	1.0	0.9	0.6	7.1
1924	0.4	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.4	0.3	4.7
1925	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.5	4.9
1926	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.7	0.7	0.7	0.5	5.3
1927	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.9	1.0	1.0	0.9	0.6	6.7
1928	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.0
1929	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.6	0.5	0.4	5.0
1930	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.8	0.8	0.7	0.5	5.2
1931	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.4	0.5	0.5	0.3	4.1
1932	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.4	0.3	3.6
1933	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.3	3.7
1934	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.6	0.6	0.5	0.4	4.2
1935	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.7	0.7	0.7	0.6	5.0
1936	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.7	0.8	0.7	0.5	5.5
1937	0.4	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.7	0.8	0.7	0.5	5.5
1938	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.8	1.0	1.0	1.0	0.6	6.8
1939	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.7	0.9	0.9	0.8	0.5	6.5
1940	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.0
1941	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.0	1.0	1.0	0.9	7.2
1942	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.0	1.0	1.0	0.8	7.1
1943	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1944	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	1.0	0.9	0.6	7.0
1945	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.1
1946	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1947	0.5	0.3	0.3	0.3	0.3	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.7
1948	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.7	1.0	1.0	1.0	0.9	6.6
1949	0.5	0.3	0.3	0.3	0.3	0.2	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1950	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.7	0.7	0.7	0.5	6.0
1951	0.2	0.2	0.2	0.2	0.2	0.4	0.9	0.8	1.0	1.0	0.9	0.6	6.8
1952	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.1
1953	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1954	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1955	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.8	0.8	0.7	0.4	6.0
1956	0.3	0.3	0.3	0.3	0.3	0.4	0.8	0.8	1.0	1.0	0.9	0.6	6.8
1957	0.4	0.4	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.0	0.7	7.2
1958	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.0	1.0	1.0	0.7	7.1
1959	0.5	0.4	0.3	0.3	0.3	0.4	0.8	0.9	1.0	1.0	0.9	0.5	7.2
1960	0.5	0.4	0.3	0.3	0.3	0.2	0.6	0.6	0.7	0.8	0.7	0.5	5.8
1961	0.4	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.0	1.0	0.9	0.6	6.7
1962	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.3
1963	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.8	7.1
1964	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.7	0.7	0.6	0.4	5.8
1965	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	0.9	0.6	6.5
1966	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	0.9	1.0	0.8	0.6	7.2
1967	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.2
1968	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1969	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1970	0.4	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1.0	0.9	0.6	7.2
1971	0.4	0.3	0.3	0.3	0.3	0.4	0.9	0.8	1.0	1.0	0.9	0.6	7.1
1972	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	1.0	1.0	0.9	0.5	7.1
1973	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.1
1974	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	0.9	0.9	0.6	7.1
1975	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1976	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.4	5.1
1977	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.5	0.6	0.5	0.3	4.3
1978	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	1.0	0.6	6.4
1979	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1980	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.6	7.0
1981	0.5	0.4	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	1.0	0.6	7.4
1982	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.0	1.0	1.0	1.0	0.8	7.2
1983	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.1
1984	0.5	0.3	0.3	0.3	0.3	0.4	0.9	0.9	0.9	1.0	0.8	0.6	7.3
1985	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1986	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	0.9	0.9	0.5	6.8
1987	0.4	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.8	0.8	0.7	0.5	6.0
1988	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.5	0.5	0.5	0.3	4.2
1989	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	0.7	0.7	0.4	5.0
1990	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.5	0.4	0.3	4.0
1991	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.6	0.6	0.6	0.4	4.3
1992	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.7	0.7	0.5	5.2
1993	0.3	0.3	0.2	0.2	0.2	0.3	0.8	0.8	0.9	1.0	0.9	0.6	6.7
AVG:	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.9	0.9	0.8	0.6	6.3
MIN:	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.3	3.6
MAX:	0.5	0.4	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	1.0	0.9	7.4

Table 3.4.2-8. Simulated SCWA CVP Diversions @ Sacramento River Water Treatment Plant (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1923	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1924	1.0	0.9	0.7	0.5	0.5	0.6	0.7	0.9	0.9	0.8	0.8	0.4	8.7
1925	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1926	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	0.9	0.9	0.9	1.0	7.2
1927	0.9	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1928	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1929	1.0	0.9	0.8	0.4	0.1	0.7	0.9	1.0	1.0	1.0	0.9	0.4	9.3
1930	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.2
1931	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1932	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	5.0
1933	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.9	0.9	0.8	0.8	0.4	5.1
1934	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.0	1.0	0.9	0.4	6.0
1935	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.0	1.0	0.9	0.9	1.0	5.9
1936	1.0	0.3	0.0	0.0	0.0	0.7	0.9	1.0	1.1	1.0	1.0	1.1	7.9
1937	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1938	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1939	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1940	1.0	1.0	0.4	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.0
1941	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1942	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1943	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1944	1.0	0.9	0.7	0.5	0.5	0.7	0.8	0.9	1.0	0.9	0.9	1.0	9.8
1945	1.0	0.9	0.8	0.4	0.1	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.6
1946	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1947	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1948	1.0	1.0	0.4	0.0	0.0	0.4	0.6	1.0	1.0	0.9	0.9	1.0	8.4
1949	1.0	0.9	0.7	0.5	0.5	0.5	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1950	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1951	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1952	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1953	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1954	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1955	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1956	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1957	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1958	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1959	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1960	1.0	0.9	0.7	0.5	0.5	0.5	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1961	1.0	0.3	0.0	0.0	0.0	0.5	0.8	1.0	1.0	0.9	0.9	1.0	7.5
1962	1.0	1.0	0.8	0.4	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1963	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1964	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1965	1.0	0.3	0.0	0.0	0.0	0.6	0.7	1.0	1.0	0.9	0.9	1.0	7.4
1966	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1967	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1968	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1969	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1970	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1971	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1972	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1973	1.0	0.9	0.8	0.4	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1974	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1975	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1976	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1977	0.1	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	0.4	5.9
1978	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.5
1979	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1980	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1981	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1982	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1983	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1984	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1985	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1986	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	1.0	0.9	0.9	1.0	9.7
1987	1.0	0.9	0.8	0.4	0.1	0.7	0.9	1.0	1.1	1.0	1.0	1.1	9.9
1988	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.3
1989	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.0	1.0	0.9	0.9	1.0	6.1
1990	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1991	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	6.1
1992	0.1	0.0	0.0	0.0	0.0	0.6	0.8	0.9	1.0	0.9	0.9	1.0	6.1
1993	0.9	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
AVG:	0.8	0.7	0.5	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.9	0.9	8.8
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	0.9	0.8	0.7	0.0	5.0
MAX:	1.0	1.0	0.8	0.5	0.5	0.7	0.9	1.0	1.1	1.0	1.0	1.1	10.0

Table 3.4.2-9. Simulated SCWA CVP Diversions @ Sacramento River Water Treatment Plant (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1923	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1924	1.0	0.9	0.7	0.5	0.5	0.6	0.7	0.9	0.9	0.8	0.8	0.4	8.7
1925	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1926	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	0.9	0.9	0.9	0.9	7.2
1927	0.9	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1928	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1929	1.0	0.9	0.8	0.4	0.1	0.7	0.9	1.0	1.0	1.0	0.9	0.4	9.3
1930	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1931	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1932	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	5.0
1933	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.9	0.9	0.8	0.8	0.4	5.1
1934	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.0	1.0	0.9	0.4	6.0
1935	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.0	1.0	0.9	0.9	1.0	6.0
1936	1.0	0.3	0.0	0.0	0.0	0.7	0.9	1.0	1.1	1.0	1.0	1.1	8.0
1937	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1938	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1939	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1940	1.0	1.0	0.4	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.0
1941	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1942	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1943	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1944	1.0	0.9	0.7	0.5	0.5	0.7	0.8	0.9	1.0	0.9	0.9	1.0	9.7
1945	1.0	0.9	0.8	0.4	0.1	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.6
1946	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1947	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1948	1.0	1.0	0.4	0.0	0.0	0.4	0.6	1.0	1.0	0.9	0.9	1.0	8.4
1949	1.0	0.9	0.7	0.5	0.5	0.5	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1950	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1951	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1952	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1953	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1954	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1955	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1956	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1957	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1958	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1959	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1960	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1961	1.0	0.3	0.0	0.0	0.0	0.5	0.9	1.0	1.0	1.0	1.0	1.0	7.6
1962	1.0	1.0	0.8	0.5	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1963	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1964	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1965	1.0	0.3	0.0	0.0	0.0	0.6	0.7	1.0	1.0	0.9	0.9	1.0	7.4
1966	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1967	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1968	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1969	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1970	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1971	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1972	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1973	1.0	0.9	0.8	0.4	0.1	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1974	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1975	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1976	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1977	0.2	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	0.4	5.9
1978	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.5
1979	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1980	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1981	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1982	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1983	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1984	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1985	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1986	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	1.0	0.9	0.9	1.0	9.7
1987	1.0	0.9	0.8	0.4	0.1	0.7	0.9	1.0	1.1	1.0	1.0	1.1	9.9
1988	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.7	0.0	6.4
1989	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.0	1.0	0.9	0.9	1.0	6.1
1990	1.0	0.3	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1991	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	6.1
1992	0.1	0.0	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1993	1.0	0.3	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
AVG:	0.8	0.7	0.5	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.9	0.9	8.8
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	0.9	0.8	0.7	0.0	5.0
MAX:	1.0	1.0	0.8	0.5	0.5	0.7	0.9	1.0	1.1	1.0	1.0	1.1	10.0

Figures 3.4.2-21 through 3.4.2-26 display time series and exceedence data for deliveries to SCWA at Freeport on a contract year and water basis, as well as dry period deliveries. Unlike the EBMUD or SCWA Freeport diversions which are only CVP contract water, the SCWA diversions at Freeport are comprised of CVP contract water, appropriated surplus Delta flows, and "Other" water (see Section 3.2 of this appendix for more details).

Figure 3.4.2-21 Exceedence for Simulated Annual Deliveries to SCWA at Freeport, 2001 LOD (Contract Year)

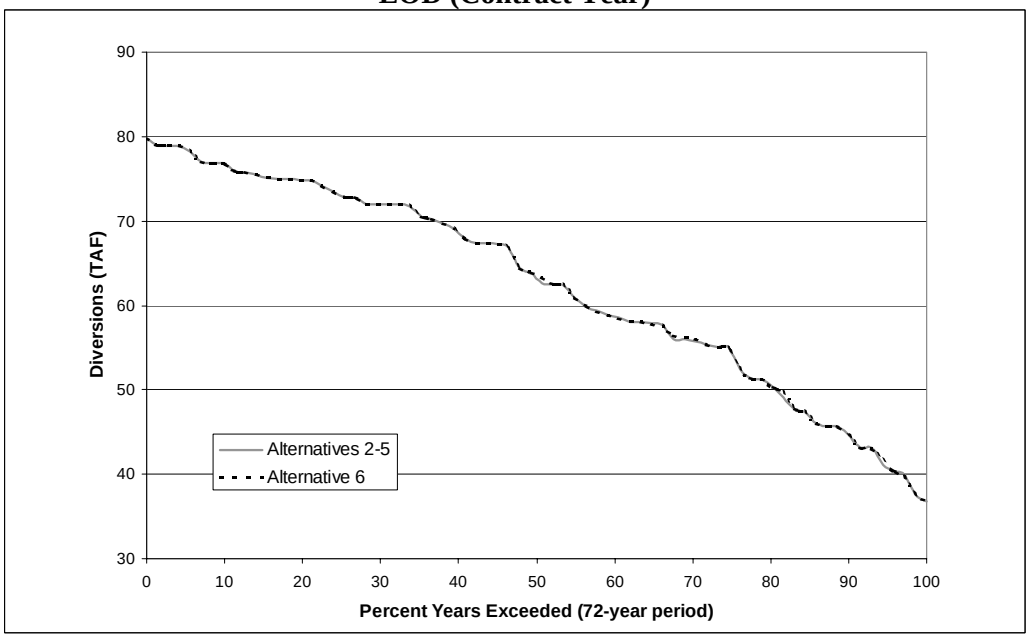
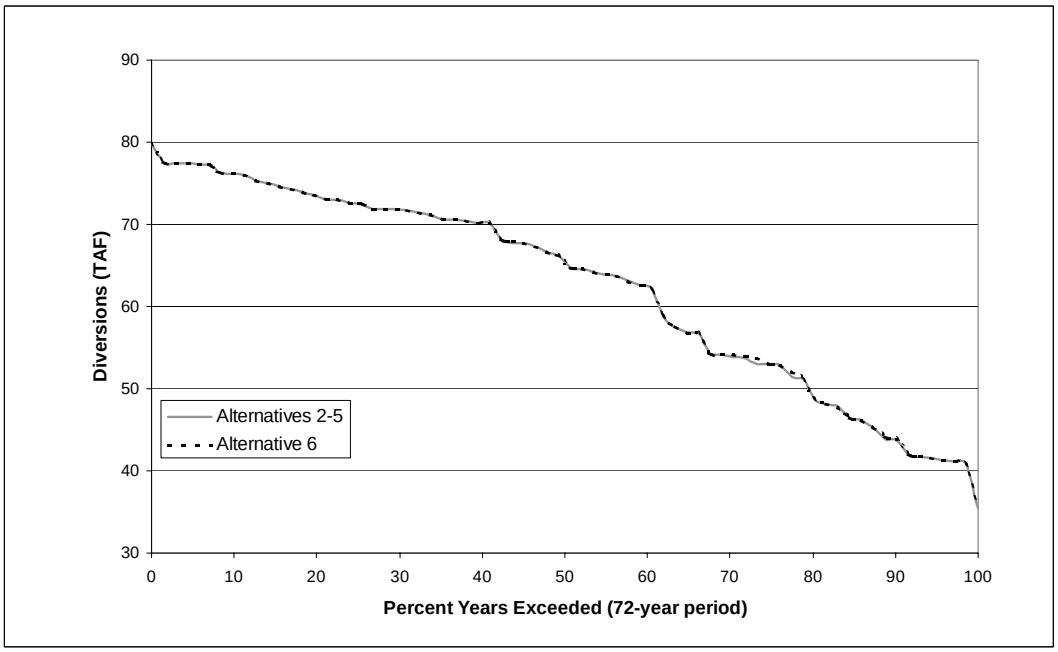


Figure 3.4.2-22 Exceedence for Simulated Annual Deliveries to SCWA at Freeport, 2001 LOD (Water Year)



The following two tables show annual delivery time series data for the SCWA diversion at Freeport. Since Alternative 1 does not divert SCWA water at Freeport, the charts include only the data from Alternatives 2-5 and Alternative 6. Since there is virtually no change in diversions between the Action alternatives, actual diversions are plotted for Alternatives 2-5 but represent Alternative 6 diversions as well.

Dry year data is provided following the time series plots. Tables then display the simulated diversions at SCWA for each of the three types of water, along with a comparison of each of the Action alternatives back to Alternative 1.

Figure 3.4.2-23 Simulated Annual Deliveries to SCWA at Freeport, 2001 LOD (Contract Year) Alternatives 2-5 & 6

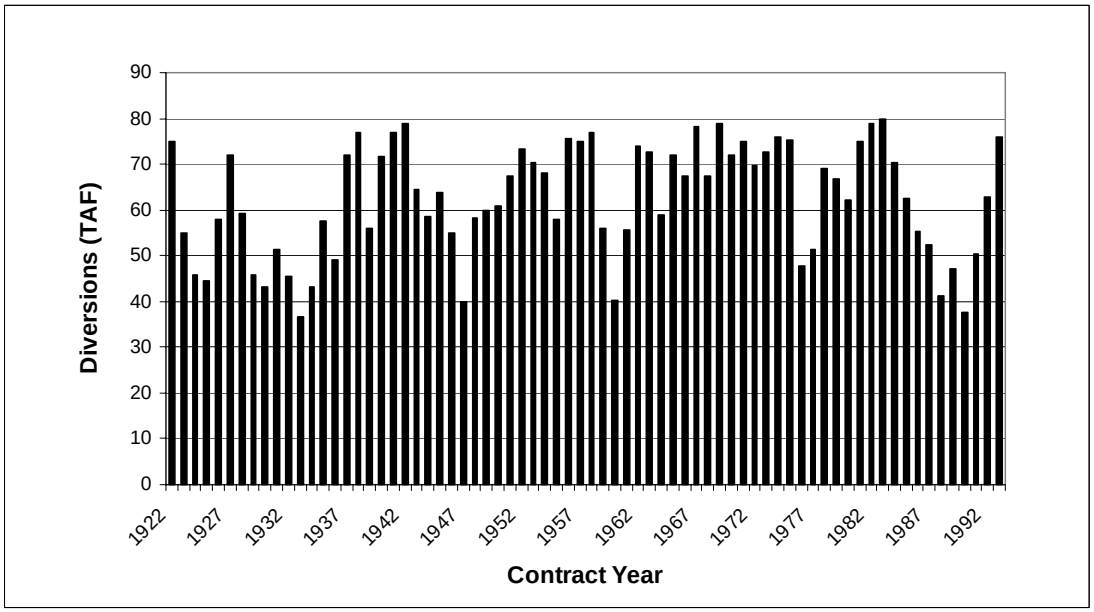


Figure 3.4.2-24 Simulated Annual Deliveries to SCWA at Freeport, 2001 LOD (Water Year) Alternatives 2-5 & 6

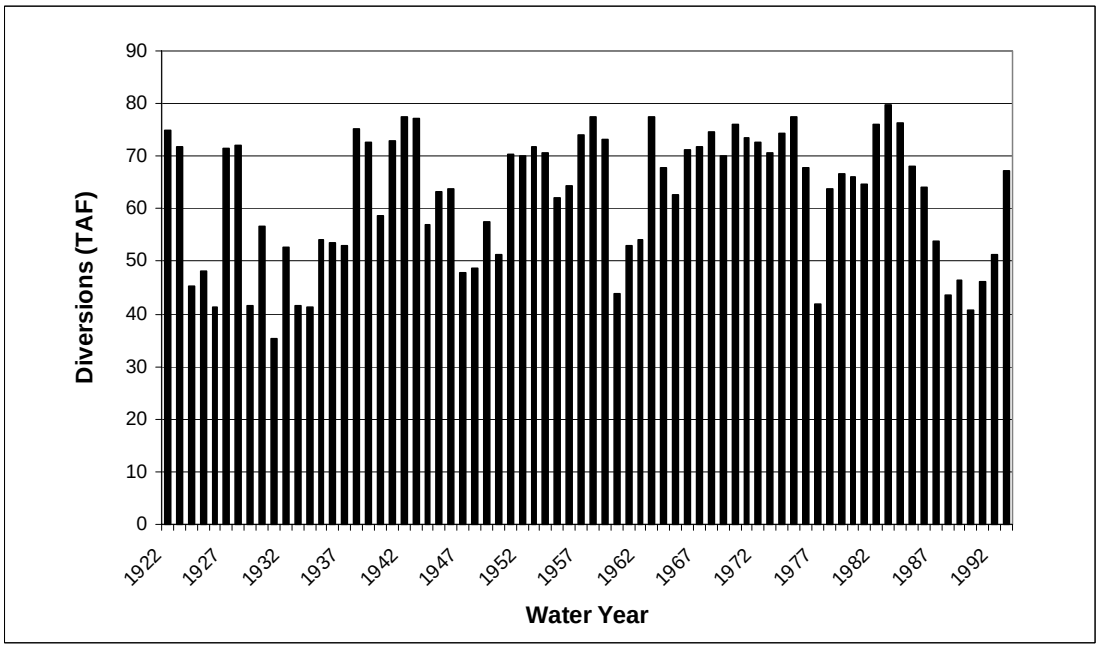


Figure 3.4.2-25 Simulated Monthly Deliveries to SCWA at Freeport, 2001 LOD (Dry Period WY 1928-1934)

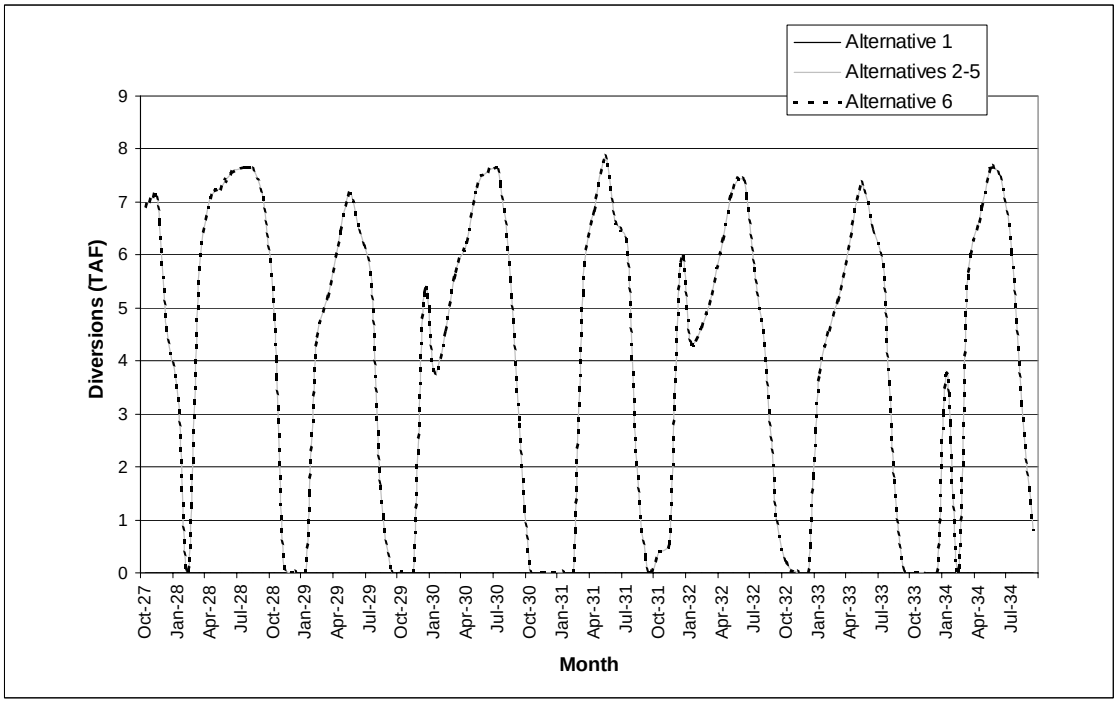


Figure 3.4.2-26 Simulated Monthly Deliveries to SCWA at Freeport, 2001 LOD (Dry Period WY 1987-1992)

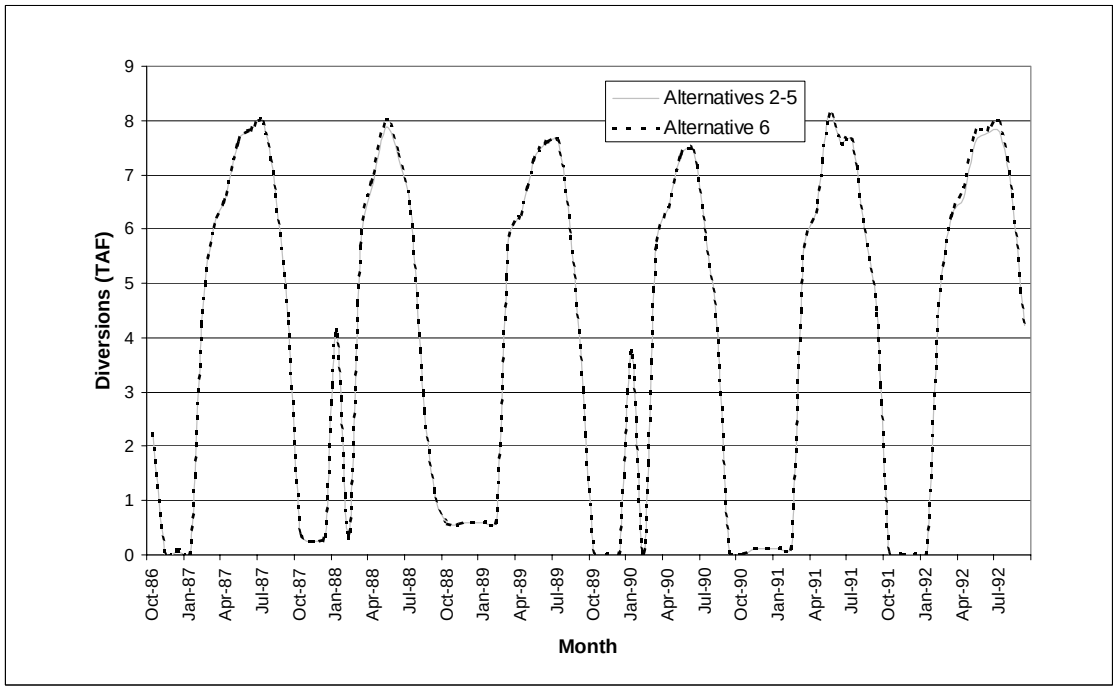


Table 3.4.2-10. Simulated SCWA Total Diversions at Freeport (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6.9	5.6	4.6	3.3	4.1	5.6	6.2	8.1	7.8	7.6	7.6	7.4	74.9
1923	6.9	5.6	4.6	3.3	4.1	5.1	6.2	7.2	7.5	7.6	7.6	5.9	71.7
1924	1.8	1.7	0.3	0.0	4.1	6.1	7.1	7.9	7.1	6.6	2.4	0.0	45.3
1925	0.6	0.8	0.8	0.8	5.4	5.2	6.2	7.3	7.6	7.0	5.8	0.7	48.2
1926	0.1	0.0	0.0	0.0	4.6	5.2	6.3	7.3	7.6	6.0	4.0	0.1	41.2
1927	0.0	7.8	5.3	3.8	4.6	5.6	7.1	7.2	7.5	7.6	7.6	7.4	71.5
1928	6.9	7.1	4.6	3.3	0.0	5.7	7.1	7.3	7.6	7.6	7.6	7.1	71.9
1929	4.8	0.1	0.0	0.0	4.5	5.2	6.2	7.2	6.4	5.7	1.6	0.0	41.7
1930	0.0	0.0	5.3	3.8	4.6	5.7	6.2	7.3	7.6	7.6	5.9	2.8	56.7
1931	0.0	0.0	0.0	0.0	0.0	5.8	6.8	7.8	6.6	6.3	2.1	0.0	35.4
1932	0.4	0.5	5.9	4.3	4.7	5.3	6.3	7.3	7.4	5.7	4.1	1.0	52.8
1933	0.2	0.0	0.0	3.8	4.6	5.4	6.3	7.3	6.5	5.8	1.7	0.0	41.5
1934	0.0	0.0	0.0	3.8	0.0	5.7	6.6	7.6	7.5	6.1	3.2	0.8	41.3
1935	0.4	0.4	0.4	4.2	0.4	5.9	7.3	7.3	7.6	7.6	7.2	5.7	54.2
1936	0.7	0.0	0.0	3.8	4.6	5.6	6.2	7.2	7.5	7.6	6.3	4.2	53.7
1937	0.0	0.0	0.0	0.0	4.6	5.7	7.1	7.3	7.6	7.6	7.4	5.7	53.0
1938	2.2	7.7	5.3	3.8	4.6	5.6	7.1	8.1	7.8	7.6	7.6	7.8	75.3
1939	8.1	5.5	4.6	3.3	3.7	5.4	6.4	7.4	7.7	7.8	7.2	5.5	72.5
1940	0.1	0.0	0.0	3.9	4.7	5.6	7.1	7.2	7.5	7.6	7.6	7.4	58.8
1941	6.5	3.1	4.6	3.3	4.1	5.6	7.1	8.1	7.5	7.6	7.6	7.8	73.0
1942	8.1	5.5	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	77.3
1943	8.1	7.1	4.6	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.4	77.3
1944	6.6	3.3	0.3	0.0	4.1	5.1	6.2	7.3	7.6	7.1	6.0	3.2	56.8
1945	0.5	7.1	3.5	0.5	4.5	5.2	6.2	7.2	7.5	7.6	7.5	5.8	63.1
1946	1.8	7.1	4.6	3.3	0.0	5.1	6.2	7.2	7.5	7.6	7.6	5.8	63.9
1947	1.8	1.7	0.3	0.0	4.1	5.3	6.3	7.3	7.5	7.0	5.9	0.7	47.9
1948	0.0	0.0	0.0	0.0	0.0	5.4	6.3	8.1	7.5	7.6	7.6	6.1	48.7
1949	3.2	1.7	0.3	0.0	4.1	5.8	6.2	7.2	7.5	7.6	7.6	6.2	57.5
1950	2.3	1.7	0.3	3.3	4.1	5.2	6.2	7.3	7.6	6.9	5.8	0.5	51.2
1951	0.1	7.7	5.3	3.8	4.6	5.6	6.2	7.2	7.5	7.6	7.6	7.3	70.5
1952	4.7	1.7	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	70.1
1953	8.1	5.5	4.6	3.3	0.2	4.9	7.1	7.2	7.8	7.6	7.6	7.8	71.8
1954	5.6	7.1	0.3	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.4	70.5
1955	6.6	3.3	4.6	3.3	0.0	5.2	6.2	7.2	7.5	7.6	6.4	4.2	62.2
1956	0.0	0.0	5.3	3.8	4.6	5.6	6.2	8.1	7.8	7.6	7.6	7.8	64.5
1957	8.1	5.5	4.1	2.9	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.4	73.9
1958	8.1	5.6	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	77.5
1959	8.1	5.5	4.1	3.3	4.1	5.2	6.3	7.3	7.6	7.8	7.7	6.0	73.1
1960	1.8	1.7	0.4	0.0	4.2	5.3	6.2	7.3	7.4	6.0	3.5	0.1	43.9
1961	0.0	0.0	0.0	0.0	4.6	5.4	6.4	7.4	7.7	7.8	7.7	6.1	53.0
1962	1.9	0.2	0.0	0.6	4.6	5.2	6.2	7.2	7.5	7.6	7.4	5.8	54.2
1963	8.1	7.1	4.6	3.3	4.1	4.9	7.1	8.1	7.5	7.6	7.6	7.4	77.4
1964	8.1	7.1	4.1	3.3	0.0	5.2	6.2	7.3	7.6	7.6	6.3	5.0	67.8
1965	0.1	0.0	5.3	3.8	4.6	5.0	7.2	7.2	7.5	7.6	7.6	6.7	62.6
1966	4.0	7.1	4.6	3.3	4.1	5.1	7.1	7.2	7.5	7.6	7.6	5.9	71.1
1967	1.8	5.4	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	71.8
1968	8.1	5.5	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.3	74.6
1969	4.7	1.7	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	70.1
1970	8.1	7.1	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.2	76.1
1971	4.4	7.1	4.6	3.3	3.6	5.6	6.2	8.1	7.5	7.6	7.6	7.8	73.5
1972	6.9	5.4	4.6	3.3	4.1	5.6	6.2	7.3	7.6	7.6	7.6	6.2	72.5
1973	2.2	7.1	4.5	3.3	4.5	5.6	6.2	7.2	7.5	7.6	7.6	7.3	70.6
1974	4.7	7.1	4.6	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.8	74.3
1975	8.1	5.5	4.6	3.1	4.1	5.6	7.1	8.1	7.8	7.6	8.1	7.8	77.6
1976	8.1	7.1	4.1	0.0	3.7	6.3	6.9	7.8	7.8	7.7	6.4	1.8	67.7
1977	0.5	0.6	0.6	0.6	0.6	6.1	7.1	7.9	7.6	6.5	2.9	0.8	41.9
1978	0.8	0.8	0.8	4.6	5.4	5.6	7.1	8.1	7.5	7.6	7.6	7.8	63.8
1979	6.6	3.3	0.3	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.1	66.5
1980	4.2	1.7	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	6.5	66.2
1981	4.7	1.7	0.3	3.3	4.1	5.7	7.2	7.3	7.6	7.7	7.7	7.4	64.7
1982	4.8	7.2	4.7	3.4	4.2	5.6	7.1	8.1	7.8	7.6	7.6	7.8	76.0
1983	8.1	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	79.8
1984	8.1	7.1	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.3	76.3
1985	4.9	7.1	4.6	0.4	4.1	5.1	6.2	7.2	7.5	7.6	7.5	5.8	68.1
1986	1.8	1.7	4.6	3.3	4.1	5.8	6.3	7.3	7.6	7.7	7.7	6.2	64.1
1987	2.2	0.0	0.1	0.0	4.5	6.0	6.6	7.6	7.8	8.0	6.6	4.3	53.8
1988	0.4	0.3	0.4	4.1	0.4	5.8	6.9	7.9	7.3	6.3	3.0	1.0	43.7
1989	0.6	0.6	0.6	0.6	0.6	5.9	6.2	7.3	7.6	7.6	5.9	3.0	46.4
1990	0.0	0.0	0.0	3.8	0.0	5.8	6.4	7.4	7.4	5.8	4.2	0.0	40.9
1991	0.0	0.1	0.1	0.1	0.1	5.7	6.3	8.1	7.6	7.6	6.0	4.5	46.2
1992	0.0	0.0	0.0	0.0	4.6	6.2	6.6	7.6	7.8	7.8	6.6	4.2	51.4
1993	0.5	0.3	5.8	4.3	5.1	5.6	7.1	8.1	7.8	7.6	7.6	7.4	67.2
AVG:	3.6	3.4	2.8	2.5	3.5	5.5	6.6	7.5	7.5	7.4	6.6	5.3	62.3
MIN:	0.0	0.0	0.0	0.0	0.0	4.9	6.2	7.2	6.4	5.7	1.6	0.0	35.4
MAX:	8.1	7.8	5.9	4.6	5.4	6.3	7.3	8.1	7.8	8.1	8.1	7.8	79.8

Table 3.4.2-11. Simulated SCWA Total Diversions at Freeport (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6.9	5.6	4.6	3.3	4.1	5.6	6.2	8.1	7.8	7.6	7.6	7.4	74.9
1923	6.9	5.6	4.6	3.3	4.1	5.1	6.2	7.2	7.5	7.6	7.6	5.9	71.7
1924	1.8	1.7	0.3	0.0	4.1	6.1	7.1	7.9	7.1	6.6	2.4	0.0	45.3
1925	0.6	0.8	0.8	0.8	5.4	5.2	6.2	7.3	7.6	7.0	5.8	0.7	48.2
1926	0.1	0.0	0.0	0.0	4.6	5.2	6.3	7.3	7.6	6.0	4.0	0.1	41.1
1927	0.0	7.8	5.3	3.8	4.6	5.6	7.1	7.2	7.5	7.6	7.6	7.4	71.5
1928	6.9	7.1	4.6	3.3	0.0	5.7	7.1	7.3	7.5	7.6	7.6	7.1	71.9
1929	4.8	0.1	0.0	0.0	4.5	5.2	6.2	7.2	6.4	5.7	1.6	0.0	41.7
1930	0.0	0.0	5.3	3.8	4.6	5.7	6.2	7.3	7.6	7.6	5.9	2.8	56.7
1931	0.0	0.0	0.0	0.0	0.0	5.8	6.8	7.8	6.6	6.3	2.1	0.0	35.4
1932	0.4	0.5	5.9	4.3	4.6	5.3	6.3	7.3	7.4	5.7	4.1	1.0	52.8
1933	0.2	0.0	0.0	3.8	4.6	5.4	6.3	7.3	6.5	5.8	1.7	0.0	41.6
1934	0.0	0.0	0.0	3.8	0.0	5.7	6.6	7.6	7.5	6.1	3.2	0.8	41.3
1935	0.4	0.4	0.4	4.2	0.4	5.9	7.2	7.3	7.6	7.6	7.2	5.7	54.1
1936	0.7	0.0	0.0	3.8	4.6	5.6	6.3	7.3	7.6	7.7	6.4	4.2	54.1
1937	0.0	0.0	0.0	0.0	4.6	5.7	7.1	7.3	7.6	7.6	7.4	5.7	53.0
1938	2.2	7.7	5.3	3.8	4.6	5.6	7.1	8.1	7.8	7.6	7.6	7.8	75.3
1939	8.1	5.5	4.6	3.3	3.7	5.4	6.4	7.4	7.7	7.8	7.2	5.5	72.6
1940	0.1	0.0	0.0	3.9	4.7	5.6	7.1	7.2	7.5	7.6	7.6	7.4	58.8
1941	6.5	3.1	4.6	3.3	4.1	5.6	7.1	8.1	7.5	7.6	7.6	7.8	73.0
1942	8.1	5.5	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	77.3
1943	8.1	7.1	4.6	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.4	77.3
1944	6.6	3.3	0.3	0.0	4.1	5.1	6.2	7.3	7.6	7.0	6.0	3.2	56.7
1945	0.5	7.1	3.4	0.5	4.5	5.2	6.2	7.2	7.5	7.6	7.5	5.8	63.1
1946	1.8	7.1	4.6	3.3	0.0	5.1	6.2	7.2	7.5	7.6	7.6	5.8	63.9
1947	1.8	1.7	0.3	0.0	4.1	5.3	6.2	7.2	7.5	7.0	5.9	0.7	47.6
1948	0.0	0.0	0.0	0.0	0.0	5.4	6.3	8.1	7.5	7.6	7.6	6.1	48.7
1949	3.2	1.7	0.3	0.0	4.1	5.8	6.2	7.2	7.5	7.7	7.6	6.2	57.6
1950	2.3	1.7	0.3	3.3	4.1	5.2	6.2	7.3	7.6	6.9	5.8	0.5	51.2
1951	0.1	7.7	5.3	3.8	4.6	5.6	6.2	7.2	7.5	7.6	7.6	7.3	70.5
1952	4.7	1.7	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	70.1
1953	8.1	5.5	4.6	3.3	0.2	4.9	7.1	7.2	7.8	7.6	7.6	7.8	71.8
1954	5.6	7.1	0.3	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.4	70.5
1955	6.6	3.3	4.6	3.3	0.0	5.2	6.2	7.2	7.5	7.6	6.4	4.2	62.2
1956	0.0	0.0	5.3	3.8	4.6	5.6	6.2	8.1	7.8	7.6	7.6	7.8	64.5
1957	8.1	5.5	4.1	2.9	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.4	73.9
1958	8.1	5.6	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	77.5
1959	8.1	5.5	4.1	3.3	4.1	5.2	6.3	7.3	7.6	7.8	7.7	6.0	73.1
1960	1.8	1.7	0.4	0.0	4.2	5.3	6.2	7.3	7.4	6.0	3.5	0.1	43.9
1961	0.0	0.0	0.0	0.0	4.6	5.4	6.4	7.5	7.8	7.9	7.9	6.2	53.6
1962	1.9	0.2	0.0	0.6	4.6	5.2	6.2	7.2	7.5	7.6	7.4	5.8	54.2
1963	8.1	7.1	4.6	3.3	4.1	4.9	7.1	8.1	7.5	7.6	7.6	7.4	77.4
1964	8.1	7.1	4.1	3.3	0.0	5.2	6.2	7.3	7.6	7.6	6.3	5.0	67.8
1965	0.1	0.0	5.3	3.8	4.6	5.0	7.2	7.2	7.5	7.6	7.6	6.7	62.6
1966	4.0	7.1	4.6	3.3	4.1	5.1	7.1	7.2	7.5	7.6	7.6	5.9	71.1
1967	1.8	5.4	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	71.8
1968	8.1	5.5	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.3	74.6
1969	4.7	1.7	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.6	7.8	70.1
1970	8.1	7.1	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.2	76.1
1971	4.4	7.1	4.6	3.3	3.6	5.6	6.2	8.1	7.5	7.6	7.6	7.8	73.5
1972	6.9	5.4	4.6	3.3	4.1	5.6	6.2	7.3	7.6	7.6	7.6	6.2	72.5
1973	2.2	7.1	4.5	3.3	4.5	5.6	6.2	7.2	7.5	7.6	7.6	7.3	70.6
1974	4.7	7.1	4.6	3.3	4.1	5.6	7.1	7.2	7.5	7.6	7.6	7.8	74.3
1975	8.1	5.5	4.6	3.1	4.1	5.6	7.1	8.1	7.8	7.6	8.1	7.8	77.6
1976	8.1	7.1	4.1	0.0	3.7	6.3	7.0	7.8	7.8	7.7	6.4	1.8	67.8
1977	0.5	0.6	0.6	0.6	0.6	6.1	7.1	7.9	7.6	6.5	2.9	0.8	41.9
1978	0.8	0.8	0.8	4.6	5.4	5.6	7.1	8.1	7.5	7.6	7.6	7.8	63.8
1979	6.6	3.3	0.3	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.1	66.5
1980	4.2	1.7	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	6.5	66.2
1981	4.7	1.7	0.3	3.3	4.1	5.7	7.2	7.3	7.6	7.7	7.7	7.4	64.7
1982	4.8	7.2	4.7	3.4	4.2	5.6	7.1	8.1	7.8	7.6	7.6	7.8	76.0
1983	8.1	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	79.8
1984	8.1	7.1	4.6	3.3	4.1	5.6	6.2	7.2	7.5	7.6	7.6	7.3	76.3
1985	4.9	7.1	4.6	0.4	4.1	5.1	6.2	7.2	7.5	7.6	7.5	5.8	68.1
1986	1.8	1.7	4.6	3.3	4.1	5.8	6.3	7.3	7.6	7.7	7.7	6.2	64.1
1987	2.2	0.0	0.1	0.0	4.5	6.0	6.6	7.6	7.8	8.0	6.6	4.3	53.8
1988	0.4	0.3	0.4	4.1	0.4	5.9	7.0	8.0	7.4	6.3	3.0	1.0	44.1
1989	0.6	0.6	0.6	0.6	0.6	5.9	6.2	7.3	7.6	7.6	5.9	3.0	46.4
1990	0.0	0.0	0.0	3.8	0.0	5.8	6.4	7.4	7.4	5.8	4.2	0.0	40.9
1991	0.0	0.1	0.1	0.1	0.1	5.7	6.3	8.1	7.6	7.6	6.0	4.5	46.2
1992	0.0	0.0	0.0	0.0	4.6	6.2	6.8	7.8	7.8	8.0	6.6	4.2	52.0
1993	0.5	0.3	5.8	4.3	5.1	5.6	7.1	8.1	7.8	7.6	7.6	7.4	67.2
AVG:	3.6	3.4	2.8	2.5	3.5	5.5	6.6	7.5	7.5	7.4	6.7	5.3	62.4
MIN:	0.0	0.0	0.0	0.0	0.0	4.9	6.2	7.2	6.4	5.7	1.6	0.0	35.4
MAX:	8.1	7.8	5.9	4.6	5.4	6.3	7.2	8.1	7.8	8.1	8.1	7.8	79.8

Table 3.4.2-12. Simulated SCWA CVP Diversions @ Freeport (TAF) Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1923	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1924	1.8	1.7	0.3	0.0	0.0	4.6	5.2	5.4	3.1	0.0	0.0	0.0	22.1
1925	0.0	0.0	0.0	0.0	0.0	2.2	4.9	5.6	6.0	5.2	2.3	0.1	26.3
1926	0.0	0.0	0.0	0.0	0.0	2.0	4.7	5.3	5.7	5.0	2.2	0.1	25.0
1927	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1928	1.8	1.7	0.3	0.0	0.0	1.1	4.7	6.0	6.1	6.2	6.0	3.3	37.3
1929	0.5	0.0	0.0	0.0	0.0	5.2	5.9	6.1	3.5	0.0	0.0	0.0	21.3
1930	0.0	0.0	0.0	0.0	0.0	2.0	4.9	5.6	6.0	5.2	2.3	0.1	26.1
1931	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1932	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1933	0.0	0.0	0.0	0.0	0.0	4.5	5.1	5.3	3.1	0.0	0.0	0.0	18.0
1934	0.0	0.0	0.0	0.0	0.0	5.2	5.9	6.2	3.6	0.0	0.0	0.0	20.9
1935	0.0	0.0	0.0	0.0	0.0	1.4	3.9	5.6	6.0	5.2	2.3	0.1	24.5
1936	0.0	0.0	0.0	0.0	0.0	2.3	5.2	5.9	6.4	5.6	2.4	0.1	27.8
1937	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.0	5.2	2.3	0.1	26.2
1938	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1939	1.8	1.7	0.3	0.0	0.0	2.3	5.7	6.0	6.1	6.1	4.2	0.2	34.4
1940	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1941	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1942	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1943	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1944	1.8	1.7	0.3	0.0	0.0	1.2	4.6	5.8	6.0	6.0	5.8	3.2	36.5
1945	0.5	0.0	0.0	0.0	0.0	1.3	3.7	4.4	5.1	6.3	6.4	3.6	31.4
1946	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1947	1.8	1.7	0.3	0.0	0.0	2.3	5.7	5.9	6.1	6.1	4.2	0.2	34.3
1948	0.0	0.0	0.0	0.0	0.0	0.8	2.8	4.4	5.1	6.3	6.4	3.6	29.4
1949	1.8	1.7	0.3	0.0	0.0	1.2	3.7	4.4	5.1	6.3	6.4	3.6	34.5
1950	1.8	1.7	0.3	0.0	0.0	2.1	4.9	5.6	6.0	5.2	2.3	0.1	30.0
1951	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1952	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1953	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1954	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1955	1.8	1.7	0.3	0.0	0.0	2.2	5.0	5.7	6.2	5.4	2.3	0.1	30.9
1956	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1957	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1958	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1959	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1960	1.8	1.7	0.3	0.0	0.0	1.7	4.9	5.6	6.0	5.2	2.3	0.1	29.6
1961	0.0	0.0	0.0	0.0	0.0	1.0	4.8	6.0	6.2	6.2	6.1	3.3	33.5
1962	0.5	0.0	0.0	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	31.6
1963	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1964	1.8	1.7	0.3	0.0	0.0	2.2	4.9	5.6	6.0	5.2	2.3	0.1	30.1
1965	0.0	0.0	0.0	0.0	0.0	1.3	3.0	4.4	5.1	6.3	6.4	3.6	30.2
1966	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1967	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1968	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1969	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1970	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1971	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1972	1.8	1.7	0.3	0.0	0.0	1.2	4.7	6.0	6.1	6.1	6.0	3.3	37.2
1973	0.5	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.7
1974	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1975	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1976	1.8	1.7	0.3	0.0	0.0	0.4	5.6	3.7	6.0	5.4	1.4	0.0	26.4
1977	0.0	0.0	0.0	0.0	0.0	5.0	5.7	5.9	3.4	0.0	0.0	0.0	20.0
1978	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1979	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1980	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1981	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1982	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1983	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1984	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1985	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1986	1.8	1.7	0.3	0.0	0.0	1.0	4.6	5.8	6.0	6.0	5.8	3.2	36.3
1987	0.5	0.0	0.0	0.0	0.0	2.1	5.2	5.9	6.4	5.6	2.4	0.1	28.3
1988	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1989	0.0	0.0	0.0	0.0	0.0	1.4	4.9	5.6	6.0	5.2	2.3	0.1	25.5
1990	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1991	0.0	0.0	0.0	0.0	0.0	0.4	5.5	3.6	5.9	5.3	1.4	0.0	22.0
1992	0.0	0.0	0.0	0.0	0.0	1.8	4.7	5.4	5.8	5.1	2.2	0.1	25.1
1993	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
AVG:	1.1	1.0	0.2	0.0	0.0	1.9	4.3	4.9	5.1	5.3	4.6	2.3	30.7
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	2.8	3.6	2.3	0.0	0.0	0.0	17.5
MAX:	1.8	1.7	0.3	0.0	0.0	5.2	5.9	6.2	6.4	6.3	6.4	3.6	37.3

Table 3.4.2-13. Simulated SCWA CVP Diversions @ Freeport (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1923	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1924	1.8	1.7	0.3	0.0	0.0	4.6	5.2	5.4	3.1	0.0	0.0	0.0	22.1
1925	0.0	0.0	0.0	0.0	0.0	2.2	4.9	5.6	6.0	5.2	2.3	0.1	26.3
1926	0.0	0.0	0.0	0.0	0.0	2.0	4.6	5.3	5.7	5.0	2.2	0.1	24.9
1927	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1928	1.8	1.7	0.3	0.0	0.0	1.1	4.7	6.0	6.1	6.2	6.0	3.3	37.3
1929	0.5	0.0	0.0	0.0	0.0	5.2	5.9	6.1	3.5	0.0	0.0	0.0	21.3
1930	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.0	5.2	2.3	0.1	26.2
1931	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1932	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1933	0.0	0.0	0.0	0.0	0.0	4.5	5.1	5.3	3.1	0.0	0.0	0.0	18.0
1934	0.0	0.0	0.0	0.0	0.0	5.2	5.9	6.2	3.5	0.0	0.0	0.0	20.8
1935	0.0	0.0	0.0	0.0	0.0	1.4	4.3	5.6	6.0	5.2	2.3	0.1	25.0
1936	0.0	0.0	0.0	0.0	0.0	2.3	5.3	6.0	6.5	5.7	2.5	0.1	28.4
1937	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.0	5.2	2.3	0.1	26.2
1938	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1939	1.8	1.7	0.3	0.0	0.0	2.3	5.7	6.0	6.1	6.1	4.2	0.2	34.5
1940	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1941	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1942	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1943	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1944	1.8	1.7	0.3	0.0	0.0	1.2	4.6	5.8	5.9	6.0	5.8	3.2	36.4
1945	0.5	0.0	0.0	0.0	0.0	1.3	3.7	4.4	5.1	6.3	6.4	3.6	31.4
1946	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1947	1.8	1.7	0.3	0.0	0.0	2.3	5.6	5.9	6.0	6.0	4.1	0.2	34.0
1948	0.0	0.0	0.0	0.0	0.0	0.8	2.8	4.4	5.1	6.3	6.4	3.6	29.4
1949	1.8	1.7	0.3	0.0	0.0	1.2	3.7	4.4	5.1	6.3	6.4	3.6	34.6
1950	1.8	1.7	0.3	0.0	0.0	2.1	4.9	5.6	6.0	5.2	2.3	0.1	30.1
1951	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1952	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1953	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1954	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1955	1.8	1.7	0.3	0.0	0.0	2.2	5.0	5.7	6.2	5.4	2.3	0.1	30.9
1956	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1957	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1958	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1959	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1960	1.8	1.7	0.3	0.0	0.0	1.7	4.9	5.6	6.0	5.2	2.3	0.1	29.7
1961	0.0	0.0	0.0	0.0	0.0	1.0	4.9	6.2	6.3	6.3	6.2	3.4	34.1
1962	0.5	0.0	0.0	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	31.6
1963	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1964	1.8	1.7	0.3	0.0	0.0	2.2	4.9	5.6	6.0	5.2	2.3	0.1	30.1
1965	0.0	0.0	0.0	0.0	0.0	1.3	3.1	4.4	5.1	6.3	6.4	3.6	30.2
1966	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1967	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1968	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1969	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1970	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1971	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1972	1.8	1.7	0.3	0.0	0.0	1.2	4.7	6.0	6.1	6.1	6.0	3.3	37.2
1973	0.5	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.7
1974	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1975	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1976	1.8	1.7	0.3	0.0	0.0	0.4	5.7	3.7	6.1	5.5	1.4	0.0	26.6
1977	0.0	0.0	0.0	0.0	0.0	5.0	5.7	5.9	3.4	0.0	0.0	0.0	20.0
1978	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
1979	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1980	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1981	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1982	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1983	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1984	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1985	1.8	1.7	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1986	1.8	1.7	0.3	0.0	0.0	1.0	4.6	5.8	6.0	6.0	5.8	3.2	36.3
1987	0.5	0.0	0.0	0.0	0.0	2.1	5.2	5.9	6.4	5.6	2.4	0.1	28.3
1988	0.0	0.0	0.0	0.0	0.0	3.9	5.7	6.0	2.4	0.0	0.0	0.0	18.0
1989	0.0	0.0	0.0	0.0	0.0	1.4	4.9	5.6	6.0	5.2	2.3	0.1	25.5
1990	0.0	0.0	0.0	0.0	0.0	3.8	5.6	5.8	2.3	0.0	0.0	0.0	17.5
1991	0.0	0.0	0.0	0.0	0.0	0.4	5.5	3.6	5.9	5.3	1.4	0.0	22.0
1992	0.0	0.0	0.0	0.0	0.0	1.8	4.9	5.6	6.0	5.2	2.3	0.1	26.0
1993	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.2
AVG:	1.1	1.0	0.2	0.0	0.0	1.9	4.3	4.9	5.1	5.3	4.6	2.3	30.8
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	2.8	3.6	2.3	0.0	0.0	0.0	17.5
MAX:	1.8	1.7	0.3	0.0	0.0	5.2	5.9	6.2	6.5	6.3	6.4	3.6	37.3

Table 3.4.2-14. Simulated SCWA Appropriated Excess Water @ Freeport (TAF), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	0.0	0.0	4.3	3.3	4.1	4.0	0.0	3.7	2.7	0.0	0.0	0.0	22.1
1923	0.0	0.0	4.3	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
1924	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1925	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
1926	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1927	0.0	7.8	5.3	3.8	4.6	4.0	3.3	0.0	0.0	0.0	0.0	0.0	28.8
1928	0.0	5.4	4.3	3.3	0.0	4.6	2.3	0.0	0.0	0.0	0.0	0.0	20.0
1929	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
1930	0.0	0.0	5.3	3.8	4.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	17.3
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	5.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
1933	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1934	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1935	0.0	0.0	0.0	4.2	0.0	4.4	3.4	0.0	0.0	0.0	0.0	0.0	12.0
1936	0.0	0.0	0.0	3.8	4.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	11.7
1937	0.0	0.0	0.0	0.0	4.6	3.6	2.2	0.0	0.0	0.0	0.0	0.0	10.4
1938	0.0	7.7	5.3	3.8	4.6	4.0	3.3	3.7	2.7	0.0	0.0	4.2	39.4
1939	6.3	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9
1940	0.0	0.0	0.0	3.9	4.7	4.1	3.3	0.0	0.0	0.0	0.0	0.0	16.0
1941	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	0.0	0.0	0.0	4.2	27.0
1942	6.3	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	36.0
1943	6.3	5.4	4.3	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	0.0	30.7
1944	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1945	0.0	7.1	3.5	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
1946	0.0	5.4	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
1947	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.7
1949	0.0	0.0	0.0	0.0	4.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	8.7
1950	0.0	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
1951	0.0	7.7	5.3	3.8	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4
1952	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	29.7
1953	6.3	0.0	4.3	3.3	0.0	0.0	3.3	0.0	2.7	0.0	0.0	4.2	24.1
1954	0.0	5.4	0.0	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	0.0	20.2
1955	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1956	0.0	0.0	5.3	3.8	4.6	4.0	0.0	3.7	2.7	0.0	0.0	4.2	28.3
1957	6.3	0.0	0.0	0.0	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4
1958	6.3	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	36.0
1959	6.3	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1960	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
1961	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1962	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1963	6.3	5.4	4.3	3.3	4.1	0.0	3.3	3.7	0.0	0.0	0.0	0.0	30.4
1964	6.3	5.4	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
1965	0.0	0.0	5.3	3.8	4.6	0.0	4.2	0.0	0.0	0.0	0.0	0.0	17.8
1966	0.0	5.4	4.3	3.3	4.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	20.4
1967	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	1.8	1.7	4.2	33.2
1968	6.3	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0
1969	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	29.7
1970	6.3	5.4	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
1971	0.0	5.4	4.3	3.3	0.0	4.0	0.0	3.7	0.0	0.0	0.0	4.2	24.9
1972	0.0	0.0	4.3	3.3	4.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0	16.1
1973	0.0	7.1	4.5	3.3	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4
1974	0.0	5.4	4.3	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	4.2	28.6
1975	6.3	0.0	4.3	0.0	4.1	4.0	3.3	3.7	2.7	0.0	1.7	4.2	34.3
1976	6.3	5.4	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	17.6
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	4.6	5.4	4.0	3.3	3.7	0.0	0.0	0.0	4.2	25.3
1979	0.0	0.0	0.0	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4
1980	0.0	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
1981	0.0	0.0	0.0	3.3	4.1	4.1	3.4	0.0	0.0	0.0	0.0	0.0	15.0
1982	0.0	5.5	4.4	3.4	4.2	4.0	3.3	3.7	2.7	0.0	0.0	4.2	35.5
1983	6.3	5.4	4.3	3.3	4.1	4.0	3.3	3.7	2.7	1.8	1.7	4.2	44.8
1984	6.3	5.4	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
1985	0.0	5.4	4.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
1986	0.0	0.0	4.3	3.3	4.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.4
1987	0.0	0.0	0.0	0.0	4.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1988	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1989	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	4.4
1990	0.0	0.0	0.0	3.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
1991	0.0	0.0	0.0	0.0	0.0	5.3	0.0	4.5	0.0	0.0	0.0	0.0	9.8
1992	0.0	0.0	0.0	0.0	4.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	9.0
1993	0.0	0.0	5.8	4.3	5.1	4.0	3.3	3.7	2.7	0.0	0.0	0.0	28.9
AVG:	1.3	1.6	2.4	2.4	3.2	2.5	1.1	0.9	0.5	0.0	0.1	0.9	17.0
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	6.3	7.8	5.9	4.6	5.4	5.9	4.2	4.5	2.7	1.8	1.7	4.2	44.8

Table 3.4.2-15. Simulated SCWA Appropriated Excess Water @ Freeport (TAF), Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	0.0	0.0	4.3	3.3	4.1	4.0	0.0	3.7	2.7	0.0	0.0	0.0	22.1
1923	0.0	0.0	4.3	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
1924	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1925	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
1926	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1927	0.0	7.8	5.3	3.8	4.6	4.0	3.3	0.0	0.0	0.0	0.0	0.0	28.8
1928	0.0	5.4	4.3	3.3	0.0	4.6	2.3	0.0	0.0	0.0	0.0	0.0	20.0
1929	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
1930	0.0	0.0	5.3	3.8	4.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	17.3
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	5.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
1933	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1934	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1935	0.0	0.0	0.0	4.2	0.0	4.4	2.9	0.0	0.0	0.0	0.0	0.0	11.5
1936	0.0	0.0	0.0	3.8	4.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	11.6
1937	0.0	0.0	0.0	0.0	4.6	3.6	2.2	0.0	0.0	0.0	0.0	0.0	10.4
1938	0.0	7.7	5.3	3.8	4.6	4.0	3.3	3.7	2.7	0.0	0.0	4.2	39.4
1939	6.3	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9
1940	0.0	0.0	0.0	3.9	4.7	4.0	3.3	0.0	0.0	0.0	0.0	0.0	16.0
1941	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	0.0	0.0	0.0	4.2	27.0
1942	6.3	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	36.0
1943	6.3	5.4	4.3	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	0.0	30.7
1944	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1945	0.0	7.1	3.4	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
1946	0.0	5.4	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
1947	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.7
1949	0.0	0.0	0.0	0.0	4.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	8.7
1950	0.0	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
1951	0.0	7.7	5.3	3.8	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4
1952	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	29.7
1953	6.3	0.0	4.3	3.3	0.0	0.0	3.3	0.0	2.7	0.0	0.0	4.2	24.1
1954	0.0	5.4	0.0	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	0.0	20.2
1955	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1956	0.0	0.0	5.3	3.8	4.6	4.0	0.0	3.7	2.7	0.0	0.0	4.2	28.3
1957	6.3	0.0	0.0	0.0	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4
1958	6.3	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	36.0
1959	6.3	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1960	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
1961	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1962	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1963	6.3	5.4	4.3	3.3	4.1	0.0	3.3	3.7	0.0	0.0	0.0	0.0	30.4
1964	6.3	5.4	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
1965	0.0	0.0	5.3	3.8	4.6	0.0	4.2	0.0	0.0	0.0	0.0	0.0	17.8
1966	0.0	5.4	4.3	3.3	4.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	20.4
1967	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	1.8	1.7	4.2	33.2
1968	6.3	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0
1969	0.0	0.0	4.3	3.3	4.1	4.0	3.3	3.7	2.7	0.0	0.0	4.2	29.7
1970	6.3	5.4	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
1971	0.0	5.4	4.3	3.3	0.0	4.0	0.0	3.7	0.0	0.0	0.0	4.2	24.9
1972	0.0	0.0	4.3	3.3	4.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0	16.1
1973	0.0	7.1	4.5	3.3	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4
1974	0.0	5.4	4.3	3.3	4.1	4.0	3.3	0.0	0.0	0.0	0.0	4.2	28.6
1975	6.3	0.0	4.3	0.0	4.1	4.0	3.3	3.7	2.7	0.0	1.7	4.2	34.3
1976	6.3	5.4	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	17.6
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	4.6	5.4	4.0	3.3	3.7	0.0	0.0	0.0	4.2	25.3
1979	0.0	0.0	0.0	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4
1980	0.0	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
1981	0.0	0.0	0.0	3.3	4.1	4.1	3.4	0.0	0.0	0.0	0.0	0.0	15.0
1982	0.0	5.5	4.4	3.4	4.2	4.0	3.3	3.7	2.7	0.0	0.0	4.2	35.5
1983	6.3	5.4	4.3	3.3	4.1	4.0	3.3	3.7	2.7	1.8	1.7	4.2	44.8
1984	6.3	5.4	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
1985	0.0	5.4	4.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
1986	0.0	0.0	4.3	3.3	4.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	16.4
1987	0.0	0.0	0.0	0.0	4.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1988	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1989	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	4.4
1990	0.0	0.0	0.0	3.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
1991	0.0	0.0	0.0	0.0	0.0	5.3	0.0	4.5	0.0	0.0	0.0	0.0	9.8
1992	0.0	0.0	0.0	0.0	4.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	9.0
1993	0.0	0.0	5.8	4.3	5.1	4.0	3.3	3.7	2.7	0.0	0.0	0.0	28.9
AVG:	1.3	1.6	2.4	2.4	3.2	2.4	1.1	0.9	0.5	0.0	0.1	0.9	17.0
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	6.3	7.8	5.9	4.6	5.4	5.9	4.2	4.5	2.7	1.8	1.7	4.2	44.8

Table 3.4.2-16. Simulated "Other" Water Diversions @ Freeport (TAF), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	5.1	3.9	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	3.8	17.8
1923	5.1	3.9	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.3	25.0
1924	0.0	0.0	0.0	0.0	0.0	1.6	2.0	2.5	4.0	6.6	2.4	0.0	19.1
1925	0.6	0.8	0.8	0.8	0.0	3.0	1.4	1.7	1.6	1.8	3.6	0.5	16.5
1926	0.1	0.0	0.0	0.0	0.0	3.2	1.6	2.0	1.9	1.0	1.8	0.0	11.6
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.5
1928	5.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.5	1.6	3.8	14.6
1929	4.3	0.1	0.0	0.0	0.0	0.0	0.3	1.0	2.9	5.7	1.6	0.0	15.9
1930	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.7	1.6	2.4	3.6	2.7	13.3
1931	0.0	0.0	0.0	0.0	0.0	2.0	1.3	2.0	4.3	6.3	2.1	0.0	17.9
1932	0.4	0.5	0.0	0.0	4.6	1.5	0.7	1.5	5.1	5.7	4.1	1.0	25.1
1933	0.2	0.0	0.0	0.0	0.0	0.8	1.2	2.0	3.4	5.8	1.7	0.0	15.2
1934	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.5	3.9	6.1	3.2	0.8	16.7
1935	0.4	0.4	0.4	0.0	0.4	0.0	0.0	1.7	1.6	2.4	4.9	5.6	17.6
1936	0.7	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.1	2.0	3.9	4.1	14.2
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.6	2.4	5.2	5.6	16.5
1938	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	4.8
1939	0.0	3.8	0.0	0.0	3.6	3.1	0.7	1.4	1.6	1.6	3.0	5.3	24.2
1940	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.6
1941	4.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	11.0
1942	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	6.4
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.5
1944	4.8	1.6	0.0	0.0	0.0	3.9	1.6	1.5	1.6	1.1	0.2	0.0	16.2
1945	0.0	0.0	0.0	0.5	0.0	3.9	2.4	2.8	2.4	1.4	1.1	2.2	16.7
1946	0.0	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.2	15.9
1947	0.0	0.0	0.0	0.0	0.0	3.0	0.6	1.3	1.5	0.9	1.7	0.4	9.4
1948	0.0	0.0	0.0	0.0	0.0	4.6	3.5	0.0	2.4	1.4	1.2	2.5	15.6
1949	1.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	2.6	14.3
1950	0.5	0.0	0.0	0.0	0.0	3.1	1.4	1.7	1.6	1.6	3.6	0.3	13.7
1951	0.1	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	13.9
1952	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.4
1953	0.0	3.8	0.0	0.0	0.2	3.3	0.0	2.8	0.0	1.4	1.2	0.0	12.7
1954	3.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	15.4
1955	4.8	1.6	0.0	0.0	0.0	2.9	1.2	1.5	1.3	2.2	4.0	4.1	23.7
1956	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	0.0	5.1
1957	0.0	3.8	3.8	2.9	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.8	24.5
1958	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	6.5
1959	0.0	3.8	3.8	0.0	0.0	3.7	2.5	2.9	2.5	1.5	1.3	2.4	24.4
1960	0.0	0.0	0.0	0.0	0.0	3.6	1.4	1.7	1.4	0.8	1.2	0.0	10.0
1961	0.0	0.0	0.0	0.0	0.0	4.4	1.6	1.4	1.5	1.6	1.7	2.8	14.9
1962	1.3	0.2	0.0	0.6	0.0	3.7	2.4	2.8	2.4	1.4	1.0	2.2	18.0
1963	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.4	1.4	1.2	3.8	12.0
1964	0.0	0.0	3.8	0.0	0.0	3.0	1.4	1.7	1.6	2.4	4.0	4.8	22.7
1965	0.1	0.0	0.0	0.0	0.0	3.7	0.0	2.8	2.4	1.4	1.2	3.1	14.6
1966	2.2	0.0	0.0	0.0	0.0	3.5	0.0	2.8	2.4	1.4	1.2	2.3	15.7
1967	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
1968	0.0	3.8	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	17.6
1969	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.4
1970	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	13.7
1971	2.6	0.0	0.0	0.0	3.6	0.0	2.4	0.0	2.4	1.4	1.2	0.0	13.6
1972	5.1	3.7	0.0	0.0	0.0	0.0	1.5	1.3	1.5	1.5	1.6	2.9	19.2
1973	1.7	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	15.5
1974	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	0.0	10.6
1975	0.0	3.8	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	8.2
1976	0.0	0.0	3.8	0.0	3.6	0.0	1.3	4.1	1.8	2.2	5.0	1.8	23.7
1977	0.5	0.6	0.6	0.6	0.6	1.1	1.4	2.0	4.1	6.5	2.9	0.8	21.9
1978	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	7.3
1979	4.8	1.6	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	20.1
1980	2.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	2.8	15.4
1981	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.5	1.5	1.3	3.7	14.7
1982	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.5
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.7	13.9
1985	3.1	0.0	0.0	0.4	0.0	3.5	2.4	2.8	2.4	1.4	1.1	2.2	19.3
1986	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.5	1.7	1.7	1.8	3.0	11.4
1987	1.7	0.0	0.1	0.0	0.0	0.0	1.4	1.7	1.4	2.4	4.2	4.2	17.1
1988	0.4	0.3	0.4	0.0	0.4	2.1	1.3	2.1	5.0	6.3	3.0	1.0	22.0
1989	0.6	0.6	0.6	0.6	0.6	0.0	1.4	1.7	1.6	2.4	3.6	2.9	16.4
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	5.1	5.8	4.2	0.0	17.6
1991	0.0	0.1	0.1	0.1	0.1	0.0	0.8	0.0	1.7	2.4	4.6	4.5	14.4
1992	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.2	2.0	2.7	4.4	4.1	17.3
1993	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	3.8	7.2
AVG:	1.2	0.8	0.3	0.1	0.2	1.2	1.1	1.7	1.9	2.1	2.0	2.1	14.6
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	5.1	3.9	3.8	3.1	4.6	4.6	3.5	4.1	5.1	6.6	5.2	5.6	25.1

Table 3.4.2-17. Simulated "Other" Water Diversions @ Freeport (TAF), Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	5.1	3.9	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	3.8	17.8
1923	5.1	3.9	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.3	25.0
1924	0.0	0.0	0.0	0.0	0.0	1.6	2.0	2.5	4.0	6.6	2.4	0.0	19.1
1925	0.6	0.8	0.8	0.8	0.0	3.0	1.4	1.7	1.6	1.8	3.6	0.5	16.5
1926	0.1	0.0	0.0	0.0	0.0	3.2	1.6	2.0	1.9	1.0	1.8	0.0	11.6
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.5
1928	5.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.5	1.6	3.8	14.6
1929	4.3	0.1	0.0	0.0	0.0	0.0	0.3	1.0	2.9	5.7	1.6	0.0	15.9
1930	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.7	1.6	2.4	3.6	2.7	13.3
1931	0.0	0.0	0.0	0.0	0.0	2.0	1.3	2.0	4.3	6.3	2.1	0.0	17.9
1932	0.4	0.5	0.0	0.0	4.6	1.5	0.7	1.5	5.1	5.7	4.1	1.0	25.1
1933	0.2	0.0	0.0	0.0	0.0	0.8	1.2	2.0	3.4	5.8	1.7	0.0	15.2
1934	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.5	3.9	6.1	3.2	0.8	16.7
1935	0.4	0.4	0.4	0.0	0.4	0.0	0.0	1.7	1.6	2.4	4.9	5.6	17.6
1936	0.7	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.1	2.0	3.9	4.1	14.2
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.6	2.4	5.2	5.6	16.5
1938	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	4.8
1939	0.0	3.8	0.0	0.0	3.6	3.1	0.7	1.4	1.6	1.6	3.0	5.3	24.2
1940	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.6
1941	4.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	11.0
1942	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	6.4
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	11.5
1944	4.8	1.6	0.0	0.0	0.0	3.9	1.6	1.5	1.6	1.1	0.2	0.0	16.2
1945	0.0	0.0	0.0	0.5	0.0	3.9	2.4	2.8	2.4	1.4	1.1	2.2	16.7
1946	0.0	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.4	1.4	1.2	2.2	15.9
1947	0.0	0.0	0.0	0.0	0.0	3.0	0.6	1.3	1.5	0.9	1.7	0.4	9.4
1948	0.0	0.0	0.0	0.0	0.0	4.6	3.5	0.0	2.4	1.4	1.2	2.5	15.6
1949	1.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	2.6	14.3
1950	0.5	0.0	0.0	0.0	0.0	3.1	1.4	1.7	1.6	1.6	3.6	0.3	13.7
1951	0.1	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	13.9
1952	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.4
1953	0.0	3.8	0.0	0.0	0.2	3.3	0.0	2.8	0.0	1.4	1.2	0.0	12.7
1954	3.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	3.8	15.4
1955	4.8	1.6	0.0	0.0	0.0	2.9	1.2	1.5	1.3	2.2	4.0	4.1	23.7
1956	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.4	1.2	0.0	5.1
1957	0.0	3.8	3.8	2.9	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.8	24.5
1958	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	6.5
1959	0.0	3.8	3.8	0.0	0.0	3.7	2.5	2.9	2.5	1.5	1.3	2.4	24.4
1960	0.0	0.0	0.0	0.0	0.0	3.6	1.4	1.7	1.4	0.8	1.2	0.0	10.0
1961	0.0	0.0	0.0	0.0	0.0	4.4	1.6	1.4	1.5	1.6	1.7	2.8	14.9
1962	1.3	0.2	0.0	0.6	0.0	3.7	2.4	2.8	2.4	1.4	1.0	2.2	18.0
1963	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.4	1.4	1.2	3.8	12.0
1964	0.0	0.0	3.8	0.0	0.0	3.0	1.4	1.7	1.6	2.4	4.0	4.8	22.7
1965	0.1	0.0	0.0	0.0	0.0	3.7	0.0	2.8	2.4	1.4	1.2	3.1	14.6
1966	2.2	0.0	0.0	0.0	0.0	3.5	0.0	2.8	2.4	1.4	1.2	2.3	15.7
1967	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
1968	0.0	3.8	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	17.6
1969	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.4
1970	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	13.7
1971	2.6	0.0	0.0	0.0	3.6	0.0	2.4	0.0	2.4	1.4	1.2	0.0	13.6
1972	5.1	3.7	0.0	0.0	0.0	0.0	1.5	1.3	1.5	1.5	1.6	2.9	19.2
1973	1.7	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.6	15.5
1974	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.4	1.4	1.2	0.0	10.6
1975	0.0	3.8	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	8.2
1976	0.0	0.0	3.8	0.0	3.6	0.0	1.3	4.1	1.8	2.2	5.0	1.8	23.6
1977	0.5	0.6	0.6	0.6	0.6	1.1	1.4	2.0	4.1	6.5	2.9	0.8	21.9
1978	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	2.4	1.4	1.2	0.0	7.3
1979	4.8	1.6	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.5	20.1
1980	2.4	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	2.8	15.4
1981	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.5	1.5	1.3	3.7	14.7
1982	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	0.0	5.5
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.4	1.4	1.2	3.7	13.9
1985	3.1	0.0	0.0	0.4	0.0	3.5	2.4	2.8	2.4	1.4	1.1	2.2	19.3
1986	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.5	1.7	1.7	1.8	3.0	11.4
1987	1.7	0.0	0.1	0.0	0.0	0.0	1.4	1.7	1.4	2.4	4.2	4.2	17.1
1988	0.4	0.3	0.4	0.0	0.4	2.1	1.3	2.1	5.0	6.3	3.0	1.0	22.0
1989	0.6	0.6	0.6	0.6	0.6	0.0	1.4	1.7	1.6	2.4	3.6	2.9	16.4
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	5.1	5.8	4.2	0.0	17.6
1991	0.0	0.1	0.1	0.1	0.1	0.0	0.8	0.0	1.7	2.4	4.6	4.5	14.4
1992	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.2	1.8	2.7	4.4	4.1	17.1
1993	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.2	3.8	7.2
AVG:	1.2	0.8	0.3	0.1	0.2	1.2	1.1	1.7	1.9	2.1	2.0	2.1	14.6
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	5.1	3.9	3.8	3.1	4.6	4.6	3.5	4.1	5.1	6.6	5.2	5.6	25.1

3.4.3. Reservoir Storage

This section provides reservoir storage results for the FRWP alternatives for a number of key storage facilities in the CVP/SWP system. Data for end-of-September storage exceedences and time series, along with dry period storages, are given in both figures and tables.

Figures 3.4.3-1 through Figures 3.4.3-4 show results for Pardee Reservoir on the EBMUD Mokelumne River system. Alternative 6 Pardee storage results reflect the increased storage capacity after the reservoir is enlarged.

Figure 3.4.3-1 Exceedence for Simulated Pardee Reservoir End-of-September Storage, 2001 LOD

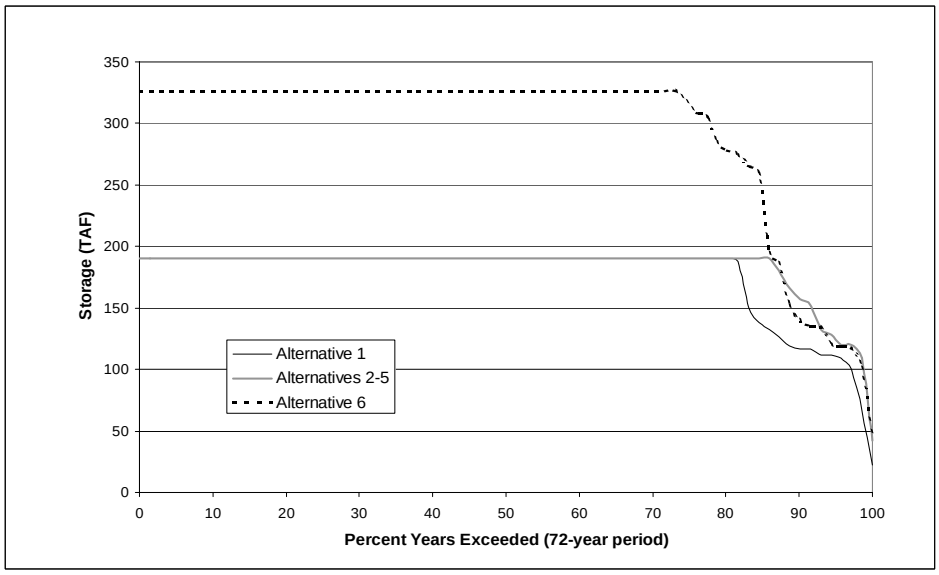


Figure 3.4.3-2. Simulated Pardee Reservoir End-of-September Storage, 2001 LOD

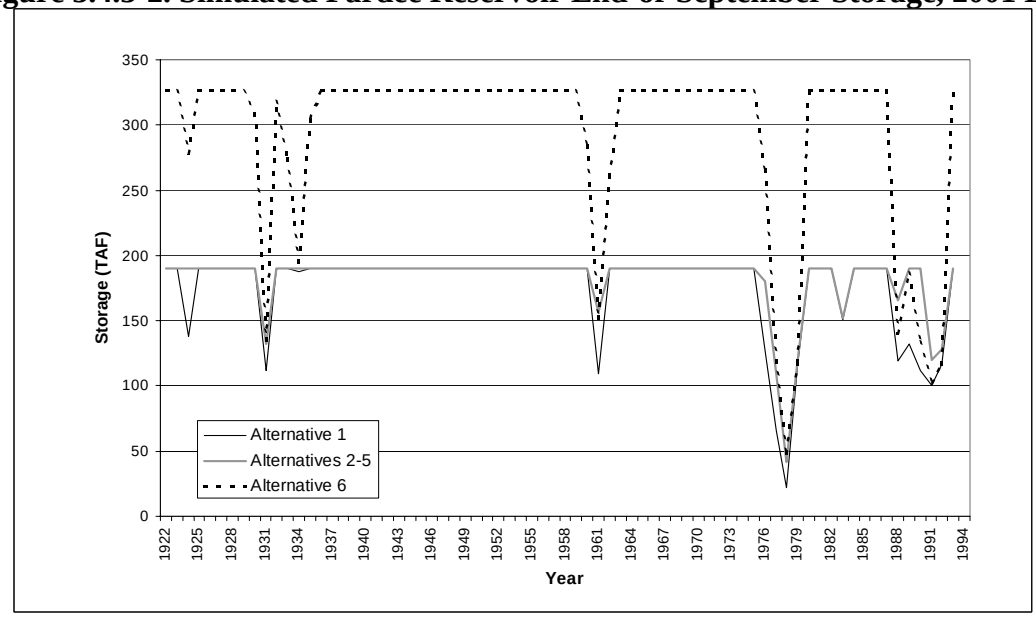


Figure 3.4.3-3. Simulated Pardee Reservoir Drought Period Storage, 2001 LOD (WY 1928-1934)

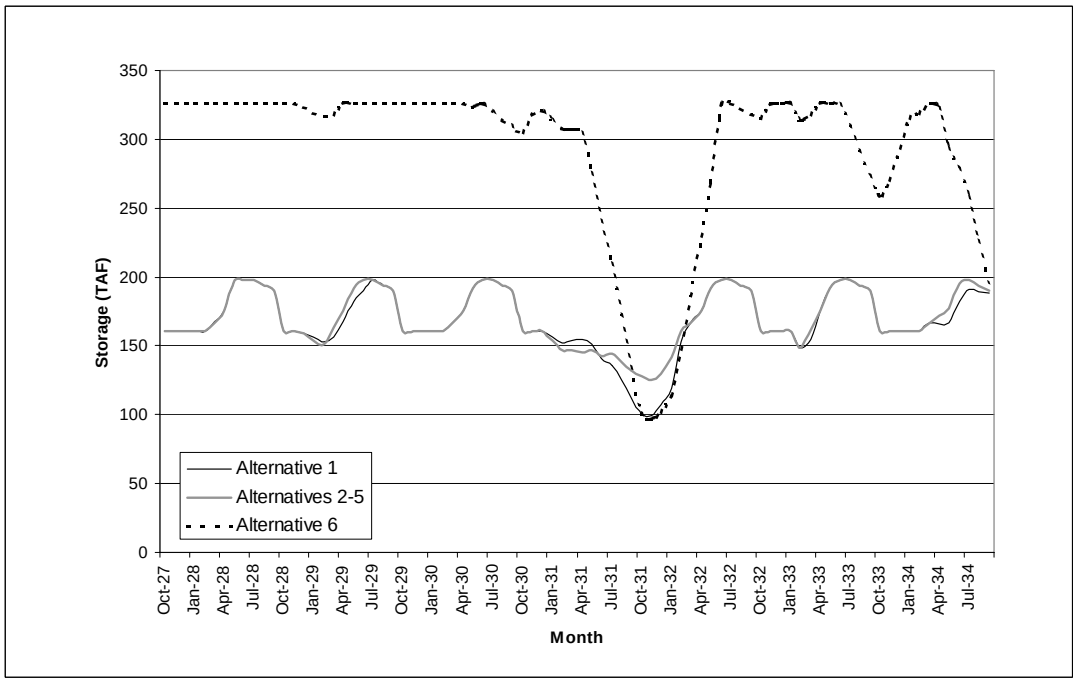


Figure 3.4.3-4. Simulated Pardee Reservoir Drought Period Storage, 2001 LOD (WY 1987-1992)

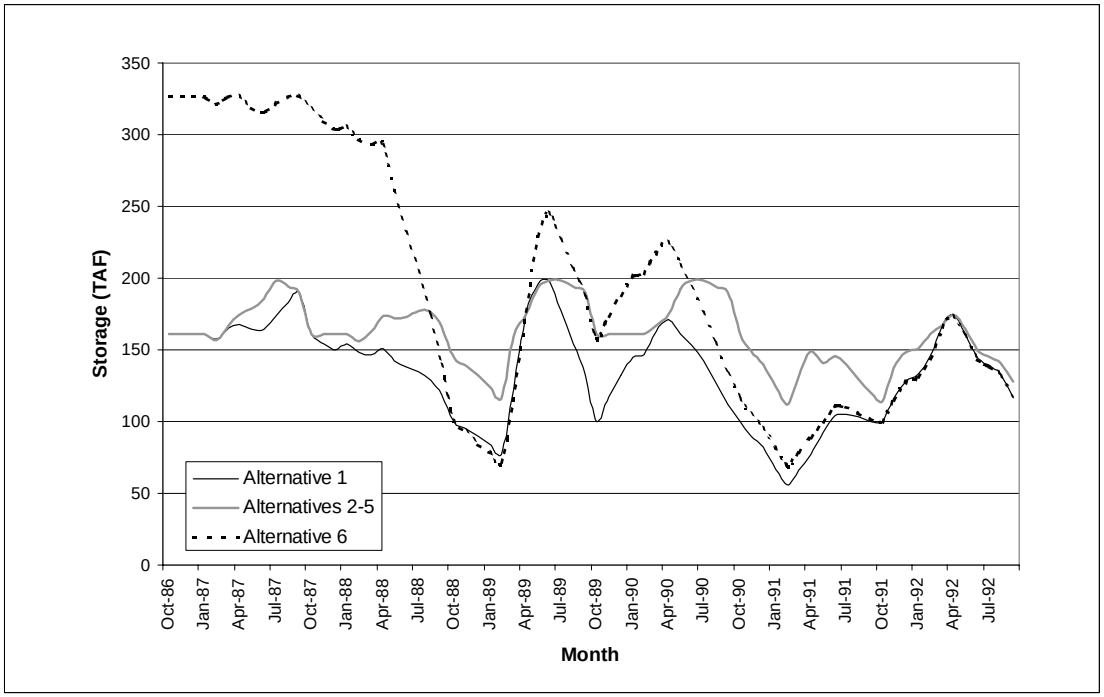


Table 3.4.3-1. Simulated Pardee Storage (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1923	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1924	161.0	161.0	161.0	161.0	155.0	149.0	153.0	154.0	149.0	145.0	141.0	138.0
1925	140.0	139.0	140.0	148.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1926	161.0	161.0	161.0	161.0	161.0	163.0	175.0	192.0	198.0	198.0	194.0	190.0
1927	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1928	161.0	161.0	161.0	161.0	161.0	168.0	175.0	198.0	198.0	198.0	194.0	190.0
1929	161.0	161.0	159.0	156.0	153.0	156.0	168.0	182.0	190.0	198.0	194.0	190.0
1930	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1931	161.0	161.0	161.0	156.0	152.0	154.0	155.0	151.0	141.0	136.0	125.0	112.0
1932	100.0	99.0	107.0	119.0	153.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1933	161.0	161.0	161.0	161.0	149.0	155.0	175.0	192.0	198.0	198.0	194.0	190.0
1934	161.0	161.0	161.0	161.0	161.0	167.0	166.0	167.0	182.0	191.0	189.0	188.0
1935	161.0	161.0	161.0	161.0	161.0	167.0	192.0	198.0	198.0	198.0	194.0	190.0
1936	161.0	161.0	161.0	161.0	198.0	190.0	188.0	198.0	198.0	198.0	194.0	190.0
1937	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1938	161.0	161.0	161.0	161.0	172.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1939	161.0	161.0	161.0	161.0	157.0	164.0	174.0	178.0	191.0	198.0	194.0	190.0
1940	161.0	161.0	158.0	161.0	166.0	189.0	193.0	198.0	198.0	198.0	194.0	190.0
1941	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1942	161.0	161.0	161.0	162.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1943	161.0	161.0	161.0	169.0	161.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1944	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1945	161.0	161.0	161.0	161.0	169.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1946	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1947	161.0	161.0	161.0	161.0	161.0	167.0	175.0	189.0	198.0	198.0	194.0	190.0
1948	161.0	161.0	157.0	161.0	154.0	158.0	175.0	192.0	198.0	198.0	194.0	190.0
1949	161.0	161.0	161.0	161.0	154.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1950	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1951	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1952	161.0	161.0	161.0	174.0	184.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1953	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1954	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1955	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1956	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1957	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1958	161.0	161.0	161.0	161.0	164.0	176.0	198.0	198.0	198.0	198.0	194.0	190.0
1959	161.0	161.0	161.0	161.0	161.0	167.0	171.0	175.0	183.0	192.0	194.0	190.0
1960	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1961	161.0	161.0	161.0	161.0	155.0	155.0	157.0	141.0	133.0	126.0	117.0	109.0
1962	100.0	100.0	99.0	97.0	134.0	166.0	175.0	192.0	198.0	198.0	194.0	190.0
1963	161.0	161.0	161.0	161.0	162.0	167.0	190.0	198.0	198.0	198.0	194.0	190.0
1964	161.0	161.0	161.0	161.0	161.0	167.0	175.0	185.0	195.0	198.0	194.0	190.0
1965	161.0	161.0	198.0	198.0	198.0	184.0	198.0	198.0	198.0	198.0	194.0	190.0
1966	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	196.0	198.0	194.0	190.0
1967	161.0	161.0	161.0	161.0	161.0	174.0	198.0	198.0	198.0	198.0	194.0	190.0
1968	161.0	161.0	161.0	161.0	161.0	167.0	175.0	182.0	196.0	198.0	194.0	190.0
1969	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1970	161.0	161.0	161.0	198.0	198.0	198.0	180.0	198.0	198.0	198.0	194.0	190.0
1971	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1972	161.0	161.0	161.0	161.0	161.0	167.0	175.0	191.0	198.0	198.0	194.0	190.0
1973	161.0	161.0	161.0	161.0	164.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1974	161.0	161.0	161.0	166.0	161.0	194.0	198.0	198.0	198.0	198.0	194.0	190.0
1975	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1976	161.0	161.0	161.0	161.0	153.0	148.0	147.0	144.0	140.0	135.0	131.0	127.0
1977	119.0	110.0	97.0	89.0	74.0	64.0	61.0	63.0	64.0	64.0	65.0	66.0
1978	61.0	50.0	30.0	15.0	17.0	25.0	25.0	29.0	27.0	27.0	20.0	22.0
1979	22.0	15.0	12.0	22.0	38.0	89.0	136.0	175.0	198.0	179.0	149.0	117.0
1980	100.0	120.0	149.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1981	161.0	161.0	161.0	161.0	161.0	167.0	175.0	185.0	191.0	198.0	194.0	190.0
1982	161.0	161.0	161.0	192.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1983	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	180.0	151.0
1984	122.0	161.0	198.0	198.0	198.0	198.0	192.0	198.0	198.0	198.0	194.0	190.0
1985	161.0	161.0	161.0	161.0	161.0	167.0	175.0	185.0	193.0	198.0	194.0	190.0
1986	161.0	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1987	161.0	161.0	161.0	161.0	158.0	165.0	168.0	164.0	164.0	174.0	183.0	190.0
1988	161.0	154.0	150.0	154.0	148.0	147.0	151.0	142.0	138.0	135.0	129.0	119.0
1989	100.0	95.0	90.0	84.0	77.0	122.0	175.0	196.0	198.0	177.0	154.0	132.0
1990	100.0	117.0	132.0	145.0	147.0	163.0	171.0	161.0	153.0	142.0	127.0	112.0
1991	100.0	90.0	82.0	67.0	56.0	66.0	77.0	92.0	104.0	105.0	103.0	100.0
1992	100.0	116.0	128.0	133.0	146.0	167.0	175.0	161.0	144.0	139.0	133.0	117.0
1993	100.0	97.0	103.0	161.0	161.0	192.0	198.0	198.0	198.0	198.0	194.0	190.0
AVG:	149.5	150.5	152.7	156.1	157.8	165.7	173.4	183.6	185.7	185.5	180.6	175.4
MIN:	22.0	15.0	12.0	15.0	17.0	25.0	25.0	29.0	27.0	27.0	20.0	22.0
MAX:	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0

Table 3.4.3-2. Simulated Pardee Storage (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1923	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1924	161.0	161.0	161.0	161.0	154.0	157.0	169.0	178.0	181.0	184.0	188.0	190.0
1925	161.0	159.0	159.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1926	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1927	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1928	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1929	161.0	161.0	159.0	154.0	151.0	163.0	175.0	192.0	198.0	198.0	194.0	190.0
1930	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1931	161.0	161.0	161.0	154.0	147.0	147.0	145.0	147.0	143.0	144.0	138.0	132.0
1932	128.0	125.0	130.0	142.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1933	161.0	161.0	161.0	161.0	149.0	162.0	175.0	192.0	198.0	198.0	194.0	190.0
1934	161.0	161.0	161.0	161.0	161.0	167.0	172.0	177.0	195.0	198.0	194.0	190.0
1935	161.0	161.0	161.0	161.0	161.0	167.0	191.0	198.0	198.0	198.0	194.0	190.0
1936	161.0	161.0	161.0	161.0	198.0	189.0	187.0	198.0	198.0	198.0	194.0	190.0
1937	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1938	161.0	161.0	161.0	161.0	171.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1939	161.0	161.0	161.0	161.0	156.0	167.0	175.0	187.0	198.0	198.0	194.0	190.0
1940	161.0	161.0	161.0	161.0	174.0	196.0	198.0	198.0	198.0	198.0	194.0	190.0
1941	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1942	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1943	161.0	161.0	161.0	168.0	161.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1944	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1945	161.0	161.0	161.0	161.0	169.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1946	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1947	161.0	161.0	161.0	161.0	161.0	167.0	175.0	188.0	198.0	198.0	194.0	190.0
1948	161.0	161.0	156.0	161.0	153.0	157.0	175.0	192.0	198.0	198.0	194.0	190.0
1949	161.0	161.0	161.0	161.0	154.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1950	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1951	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1952	161.0	161.0	161.0	173.0	183.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1953	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1954	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1955	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1956	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1957	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1958	161.0	161.0	161.0	161.0	163.0	175.0	198.0	198.0	198.0	198.0	194.0	190.0
1959	161.0	161.0	161.0	161.0	161.0	167.0	175.0	187.0	198.0	198.0	194.0	190.0
1960	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1961	161.0	161.0	161.0	161.0	153.0	150.0	150.0	145.0	149.0	152.0	154.0	157.0
1962	161.0	159.0	155.0	153.0	161.0	167.0	177.0	192.0	198.0	198.0	194.0	190.0
1963	161.0	161.0	161.0	161.0	171.0	167.0	189.0	198.0	198.0	198.0	194.0	190.0
1964	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1965	161.0	161.0	198.0	198.0	198.0	184.0	198.0	198.0	198.0	198.0	194.0	190.0
1966	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	195.0	198.0	194.0	190.0
1967	161.0	161.0	161.0	161.0	161.0	173.0	198.0	198.0	198.0	198.0	194.0	190.0
1968	161.0	161.0	161.0	161.0	161.0	167.0	175.0	190.0	198.0	198.0	194.0	190.0
1969	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1970	161.0	161.0	161.0	198.0	198.0	198.0	179.0	198.0	198.0	198.0	194.0	190.0
1971	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1972	161.0	161.0	161.0	161.0	161.0	167.0	175.0	190.0	198.0	198.0	194.0	190.0
1973	161.0	161.0	161.0	161.0	164.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1974	161.0	161.0	161.0	165.0	161.0	193.0	198.0	198.0	198.0	198.0	194.0	190.0
1975	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1976	161.0	161.0	161.0	161.0	152.0	156.0	162.0	168.0	171.0	173.0	177.0	180.0
1977	161.0	161.0	147.0	138.0	123.0	121.0	127.0	125.0	121.0	117.0	113.0	109.0
1978	100.0	94.0	82.0	71.0	60.0	63.0	62.0	62.0	49.0	48.0	40.0	42.0
1979	42.0	35.0	32.0	38.0	53.0	112.0	162.0	192.0	198.0	176.0	143.0	120.0
1980	100.0	128.0	157.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1981	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1982	161.0	161.0	161.0	191.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1983	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	180.0	152.0
1984	124.0	161.0	198.0	198.0	198.0	198.0	191.0	198.0	198.0	198.0	194.0	190.0
1985	161.0	161.0	161.0	161.0	161.0	167.0	175.0	184.0	191.0	196.0	194.0	190.0
1986	161.0	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1987	161.0	161.0	161.0	161.0	157.0	167.0	175.0	179.0	186.0	198.0	194.0	190.0
1988	161.0	161.0	161.0	161.0	156.0	163.0	174.0	172.0	173.0	177.0	176.0	166.0
1989	145.0	139.0	132.0	124.0	116.0	159.0	175.0	193.0	198.0	198.0	194.0	190.0
1990	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1991	161.0	149.0	140.0	125.0	112.0	131.0	149.0	141.0	146.0	140.0	130.0	120.0
1992	114.0	137.0	148.0	151.0	161.0	167.0	175.0	164.0	149.0	145.0	141.0	128.0
1993	113.0	109.0	114.0	161.0	161.0	191.0	198.0	198.0	198.0	198.0	194.0	190.0
AVG:	155.1	156.3	158.3	160.8	161.6	169.4	177.1	188.4	190.7	190.7	186.3	181.8
MIN:	42.0	35.0	32.0	38.0	53.0	63.0	62.0	62.0	49.0	48.0	40.0	42.0
MAX:	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0

Table 3.4.3-3. Simulated Pardee Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1923	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1924	326.0	326.0	326.0	326.0	318.0	311.0	313.0	310.0	301.0	293.0	285.0	278.0
1925	278.0	275.0	274.0	282.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1926	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1927	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1928	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1929	326.0	326.0	323.0	319.0	316.0	318.0	326.0	326.0	326.0	326.0	326.0	326.0
1930	326.0	326.0	326.0	326.0	326.0	326.0	326.0	323.0	326.0	320.0	314.0	309.0
1931	305.0	317.0	321.0	314.0	308.0	307.0	305.0	276.0	241.0	210.0	173.0	135.0
1932	100.0	97.0	102.0	113.0	147.0	186.0	229.0	269.0	326.0	326.0	322.0	318.0
1933	315.0	325.0	326.0	326.0	314.0	318.0	326.0	326.0	325.0	310.0	292.0	274.0
1934	258.0	270.0	293.0	315.0	319.0	326.0	323.0	294.0	279.0	258.0	226.0	195.0
1935	164.0	167.0	169.0	175.0	193.0	213.0	303.0	326.0	326.0	321.0	312.0	305.0
1936	301.0	313.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1937	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1938	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1939	326.0	326.0	326.0	326.0	321.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1940	326.0	326.0	321.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1941	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1942	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1943	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1944	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1945	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1946	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1947	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1948	326.0	326.0	321.0	326.0	318.0	322.0	326.0	326.0	326.0	326.0	326.0	326.0
1949	326.0	326.0	326.0	326.0	319.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1950	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1951	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1952	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1953	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1954	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1955	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1956	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1957	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1958	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1959	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1960	326.0	326.0	326.0	324.0	326.0	326.0	326.0	326.0	326.0	311.0	298.0	285.0
1961	272.0	280.0	288.0	291.0	284.0	283.0	283.0	251.0	227.0	202.0	177.0	152.0
1962	128.0	127.0	125.0	123.0	159.0	190.0	256.0	265.0	326.0	305.0	283.0	260.0
1963	243.0	258.0	273.0	297.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1964	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1965	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1966	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1967	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1968	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1969	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1970	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1971	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1972	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1973	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1974	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1975	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1976	326.0	326.0	326.0	326.0	316.0	310.0	306.0	300.0	292.0	282.0	274.0	266.0
1977	256.0	245.0	230.0	221.0	206.0	195.0	192.0	179.0	164.0	149.0	134.0	120.0
1978	100.0	94.0	81.0	71.0	60.0	58.0	58.0	61.0	55.0	54.0	46.0	48.0
1979	48.0	41.0	38.0	45.0	60.0	111.0	154.0	188.0	211.0	186.0	151.0	118.0
1980	96.0	115.0	144.0	292.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1981	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1982	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1983	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1984	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1985	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1986	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1987	326.0	326.0	326.0	326.0	321.0	326.0	326.0	319.0	315.0	321.0	326.0	326.0
1988	318.0	309.0	303.0	305.0	297.0	293.0	293.0	261.0	232.0	205.0	174.0	140.0
1989	100.0	93.0	84.0	78.0	71.0	114.0	176.0	229.0	245.0	227.0	206.0	187.0
1990	158.0	174.0	188.0	201.0	203.0	217.0	225.0	209.0	194.0	176.0	155.0	134.0
1991	116.0	105.0	96.0	81.0	69.0	79.0	89.0	100.0	110.0	110.0	106.0	102.0
1992	100.0	115.0	127.0	131.0	143.0	165.0	173.0	160.0	143.0	138.0	132.0	117.0
1993	100.0	97.0	102.0	164.0	214.0	312.0	326.0	326.0	326.0	326.0	326.0	326.0
AVG:	287.6	288.5	289.3	293.0	295.1	299.7	304.6	304.5	304.4	300.8	296.4	292.0
MIN:	48.0	41.0	38.0	45.0	60.0	58.0	58.0	61.0	55.0	54.0	46.0	48.0
MAX:	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0

Table 3.4.3-4. Simulated Camanche Storage (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	310.0	301.0	300.0	302.0	320.0	333.0	339.0	320.0	417.0	370.0	320.0	279.0
1923	299.0	296.0	316.0	324.0	324.0	321.0	343.0	365.0	385.0	348.0	309.0	284.0
1924	303.0	294.0	287.0	280.0	262.0	241.0	227.0	210.0	189.0	169.0	152.0	140.0
1925	131.0	123.0	117.0	111.0	157.0	187.0	220.0	309.0	363.0	330.0	303.0	289.0
1926	307.0	298.0	291.0	286.0	281.0	261.0	245.0	228.0	208.0	189.0	176.0	172.0
1927	197.0	208.0	213.0	228.0	283.0	303.0	336.0	356.0	417.0	367.0	320.0	284.0
1928	302.0	290.0	287.0	284.0	274.0	290.0	314.0	401.0	370.0	345.0	327.0	321.0
1929	337.0	324.0	305.0	286.0	269.0	250.0	231.0	206.0	187.0	167.0	162.0	161.0
1930	185.0	181.0	176.0	174.0	165.0	168.0	160.0	139.0	167.0	152.0	144.0	145.0
1931	172.0	172.0	164.0	152.0	140.0	126.0	112.0	107.0	99.0	91.0	86.0	85.0
1932	88.0	80.0	76.0	69.0	66.0	83.0	101.0	131.0	255.0	250.0	239.0	237.0
1933	258.0	253.0	251.0	240.0	226.0	211.0	200.0	190.0	189.0	177.0	169.0	168.0
1934	196.0	194.0	208.0	219.0	215.0	218.0	198.0	174.0	154.0	132.0	114.0	101.0
1935	112.0	103.0	92.0	87.0	93.0	96.0	146.0	191.0	281.0	264.0	251.0	248.0
1936	272.0	269.0	267.0	289.0	287.0	322.0	347.0	395.0	417.0	367.0	321.0	287.0
1937	306.0	298.0	296.0	284.0	314.0	344.0	370.0	389.0	404.0	360.0	323.0	296.0
1938	315.0	309.0	259.0	265.0	271.0	270.0	217.0	321.0	417.0	376.0	321.0	276.0
1939	297.0	293.0	289.0	288.0	270.0	251.0	232.0	208.0	187.0	167.0	161.0	161.0
1940	187.0	176.0	162.0	185.0	243.0	293.0	326.0	417.0	406.0	362.0	328.0	303.0
1941	323.0	317.0	324.0	324.0	324.0	344.0	372.0	380.0	417.0	368.0	319.0	281.0
1942	301.0	295.0	291.0	280.0	277.0	291.0	327.0	335.0	417.0	377.0	324.0	281.0
1943	300.0	293.0	293.0	271.0	273.0	259.0	337.0	400.0	403.0	358.0	318.0	288.0
1944	309.0	302.0	299.0	291.0	277.0	276.0	261.0	250.0	247.0	230.0	219.0	215.0
1945	239.0	252.0	261.0	268.0	305.0	339.0	345.0	355.0	408.0	360.0	317.0	284.0
1946	304.0	291.0	277.0	281.0	289.0	307.0	321.0	404.0	394.0	355.0	322.0	301.0
1947	321.0	321.0	320.0	316.0	310.0	296.0	296.0	269.0	248.0	228.0	215.0	211.0
1948	240.0	229.0	215.0	213.0	200.0	188.0	194.0	201.0	306.0	290.0	280.0	278.0
1949	300.0	297.0	297.0	294.0	281.0	275.0	297.0	320.0	329.0	314.0	302.0	299.0
1950	316.0	309.0	300.0	306.0	324.0	344.0	375.0	368.0	412.0	358.0	310.0	276.0
1951	298.0	217.0	217.0	217.0	217.0	259.0	328.0	394.0	365.0	336.0	314.0	301.0
1952	319.0	317.0	324.0	312.0	301.0	305.0	226.0	292.0	409.0	382.0	317.0	261.0
1953	284.0	282.0	288.0	320.0	270.0	278.0	311.0	291.0	338.0	317.0	288.0	271.0
1954	298.0	296.0	290.0	287.0	284.0	296.0	323.0	341.0	319.0	297.0	285.0	284.0
1955	311.0	315.0	316.0	320.0	311.0	304.0	288.0	269.0	268.0	248.0	236.0	233.0
1956	254.0	250.0	230.0	217.0	233.0	286.0	331.0	364.0	417.0	365.0	309.0	264.0
1957	288.0	288.0	290.0	285.0	286.0	294.0	290.0	296.0	355.0	321.0	295.0	281.0
1958	304.0	305.0	307.0	317.0	321.0	335.0	340.0	349.0	417.0	369.0	316.0	267.0
1959	290.0	286.0	276.0	275.0	287.0	280.0	261.0	234.0	210.0	182.0	164.0	161.0
1960	182.0	176.0	172.0	159.0	161.0	156.0	143.0	138.0	143.0	127.0	119.0	119.0
1961	143.0	140.0	137.0	127.0	115.0	102.0	88.0	94.0	96.0	96.0	99.0	107.0
1962	119.0	111.0	103.0	95.0	95.0	88.0	128.0	128.0	197.0	185.0	178.0	178.0
1963	211.0	213.0	216.0	227.0	255.0	265.0	310.0	393.0	417.0	363.0	317.0	279.0
1964	303.0	284.0	284.0	293.0	287.0	273.0	257.0	231.0	207.0	188.0	178.0	176.0
1965	204.0	212.0	226.0	231.0	244.0	298.0	349.0	363.0	400.0	350.0	301.0	274.0
1966	315.0	316.0	324.0	324.0	309.0	302.0	306.0	285.0	260.0	238.0	225.0	224.0
1967	246.0	251.0	289.0	324.0	324.0	336.0	341.0	275.0	387.0	395.0	326.0	267.0
1968	292.0	292.0	292.0	294.0	301.0	302.0	292.0	265.0	241.0	216.0	202.0	199.0
1969	221.0	227.0	238.0	280.0	287.0	312.0	300.0	338.0	417.0	373.0	317.0	273.0
1970	307.0	305.0	314.0	217.0	217.0	266.0	299.0	322.0	361.0	335.0	309.0	293.0
1971	313.0	312.0	324.0	324.0	324.0	343.0	357.0	316.0	362.0	341.0	324.0	307.0
1972	335.0	324.0	324.0	319.0	307.0	315.0	311.0	281.0	287.0	271.0	259.0	258.0
1973	283.0	287.0	296.0	324.0	321.0	343.0	361.0	391.0	397.0	362.0	325.0	300.0
1974	325.0	280.0	286.0	271.0	299.0	310.0	358.0	383.0	404.0	368.0	334.0	302.0
1975	323.0	311.0	301.0	286.0	290.0	327.0	345.0	325.0	396.0	358.0	319.0	289.0
1976	321.0	317.0	312.0	298.0	279.0	259.0	245.0	228.0	207.0	187.0	170.0	157.0
1977	148.0	139.0	131.0	123.0	116.0	107.0	93.0	78.0	59.0	41.0	26.0	15.0
1978	7.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	21.0	37.0	45.0	55.0	73.0
1980	96.0	88.0	81.0	177.0	235.0	295.0	329.0	348.0	396.0	372.0	315.0	270.0
1981	289.0	280.0	278.0	283.0	277.0	269.0	265.0	239.0	213.0	189.0	173.0	168.0
1982	193.0	206.0	254.0	238.0	217.0	255.0	273.0	360.0	403.0	355.0	292.0	233.0
1983	274.0	259.0	229.0	256.0	267.0	304.0	318.0	233.0	356.0	400.0	334.0	283.0
1984	329.0	254.0	217.0	217.0	226.0	276.0	309.0	359.0	373.0	348.0	326.0	301.0
1985	326.0	320.0	323.0	305.0	299.0	304.0	315.0	289.0	265.0	238.0	227.0	225.0
1986	249.0	252.0	254.0	272.0	222.0	259.0	334.0	394.0	409.0	360.0	314.0	279.0
1987	298.0	292.0	281.0	266.0	249.0	232.0	217.0	200.0	179.0	156.0	137.0	124.0
1988	132.0	119.0	105.0	93.0	80.0	66.0	53.0	53.0	49.0	47.0	48.0	52.0
1989	59.0	52.0	44.0	37.0	30.0	23.0	13.0	53.0	68.0	79.0	93.0	114.0
1990	140.0	132.0	123.0	116.0	110.0	103.0	85.0	89.0	96.0	101.0	110.0	124.0
1991	141.0	132.0	124.0	116.0	109.0	107.0	94.0	79.0	76.0	72.0	71.0	76.0
1992	84.0	77.0	69.0	61.0	57.0	50.0	38.0	43.0	44.0	44.0	47.0	55.0
1993	67.0	59.0	52.0	55.0	101.0	161.0	212.0	298.0	379.0	337.0	319.0	294.0
AVG:	242.4	235.4	233.1	232.8	234.0	243.6	253.2	264.8	288.6	263.6	238.5	221.8
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	337.0	324.0	324.0	324.0	324.0	344.0	375.0	417.0	417.0	400.0	334.0	321.0

Table 3.4.3-5. Simulated Camanche Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	310.0	300.0	298.0	300.0	318.0	330.0	335.0	320.0	417.0	370.0	320.0	280.0
1923	299.0	296.0	316.0	324.0	324.0	320.0	341.0	364.0	385.0	347.0	310.0	285.0
1924	303.0	293.0	286.0	278.0	260.0	239.0	225.0	208.0	187.0	167.0	150.0	140.0
1925	159.0	145.0	133.0	127.0	181.0	204.0	237.0	323.0	374.0	337.0	307.0	290.0
1926	307.0	298.0	290.0	284.0	279.0	262.0	259.0	251.0	239.0	227.0	222.0	226.0
1927	258.0	276.0	287.0	301.0	324.0	342.0	360.0	371.0	417.0	367.0	320.0	284.0
1928	302.0	290.0	287.0	283.0	272.0	290.0	313.0	401.0	370.0	346.0	328.0	321.0
1929	337.0	324.0	305.0	286.0	269.0	250.0	238.0	218.0	208.0	204.0	206.0	213.0
1930	244.0	241.0	233.0	228.0	215.0	224.0	223.0	207.0	240.0	229.0	226.0	232.0
1931	264.0	269.0	258.0	243.0	230.0	214.0	200.0	184.0	163.0	144.0	126.0	114.0
1932	105.0	98.0	93.0	87.0	99.0	123.0	140.0	168.0	291.0	285.0	272.0	269.0
1933	290.0	284.0	281.0	270.0	256.0	240.0	245.0	243.0	250.0	245.0	244.0	251.0
1934	279.0	274.0	286.0	292.0	284.0	292.0	272.0	248.0	227.0	213.0	199.0	192.0
1935	211.0	203.0	190.0	184.0	190.0	192.0	243.0	277.0	357.0	329.0	306.0	295.0
1936	313.0	305.0	298.0	315.0	287.0	322.0	348.0	395.0	417.0	367.0	322.0	288.0
1937	306.0	297.0	294.0	282.0	312.0	344.0	369.0	388.0	404.0	360.0	324.0	297.0
1938	315.0	308.0	259.0	265.0	271.0	270.0	217.0	321.0	417.0	377.0	322.0	277.0
1939	297.0	292.0	288.0	285.0	268.0	253.0	244.0	220.0	209.0	204.0	205.0	212.0
1940	245.0	240.0	230.0	263.0	311.0	285.0	320.0	417.0	406.0	362.0	328.0	304.0
1941	323.0	317.0	324.0	324.0	324.0	344.0	371.0	379.0	417.0	368.0	320.0	282.0
1942	301.0	295.0	291.0	280.0	277.0	290.0	325.0	335.0	417.0	377.0	324.0	282.0
1943	300.0	293.0	293.0	271.0	273.0	259.0	337.0	400.0	403.0	358.0	318.0	288.0
1944	309.0	302.0	298.0	289.0	275.0	273.0	257.0	245.0	241.0	223.0	211.0	206.0
1945	230.0	242.0	251.0	257.0	305.0	338.0	344.0	354.0	408.0	360.0	317.0	285.0
1946	304.0	291.0	277.0	281.0	288.0	306.0	319.0	405.0	395.0	356.0	323.0	302.0
1947	321.0	321.0	319.0	314.0	307.0	293.0	292.0	265.0	242.0	222.0	208.0	203.0
1948	231.0	219.0	205.0	202.0	189.0	177.0	181.0	187.0	292.0	274.0	263.0	260.0
1949	282.0	278.0	278.0	274.0	261.0	254.0	275.0	298.0	306.0	290.0	277.0	273.0
1950	294.0	291.0	286.0	297.0	324.0	344.0	374.0	368.0	412.0	358.0	311.0	276.0
1951	298.0	217.0	217.0	217.0	217.0	259.0	327.0	393.0	365.0	336.0	314.0	302.0
1952	319.0	317.0	324.0	312.0	302.0	305.0	226.0	292.0	409.0	382.0	318.0	262.0
1953	284.0	281.0	287.0	318.0	270.0	278.0	309.0	290.0	338.0	317.0	288.0	272.0
1954	298.0	295.0	289.0	285.0	282.0	293.0	319.0	336.0	313.0	290.0	277.0	275.0
1955	302.0	305.0	306.0	309.0	299.0	292.0	275.0	255.0	253.0	232.0	220.0	215.0
1956	238.0	235.0	230.0	217.0	233.0	286.0	331.0	364.0	417.0	365.0	309.0	265.0
1957	288.0	287.0	289.0	283.0	283.0	291.0	286.0	294.0	353.0	320.0	294.0	282.0
1958	304.0	304.0	305.0	315.0	322.0	336.0	340.0	349.0	417.0	370.0	316.0	268.0
1959	290.0	285.0	274.0	273.0	284.0	285.0	271.0	244.0	224.0	212.0	208.0	212.0
1960	240.0	241.0	242.0	235.0	242.0	241.0	234.0	233.0	241.0	227.0	218.0	211.0
1961	232.0	226.0	220.0	208.0	196.0	183.0	169.0	158.0	143.0	126.0	113.0	105.0
1962	101.0	93.0	85.0	77.0	104.0	131.0	178.0	187.0	261.0	255.0	253.0	259.0
1963	294.0	297.0	302.0	316.0	247.0	258.0	305.0	393.0	417.0	364.0	317.0	280.0
1964	303.0	284.0	283.0	292.0	285.0	280.0	272.0	247.0	236.0	227.0	221.0	219.0
1965	244.0	249.0	226.0	231.0	244.0	296.0	346.0	360.0	400.0	351.0	301.0	275.0
1966	315.0	316.0	324.0	324.0	308.0	301.0	304.0	282.0	258.0	233.0	220.0	217.0
1967	241.0	246.0	286.0	324.0	324.0	337.0	341.0	275.0	387.0	395.0	326.0	268.0
1968	292.0	291.0	290.0	292.0	298.0	308.0	307.0	280.0	270.0	256.0	250.0	255.0
1969	284.0	296.0	314.0	280.0	287.0	312.0	300.0	338.0	417.0	373.0	318.0	273.0
1970	307.0	304.0	314.0	217.0	217.0	266.0	299.0	321.0	361.0	336.0	309.0	294.0
1971	313.0	312.0	324.0	324.0	324.0	343.0	356.0	316.0	362.0	341.0	325.0	308.0
1972	335.0	324.0	324.0	318.0	306.0	313.0	309.0	278.0	282.0	266.0	253.0	250.0
1973	275.0	278.0	287.0	324.0	322.0	343.0	360.0	389.0	400.0	364.0	326.0	301.0
1974	325.0	280.0	286.0	272.0	298.0	311.0	358.0	383.0	405.0	368.0	334.0	302.0
1975	323.0	310.0	300.0	284.0	287.0	324.0	341.0	325.0	396.0	358.0	319.0	290.0
1976	321.0	317.0	311.0	296.0	278.0	257.0	243.0	226.0	205.0	185.0	168.0	155.0
1977	160.0	146.0	132.0	118.0	106.0	92.0	78.0	76.0	70.0	64.0	62.0	63.0
1978	68.0	60.0	52.0	44.0	37.0	29.0	15.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	28.0	60.0	80.0	102.0	132.0
1980	167.0	159.0	152.0	238.0	235.0	295.0	328.0	347.0	396.0	372.0	315.0	270.0
1981	289.0	280.0	276.0	281.0	274.0	275.0	279.0	254.0	236.0	226.0	218.0	221.0
1982	252.0	267.0	254.0	239.0	217.0	255.0	273.0	360.0	403.0	355.0	293.0	234.0
1983	274.0	260.0	229.0	256.0	267.0	304.0	318.0	233.0	356.0	400.0	334.0	282.0
1984	327.0	254.0	217.0	217.0	226.0	276.0	309.0	358.0	373.0	348.0	327.0	301.0
1985	326.0	320.0	322.0	304.0	297.0	301.0	312.0	286.0	261.0	233.0	219.0	217.0
1986	240.0	243.0	244.0	262.0	222.0	259.0	333.0	394.0	409.0	360.0	314.0	279.0
1987	298.0	292.0	280.0	263.0	247.0	234.0	221.0	204.0	184.0	165.0	166.0	171.0
1988	186.0	173.0	164.0	164.0	151.0	137.0	124.0	123.0	119.0	116.0	116.0	120.0
1989	126.0	119.0	112.0	104.0	97.0	91.0	115.0	154.0	161.0	146.0	135.0	136.0
1990	153.0	153.0	151.0	150.0	141.0	145.0	135.0	120.0	119.0	119.0	123.0	133.0
1991	156.0	142.0	129.0	115.0	104.0	96.0	78.0	85.0	97.0	106.0	119.0	136.0
1992	158.0	150.0	143.0	135.0	133.0	150.0	136.0	128.0	124.0	118.0	115.0	118.0
1993	124.0	116.0	110.0	125.0	170.0	230.0	280.0	354.0	415.0	361.0	331.0	295.0
AVG:	259.9	252.9	249.2	247.9	246.7	256.6	267.3	278.8	303.2	279.0	254.4	238.3
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	337.0	324.0	324.0	324.0	324.0	344.0	374.0	417.0	417.0	400.0	334.0	321.0

Table 3.4.3-6. Simulated Camanche Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	324.0	313.0	312.0	314.0	332.0	350.0	364.0	371.0	417.0	387.0	350.0	323.0
1923	313.0	309.0	330.0	338.0	338.0	339.0	369.0	415.0	417.0	386.0	351.0	327.0
1924	317.0	307.0	299.0	291.0	272.0	252.0	237.0	220.0	199.0	179.0	162.0	149.0
1925	135.0	121.0	109.0	98.0	108.0	137.0	178.0	302.0	368.0	348.0	328.0	319.0
1926	308.0	298.0	290.0	285.0	279.0	259.0	255.0	254.0	238.0	216.0	197.0	188.0
1927	181.0	190.0	192.0	204.0	257.0	281.0	321.0	376.0	417.0	385.0	351.0	327.0
1928	316.0	304.0	300.0	296.0	286.0	310.0	341.0	417.0	394.0	368.0	345.0	333.0
1929	320.0	313.0	293.0	275.0	258.0	238.0	223.0	209.0	196.0	182.0	170.0	163.0
1930	158.0	152.0	146.0	143.0	132.0	139.0	137.0	132.0	158.0	145.0	134.0	132.0
1931	131.0	118.0	103.0	91.0	79.0	65.0	51.0	67.0	79.0	92.0	107.0	126.0
1932	148.0	140.0	136.0	129.0	127.0	119.0	101.0	106.0	179.0	172.0	161.0	157.0
1933	155.0	141.0	139.0	129.0	117.0	104.0	105.0	111.0	117.0	118.0	123.0	136.0
1934	150.0	136.0	126.0	114.0	106.0	107.0	89.0	94.0	104.0	111.0	122.0	138.0
1935	152.0	140.0	126.0	114.0	102.0	90.0	75.0	102.0	192.0	179.0	170.0	169.0
1936	169.0	155.0	142.0	165.0	297.0	342.0	379.0	417.0	417.0	385.0	352.0	330.0
1937	320.0	311.0	308.0	296.0	326.0	364.0	397.0	417.0	417.0	387.0	359.0	340.0
1938	329.0	322.0	273.0	278.0	295.0	321.0	268.0	372.0	417.0	394.0	352.0	320.0
1939	311.0	305.0	301.0	299.0	281.0	263.0	253.0	231.0	221.0	205.0	193.0	186.0
1940	180.0	167.0	151.0	170.0	232.0	311.0	353.0	417.0	417.0	388.0	362.0	347.0
1941	337.0	330.0	338.0	338.0	338.0	364.0	399.0	417.0	417.0	385.0	350.0	325.0
1942	315.0	308.0	305.0	294.0	291.0	310.0	353.0	386.0	417.0	394.0	355.0	325.0
1943	314.0	307.0	307.0	292.0	287.0	310.0	388.0	417.0	417.0	385.0	354.0	331.0
1944	323.0	315.0	311.0	303.0	289.0	293.0	285.0	289.0	290.0	271.0	254.0	245.0
1945	237.0	248.0	255.0	259.0	322.0	351.0	368.0	405.0	417.0	383.0	350.0	327.0
1946	318.0	305.0	291.0	295.0	302.0	326.0	347.0	417.0	417.0	388.0	361.0	345.0
1947	335.0	334.0	332.0	328.0	321.0	312.0	320.0	305.0	291.0	270.0	251.0	241.0
1948	238.0	224.0	209.0	203.0	189.0	175.0	193.0	216.0	326.0	308.0	292.0	284.0
1949	272.0	263.0	259.0	251.0	234.0	228.0	257.0	296.0	310.0	293.0	276.0	267.0
1950	259.0	256.0	251.0	262.0	294.0	326.0	373.0	403.0	417.0	379.0	343.0	319.0
1951	312.0	268.0	268.0	268.0	268.0	310.0	377.0	417.0	402.0	378.0	357.0	345.0
1952	333.0	330.0	338.0	338.0	338.0	356.0	277.0	343.0	417.0	405.0	351.0	305.0
1953	298.0	294.0	301.0	332.0	283.0	297.0	337.0	340.0	388.0	368.0	335.0	314.0
1954	312.0	308.0	303.0	299.0	296.0	313.0	347.0	380.0	362.0	339.0	321.0	314.0
1955	306.0	305.0	301.0	300.0	287.0	280.0	272.0	269.0	272.0	250.0	233.0	224.0
1956	215.0	211.0	281.0	268.0	284.0	337.0	381.0	415.0	417.0	382.0	340.0	307.0
1957	302.0	301.0	302.0	296.0	297.0	311.0	313.0	345.0	404.0	371.0	341.0	324.0
1958	318.0	318.0	319.0	329.0	338.0	364.0	391.0	400.0	417.0	387.0	347.0	310.0
1959	304.0	298.0	288.0	286.0	298.0	296.0	280.0	255.0	236.0	214.0	195.0	186.0
1960	176.0	167.0	159.0	145.0	141.0	137.0	129.0	135.0	140.0	133.0	128.0	131.0
1961	136.0	123.0	109.0	95.0	83.0	70.0	57.0	77.0	93.0	107.0	124.0	147.0
1962	167.0	153.0	140.0	126.0	121.0	109.0	90.0	98.0	110.0	117.0	126.0	144.0
1963	164.0	150.0	137.0	124.0	149.0	163.0	236.0	373.0	417.0	381.0	348.0	322.0
1964	317.0	298.0	297.0	306.0	298.0	290.0	281.0	263.0	247.0	229.0	213.0	206.0
1965	202.0	207.0	277.0	281.0	294.0	332.0	396.0	410.0	417.0	380.0	337.0	318.0
1966	328.0	330.0	338.0	338.0	322.0	321.0	332.0	326.0	303.0	281.0	262.0	255.0
1967	247.0	251.0	290.0	338.0	338.0	363.0	391.0	325.0	417.0	417.0	359.0	311.0
1968	306.0	305.0	304.0	306.0	312.0	319.0	316.0	294.0	282.0	258.0	238.0	229.0
1969	219.0	223.0	232.0	330.0	338.0	363.0	351.0	389.0	417.0	390.0	348.0	316.0
1970	320.0	317.0	328.0	268.0	268.0	317.0	331.0	372.0	412.0	386.0	356.0	337.0
1971	327.0	325.0	338.0	338.0	338.0	363.0	383.0	367.0	413.0	392.0	371.0	350.0
1972	349.0	338.0	338.0	332.0	319.0	333.0	339.0	323.0	334.0	316.0	298.0	291.0
1973	282.0	281.0	285.0	335.0	338.0	363.0	388.0	417.0	417.0	393.0	362.0	343.0
1974	339.0	293.0	300.0	289.0	312.0	356.0	408.0	417.0	417.0	394.0	369.0	345.0
1975	336.0	324.0	313.0	298.0	301.0	344.0	369.0	376.0	417.0	389.0	357.0	332.0
1976	335.0	331.0	325.0	309.0	290.0	270.0	255.0	238.0	218.0	197.0	180.0	167.0
1977	152.0	138.0	124.0	111.0	98.0	85.0	71.0	69.0	65.0	61.0	59.0	62.0
1978	68.0	60.0	52.0	44.0	36.0	28.0	15.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	15.0	22.0	36.0	52.0	76.0
1980	104.0	97.0	90.0	85.0	188.0	276.0	321.0	357.0	417.0	403.0	353.0	313.0
1981	303.0	293.0	290.0	295.0	288.0	286.0	289.0	270.0	248.0	228.0	206.0	195.0
1982	188.0	199.0	252.0	282.0	268.0	306.0	324.0	410.0	417.0	381.0	327.0	276.0
1983	288.0	273.0	280.0	307.0	318.0	354.0	368.0	284.0	406.0	417.0	351.0	287.0
1984	303.0	268.0	268.0	268.0	276.0	327.0	352.0	409.0	417.0	395.0	371.0	344.0
1985	340.0	334.0	336.0	318.0	311.0	321.0	340.0	322.0	303.0	279.0	263.0	255.0
1986	250.0	252.0	253.0	271.0	273.0	309.0	383.0	417.0	417.0	383.0	347.0	322.0
1987	312.0	305.0	293.0	276.0	260.0	243.0	229.0	212.0	191.0	168.0	149.0	139.0
1988	124.0	110.0	97.0	84.0	72.0	58.0	45.0	63.0	77.0	93.0	111.0	133.0
1989	158.0	150.0	143.0	135.0	128.0	122.0	103.0	107.0	105.0	111.0	120.0	138.0
1990	156.0	142.0	128.0	115.0	104.0	91.0	73.0	82.0	95.0	106.0	119.0	138.0
1991	161.0	152.0	144.0	136.0	129.0	128.0	110.0	90.0	88.0	84.0	84.0	88.0
1992	97.0	90.0	82.0	74.0	70.0	63.0	49.0	53.0	53.0	52.0	54.0	61.0
1993	72.0	64.0	57.0	56.0	50.0	42.0	86.0	197.0	303.0	287.0	289.0	282.0
AVG:	245.8	237.7	236.6	236.0	239.1	251.5	263.4	282.0	298.6	280.9	260.1	247.3
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	349.0	338.0	338.0	338.0	338.0	364.0	408.0	417.0	417.0	417.0	371.0	350.0

Figures 3.4.3-5 and 3.4.3-6 display data for total storage in the EBMUD system, calculated as the sum of storages in Pardee and Camanche Reservoirs. EBMUD may divert CVP water at Freeport in Alternatives 2-5 only when EBMUD total system storage falls below 500 TAF on October 5. End-of-September storage values indicate when this condition is met.

Figure 3.4.3-5. Exceedence for Simulated EBMUD Total System Storage: End-of-September Storage, 2001 LOD

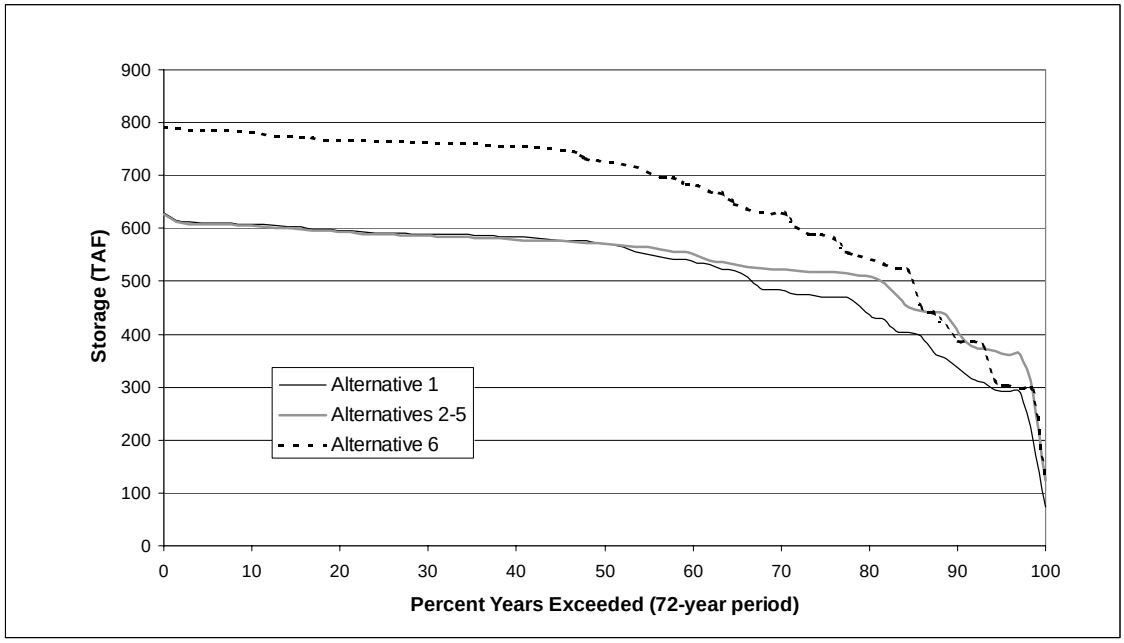


Figure 3.4.3-6. Simulated EBMUD Total System Storage: End-of-September Storage, 2001 LOD

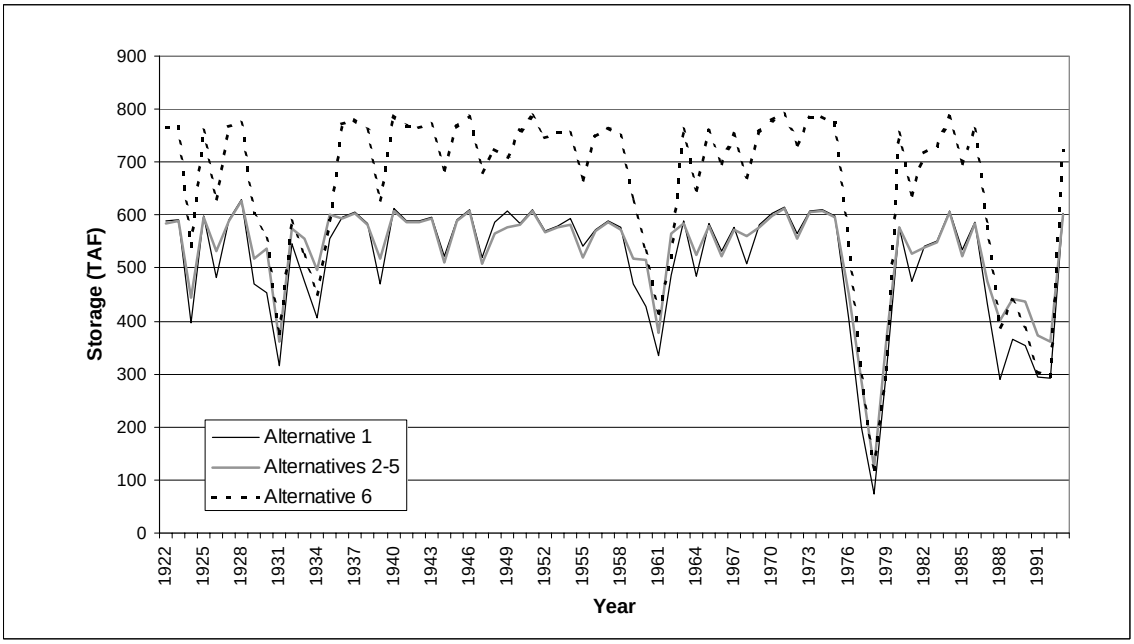


Table 3.4.3-7. Simulated EBMUD Total System Storage (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	589.0	583.0	587.0	594.0	620.0	641.0	655.0	656.0	748.0	695.0	636.0	588.0
1923	578.0	579.0	603.0	617.0	624.0	629.0	659.0	701.0	716.0	673.0	625.0	592.0
1924	582.0	576.0	574.0	573.0	556.0	532.0	521.0	502.0	472.0	442.0	415.0	396.0
1925	390.0	383.0	383.0	390.0	457.0	495.0	536.0	646.0	695.0	656.0	619.0	598.0
1926	586.0	581.0	578.0	579.0	581.0	565.0	561.0	558.0	539.0	514.0	492.0	481.0
1927	476.0	490.0	500.0	520.0	583.0	612.0	651.0	692.0	748.0	693.0	636.0	592.0
1928	581.0	573.0	574.0	576.0	574.0	599.0	630.0	737.0	702.0	670.0	643.0	629.0
1929	616.0	607.0	590.0	573.0	561.0	547.0	540.0	526.0	510.0	492.0	478.0	470.0
1930	464.0	464.0	463.0	467.0	465.0	476.0	476.0	469.0	498.0	477.0	460.0	454.0
1931	451.0	455.0	451.0	439.0	430.0	421.0	408.0	396.0	373.0	354.0	332.0	316.0
1932	306.0	301.0	308.0	319.0	359.0	392.0	417.0	461.0	586.0	575.0	555.0	545.0
1933	537.0	536.0	538.0	533.0	514.0	507.0	516.0	520.0	521.0	502.0	485.0	476.0
1934	475.0	476.0	495.0	511.0	515.0	526.0	505.0	479.0	469.0	451.0	424.0	407.0
1935	391.0	385.0	379.0	379.0	393.0	404.0	478.0	527.0	613.0	590.0	567.0	556.0
1936	551.0	551.0	554.0	582.0	624.0	653.0	676.0	731.0	748.0	692.0	637.0	596.0
1937	585.0	580.0	583.0	576.0	614.0	653.0	686.0	725.0	735.0	686.0	639.0	605.0
1938	594.0	591.0	546.0	557.0	581.0	610.0	556.0	657.0	748.0	702.0	637.0	585.0
1939	576.0	575.0	577.0	580.0	566.0	556.0	546.0	523.0	511.0	493.0	477.0	470.0
1940	466.0	459.0	446.0	477.0	548.0	623.0	660.0	753.0	737.0	687.0	644.0	612.0
1941	602.0	600.0	611.0	617.0	624.0	653.0	688.0	716.0	748.0	693.0	635.0	590.0
1942	580.0	578.0	578.0	573.0	577.0	599.0	642.0	671.0	748.0	702.0	640.0	590.0
1943	579.0	576.0	580.0	571.0	573.0	599.0	676.0	736.0	734.0	683.0	634.0	596.0
1944	588.0	585.0	586.0	583.0	577.0	584.0	577.0	580.0	578.0	555.0	535.0	523.0
1945	518.0	534.0	548.0	560.0	613.0	647.0	661.0	691.0	740.0	685.0	632.0	592.0
1946	583.0	574.0	564.0	574.0	589.0	616.0	637.0	740.0	725.0	680.0	638.0	610.0
1947	600.0	604.0	607.0	608.0	610.0	604.0	612.0	596.0	579.0	554.0	531.0	520.0
1948	519.0	511.0	498.0	505.0	493.0	488.0	509.0	531.0	638.0	615.0	596.0	586.0
1949	579.0	579.0	584.0	587.0	574.0	583.0	613.0	651.0	661.0	639.0	618.0	607.0
1950	595.0	591.0	587.0	599.0	624.0	653.0	691.0	704.0	743.0	683.0	626.0	584.0
1951	577.0	537.0	541.0	547.0	554.0	599.0	667.0	730.0	696.0	662.0	630.0	610.0
1952	598.0	600.0	611.0	617.0	624.0	645.0	565.0	628.0	740.0	708.0	633.0	570.0
1953	563.0	564.0	575.0	613.0	570.0	587.0	627.0	627.0	669.0	643.0	604.0	580.0
1954	577.0	578.0	578.0	579.0	584.0	605.0	639.0	671.0	650.0	622.0	601.0	593.0
1955	590.0	597.0	603.0	612.0	611.0	612.0	604.0	599.0	599.0	573.0	552.0	541.0
1956	533.0	533.0	554.0	547.0	570.0	626.0	670.0	700.0	748.0	690.0	625.0	572.0
1957	567.0	570.0	577.0	577.0	586.0	602.0	605.0	633.0	686.0	646.0	611.0	590.0
1958	583.0	587.0	594.0	609.0	624.0	653.0	679.0	685.0	748.0	695.0	632.0	576.0
1959	569.0	568.0	563.0	567.0	587.0	588.0	573.0	547.0	526.0	501.0	480.0	469.0
1960	462.0	459.0	459.0	452.0	461.0	464.0	458.0	468.0	474.0	452.0	435.0	427.0
1961	422.0	423.0	424.0	420.0	410.0	398.0	386.0	373.0	362.0	348.0	337.0	334.0
1962	337.0	333.0	328.0	324.0	368.0	395.0	444.0	458.0	528.0	510.0	494.0	486.0
1963	490.0	495.0	503.0	520.0	556.0	573.0	640.0	729.0	748.0	689.0	633.0	588.0
1964	582.0	567.0	571.0	585.0	587.0	581.0	573.0	553.0	535.0	513.0	493.0	485.0
1965	483.0	494.0	550.0	560.0	580.0	623.0	687.0	699.0	731.0	676.0	617.0	583.0
1966	594.0	598.0	611.0	617.0	609.0	611.0	622.0	615.0	589.0	563.0	541.0	532.0
1967	525.0	533.0	576.0	616.0	624.0	652.0	680.0	611.0	718.0	720.0	642.0	576.0
1968	571.0	574.0	579.0	586.0	601.0	610.0	608.0	585.0	570.0	542.0	518.0	508.0
1969	500.0	510.0	525.0	609.0	624.0	652.0	639.0	674.0	748.0	698.0	633.0	581.0
1970	586.0	587.0	601.0	546.0	554.0	606.0	620.0	658.0	692.0	661.0	625.0	602.0
1971	592.0	594.0	611.0	616.0	624.0	652.0	673.0	653.0	693.0	666.0	640.0	615.0
1972	615.0	606.0	611.0	611.0	607.0	623.0	627.0	610.0	618.0	597.0	575.0	566.0
1973	562.0	569.0	583.0	616.0	624.0	652.0	677.0	727.0	728.0	687.0	641.0	609.0
1974	604.0	562.0	574.0	568.0	599.0	645.0	696.0	719.0	736.0	693.0	650.0	610.0
1975	602.0	593.0	588.0	578.0	590.0	635.0	661.0	661.0	727.0	684.0	635.0	598.0
1976	600.0	600.0	599.0	590.0	571.0	548.0	532.0	510.0	480.0	449.0	422.0	403.0
1977	385.0	371.0	354.0	343.0	329.0	312.0	295.0	279.0	256.0	233.0	212.0	200.0
1978	186.0	176.0	160.0	151.0	142.0	139.0	128.0	121.0	108.0	95.0	78.0	73.0
1979	61.0	46.0	35.0	51.0	76.0	138.0	197.0	266.0	317.0	318.0	309.0	308.0
1980	314.0	330.0	356.0	506.0	572.0	634.0	668.0	684.0	727.0	697.0	631.0	578.0
1981	569.0	563.0	565.0	575.0	577.0	578.0	581.0	562.0	537.0	514.0	489.0	476.0
1982	472.0	488.0	541.0	561.0	554.0	595.0	612.0	696.0	734.0	680.0	608.0	541.0
1983	553.0	542.0	553.0	586.0	604.0	643.0	656.0	569.0	687.0	725.0	636.0	552.0
1984	569.0	536.0	541.0	546.0	563.0	616.0	642.0	695.0	704.0	674.0	642.0	609.0
1985	605.0	603.0	610.0	598.0	599.0	612.0	631.0	612.0	591.0	563.0	542.0	534.0
1986	528.0	534.0	541.0	565.0	559.0	598.0	672.0	730.0	740.0	685.0	630.0	587.0
1987	577.0	575.0	569.0	558.0	546.0	538.0	525.0	501.0	476.0	458.0	442.0	433.0
1988	411.0	394.0	381.0	378.0	367.0	355.0	344.0	333.0	320.0	310.0	298.0	290.0
1989	277.0	269.0	260.0	252.0	246.0	286.0	329.0	387.0	399.0	383.0	368.0	365.0
1990	358.0	370.0	381.0	392.0	396.0	406.0	396.0	388.0	382.0	370.0	358.0	355.0
1991	359.0	343.0	331.0	314.0	304.0	315.0	312.0	309.0	314.0	305.0	296.0	295.0
1992	302.0	314.0	323.0	325.0	342.0	358.0	353.0	342.0	321.0	310.0	301.0	291.0
1993	285.0	277.0	281.0	348.0	401.0	494.0	551.0	634.0	710.0	662.0	635.0	603.0
AVG:	508.8	506.1	510.3	518.8	529.1	548.9	565.7	584.8	605.9	575.0	539.7	514.7
MIN:	61.0	46.0	35.0	51.0	76.0	138.0	128.0	121.0	108.0	95.0	78.0	73.0
MAX:	616.0	607.0	611.0	617.0	624.0	653.0	696.0	753.0	748.0	725.0	650.0	629.0

Table 3.4.3-8. Simulated EBMUD Total System Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	586.0	579.0	582.0	589.0	614.0	635.0	647.0	653.0	745.0	692.0	632.0	585.0
1923	575.0	575.0	600.0	613.0	621.0	625.0	654.0	696.0	712.0	669.0	622.0	590.0
1924	579.0	572.0	569.0	567.0	549.0	534.0	531.0	520.0	498.0	475.0	456.0	445.0
1925	434.0	421.0	414.0	416.0	478.0	509.0	549.0	656.0	702.0	659.0	619.0	595.0
1926	583.0	577.0	574.0	573.0	575.0	567.0	572.0	578.0	566.0	549.0	535.0	531.0
1927	534.0	554.0	571.0	590.0	621.0	647.0	672.0	704.0	745.0	689.0	632.0	589.0
1928	578.0	569.0	570.0	572.0	568.0	595.0	626.0	733.0	698.0	667.0	640.0	627.0
1929	613.0	603.0	586.0	568.0	555.0	550.0	551.0	545.0	536.0	526.0	519.0	518.0
1930	519.0	520.0	516.0	517.0	511.0	529.0	535.0	534.0	568.0	551.0	538.0	537.0
1931	539.0	548.0	541.0	525.0	512.0	499.0	482.0	466.0	437.0	411.0	383.0	362.0
1932	348.0	340.0	346.0	356.0	395.0	428.0	452.0	495.0	619.0	606.0	585.0	574.0
1933	565.0	563.0	565.0	558.0	540.0	541.0	558.0	570.0	578.0	567.0	557.0	556.0
1934	555.0	553.0	570.0	581.0	581.0	597.0	581.0	559.0	551.0	535.0	511.0	497.0
1935	487.0	482.0	473.0	473.0	486.0	497.0	571.0	610.0	685.0	651.0	618.0	600.0
1936	589.0	584.0	582.0	604.0	621.0	649.0	672.0	728.0	745.0	689.0	634.0	593.0
1937	582.0	576.0	578.0	571.0	608.0	649.0	682.0	721.0	732.0	682.0	636.0	602.0
1938	591.0	587.0	543.0	553.0	578.0	606.0	553.0	654.0	745.0	698.0	634.0	582.0
1939	573.0	571.0	572.0	574.0	559.0	558.0	556.0	542.0	537.0	526.0	518.0	518.0
1940	520.0	519.0	513.0	552.0	620.0	619.0	656.0	750.0	734.0	684.0	640.0	609.0
1941	599.0	595.0	608.0	613.0	621.0	649.0	683.0	712.0	745.0	690.0	632.0	587.0
1942	577.0	574.0	575.0	569.0	574.0	595.0	637.0	668.0	745.0	699.0	637.0	587.0
1943	576.0	572.0	577.0	567.0	570.0	595.0	672.0	733.0	731.0	680.0	631.0	593.0
1944	585.0	581.0	581.0	578.0	571.0	578.0	570.0	572.0	568.0	545.0	523.0	511.0
1945	506.0	521.0	534.0	546.0	610.0	643.0	656.0	687.0	736.0	681.0	629.0	590.0
1946	580.0	570.0	561.0	570.0	584.0	611.0	631.0	738.0	723.0	677.0	636.0	607.0
1947	597.0	600.0	602.0	603.0	604.0	597.0	605.0	588.0	570.0	544.0	520.0	508.0
1948	507.0	498.0	484.0	490.0	478.0	472.0	493.0	513.0	619.0	596.0	576.0	565.0
1949	558.0	557.0	562.0	563.0	550.0	559.0	588.0	625.0	634.0	612.0	590.0	578.0
1950	570.0	570.0	570.0	586.0	621.0	649.0	687.0	701.0	740.0	680.0	623.0	581.0
1951	574.0	533.0	538.0	543.0	551.0	595.0	663.0	726.0	692.0	658.0	627.0	607.0
1952	595.0	596.0	608.0	613.0	621.0	641.0	562.0	625.0	737.0	704.0	630.0	567.0
1953	560.0	560.0	570.0	607.0	566.0	582.0	622.0	622.0	665.0	639.0	601.0	577.0
1954	574.0	574.0	573.0	574.0	578.0	598.0	632.0	663.0	641.0	612.0	590.0	581.0
1955	577.0	584.0	589.0	598.0	596.0	596.0	587.0	582.0	581.0	554.0	532.0	520.0
1956	514.0	514.0	551.0	543.0	567.0	622.0	666.0	697.0	745.0	687.0	622.0	570.0
1957	564.0	566.0	573.0	572.0	580.0	596.0	598.0	626.0	680.0	642.0	607.0	587.0
1958	580.0	583.0	589.0	604.0	621.0	649.0	675.0	682.0	745.0	692.0	629.0	573.0
1959	566.0	564.0	558.0	562.0	581.0	590.0	583.0	566.0	552.0	534.0	520.0	517.0
1960	516.0	519.0	526.0	524.0	538.0	546.0	546.0	559.0	568.0	549.0	530.0	516.0
1961	507.0	505.0	504.0	497.0	485.0	471.0	456.0	438.0	422.0	402.0	385.0	377.0
1962	377.0	370.0	363.0	358.0	400.0	436.0	492.0	513.0	589.0	576.0	566.0	564.0
1963	569.0	576.0	586.0	605.0	553.0	562.0	632.0	726.0	745.0	685.0	629.0	585.0
1964	579.0	563.0	567.0	581.0	581.0	585.0	585.0	574.0	563.0	549.0	534.0	524.0
1965	520.0	528.0	547.0	557.0	577.0	617.0	681.0	693.0	727.0	673.0	614.0	580.0
1966	591.0	595.0	608.0	613.0	605.0	606.0	617.0	609.0	582.0	555.0	532.0	522.0
1967	516.0	525.0	570.0	613.0	621.0	648.0	676.0	607.0	715.0	717.0	638.0	573.0
1968	568.0	570.0	574.0	581.0	595.0	613.0	619.0	605.0	598.0	578.0	562.0	560.0
1969	559.0	575.0	598.0	606.0	621.0	648.0	636.0	671.0	745.0	695.0	630.0	578.0
1970	582.0	583.0	598.0	543.0	551.0	602.0	616.0	654.0	689.0	657.0	622.0	599.0
1971	589.0	591.0	608.0	613.0	621.0	648.0	668.0	649.0	690.0	663.0	637.0	613.0
1972	611.0	603.0	608.0	607.0	602.0	618.0	621.0	603.0	610.0	588.0	565.0	555.0
1973	550.0	557.0	570.0	613.0	621.0	648.0	673.0	722.0	728.0	686.0	639.0	606.0
1974	601.0	559.0	570.0	565.0	594.0	641.0	693.0	715.0	733.0	690.0	647.0	607.0
1975	598.0	589.0	583.0	573.0	584.0	629.0	654.0	657.0	723.0	680.0	632.0	595.0
1976	597.0	596.0	595.0	585.0	565.0	551.0	542.0	528.0	506.0	482.0	463.0	451.0
1977	435.0	424.0	401.0	384.0	364.0	351.0	343.0	336.0	320.0	305.0	292.0	288.0
1978	283.0	272.0	256.0	243.0	232.0	229.0	214.0	200.0	181.0	160.0	135.0	123.0
1979	107.0	89.0	75.0	90.0	113.0	184.0	245.0	312.0	359.0	366.0	364.0	368.0
1980	381.0	405.0	431.0	564.0	568.0	631.0	663.0	680.0	724.0	693.0	628.0	576.0
1981	565.0	559.0	560.0	570.0	570.0	580.0	592.0	581.0	564.0	548.0	531.0	526.0
1982	528.0	546.0	538.0	558.0	551.0	591.0	608.0	693.0	731.0	677.0	605.0	539.0
1983	550.0	539.0	550.0	582.0	600.0	639.0	653.0	566.0	683.0	722.0	633.0	549.0
1984	566.0	533.0	538.0	543.0	559.0	612.0	637.0	691.0	701.0	670.0	639.0	606.0
1985	602.0	599.0	606.0	593.0	594.0	606.0	624.0	605.0	582.0	553.0	532.0	522.0
1986	516.0	522.0	528.0	551.0	556.0	595.0	668.0	726.0	737.0	682.0	627.0	585.0
1987	574.0	571.0	564.0	552.0	539.0	539.0	534.0	517.0	499.0	487.0	478.0	476.0
1988	462.0	452.0	448.0	453.0	443.0	437.0	435.0	430.0	421.0	417.0	410.0	401.0
1989	386.0	376.0	366.0	356.0	349.0	388.0	427.0	481.0	488.0	468.0	448.0	441.0
1990	429.0	432.0	435.0	439.0	437.0	450.0	448.0	446.0	446.0	441.0	435.0	438.0
1991	432.0	410.0	391.0	367.0	351.0	365.0	365.0	361.0	372.0	370.0	367.0	372.0
1992	387.0	405.0	413.0	414.0	430.0	455.0	448.0	426.0	402.0	386.0	374.0	361.0
1993	352.0	343.0	346.0	413.0	467.0	559.0	615.0	687.0	743.0	682.0	643.0	600.0
AVG:	529.1	526.2	529.0	535.5	542.7	562.9	581.1	601.4	623.2	593.1	558.8	534.6
MIN:	107.0	89.0	75.0	90.0	113.0	184.0	214.0	200.0	181.0	160.0	135.0	123.0
MAX:	613.0	603.0	608.0	613.0	621.0	649.0	693.0	750.0	745.0	722.0	647.0	627.0

Table 3.4.3-9. Simulated EBMUD Total System Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	764.0	757.0	760.0	767.0	793.0	814.0	827.0	831.0	873.0	837.0	794.0	764.0
1923	753.0	753.0	778.0	791.0	799.0	803.0	832.0	875.0	873.0	836.0	795.0	768.0
1924	757.0	750.0	747.0	744.0	726.0	701.0	687.0	664.0	631.0	596.0	564.0	542.0
1925	527.0	514.0	506.0	508.0	570.0	601.0	641.0	763.0	824.0	798.0	772.0	760.0
1926	748.0	742.0	739.0	738.0	741.0	723.0	718.0	714.0	693.0	666.0	641.0	629.0
1927	621.0	633.0	640.0	658.0	719.0	745.0	784.0	836.0	873.0	835.0	795.0	768.0
1928	756.0	747.0	749.0	750.0	747.0	773.0	804.0	878.0	850.0	817.0	789.0	774.0
1929	760.0	756.0	739.0	722.0	709.0	694.0	686.0	670.0	651.0	632.0	614.0	604.0
1930	598.0	596.0	594.0	596.0	593.0	603.0	600.0	589.0	614.0	588.0	566.0	556.0
1931	551.0	552.0	547.0	533.0	521.0	510.0	494.0	478.0	450.0	425.0	397.0	376.0
1932	362.0	355.0	360.0	371.0	410.0	443.0	467.0	510.0	634.0	622.0	601.0	590.0
1933	584.0	584.0	587.0	583.0	566.0	559.0	568.0	572.0	572.0	553.0	534.0	525.0
1934	523.0	524.0	542.0	557.0	560.0	571.0	549.0	523.0	513.0	493.0	466.0	448.0
1935	431.0	424.0	418.0	417.0	431.0	441.0	515.0	562.0	647.0	624.0	600.0	589.0
1936	585.0	586.0	590.0	619.0	758.0	806.0	842.0	878.0	873.0	834.0	796.0	771.0
1937	760.0	754.0	756.0	749.0	787.0	827.0	860.0	878.0	873.0	836.0	803.0	781.0
1938	769.0	765.0	721.0	732.0	756.0	784.0	731.0	832.0	873.0	843.0	796.0	761.0
1939	751.0	749.0	750.0	752.0	738.0	727.0	716.0	691.0	677.0	655.0	637.0	627.0
1940	620.0	610.0	595.0	624.0	693.0	774.0	816.0	878.0	873.0	837.0	806.0	788.0
1941	777.0	773.0	786.0	791.0	799.0	827.0	862.0	878.0	873.0	835.0	794.0	766.0
1942	755.0	752.0	753.0	747.0	752.0	773.0	816.0	846.0	873.0	844.0	799.0	765.0
1943	754.0	750.0	755.0	745.0	748.0	773.0	851.0	878.0	873.0	835.0	798.0	772.0
1944	763.0	759.0	759.0	756.0	750.0	756.0	748.0	750.0	746.0	721.0	698.0	685.0
1945	678.0	692.0	703.0	713.0	783.0	815.0	831.0	865.0	873.0	832.0	794.0	768.0
1946	758.0	748.0	739.0	748.0	763.0	790.0	810.0	878.0	873.0	838.0	805.0	786.0
1947	775.0	778.0	781.0	781.0	782.0	776.0	783.0	765.0	746.0	719.0	695.0	682.0
1948	679.0	668.0	652.0	657.0	642.0	635.0	656.0	676.0	782.0	757.0	736.0	725.0
1949	713.0	707.0	707.0	704.0	688.0	691.0	720.0	757.0	766.0	743.0	720.0	708.0
1950	700.0	700.0	699.0	716.0	755.0	790.0	836.0	863.0	873.0	829.0	787.0	760.0
1951	752.0	711.0	716.0	721.0	729.0	773.0	840.0	878.0	857.0	828.0	801.0	786.0
1952	773.0	774.0	786.0	791.0	799.0	819.0	740.0	803.0	873.0	854.0	795.0	746.0
1953	738.0	738.0	749.0	786.0	745.0	761.0	800.0	801.0	844.0	817.0	779.0	755.0
1954	752.0	752.0	751.0	752.0	757.0	777.0	810.0	841.0	818.0	788.0	765.0	755.0
1955	747.0	749.0	750.0	754.0	748.0	744.0	735.0	729.0	727.0	700.0	677.0	665.0
1956	656.0	655.0	729.0	721.0	745.0	800.0	844.0	875.0	873.0	832.0	784.0	748.0
1957	742.0	744.0	750.0	750.0	758.0	774.0	776.0	805.0	859.0	821.0	785.0	765.0
1958	758.0	761.0	767.0	782.0	799.0	827.0	854.0	860.0	873.0	837.0	791.0	751.0
1959	744.0	742.0	736.0	740.0	759.0	759.0	743.0	715.0	692.0	664.0	639.0	627.0
1960	616.0	610.0	608.0	596.0	602.0	600.0	592.0	596.0	596.0	568.0	544.0	531.0
1961	522.0	520.0	519.0	514.0	503.0	490.0	477.0	462.0	449.0	433.0	419.0	414.0
1962	410.0	399.0	388.0	377.0	415.0	436.0	484.0	497.0	565.0	546.0	528.0	519.0
1963	522.0	526.0	533.0	549.0	610.0	626.0	699.0	833.0	873.0	831.0	792.0	763.0
1964	757.0	741.0	745.0	759.0	760.0	753.0	744.0	723.0	703.0	679.0	657.0	647.0
1965	642.0	650.0	725.0	735.0	755.0	796.0	859.0	871.0	873.0	829.0	781.0	759.0
1966	769.0	773.0	786.0	791.0	783.0	784.0	795.0	786.0	759.0	731.0	706.0	696.0
1967	688.0	695.0	738.0	791.0	799.0	826.0	854.0	786.0	873.0	867.0	803.0	752.0
1968	746.0	749.0	752.0	760.0	773.0	783.0	779.0	755.0	738.0	708.0	682.0	670.0
1969	660.0	667.0	680.0	784.0	799.0	826.0	814.0	849.0	873.0	840.0	792.0	757.0
1970	760.0	761.0	776.0	721.0	729.0	780.0	794.0	832.0	867.0	836.0	800.0	778.0
1971	767.0	769.0	786.0	791.0	799.0	826.0	846.0	827.0	868.0	842.0	815.0	791.0
1972	789.0	781.0	786.0	785.0	780.0	796.0	802.0	783.0	789.0	766.0	742.0	732.0
1973	722.0	725.0	733.0	789.0	799.0	826.0	851.0	878.0	873.0	842.0	806.0	784.0
1974	779.0	737.0	748.0	743.0	773.0	819.0	871.0	878.0	873.0	843.0	813.0	786.0
1975	777.0	767.0	761.0	751.0	762.0	808.0	832.0	836.0	873.0	839.0	801.0	773.0
1976	775.0	774.0	773.0	762.0	741.0	717.0	698.0	672.0	639.0	603.0	572.0	548.0
1977	522.0	501.0	477.0	459.0	440.0	417.0	399.0	383.0	358.0	333.0	311.0	297.0
1978	282.0	271.0	255.0	242.0	231.0	225.0	210.0	196.0	176.0	155.0	131.0	118.0
1979	103.0	85.0	70.0	86.0	110.0	171.0	225.0	282.0	322.0	322.0	312.0	309.0
1980	314.0	330.0	356.0	505.0	650.0	739.0	784.0	817.0	873.0	853.0	797.0	754.0
1981	743.0	737.0	738.0	748.0	749.0	749.0	752.0	731.0	704.0	678.0	650.0	636.0
1982	629.0	642.0	700.0	736.0	729.0	769.0	787.0	871.0	873.0	831.0	771.0	717.0
1983	728.0	717.0	728.0	760.0	779.0	818.0	831.0	744.0	862.0	867.0	795.0	728.0
1984	744.0	711.0	716.0	721.0	738.0	791.0	815.0	869.0	873.0	844.0	815.0	785.0
1985	780.0	777.0	784.0	771.0	772.0	785.0	803.0	782.0	759.0	729.0	707.0	696.0
1986	690.0	696.0	702.0	725.0	734.0	773.0	846.0	878.0	873.0	833.0	791.0	763.0
1987	752.0	748.0	742.0	730.0	717.0	707.0	692.0	665.0	636.0	613.0	593.0	580.0
1988	556.0	537.0	522.0	517.0	504.0	488.0	475.0	459.0	439.0	422.0	403.0	388.0
1989	372.0	361.0	349.0	340.0	334.0	374.0	416.0	471.0	480.0	462.0	444.0	439.0
1990	428.0	434.0	438.0	443.0	442.0	446.0	435.0	426.0	419.0	406.0	393.0	388.0
1991	391.0	375.0	362.0	345.0	334.0	344.0	336.0	324.0	328.0	318.0	308.0	305.0
1992	312.0	323.0	331.0	333.0	349.0	365.0	360.0	348.0	326.0	313.0	304.0	294.0
1993	286.0	278.0	281.0	348.0	400.0	492.0	549.0	657.0	759.0	737.0	733.0	723.0
AVG:	646.8	642.7	646.9	655.2	668.2	687.6	704.1	720.2	732.0	704.7	673.9	653.6
MIN:	103.0	85.0	70.0	86.0	110.0	171.0	210.0	196.0	176.0	155.0	131.0	118.0
MAX:	789.0	781.0	786.0	791.0	799.0	827.0	871.0	878.0	873.0	867.0	815.0	791.0

The following figures and tables illustrate results for Trinity Reservoir on the CVP system. Tables are provided for Whiskeytown Reservoir following the Trinity Reservoir results.

Figure 3.4.3-7. Exceedence for Simulated Trinity Reservoir End-of-September Storage, 2001 LOD

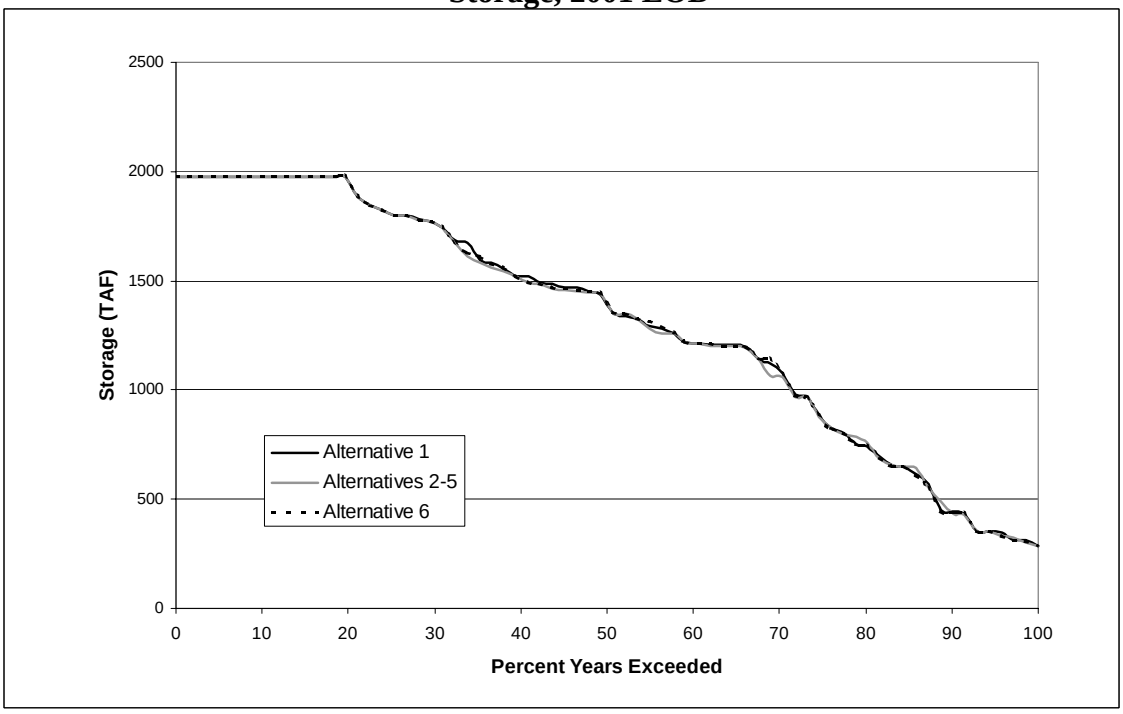


Figure 3.4.3-8. Simulated Trinity Reservoir End-of-September Storage, 2001 LOD

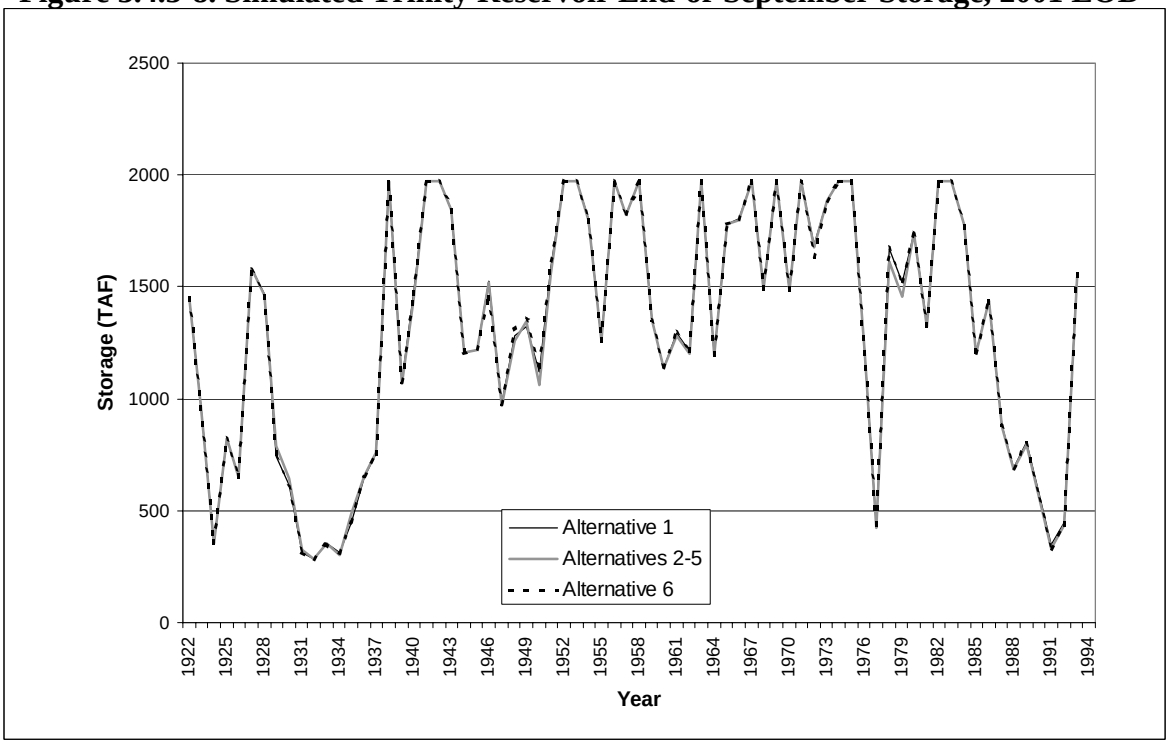


Figure 3.4.3-9. Simulated Trinity Reservoir Drought Period Storage, 2001 LOD (WY 1928-1934)

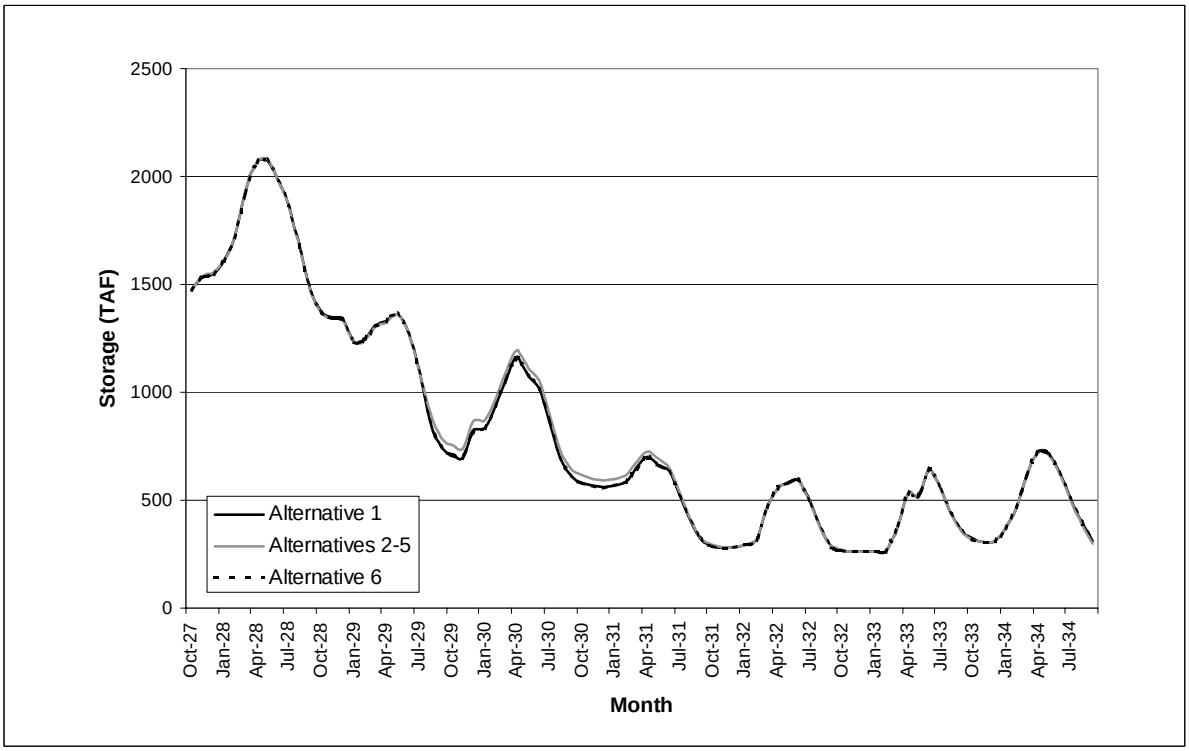


Figure 3.4.3-10. Simulated Trinity Reservoir Drought Period Storage, 2001 LOD (WY 1987-1992)

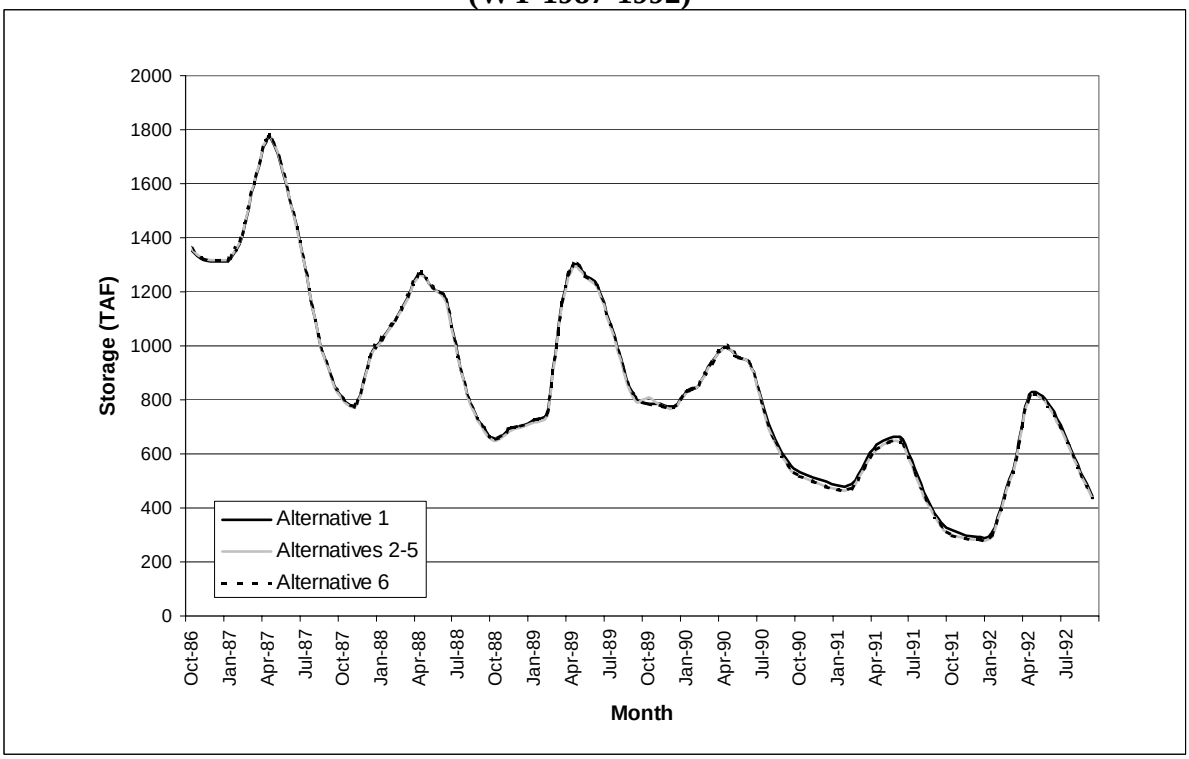


Table 3.4.3-10. Simulated Trinity Storage (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1679.4	1665.8	1662.7	1685.2	1735.2	1833.7	1906.7	1957.3	1845.2	1645.5	1452.4
1923	1367.4	1338.7	1348.4	1374.9	1398.3	1450.1	1564.9	1524.4	1456.4	1259.6	1078.8	966.2
1924	896.1	862.0	846.3	841.8	899.3	905.1	899.3	812.9	685.7	563.5	442.5	355.9
1925	333.2	402.7	444.5	452.7	717.8	852.9	1145.2	1234.3	1241.4	1086.8	926.5	825.3
1926	753.5	747.8	766.3	767.3	911.5	1013.9	1232.5	1136.8	1066.4	902.2	735.7	651.2
1927	624.8	780.6	975.6	1093.3	1331.1	1509.1	1732.3	1832.7	1963.0	1881.4	1767.6	1581.2
1928	1475.3	1533.2	1551.4	1608.1	1717.6	1924.1	2067.0	2076.2	1979.9	1866.1	1656.0	1466.4
1929	1373.1	1348.3	1339.9	1232.6	1248.7	1308.9	1327.7	1359.7	1275.9	1101.5	873.3	742.7
1930	710.7	693.6	821.3	837.6	936.4	1061.8	1162.2	1074.6	1021.3	861.7	696.3	613.0
1931	581.5	567.4	557.9	566.8	585.9	649.9	698.2	667.2	636.9	520.9	401.0	315.7
1932	284.7	277.9	280.9	293.3	314.9	467.4	557.0	580.8	592.3	485.1	368.8	284.4
1933	266.7	265.1	263.1	261.1	261.8	378.8	532.4	520.9	639.8	549.5	434.6	353.2
1934	320.9	307.0	310.1	371.7	461.6	618.5	727.1	711.0	630.8	515.1	396.3	311.9
1935	286.0	350.5	381.5	416.7	500.9	561.5	775.2	812.4	816.8	648.1	530.7	447.9
1936	418.8	408.1	405.0	512.5	647.3	764.9	938.8	941.3	976.2	864.8	733.9	652.4
1937	619.5	602.5	587.0	572.6	570.8	676.3	902.0	1045.0	1113.7	995.5	866.1	754.5
1938	731.0	872.5	1091.6	1188.7	1345.6	1606.5	1908.1	2184.3	2357.6	2270.0	2150.0	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1875.7	1952.2	1879.6	1745.0	1532.5	1298.4	1078.0
1940	957.3	916.5	970.7	1136.2	1462.2	1764.5	1986.7	2018.1	1961.4	1851.9	1655.7	1471.5
1941	1384.4	1365.4	1504.3	1724.8	1974.6	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2189.2	2358.4	2447.0	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2278.3	2243.5	2258.5	2153.7	2034.5	1843.7
1944	1740.7	1750.6	1744.8	1682.5	1725.6	1793.4	1830.9	1885.2	1806.7	1590.2	1379.4	1205.1
1945	1112.0	1114.5	1179.6	1233.3	1399.0	1452.9	1593.0	1629.1	1661.4	1557.7	1362.5	1218.2
1946	1175.5	1230.6	1421.5	1552.2	1607.4	1736.6	1954.3	2043.1	2007.6	1916.4	1711.0	1523.3
1947	1355.2	1349.1	1370.5	1368.0	1428.4	1547.6	1632.5	1540.9	1496.9	1332.1	1153.3	979.9
1948	947.2	934.3	926.1	1109.5	1123.0	1148.3	1327.2	1384.4	1499.6	1413.4	1302.1	1282.0
1949	1273.9	1281.2	1285.0	1277.7	1309.8	1525.5	1782.3	1860.9	1811.7	1706.7	1513.4	1325.2
1950	1233.0	1201.1	1182.5	1200.1	1256.5	1378.1	1533.6	1537.8	1519.9	1412.7	1262.7	1120.8
1951	1152.6	1267.9	1525.6	1615.9	1836.5	1940.5	2114.1	2149.5	2083.6	1975.7	1781.1	1592.1
1952	1431.2	1461.2	1608.0	1667.2	1857.4	2023.6	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2272.8	2342.0	2447.0	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1842.6	1900.0	2000.0	2100.0	2300.0	2318.1	2267.3	2170.8	1983.6	1801.7
1955	1753.6	1803.9	1850.0	1786.3	1779.7	1814.5	1866.5	1864.2	1805.6	1620.9	1429.2	1260.0
1956	1166.9	1150.9	1459.4	1792.9	1930.4	2075.3	2270.9	2420.0	2447.0	2270.0	2150.0	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2167.5	2246.5	2305.5	2200.5	2005.3	1822.0
1958	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	2000.5	2128.6	2084.4	2019.7	1797.8	1567.7	1350.8
1960	1258.1	1220.0	1199.2	1198.1	1332.0	1510.8	1624.6	1632.3	1685.7	1506.3	1312.7	1139.1
1961	1049.4	1029.2	1124.4	1155.6	1378.6	1506.6	1650.9	1692.8	1768.5	1669.7	1467.7	1294.9
1962	1201.5	1180.5	1203.0	1207.1	1341.5	1417.9	1631.1	1624.6	1642.8	1541.4	1356.1	1214.2
1963	1319.6	1371.3	1545.2	1586.0	1880.8	1959.3	2222.1	2356.2	2403.7	2270.0	2146.1	1975.0
1964	1850.0	1850.0	1840.6	1900.0	1888.0	1931.0	1955.6	1852.5	1766.3	1564.9	1363.1	1197.3
1965	1114.2	1120.6	1657.2	1871.6	1962.5	1947.1	2176.9	2195.2	2238.4	2143.6	1961.6	1779.8
1966	1673.1	1761.0	1801.5	1883.9	1952.3	2100.0	2300.0	2382.0	2406.7	2234.6	2014.1	1801.2
1967	1631.5	1638.9	1782.0	1897.1	2000.0	2100.0	2206.4	2420.0	2447.0	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.9	1844.8	2000.0	2100.0	2185.9	2149.4	2071.7	1886.4	1693.6	1493.8
1969	1407.1	1402.9	1462.4	1606.2	1731.3	1892.8	2222.0	2420.0	2447.0	2270.0	2150.0	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2131.0	2132.8	2090.0	1909.6	1694.8	1487.4
1971	1397.8	1520.1	1651.1	1885.7	1923.8	2100.0	2277.3	2420.0	2447.0	2270.0	2150.0	1975.0
1972	1850.0	1849.2	1841.4	1900.0	2000.0	2100.0	2244.5	2254.2	2207.4	2088.8	1877.8	1685.8
1973	1528.8	1568.3	1677.6	1838.1	1992.3	2100.0	2265.5	2407.4	2447.0	2270.0	2069.3	1883.7
1974	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1840.7	1827.6	1924.9	2100.0	2226.0	2420.0	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1777.8	1864.2	1846.6	1753.7	1536.1	1351.1	1210.0
1977	1145.3	1110.3	1093.5	1074.2	1068.6	1064.0	1037.2	986.8	854.6	624.2	503.9	433.7
1978	397.5	421.8	621.5	1022.1	1207.4	1493.7	1687.7	1805.6	1986.8	1941.7	1830.9	1671.9
1979	1593.7	1590.3	1586.2	1609.0	1662.4	1811.3	1919.0	2005.3	2016.4	1908.1	1707.6	1520.6
1980	1442.3	1507.3	1577.3	1805.9	2000.0	2083.4	2229.4	2246.0	2209.8	2127.1	1929.6	1740.9
1981	1630.4	1622.6	1638.1	1744.7	1884.2	2010.1	2126.1	2056.6	1952.0	1754.9	1550.7	1340.3
1982	1258.1	1501.6	1833.0	1900.0	2000.0	2100.0	2300.0	2388.6	2395.1	2270.0	2150.0	1975.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2210.1	2276.7	2244.1	2150.2	1959.2	1772.5
1985	1761.6	1850.0	1850.0	1776.5	1805.2	1856.1	2011.1	1931.2	1825.4	1597.9	1379.9	1206.8
1986	1103.7	1053.6	1054.6	1173.6	1657.7	1999.9	2078.1	2066.6	2012.5	1815.9	1619.4	1436.2
1987	1351.4	1315.9	1311.2	1321.2	1406.5	1618.9	1771.1	1679.3	1488.3	1263.9	1034.9	881.7
1988	798.9	784.6	953.8	1023.1	1094.7	1179.1	1266.9	1216.2	1170.4	961.7	782.2	692.2
1989	655.5	691.3	704.4	725.8	751.3	1095.4	1296.0	1260.8	1222.3	1077.4	911.9	804.5
1990	786.6	783.2	773.7	832.9	853.3	939.2	995.2	963.1	931.0	777.2	654.8	569.1
1991	532.2	513.0	495.3	484.5	488.8	566.8	631.9	660.3	651.3	544.6	430.2	347.4
1992	314.8	298.7	295.1	302.5	442.0	584.4	820.2	813.8	755.0	650.5	530.7	444.6
1993	413.0	406.1	423.4	479.1	617.7	989.6	1195.6	1487.3	1686.0	1703.5	1592.9	1554.2
AVG:	1246.2	1257.9	1309.7	1366.0	1471.4	1590.8	1742.3	1783.0	1776.5	1631.7	1469.7	1317.7
MIN:	266.7	265.1	263.1	261.1	261.8	378.8	532.4	520.9	592.3	485.1	368.8	284.4
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.4.3-11. Simulated Trinity Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1679.4	1665.8	1662.7	1685.2	1735.2	1833.7	1906.7	1957.3	1845.2	1645.5	1452.4
1923	1367.4	1338.7	1348.4	1374.9	1398.3	1450.1	1564.9	1524.4	1456.4	1259.1	1078.3	965.7
1924	895.6	861.5	845.8	841.3	898.9	904.7	896.1	810.0	680.8	558.6	437.7	351.1
1925	328.5	397.9	439.7	447.8	718.4	853.5	1145.9	1234.9	1242.0	1087.4	927.1	825.9
1926	754.1	748.5	767.0	768.0	912.1	1014.5	1233.2	1137.4	1067.1	902.9	736.3	651.8
1927	625.4	781.2	976.2	1093.9	1331.7	1509.7	1732.9	1833.3	1963.6	1882.0	1768.2	1581.8
1928	1475.9	1533.8	1552.0	1608.7	1718.2	1924.7	2067.6	2076.8	1980.5	1866.7	1650.3	1460.7
1929	1367.4	1342.6	1334.2	1230.0	1246.1	1306.3	1325.1	1357.1	1273.3	1099.0	916.8	786.0
1930	753.9	736.8	864.5	871.6	970.4	1095.7	1196.1	1108.3	1054.9	895.1	729.5	646.2
1931	614.5	600.5	591.0	599.9	618.9	676.7	724.9	693.8	646.4	530.3	410.4	325.0
1932	294.0	279.5	280.1	292.5	314.1	466.5	556.2	580.0	591.5	484.3	368.0	283.6
1933	266.0	264.3	262.3	260.3	261.0	378.0	531.7	520.1	639.0	548.7	433.8	352.5
1934	320.1	306.3	309.4	370.9	460.9	617.8	726.3	710.2	619.3	503.7	385.0	300.6
1935	265.2	329.8	360.8	396.0	480.2	540.8	754.5	791.8	796.3	689.1	571.5	488.5
1936	459.3	448.6	445.5	553.0	687.7	805.3	973.2	975.5	980.6	869.1	738.3	656.7
1937	623.8	606.8	591.3	576.9	575.1	680.6	906.3	1049.3	1117.9	999.7	870.4	758.7
1938	735.2	876.7	1095.8	1192.9	1349.8	1610.7	1912.3	2188.5	2361.7	2270.0	2150.0	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1880.0	1956.5	1878.0	1733.3	1520.9	1286.8	1066.4
1940	935.1	891.5	945.8	1111.3	1437.3	1739.6	1961.8	1993.4	1936.7	1827.3	1631.2	1447.1
1941	1360.0	1340.9	1479.9	1700.4	1950.2	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2189.2	2358.4	2447.0	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2278.3	2243.5	2258.5	2153.7	2034.5	1843.7
1944	1740.7	1750.6	1744.8	1681.1	1724.1	1791.9	1829.4	1883.8	1805.2	1588.7	1377.9	1203.7
1945	1110.5	1113.0	1178.1	1231.8	1397.5	1451.4	1591.6	1627.6	1659.9	1556.2	1361.1	1216.8
1946	1174.1	1229.2	1420.1	1550.8	1606.0	1735.2	1952.9	2041.7	2006.2	1915.0	1708.3	1520.7
1947	1352.6	1346.5	1358.7	1356.2	1416.6	1535.8	1620.7	1529.2	1485.2	1321.4	1142.7	969.2
1948	936.6	923.7	915.5	1098.9	1112.4	1137.7	1316.6	1373.8	1489.0	1403.0	1291.7	1259.6
1949	1251.6	1258.9	1262.7	1255.3	1287.5	1503.2	1760.1	1838.7	1789.5	1684.6	1491.4	1347.8
1950	1255.7	1223.7	1205.1	1222.7	1270.8	1392.4	1547.8	1552.0	1534.0	1350.0	1200.3	1058.7
1951	1121.2	1236.6	1494.3	1584.6	1805.2	1909.2	2082.9	2118.3	2052.5	1944.7	1750.3	1561.4
1952	1400.4	1430.4	1577.2	1636.5	1826.6	1992.9	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2272.8	2342.0	2447.0	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1842.6	1900.0	2000.0	2100.0	2300.0	2317.2	2266.3	2169.8	1982.6	1800.7
1955	1737.5	1787.7	1844.1	1784.5	1778.1	1812.9	1865.0	1862.7	1804.0	1619.3	1427.6	1258.5
1956	1165.3	1149.3	1457.8	1791.4	1928.8	2073.7	2270.5	2420.0	2447.0	2270.0	2150.0	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2167.3	2246.2	2305.3	2200.3	2005.1	1821.8
1958	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	1999.0	2126.8	2082.6	2017.9	1796.0	1565.9	1349.0
1960	1256.3	1218.2	1197.4	1196.3	1330.2	1509.0	1622.8	1630.5	1683.9	1504.5	1311.0	1137.4
1961	1047.6	1027.4	1107.3	1138.5	1361.5	1489.5	1633.8	1675.8	1751.6	1652.8	1455.0	1282.2
1962	1188.8	1167.8	1190.3	1194.5	1328.9	1405.3	1618.5	1612.1	1630.3	1529.0	1343.7	1201.8
1963	1307.3	1359.0	1532.8	1573.7	1868.5	1947.0	2209.8	2343.9	2391.5	2270.0	2146.1	1975.0
1964	1850.0	1850.0	1840.6	1900.0	1888.0	1931.0	1955.6	1852.5	1766.3	1560.5	1358.7	1192.9
1965	1109.8	1116.3	1652.8	1867.2	1958.1	1945.4	2175.2	2193.5	2236.7	2141.9	1959.9	1778.1
1966	1671.4	1759.3	1799.8	1882.2	1950.6	2100.0	2300.0	2382.0	2406.7	2231.4	2010.9	1798.0
1967	1629.2	1636.6	1779.7	1894.8	2000.0	2100.0	2206.4	2420.0	2447.0	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.6	1844.6	2000.0	2100.0	2184.2	2147.7	2070.0	1884.7	1691.9	1492.1
1969	1405.4	1401.2	1460.7	1604.5	1729.6	1891.1	2220.3	2420.0	2447.0	2270.0	2150.0	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2130.7	2132.5	2089.7	1909.3	1694.5	1487.1
1971	1397.5	1511.3	1642.3	1876.9	1921.7	2100.0	2277.3	2420.0	2447.0	2270.0	2150.0	1975.0
1972	1850.0	1849.0	1841.2	1900.0	2000.0	2100.0	2244.5	2254.2	2207.4	2079.2	1868.5	1676.5
1973	1519.5	1559.0	1668.3	1828.9	1983.1	2100.0	2265.5	2407.4	2447.0	2270.0	2069.3	1883.7
1974	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1840.5	1827.4	1924.8	2100.0	2226.0	2420.0	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1782.4	1868.8	1851.2	1758.3	1540.6	1355.6	1214.5
1977	1149.8	1114.8	1098.0	1078.6	1064.8	1060.2	1025.1	974.7	840.1	609.8	496.4	426.2
1978	333.9	358.3	558.1	958.7	1144.0	1430.4	1624.5	1742.6	1923.9	1879.0	1768.5	1609.7
1979	1530.2	1526.8	1522.7	1545.6	1598.9	1747.9	1855.7	1942.1	1953.4	1845.3	1645.1	1458.3
1980	1426.1	1461.4	1531.4	1760.0	2000.0	2083.4	2229.4	2246.0	2209.8	2127.1	1929.6	1740.9
1981	1630.4	1622.6	1638.1	1744.7	1884.2	2010.1	2126.1	2056.6	1952.0	1754.9	1535.3	1325.0
1982	1242.8	1486.3	1817.7	1900.0	2000.0	2100.0	2300.0	2388.6	2395.1	2270.0	2150.0	1975.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2210.1	2276.7	2244.1	2150.2	1959.2	1772.5
1985	1761.6	1850.0	1850.0	1776.5	1805.2	1851.2	2006.2	1926.3	1820.6	1593.1	1375.3	1202.2
1986	1099.1	1063.9	1064.9	1183.9	1668.0	2010.2	2080.7	2069.2	2015.1	1820.3	1624.2	1441.0
1987	1356.1	1320.6	1315.9	1326.0	1411.3	1623.6	1775.8	1684.0	1489.1	1264.8	1035.8	877.7
1988	795.0	780.7	949.9	1019.2	1090.8	1175.2	1263.0	1212.3	1161.3	952.6	773.2	683.2
1989	646.5	682.3	695.4	716.8	742.3	1086.4	1287.1	1251.9	1213.4	1068.8	903.4	796.0
1990	808.8	781.7	772.2	831.3	851.8	937.6	993.7	961.5	929.5	760.3	638.0	552.4
1991	515.5	496.3	478.6	467.8	472.1	550.1	615.3	643.7	634.8	528.2	413.9	331.1
1992	298.6	288.5	284.9	292.3	431.8	574.2	810.1	803.7	743.3	639.9	520.2	434.1
1993	402.5	395.6	412.9	468.6	607.2	979.1	1185.2	1476.9	1675.6	1693.2	1582.6	1543.6
AVG:	1242.4	1253.4	1304.9	1361.4	1467.4	1587.3	1738.9	1779.5	1771.9	1626.6	1465.1	1313.5
MIN:	265.2	264.3	262.3	260.3	261.0	378.0	531.7	520.1	591.5	484.3	368.0	283.6
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.4.3-12. Simulated Trinity Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1679.4	1665.8	1662.7	1685.2	1735.2	1833.7	1906.7	1957.3	1845.2	1645.5	1452.4
1923	1367.4	1338.7	1348.4	1374.9	1398.3	1450.1	1564.9	1524.4	1456.4	1258.4	1077.7	965.1
1924	895.0	860.9	845.1	840.6	898.2	904.0	896.9	810.6	683.1	560.9	440.0	353.3
1925	330.7	400.1	441.9	451.3	716.4	851.5	1143.9	1233.0	1240.1	1085.5	925.2	824.0
1926	752.2	746.5	765.0	766.1	910.2	1012.6	1231.3	1135.5	1065.2	901.0	734.4	649.9
1927	623.6	779.3	974.3	1092.1	1329.9	1507.9	1731.1	1831.5	1961.8	1880.2	1766.3	1580.0
1928	1474.1	1532.0	1550.1	1606.8	1716.4	1922.9	2065.8	2075.0	1978.7	1864.9	1650.9	1461.4
1929	1368.0	1343.3	1334.8	1231.4	1247.5	1307.6	1326.4	1358.5	1274.7	1100.3	872.2	741.5
1930	709.5	692.4	820.1	836.5	935.2	1060.6	1161.0	1073.4	1020.1	860.5	695.1	611.9
1931	580.3	566.3	556.8	565.7	584.7	648.7	697.1	666.1	635.8	519.7	399.9	314.6
1932	283.6	276.8	279.8	292.2	313.8	466.2	555.9	579.7	591.2	484.0	367.7	283.3
1933	265.7	264.0	262.0	260.0	260.7	377.7	531.4	519.8	638.7	548.4	433.5	352.2
1934	319.8	306.0	309.1	370.7	460.6	617.5	726.0	709.9	628.1	512.5	393.7	309.3
1935	283.4	347.9	379.0	414.1	498.3	559.0	772.6	809.8	814.2	645.6	528.2	445.4
1936	416.3	405.6	402.5	510.0	644.8	762.4	936.3	938.8	973.7	862.3	731.5	650.0
1937	617.1	600.0	584.6	570.2	568.4	673.8	899.6	1042.6	1111.3	993.1	863.8	752.1
1938	728.6	870.1	1089.3	1186.3	1343.3	1604.2	1905.8	2181.9	2355.2	2270.0	2150.0	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1876.0	1952.5	1879.4	1742.6	1530.2	1296.1	1075.6
1940	953.1	912.3	966.6	1132.1	1458.1	1760.3	1982.6	2014.0	1957.3	1847.9	1651.7	1467.5
1941	1380.4	1361.3	1500.2	1720.7	1970.6	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2189.2	2358.4	2447.0	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2278.3	2243.5	2258.5	2153.7	2034.5	1843.7
1944	1740.7	1750.6	1744.8	1680.2	1723.2	1791.1	1828.5	1882.9	1804.4	1587.9	1377.1	1202.8
1945	1109.7	1112.2	1177.3	1231.0	1396.7	1450.6	1590.8	1626.8	1659.1	1555.4	1360.3	1215.9
1946	1173.3	1228.4	1419.3	1550.0	1605.2	1734.3	1952.1	2040.9	2005.4	1837.5	1644.4	1456.9
1947	1365.8	1359.6	1371.8	1369.3	1429.7	1549.0	1633.8	1542.2	1498.2	1326.1	1147.4	973.9
1948	941.3	928.3	920.2	1103.6	1117.1	1142.4	1321.3	1378.4	1536.1	1449.8	1338.3	1312.9
1949	1304.8	1312.1	1315.9	1308.5	1340.6	1556.3	1813.1	1891.5	1842.2	1737.1	1543.7	1355.4
1950	1263.3	1231.3	1212.7	1230.3	1278.4	1400.0	1555.4	1559.5	1541.5	1434.2	1284.1	1142.2
1951	1173.9	1289.2	1546.9	1637.2	1857.8	1961.8	2135.4	2170.7	2104.7	1996.8	1802.1	1613.1
1952	1452.1	1481.0	1627.7	1687.0	1877.2	2043.4	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2272.8	2342.0	2447.0	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1842.6	1900.0	2000.0	2100.0	2300.0	2317.2	2266.3	2169.8	1982.6	1800.7
1955	1736.0	1786.3	1842.7	1784.0	1778.2	1813.0	1865.0	1862.7	1804.1	1619.4	1427.7	1258.5
1956	1165.4	1149.4	1457.9	1791.4	1928.8	2073.8	2270.6	2420.0	2447.0	2270.0	2150.0	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2167.2	2246.2	2305.2	2200.3	2005.1	1821.8
1958	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	2000.4	2128.5	2084.3	2019.6	1797.7	1567.5	1350.7
1960	1258.0	1219.8	1199.1	1198.0	1331.9	1510.7	1624.5	1632.2	1685.6	1506.2	1312.6	1139.0
1961	1049.3	1029.0	1124.3	1155.5	1378.5	1506.5	1650.8	1692.7	1768.4	1669.6	1466.5	1293.7
1962	1200.3	1179.3	1201.8	1205.9	1340.3	1416.7	1629.9	1623.4	1641.6	1540.3	1354.9	1213.0
1963	1318.5	1370.1	1544.0	1584.8	1879.6	1958.2	2221.0	2355.0	2402.6	2270.0	2146.1	1975.0
1964	1850.0	1850.0	1840.6	1900.0	1888.1	1931.1	1955.7	1852.5	1766.3	1563.3	1361.5	1195.8
1965	1112.6	1119.1	1655.6	1870.0	1961.0	1945.7	2175.5	2193.8	2237.0	2142.3	1960.3	1778.5
1966	1671.8	1759.7	1800.2	1882.6	1951.0	2100.0	2300.0	2382.0	2406.7	2231.4	2010.9	1798.0
1967	1629.6	1637.0	1780.1	1895.2	2000.0	2100.0	2206.4	2420.0	2447.0	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.7	1844.6	2000.0	2100.0	2185.7	2149.1	2071.4	1886.1	1693.4	1493.6
1969	1406.9	1402.7	1462.1	1606.0	1731.1	1892.5	2221.7	2420.0	2447.0	2270.0	2150.0	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2130.7	2132.5	2089.7	1909.3	1694.5	1487.1
1971	1397.5	1509.9	1640.8	1875.4	1921.4	2100.0	2277.3	2420.0	2447.0	2270.0	2150.0	1975.0
1972	1850.0	1849.0	1841.2	1900.0	2000.0	2100.0	2244.5	2254.2	2207.4	2023.1	1821.2	1629.3
1973	1472.3	1511.8	1621.1	1781.7	1935.9	2061.4	2253.3	2400.6	2447.0	2270.0	2069.3	1883.7
1974	1841.7	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1840.5	1827.4	1924.8	2100.0	2226.0	2420.0	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1782.4	1868.8	1851.2	1758.3	1540.6	1355.6	1214.5
1977	1149.8	1114.8	1098.0	1087.9	1082.4	1077.7	1042.7	992.3	858.8	628.3	505.3	435.0
1978	399.5	423.9	623.6	1024.2	1209.5	1495.8	1689.7	1807.7	1988.8	1943.7	1832.9	1673.9
1979	1594.4	1591.0	1586.9	1609.7	1663.0	1812.0	1919.7	2005.9	2017.0	1908.7	1708.3	1521.3
1980	1442.9	1508.0	1577.9	1806.6	2000.0	2083.4	2229.4	2246.0	2209.8	2127.1	1929.6	1740.9
1981	1630.4	1622.6	1638.1	1744.7	1884.2	2010.1	2126.1	2056.6	1952.0	1754.9	1535.3	1325.0
1982	1242.8	1486.3	1817.7	1900.0	2000.0	2100.0	2300.0	2388.6	2395.1	2270.0	2150.0	1975.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2210.1	2276.7	2244.1	2150.2	1959.2	1772.5
1985	1761.6	1850.0	1850.0	1776.5	1805.2	1853.6	2008.6	1928.6	1822.9	1595.4	1376.2	1203.1
1986	1100.0	1064.8	1065.8	1184.8	1668.9	2011.1	2080.9	2069.4	2015.4	1820.7	1624.5	1441.3
1987	1356.5	1321.0	1316.3	1326.3	1411.6	1624.0	1776.2	1684.4	1491.8	1267.4	1038.4	882.3
1988	799.5	785.2	954.4	1023.7	1095.3	1179.7	1267.5	1216.8	1170.0	961.2	781.8	691.7
1989	655.1	690.8	704.0	725.4	750.9	1094.9	1295.6	1260.4	1221.9	1075.7	910.2	802.8
1990	784.9	781.6	772.1	831.2	851.7	937.5	993.6	961.4	929.4	760.2	637.9	552.3
1991	515.4	496.2	478.5	467.7	472.0	550.0	615.2	643.6	634.7	528.1	413.8	331.1
1992	298.5	288.4	284.8	292.2	431.7	574.1	810.0	803.6	746.6	643.1	523.4	437.3
1993	405.7	398.8	416.1	471.8	610.4	982.3	1188.3	1480.1	1678.8	1696.4	1585.7	1559.4
AVG:	1245.2	1257.2	1308.9	1365.7	1471.1	1590.9	1742.3	1783.0	1777.1	1630.0	1468.0	1316.1
MIN:	265.7	264.0	262.0	260.0	260.7	377.7	531.4	519.8	591.2	484.0	367.7	283.3
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.4.3-13. Simulated Trinity Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	-0.5
1924	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-3.1	-2.9	-4.9	-4.8	-4.8	-4.8
1925	-4.8	-4.8	-4.8	-4.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
1926	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
1927	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
1928	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-5.7	-5.7
1929	-5.7	-5.7	-5.7	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	43.5	43.3
1930	43.2	43.2	43.2	34.0	34.0	33.9	33.8	33.7	33.6	33.4	33.2	33.1
1931	33.1	33.1	33.0	33.0	33.0	26.8	26.7	26.6	9.5	9.4	9.4	9.3
1932	9.3	1.6	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
1933	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
1934	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.7	-11.5	-11.4	-11.3	-11.3
1935	-20.7	-20.7	-20.7	-20.7	-20.7	-20.7	-20.6	-20.6	-20.5	41.0	40.8	40.6
1936	40.5	40.5	40.5	40.5	40.5	40.4	34.4	34.2	4.4	4.4	4.3	4.3
1937	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2
1938	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	4.3	4.3	-1.6	-11.7	-11.7	-11.6	-11.6
1940	-22.2	-24.9	-24.9	-24.9	-24.9	-24.9	-24.8	-24.8	-24.7	-24.6	-24.5	-24.5
1941	-24.4	-24.4	-24.4	-24.4	-24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
1945	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
1946	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-2.6	-2.6
1947	-2.6	-2.6	-11.8	-11.8	-11.8	-11.8	-11.8	-11.7	-11.7	-10.7	-10.7	-10.6
1948	-10.6	-10.6	-10.6	-10.6	-10.6	-10.6	-10.6	-10.6	-10.5	-10.5	-10.4	-22.4
1949	-22.4	-22.3	-22.3	-22.3	-22.3	-22.3	-22.3	-22.2	-22.1	-22.1	-22.0	22.6
1950	22.6	22.6	22.6	22.6	14.3	14.2	14.2	14.2	14.1	-62.6	-62.4	-62.1
1951	-31.3	-31.3	-31.3	-31.3	-31.3	-31.3	-31.2	-31.1	-31.1	-31.0	-30.8	-30.8
1952	-30.7	-30.8	-30.8	-30.8	-30.7	-30.7	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0
1955	-16.2	-16.2	-5.9	-1.9	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6
1956	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-0.4	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-1.5	-1.7	-1.8	-1.8	-1.8	-1.8	-1.8
1960	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7
1961	-1.7	-1.7	-17.1	-17.1	-17.1	-17.1	-17.1	-17.0	-17.0	-16.9	-12.7	-12.6
1962	-12.6	-12.6	-12.6	-12.6	-12.6	-12.6	-12.6	-12.5	-12.5	-12.5	-12.4	-12.4
1963	-12.4	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.4	-4.4	-4.4
1965	-4.4	-4.4	-4.4	-4.4	-4.4	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7
1966	-1.7	-1.7	-1.7	-1.7	-1.7	0.0	0.0	0.0	0.0	-3.3	-3.3	-3.3
1967	-2.3	-2.3	-2.3	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-0.2	-0.2	0.0	0.0	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7
1969	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1971	-0.3	-8.8	-8.8	-8.8	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-9.6	-9.3	-9.2
1973	-9.2	-9.2	-9.2	-9.2	-9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.2	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	4.6	4.6	4.6	4.6	4.5	4.5	4.5
1977	4.5	4.5	4.5	4.5	-3.8	-3.8	-12.2	-12.1	-14.5	-14.4	-7.5	-7.5
1978	-63.5	-63.5	-63.5	-63.4	-63.4	-63.3	-63.2	-63.1	-62.9	-62.6	-62.4	-62.3
1979	-63.5	-63.5	-63.5	-63.5	-63.4	-63.4	-63.3	-63.1	-62.9	-62.7	-62.5	-62.3
1980	-16.2	-45.9	-45.9	-45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.3	-15.3
1982	-15.3	-15.3	-15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-4.9	-4.9	-4.9	-4.9	-4.8	-4.6	-4.6
1986	-4.6	10.3	10.3	10.3	10.3	10.3	2.6	2.6	2.6	4.4	4.8	4.8
1987	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.9	0.8	0.8	-3.9
1988	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-9.2	-9.1	-9.1	-9.0
1989	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-8.9	-8.9	-8.6	-8.5	-8.5
1990	22.2	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-16.9	-16.8	-16.7
1991	-16.7	-16.7	-16.7	-16.7	-16.7	-16.6	-16.6	-16.5	-16.5	-16.4	-16.3	-16.2
1992	-16.2	-10.2	-10.2	-10.2	-10.2	-10.2	-10.2	-10.1	-11.6	-10.6	-10.6	-10.5
1993	-10.5	-10.5	-10.5	-10.5	-10.5	-10.5	-10.5	-10.4	-10.4	-10.3	-10.3	-10.6
AVG:	-3.8	-4.5	-4.8	-4.6	-4.0	-3.5	-3.4	-3.5	-4.6	-5.1	-4.6	-4.2
MIN:	-63.5	-63.5	-63.5	-63.5	-63.4	-63.4	-63.3	-63.1	-62.9	-62.7	-62.5	-62.3
MAX:	43.2	43.2	43.2	40.5	40.5	40.4	34.4	34.2	33.6	41.0	43.5	43.3

Table 3.4.3-14. Simulated Trinity Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-1.1
1924	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-2.3	-2.3	-2.6	-2.6	-2.6	-2.6
1925	-2.6	-2.6	-2.6	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
1926	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
1927	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1928	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-5.1	-5.1
1929	-5.1	-5.1	-5.1	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1930	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1931	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
1932	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
1933	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0
1934	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-2.6	-2.6	-2.6	-2.6
1935	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.5
1936	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.4
1937	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
1938	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.3	0.3	-0.2	-2.4	-2.4	-2.4	-2.3
1940	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1
1941	-4.1	-4.1	-4.1	-4.1	-4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3
1945	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.2	-2.2
1946	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-78.9	-66.5	-66.4
1947	10.5	10.5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	-6.0	-6.0	-6.0
1948	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	36.5	36.3	36.2	30.9
1949	30.9	30.8	30.8	30.8	30.8	30.8	30.7	30.7	30.6	30.5	30.4	30.3
1950	30.2	30.2	30.2	30.2	21.8	21.8	21.8	21.7	21.6	21.5	21.4	21.4
1951	21.3	21.3	21.3	21.3	21.3	21.3	21.2	21.2	21.1	21.1	21.0	20.9
1952	20.9	19.8	19.8	19.8	19.8	19.8	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0
1955	-17.6	-17.6	-7.3	-2.3	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
1956	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-0.4	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
1960	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
1961	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-1.2	-1.2
1962	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1963	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	-1.6	-1.6	-1.6
1965	-1.6	-1.6	-1.6	-1.6	-1.6	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
1966	-1.3	-1.3	-1.3	-1.3	-1.3	0.0	0.0	0.0	0.0	-3.2	-3.2	-3.2
1967	-1.9	-1.9	-1.9	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-0.2	-0.2	0.0	0.0	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
1969	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1971	-0.3	-10.2	-10.2	-10.2	-2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-65.8	-56.6	-56.5
1973	-56.4	-56.4	-56.4	-56.4	-56.4	-38.6	-12.1	-6.8	0.0	0.0	0.0	0.0
1974	-8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.2	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	4.6	4.6	4.6	4.6	4.5	4.5	4.5
1977	4.5	4.5	4.5	13.7	13.7	13.7	5.5	5.4	4.2	4.2	1.4	1.4
1978	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
1979	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
1980	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.3	-15.3
1982	-15.3	-15.3	-15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-2.5	-2.5	-2.5	-2.5	-2.5	-3.7	-3.7
1986	-3.7	11.2	11.2	11.2	11.2	11.2	2.8	2.8	2.8	4.8	5.1	5.1
1987	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	3.6	3.5	3.5	0.6
1988	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-0.5	-0.4	-0.4	-0.4
1989	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-1.7	-1.7	-1.7
1990	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-17.0	-16.9	-16.8
1991	-16.8	-16.8	-16.8	-16.8	-16.8	-16.7	-16.7	-16.6	-16.6	-16.5	-16.4	-16.3
1992	-16.3	-10.3	-10.3	-10.3	-10.3	-10.3	-10.3	-10.2	-8.4	-7.4	-7.4	-7.3
1993	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.2	-7.2	-7.2	-7.2	5.2
AVG:	-1.0	-0.8	-0.7	-0.3	-0.3	0.1	0.0	0.0	0.6	-1.7	-1.7	-1.6
MIN:	-56.4	-56.4	-56.4	-56.4	-56.4	-38.6	-16.7	-16.6	-16.6	-78.9	-66.5	-66.4
MAX:	30.9	30.8	30.8	30.8	30.8	30.8	30.7	30.7	36.5	36.3	36.2	30.9

Table 3.4.3-15. Simulated Whiskeytown Storage (TAF), Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	206.0	206.0	206.0	217.0	225.8	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	206.0	205.4	212.2	208.2	227.5	240.0	240.0	235.0
1932	217.0	206.0	203.5	206.0	206.0	217.0	216.1	224.7	240.0	240.0	240.0	235.0
1933	217.0	206.0	203.6	203.4	205.6	217.0	233.2	239.0	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	228.0	228.3	240.0	240.0	240.0	235.0
1935	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1936	217.0	206.0	206.0	206.0	206.0	205.4	221.4	230.7	240.0	240.0	240.0	235.0
1937	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	180.0	186.5	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	214.8	216.9	240.0	240.0	240.0	240.0	235.0
1991	216.9	206.0	206.0	206.0	206.0	217.0	226.6	224.4	236.7	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	216.5	205.7	205.9	205.6	206.5	216.6	238.1	238.8	239.8	240.0	240.0	235.0
MIN:	180.0	186.5	203.5	180.0	205.6	205.4	212.2	208.2	227.5	240.0	240.0	235.0
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.4.3-16 Simulated Whiskeytown Storage (TAF), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	206.0	206.0	206.0	217.0	228.4	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	206.0	211.5	218.4	214.2	240.0	240.0	240.0	214.2
1932	190.8	180.0	180.0	185.0	191.1	213.6	212.7	221.3	237.3	240.0	240.0	235.0
1933	217.0	206.0	203.6	203.4	203.3	217.0	233.2	239.0	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	228.0	228.3	240.0	240.0	240.0	190.2
1935	180.0	190.5	200.2	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1936	217.0	206.0	206.0	206.0	206.0	205.4	227.3	236.6	240.0	240.0	240.0	235.0
1937	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	180.0	186.5	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	214.8	216.9	240.0	240.0	240.0	240.0	235.0
1991	216.9	206.0	206.0	206.0	206.0	217.0	226.6	224.4	236.7	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	215.6	205.2	205.5	205.3	206.2	216.7	238.2	238.9	239.9	240.0	240.0	234.1
MIN:	180.0	180.0	180.0	180.0	191.1	205.4	212.7	214.2	236.7	240.0	240.0	190.2
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.4.3-17 Simulated Whiskeytown Storage (TAF), Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	206.0	206.0	206.0	217.0	227.0	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	206.0	205.4	212.2	208.2	227.5	240.0	240.0	235.0
1932	217.0	206.0	203.5	206.0	206.0	217.0	216.1	224.7	240.0	240.0	240.0	235.0
1933	217.0	206.0	203.6	203.4	205.1	217.0	233.2	239.0	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	228.0	228.3	240.0	240.0	240.0	235.0
1935	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1936	217.0	206.0	206.0	206.0	206.0	205.4	221.4	230.7	240.0	240.0	240.0	235.0
1937	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	180.0	186.5	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	214.8	216.9	240.0	240.0	240.0	240.0	235.0
1991	216.9	206.0	206.0	206.0	206.0	217.0	226.6	224.4	236.7	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	216.5	205.7	205.9	205.6	206.5	216.6	238.1	238.8	239.8	240.0	240.0	235.0
MIN:	180.0	186.5	203.5	180.0	205.1	205.4	212.2	208.2	227.5	240.0	240.0	235.0
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.4.3-18. Simulated Whiskeytown Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	6.1	6.1	6.1	12.5	0.0	0.0	-20.8
1932	-26.2	-26.0	-23.5	-21.0	-14.9	-3.4	-3.4	-3.4	-2.7	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-44.8
1935	-37.0	-15.5	-5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	-0.9	-0.6	-0.4	-0.3	-0.2	0.0	0.2	0.1	0.1	0.0	0.0	-0.9
MIN:	-37.0	-26.0	-23.5	-21.0	-14.9	-3.4	-3.4	-3.4	-2.7	0.0	0.0	-44.8
MAX:	0.0	0.0	0.0	0.0	0.0	6.1	6.1	6.1	12.5	0.0	0.0	0.0

Table 3.4.3-19. Simulated Whiskeytown Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MIN:	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0

The following figures and tables illustrate results for Shasta Reservoir on the CVP system.

Figure 3.4.3-11 Exceedence for Simulated Shasta Reservoir End-of-September Storage, 2001 LOD

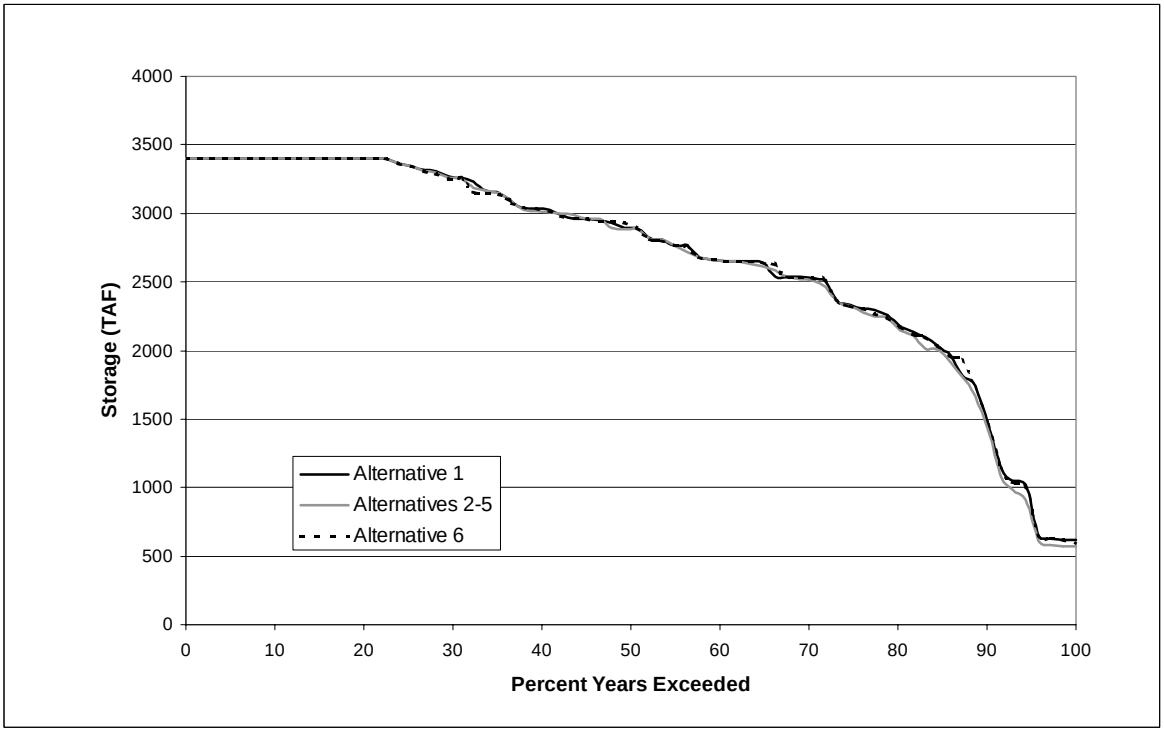


Figure 3.4.3-12. Simulated Shasta Reservoir End-of-September Storage, 2001 LOD

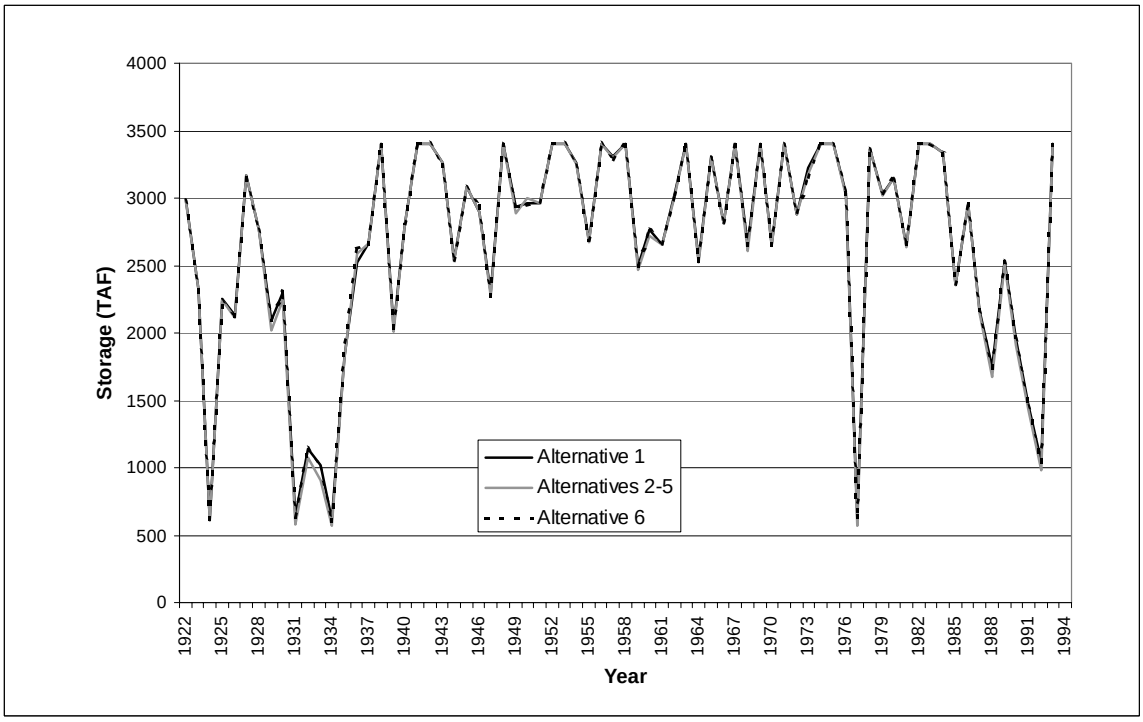


Figure 3.4.3-13. Simulated Shasta Reservoir Drought Period Storage, 2001 LOD (WY 1928-1934)

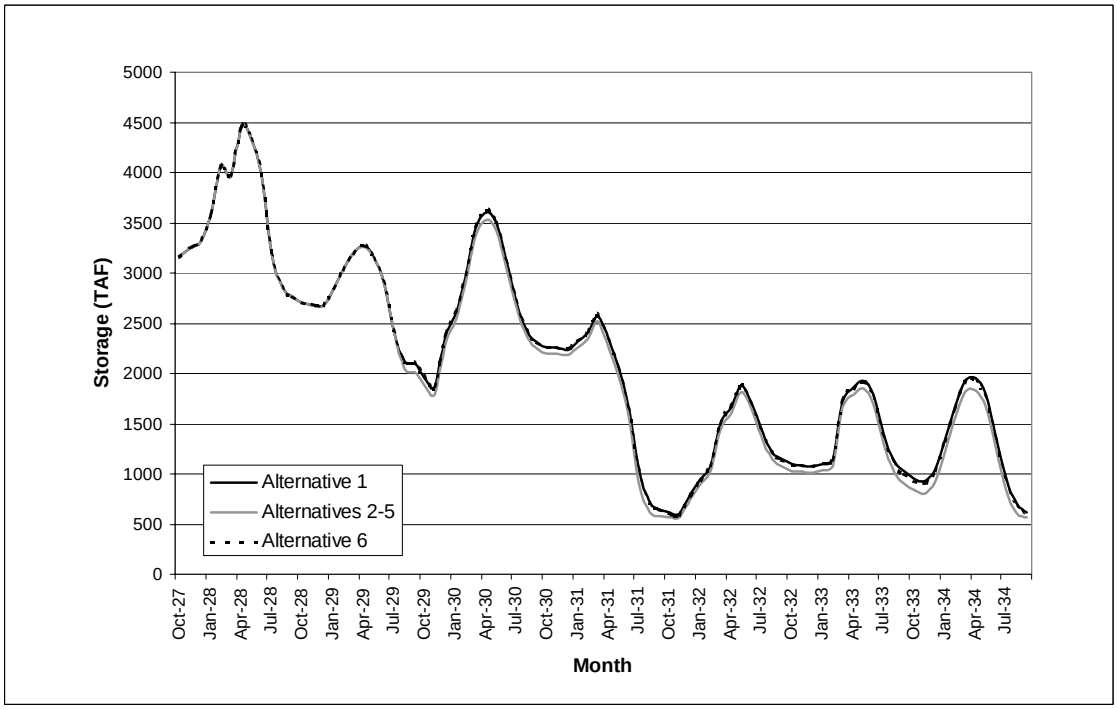


Figure 3.4.3-14. Simulated Shasta Reservoir Drought Period Storage, 2001 LOD (WY 1987-1992),

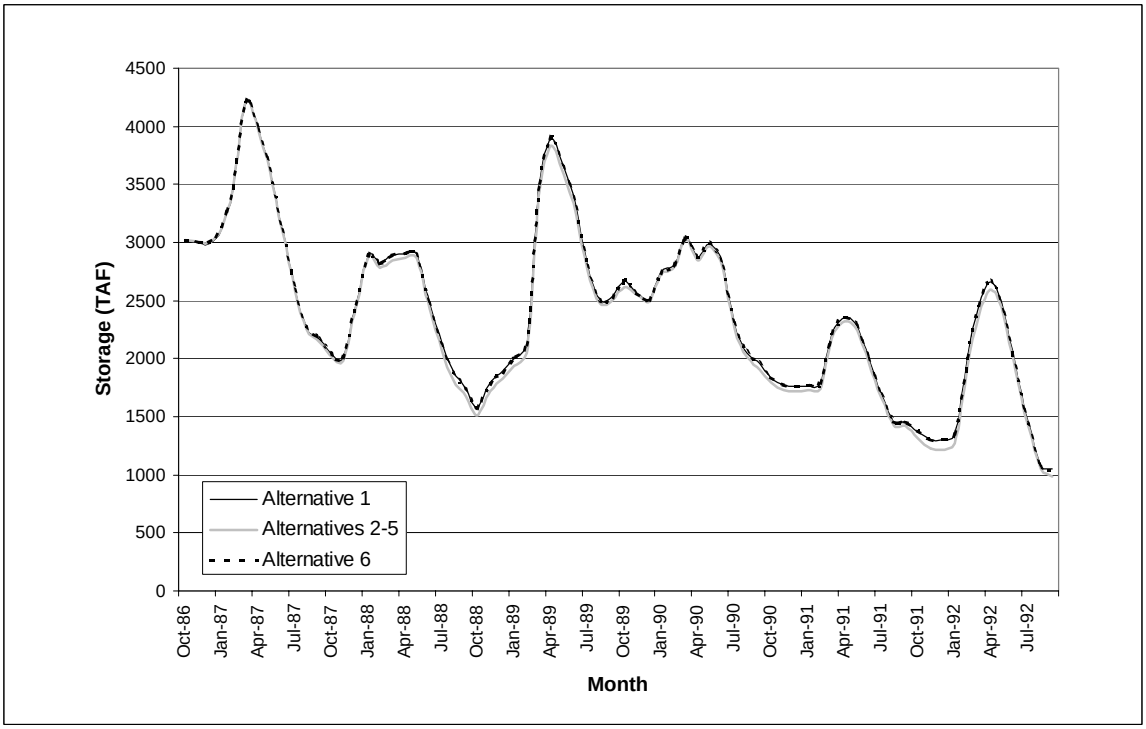


Table 3.4.3-20. Simulated Shasta Storage (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2805.9	2885.7	2986.3	3090.7	3450.4	3832.0	4306.9	4436.1	4101.4	3471.2	3108.6	2988.8
1923	3018.2	3105.2	3236.1	3434.9	3562.6	3691.1	3994.8	3689.4	3318.0	2793.1	2414.6	2330.6
1924	2314.5	2261.9	2217.7	2229.0	2379.8	2381.7	2127.3	1798.3	1409.9	961.5	709.8	620.1
1925	628.8	784.7	885.5	1081.6	2325.3	2546.5	3204.8	3270.4	3014.8	2666.5	2357.1	2253.2
1926	2243.5	2241.2	2240.2	2282.8	3003.5	3205.5	3493.3	3337.4	2974.0	2527.7	2247.7	2135.0
1927	2133.0	2616.4	3125.5	3664.3	3462.0	4093.8	4552.0	4552.0	4264.4	3673.8	3263.2	3166.8
1928	3174.5	3252.0	3327.1	3592.3	4058.0	3965.0	4463.1	4320.3	3969.1	3200.0	2853.0	2762.2
1929	2703.2	2684.0	2680.7	2843.2	3038.2	3203.6	3268.3	3152.4	2905.8	2421.5	2112.2	2097.8
1930	1955.6	1861.9	2385.1	2592.6	2967.8	3445.9	3605.3	3494.1	3121.7	2721.6	2412.7	2303.3
1931	2257.2	2253.3	2239.9	2316.5	2403.4	2573.6	2333.3	2052.7	1658.2	1064.6	718.7	642.6
1932	614.2	601.1	800.1	944.6	1074.1	1495.8	1669.1	1880.0	1712.2	1452.1	1215.5	1143.7
1933	1093.4	1084.6	1072.6	1104.5	1141.5	1734.2	1869.8	1930.6	1786.9	1405.3	1119.5	1018.9
1934	952.3	921.6	1051.0	1345.5	1670.6	1930.5	1950.7	1788.0	1376.5	978.0	706.2	617.9
1935	601.9	732.3	778.8	1081.8	1410.3	1798.9	2794.3	3005.0	2676.5	2354.2	1976.6	1820.7
1936	1779.2	1723.5	1733.4	2367.1	3254.4	3614.3	3839.3	3719.0	3495.7	3080.4	2690.4	2527.2
1937	2418.3	2333.7	2256.3	2237.6	2336.1	2983.8	3640.9	3780.9	3613.9	3200.0	2818.7	2662.1
1938	2609.2	3168.0	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4055.7	3700.0	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4089.9	3883.4	3577.7	3092.4	2514.7	2061.1	2034.2
1940	2043.0	1982.4	2142.0	3031.4	3252.0	3435.0	4161.3	4115.2	3803.3	3224.8	2878.7	2813.9
1941	2830.1	2851.7	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4500.0	4097.8	3700.0	3400.0
1942	3250.0	3252.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4269.6	3734.8	3341.5	3261.2
1944	3233.4	3217.3	3205.4	3346.7	3653.0	3963.5	3911.9	3766.8	3489.5	2989.8	2639.7	2541.3
1945	2518.4	2730.7	3045.6	3236.5	3948.0	4241.8	4411.2	4420.4	4143.5	3563.8	3216.4	3080.9
1946	3128.3	3252.0	3265.0	3622.0	3602.5	3998.5	4189.4	4125.9	3808.2	3289.4	2962.7	2898.7
1947	2931.3	3001.7	3085.2	3092.2	3352.0	3875.0	4012.2	3648.3	3389.5	2808.8	2396.0	2298.3
1948	2353.2	2427.2	2406.6	2958.4	2742.7	3086.0	3994.9	4371.9	4390.2	4001.6	3624.3	3400.0
1949	3250.0	3173.2	3174.5	3179.5	3383.5	4071.0	4400.6	4362.4	4016.2	3356.2	3009.7	2932.1
1950	2845.1	2774.8	2722.4	3001.4	3409.1	3857.8	4189.8	4120.2	3830.2	3344.8	3014.4	2960.4
1951	3232.3	3252.0	3322.0	3624.0	3794.0	4236.5	4323.3	4342.6	4004.9	3355.4	3014.2	2958.1
1952	3073.8	3252.0	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4500.0	4150.0	3700.0	3400.0
1953	3250.0	3243.7	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	4040.6	3700.0	3400.0
1954	3250.0	3252.0	3338.4	3552.0	3661.0	4106.0	4546.0	4376.4	4196.1	3472.6	3253.7	3265.3
1955	3250.0	3218.8	3360.0	3564.2	3688.3	3856.8	3905.2	3981.7	3603.2	3051.4	2696.8	2681.4
1956	2665.0	2686.3	3252.0	3252.0	3288.0	3966.9	4466.8	4552.0	4492.7	4150.0	3700.0	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4163.7	4439.5	4178.2	3575.4	3227.3	3311.5
1958	3250.0	3252.0	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4150.0	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4066.4	4112.3	3918.7	3280.2	2752.7	2362.9	2500.0
1960	2447.5	2205.0	2193.5	2395.7	3121.5	3818.6	3976.6	3980.5	3688.8	3141.3	2787.2	2762.9
1961	2750.6	2902.3	3350.0	3562.9	3914.0	4280.0	4321.5	4298.3	3917.2	3200.0	2697.8	2650.3
1962	2553.2	2444.0	2732.5	2850.1	3675.0	4205.7	4481.6	4390.3	4057.5	3429.7	3095.1	3024.2
1963	3250.0	3252.0	3349.0	3514.4	3944.0	3977.9	4137.0	4446.5	4203.6	3733.7	3428.2	3400.0
1964	3250.0	3252.0	3333.4	3705.0	3923.0	4074.0	3889.9	3679.0	3471.2	2936.3	2572.9	2537.8
1965	2527.0	2683.4	3252.0	3368.0	3789.1	3921.0	4500.0	4440.3	4132.6	3530.7	3317.8	3305.5
1966	3204.6	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4418.3	3749.7	3200.0	2831.5	2815.9
1967	2762.9	3194.0	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3214.9	3317.3	3613.7	3654.0	4248.0	4259.4	4144.7	3627.8	3062.0	2754.7	2650.6
1969	2685.5	2715.5	3026.6	3358.0	3480.0	4030.0	4434.0	4552.0	4500.0	4083.1	3700.0	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4056.6	3930.6	3683.7	2923.3	2655.2	2651.3
1971	2749.5	3252.0	3319.0	3515.0	3686.9	3873.0	4363.6	4552.0	4500.0	4102.7	3700.0	3400.0
1972	3250.0	3197.8	3335.4	3714.0	3979.0	4249.0	4419.4	4307.8	3808.0	3200.0	2853.0	2882.2
1973	3066.2	3252.0	3346.0	3552.0	3636.0	4162.0	4450.8	4461.1	4078.2	3530.6	3271.4	3227.4
1974	3250.0	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4552.0	4500.0	4150.0	3700.0	3400.0
1975	3250.0	3213.0	3339.4	3512.6	3936.0	3756.0	4343.2	4552.0	4500.0	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3723.9	3951.0	4025.0	3826.5	3427.0	3069.4	3006.8	3038.3
1977	3011.6	3076.5	2996.9	3015.9	2991.9	2972.4	2558.8	2397.8	1868.2	1067.7	650.0	624.0
1978	550.0	555.3	998.0	2914.5	3567.0	4000.0	4552.0	4552.0	4233.1	3635.8	3298.8	3366.4
1979	3250.0	3235.2	3222.0	3380.8	3740.1	4255.6	4443.0	4469.1	3891.3	3262.7	3044.2	3032.7
1980	3127.6	3252.0	3367.0	3528.0	3292.0	4047.0	4345.2	4283.2	3985.3	3415.4	3140.0	3148.5
1981	3167.6	3129.4	3251.5	3559.6	3975.4	4256.0	4399.6	4163.9	3589.5	3000.3	2645.9	2643.9
1982	2698.5	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4327.9	4251.7	3931.0	3672.4	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4345.8	4311.1	4081.3	3474.5	3299.6	3340.5
1985	3250.0	3252.0	3360.0	3558.7	3749.9	3966.6	4063.7	3707.3	3229.9	2726.7	2383.2	2358.4
1986	2353.5	2409.7	2565.9	3143.4	3252.0	3534.0	3901.5	3854.4	3492.7	3171.4	2867.3	2954.6
1987	3022.0	3005.1	2994.3	3122.0	3462.2	4197.9	3973.0	3637.4	3110.2	2593.4	2271.3	2168.9
1988	2033.4	2001.6	2458.1	2895.2	2819.5	2894.5	2906.6	2904.0	2489.0	2134.0	1894.5	1744.8
1989	1580.4	1791.9	1893.6	2004.7	2119.2	3507.0	3901.2	3662.1	3310.3	2806.3	2510.4	2536.6
1990	2673.7	2566.2	2509.9	2746.4	2799.4	3044.0	2869.9	2988.0	2800.9	2298.3	2048.1	1957.8
1991	1833.0	1771.3	1757.8	1766.5	1781.0	2211.2	2353.1	2279.1	2000.6	1693.0	1441.6	1453.8
1992	1373.6	1304.9	1300.2	1346.2	2003.3	2449.8	2665.3	2398.9	1939.2	1458.8	1076.4	1047.7
1993	956.5	881.1	1117.9	1772.6	2509.2	3973.4	4552.0	4552.0	4500.0	3807.6	3532.6	3400.0
AVG:	2622.0	2666.8	2786.4	3028.2	3276.9	3636.2	3908.3	3892.8	3610.7	3111.4	2771.8	2671.6
MIN:	550.0	555.3	778.8	944.6	1074.1	1495.8	1669.1	1788.0	1376.5	961.5	650.0	617.9
MAX:	3250.0	3252.0	3367.0	3725.0	4058.0	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.4.3-21. Simulated Shasta Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2805.9	2885.7	2986.3	3090.7	3450.4	3832.0	4306.9	4436.1	4101.4	3467.8	3105.0	2985.3
1923	3015.0	3102.0	3232.8	3431.7	3559.4	3687.8	3991.6	3686.3	3314.9	2789.2	2410.7	2326.7
1924	2310.6	2258.1	2213.9	2225.1	2376.0	2370.4	2115.7	1789.4	1391.6	939.6	688.2	607.6
1925	616.3	772.3	873.1	1069.4	2307.6	2531.2	3189.8	3256.6	3001.9	2653.7	2344.3	2240.5
1926	2230.8	2228.5	2227.5	2270.1	2990.8	3192.9	3480.9	3326.0	2955.9	2501.7	2221.7	2109.4
1927	2109.5	2592.9	3102.0	3640.8	3462.0	4093.8	4552.0	4552.0	4264.4	3672.0	3261.4	3165.0
1928	3172.8	3252.0	3327.1	3592.3	4058.0	3965.0	4463.1	4318.9	3967.6	3200.0	2853.0	2761.8
1929	2703.0	2683.0	2679.7	2839.4	3034.4	3199.7	3260.9	3145.2	2905.2	2417.2	2042.7	2016.4
1930	1879.0	1787.8	2311.1	2524.8	2897.2	3372.4	3531.1	3423.0	3051.9	2661.0	2353.5	2244.4
1931	2198.4	2194.6	2181.2	2257.8	2344.9	2515.2	2243.2	1961.0	1562.3	912.5	617.3	582.7
1932	570.8	565.2	756.8	898.7	1022.3	1432.6	1606.0	1817.1	1649.7	1387.3	1150.4	1078.8
1933	1028.7	1020.1	1008.1	1040.1	1079.5	1669.9	1786.9	1846.9	1694.4	1304.7	1011.1	907.2
1934	834.4	801.8	931.3	1225.9	1551.2	1811.3	1832.0	1669.9	1255.4	847.8	606.6	573.3
1935	559.7	661.1	698.1	995.4	1324.0	1712.7	2708.3	2925.2	2628.7	2279.2	1934.9	1809.7
1936	1799.6	1773.9	1783.7	2417.4	3304.7	3664.5	3887.9	3763.5	3574.2	3140.2	2747.8	2584.7
1937	2475.7	2391.2	2313.8	2295.2	2393.6	3041.2	3697.1	3832.5	3664.2	3200.0	2815.2	2659.4
1938	2606.8	3165.5	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4056.0	3700.0	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4085.6	3871.4	3560.8	3078.3	2500.6	2031.1	2006.1
1940	2013.4	1949.3	2109.0	2998.4	3252.0	3435.0	4161.3	4115.2	3803.4	3221.3	2875.1	2810.5
1941	2826.7	2848.4	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4500.0	4096.0	3700.0	3400.0
1942	3250.0	3252.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4269.6	3731.3	3337.8	3257.7
1944	3228.6	3212.4	3200.6	3343.4	3649.7	3960.3	3908.8	3763.8	3486.7	2985.3	2635.4	2537.1
1945	2511.9	2722.9	3036.4	3227.3	3948.0	4249.9	4418.9	4427.5	4150.5	3567.1	3219.4	3084.0
1946	3131.2	3252.0	3265.0	3622.0	3602.6	3998.5	4189.5	4125.9	3808.1	3285.9	2960.1	2896.2
1947	2928.9	2990.8	3073.7	3080.3	3340.1	3863.2	3999.8	3636.8	3374.3	2792.8	2379.8	2272.8
1948	2327.5	2401.6	2386.5	2938.3	2722.4	3065.7	3975.1	4353.7	4373.5	3982.8	3605.4	3400.0
1949	3250.0	3188.5	3189.8	3194.8	3398.8	4071.0	4400.6	4362.4	4016.7	3356.7	3010.3	2888.1
1950	2803.4	2727.9	2675.5	2954.5	3370.6	3819.3	4152.9	4086.5	3797.0	3385.5	3055.0	3001.0
1951	3210.1	3252.0	3322.0	3624.0	3794.0	4236.5	4323.4	4342.6	4004.9	3355.5	3014.2	2958.2
1952	3073.9	3252.0	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4500.0	4150.0	3700.0	3400.0
1953	3250.0	3241.7	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	4040.6	3700.0	3400.0
1954	3250.0	3252.0	3338.5	3552.0	3661.0	4106.0	4546.0	4374.7	4194.3	3467.1	3237.8	3248.9
1955	3250.0	3218.8	3360.0	3560.2	3684.4	3852.9	3899.1	3976.1	3594.5	3043.8	2691.8	2676.7
1956	2659.2	2680.1	3252.0	3252.0	3288.0	3966.9	4465.7	4552.0	4492.7	4150.0	3700.0	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4162.9	4438.8	4177.6	3574.8	3214.9	3300.1
1958	3250.0	3252.0	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4150.0	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4061.8	4107.8	3914.3	3266.3	2736.7	2337.3	2466.8
1960	2409.5	2175.5	2164.0	2366.2	3092.0	3789.1	3947.2	3953.6	3649.8	3098.3	2737.4	2716.3
1961	2704.2	2855.9	3327.1	3540.0	3914.0	4280.0	4320.9	4297.6	3916.2	3200.0	2690.8	2652.3
1962	2578.5	2464.8	2753.3	2870.7	3675.0	4205.7	4481.7	4390.5	4057.8	3422.5	3082.2	3011.2
1963	3250.0	3252.0	3349.0	3514.4	3944.0	3987.4	4137.0	4446.5	4206.2	3721.2	3415.5	3400.0
1964	3250.0	3252.0	3333.4	3705.0	3923.1	4074.1	3890.1	3679.3	3471.5	2930.1	2558.6	2523.4
1965	2518.7	2677.0	3252.0	3368.0	3789.1	3913.9	4500.0	4437.9	4130.1	3528.2	3315.7	3303.3
1966	3202.1	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4418.3	3746.5	3200.0	2828.2	2813.9
1967	2758.3	3188.6	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3213.9	3316.6	3613.0	3654.0	4248.0	4255.1	4140.0	3609.6	3033.9	2714.6	2610.0
1969	2638.3	2673.5	2989.6	3358.0	3480.0	4030.0	4434.0	4552.0	4500.0	4081.2	3700.0	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4055.8	3929.8	3682.9	2919.6	2650.8	2647.0
1971	2741.0	3252.0	3319.0	3515.0	3678.9	3873.0	4360.0	4552.0	4500.0	4099.7	3700.0	3400.0
1972	3250.0	3197.2	3334.7	3714.0	3979.0	4249.0	4416.8	4305.1	3802.7	3200.0	2853.0	2882.4
1973	3066.3	3252.0	3346.0	3552.0	3636.0	4162.0	4450.8	4461.1	4069.3	3444.2	3183.0	3181.7
1974	3250.0	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4552.0	4500.0	4150.0	3700.0	3400.0
1975	3250.0	3212.0	3338.7	3511.9	3936.0	3756.0	4343.2	4552.0	4500.0	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3723.9	3959.5	4027.4	3815.6	3423.0	3053.1	2981.6	3015.3
1977	2987.4	3051.6	2969.2	2988.1	2975.6	2953.4	2539.6	2368.7	1831.9	1026.5	612.4	574.3
1978	550.0	555.0	997.7	2914.3	3567.0	4000.0	4552.0	4552.0	4233.1	3635.8	3298.8	3366.4
1979	3250.0	3240.0	3226.9	3385.7	3744.9	4260.4	4447.6	4473.3	3893.7	3255.8	3032.9	3021.3
1980	3071.1	3225.7	3354.1	3528.0	3292.0	4047.0	4345.2	4283.2	3985.2	3411.8	3136.3	3144.9
1981	3164.3	3126.1	3248.2	3556.3	3972.1	4256.0	4399.6	4163.9	3577.4	2988.3	2640.0	2630.9
1982	2684.0	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4327.9	4251.7	3928.7	3670.1	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4344.8	4310.0	4080.2	3473.4	3298.8	3339.8
1985	3250.0	3252.0	3360.0	3558.7	3749.9	3971.5	4068.6	3712.1	3230.5	2725.1	2379.9	2353.9
1986	2350.2	2391.6	2548.0	3125.5	3252.0	3534.0	3909.2	3862.0	3499.7	3176.1	2871.6	2958.9
1987	3025.9	3009.0	2998.2	3125.9	3466.1	4201.8	3965.5	3622.1	3098.8	2582.1	2252.2	2147.5
1988	2014.7	1983.4	2440.2	2877.6	2782.2	2851.2	2863.9	2863.8	2437.0	2073.2	1822.9	1671.3
1989	1510.0	1721.6	1823.4	1934.5	2049.1	3436.9	3833.4	3596.4	3246.0	2760.2	2473.6	2506.4
1990	2616.2	2549.5	2493.2	2729.8	2784.0	3028.6	2848.3	2968.2	2766.7	2268.0	2017.8	1909.3
1991	1794.8	1731.9	1718.3	1727.1	1745.7	2176.0	2320.7	2246.9	1968.6	1668.4	1422.2	1418.4
1992	1311.3	1223.3	1218.7	1264.8	1922.0	2368.6	2591.6	2356.0	1893.8	1422.1	1046.3	981.1
1993	899.7	836.9	1073.8	1728.5	2465.1	3929.3	4552.0	4552.0	4500.0	3807.6	3532.2	3400.0
AVG:	2607.3	2653.6	2774.0	3016.4	3266.1	3625.1	3896.7	3881.4	3598.6	3095.7	2755.4	2656.1
MIN:	550.0	555.0	698.1	898.7	1022.3	1432.6	1606.0	1669.9	1255.4	847.8	606.6	573.3
MAX:	3250.0	3252.0	3361.3	3725.0	4058.0	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.4.3-22. Simulated Shasta Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2805.9	2885.7	2986.3	3090.7	3450.4	3832.0	4306.9	4436.1	4101.4	3465.2	3102.3	2982.7
1923	3012.6	3099.6	3230.4	3429.2	3557.0	3685.4	3989.3	3684.0	3312.7	2784.7	2406.1	2322.2
1924	2306.2	2253.6	2209.5	2220.7	2371.6	2373.0	2118.7	1791.0	1400.5	949.9	698.3	618.0
1925	626.7	782.6	883.4	1078.3	2322.0	2545.6	3203.9	3269.6	3003.0	2649.5	2340.2	2236.6
1926	2227.1	2224.8	2223.9	2266.6	2987.3	3189.3	3477.5	3322.8	2961.6	2510.4	2230.4	2120.5
1927	2116.6	2600.0	3109.1	3647.9	3462.0	4093.8	4552.0	4552.0	4264.4	3658.6	3247.4	3151.3
1928	3160.0	3252.0	3327.1	3592.3	4058.0	3965.0	4463.1	4332.8	3982.4	3200.0	2853.0	2762.1
1929	2703.2	2685.5	2682.2	2841.4	3036.4	3201.8	3268.5	3153.1	2915.3	2434.4	2117.0	2094.7
1930	1959.6	1870.0	2393.2	2600.7	2975.9	3454.0	3613.1	3501.3	3128.6	2723.2	2413.8	2304.4
1931	2258.3	2254.5	2241.1	2317.6	2404.6	2574.8	2332.3	2051.6	1654.8	1061.0	708.6	638.6
1932	610.2	597.1	796.1	940.6	1070.1	1491.8	1665.2	1876.0	1708.3	1448.3	1211.7	1139.9
1933	1089.6	1080.8	1068.8	1100.7	1138.2	1730.4	1854.4	1914.6	1768.7	1385.4	1098.7	998.4
1934	931.7	901.0	1030.4	1324.9	1650.1	1910.0	1930.4	1768.0	1354.2	953.6	682.8	594.8
1935	579.8	710.2	756.8	1059.8	1388.4	1777.0	2772.5	2984.7	2686.5	2397.0	2051.1	1925.5
1936	1915.1	1889.3	1899.0	2532.6	3419.8	3779.4	3998.9	3865.2	3638.6	3179.2	2784.4	2621.7
1937	2513.0	2428.5	2351.3	2332.7	2431.1	3078.7	3733.7	3866.1	3697.1	3200.0	2813.0	2657.9
1938	2605.4	3164.2	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4045.9	3700.0	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4089.5	3882.0	3575.9	3089.4	2511.7	2055.5	2028.5
1940	2037.5	1976.7	2136.4	3025.8	3252.0	3435.0	4161.3	4115.2	3803.3	3210.2	2863.5	2799.1
1941	2815.4	2837.1	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4500.0	4089.2	3700.0	3400.0
1942	3250.0	3252.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4269.6	3728.5	3334.9	3254.8
1944	3225.8	3209.6	3197.8	3341.5	3647.8	3958.4	3907.0	3762.2	3485.3	2984.2	2634.5	2536.2
1945	2512.3	2723.7	3037.6	3228.5	3948.0	4249.3	4418.3	4426.9	4149.9	3555.8	3207.7	3072.5
1946	3120.5	3252.0	3265.0	3622.0	3588.9	3984.9	4176.5	4113.5	3796.4	3343.2	3003.9	2940.0
1947	2896.1	2961.0	3045.1	3051.8	3311.6	3834.7	3971.7	3609.3	3349.6	2776.4	2364.6	2267.2
1948	2324.0	2398.1	2439.8	2991.5	2789.0	3132.3	4040.4	4414.2	4387.3	3996.4	3619.0	3400.0
1949	3250.0	3160.6	3161.9	3166.9	3370.9	4071.0	4400.6	4362.4	4015.9	3356.0	3009.4	2931.8
1950	2842.3	2765.0	2712.5	2991.5	3407.6	3856.2	4188.3	4118.9	3828.6	3328.1	2996.7	2943.0
1951	3200.0	3252.0	3322.0	3624.0	3794.0	4236.5	4323.3	4342.6	4004.9	3355.4	3014.1	2958.1
1952	3073.8	3252.0	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4500.0	4150.0	3700.0	3400.0
1953	3250.0	3241.8	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	4040.6	3700.0	3400.0
1954	3250.0	3252.0	3338.5	3552.0	3661.0	4106.0	4546.0	4374.7	4194.3	3468.1	3236.4	3247.4
1955	3250.0	3218.9	3360.0	3559.2	3684.5	3853.0	3903.1	3979.8	3597.9	3048.2	2696.5	2681.4
1956	2664.1	2685.7	3252.0	3252.0	3288.0	3966.9	4465.7	4552.0	4492.7	4104.2	3700.0	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4162.8	4438.7	4177.2	3574.4	3205.4	3291.4
1958	3250.0	3252.0	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4143.7	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4066.1	4112.0	3918.4	3278.3	2754.0	2361.6	2500.0
1960	2448.0	2205.4	2193.9	2396.1	3121.9	3819.0	3976.2	3980.1	3686.5	3138.3	2783.2	2758.8
1961	2746.1	2897.5	3350.0	3562.9	3914.0	4280.0	4320.6	4297.4	3914.0	3200.0	2696.3	2654.6
1962	2557.4	2446.3	2734.8	2854.4	3675.0	4205.7	4481.6	4390.3	4057.6	3423.7	3088.1	3017.4
1963	3250.0	3252.0	3349.0	3514.4	3944.0	3971.8	4137.0	4446.5	4203.6	3715.8	3409.6	3400.0
1964	3250.0	3252.0	3333.4	3705.0	3923.2	4074.2	3890.0	3678.9	3470.8	2933.7	2568.0	2532.8
1965	2527.4	2683.8	3252.0	3368.0	3789.1	3915.5	4500.0	4437.7	4129.9	3528.0	3315.6	3303.3
1966	3202.3	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4418.3	3746.5	3200.0	2828.2	2814.0
1967	2759.2	3189.3	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3214.0	3316.6	3613.1	3654.0	4248.0	4258.8	4144.0	3623.8	3055.3	2744.7	2640.4
1969	2673.5	2706.1	3019.6	3358.0	3480.0	4030.0	4434.0	4552.0	4500.0	4068.7	3700.0	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4055.8	3929.8	3682.9	2919.1	2650.6	2646.8
1971	2739.5	3252.0	3319.0	3515.0	3677.9	3873.0	4359.8	4552.0	4500.0	4099.1	3700.0	3400.0
1972	3250.0	3197.2	3334.7	3714.0	3979.0	4249.0	4413.8	4301.9	3799.7	3200.0	2858.9	2892.0
1973	3075.4	3252.0	3346.0	3552.0	3636.0	4162.0	4424.4	4430.2	4040.6	3409.2	3147.7	3153.2
1974	3250.0	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4552.0	4500.0	4150.0	3700.0	3400.0
1975	3250.0	3212.0	3338.7	3511.9	3936.0	3756.0	4343.2	4552.0	4500.0	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3723.9	3959.5	4032.5	3830.1	3430.7	3064.3	3014.9	3045.4
1977	3015.2	3077.9	3002.8	3012.5	2991.4	2974.3	2567.4	2403.6	1872.6	1071.5	650.0	625.0
1978	550.0	555.3	998.0	2914.6	3567.0	4000.0	4552.0	4552.0	4233.1	3635.8	3298.8	3366.4
1979	3250.0	3240.0	3226.9	3385.7	3744.9	4260.4	4447.6	4473.3	3902.3	3271.4	3051.0	3039.3
1980	3133.8	3252.0	3367.0	3528.0	3292.0	4047.0	4345.2	4283.2	3985.3	3405.3	3129.5	3138.2
1981	3158.1	3120.0	3242.1	3550.3	3966.0	4256.0	4399.6	4163.8	3586.2	2997.0	2655.5	2651.5
1982	2705.2	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4327.9	4251.7	3923.3	3664.7	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4344.8	4310.0	4080.2	3473.4	3298.8	3339.8
1985	3250.0	3252.0	3360.0	3558.7	3749.9	3969.1	4066.3	3709.8	3227.8	2722.6	2378.9	2353.1
1986	2349.8	2391.3	2547.7	3125.2	3252.0	3534.0	3909.9	3862.6	3500.3	3176.5	2872.0	2959.3
1987	3026.3	3009.3	2998.6	3126.2	3466.5	4202.2	3973.4	3635.8	3110.2	2593.3	2272.9	2171.4
1988	2033.8	2001.9	2458.3	2895.2	2818.0	2892.4	2904.4	2902.0	2485.5	2127.8	1885.0	1736.3
1989	1574.0	1785.5	1887.2	1998.3	2112.9	3500.6	3895.0	3654.5	3303.0	2798.0	2500.7	2528.3
1990	2666.1	2560.2	2503.9	2740.4	2794.1	3038.7	2869.6	2987.6	2797.2	2306.2	2055.8	1960.9
1991	1835.8	1775.8	1762.2	1770.9	1785.6	2215.9	2357.3	2283.2	2004.9	1698.4	1451.0	1459.2
1992	1376.5	1302.6	1297.9	1343.9	2001.1	2447.6	2663.2	2397.5	1933.1	1450.4	1066.7	1038.2
1993	947.1	872.2	1109.0	1763.7	2500.3	3964.5	4552.0	4552.0	4500.0	3876.4	3602.7	3400.0
AVG:	2621.3	2666.6	2787.6	3029.3	3278.7	3638.5	3910.2	3894.5	3611.5	3108.3	2769.5	2670.1
MIN:	550.0	555.3	756.8	940.6	1070.1	1491.8	1665.2	1768.0	1354.2	949.9	650.0	594.8
MAX:	3250.0	3252.0	3367.0	3725.0	4058.0	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.4.3-23. Simulated Shasta Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.6	-3.5
1923	-3.3	-3.2	-3.2	-3.2	-3.2	-3.2	-3.1	-3.1	-3.1	-3.9	-3.9	-3.9
1924	-3.9	-3.8	-3.8	-3.8	-3.8	-11.3	-11.6	-8.9	-18.3	-21.9	-21.6	-12.5
1925	-12.4	-12.4	-12.4	-12.3	-17.8	-15.3	-14.9	-13.8	-12.8	-12.8	-12.7	-12.7
1926	-12.7	-12.7	-12.7	-12.7	-12.7	-12.7	-12.4	-11.4	-18.1	-26.0	-26.0	-25.6
1927	-23.6	-23.5	-23.5	-23.5	0.0	0.0	0.0	0.0	0.0	-1.7	-1.8	-1.8
1928	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-1.5	0.0	0.0	-0.4
1929	-0.2	-1.0	-1.0	-3.8	-3.8	-3.8	-7.4	-7.2	-0.6	-4.2	-69.6	-81.4
1930	-76.5	-74.1	-74.0	-67.8	-70.5	-73.5	-74.1	-71.1	-69.8	-60.6	-59.2	-58.9
1931	-58.8	-58.7	-58.7	-58.7	-58.6	-58.5	-90.1	-91.7	-96.0	-152.1	-101.4	-59.9
1932	-43.5	-35.9	-43.4	-45.8	-51.8	-63.2	-63.1	-62.9	-62.5	-64.8	-65.1	-64.9
1933	-64.7	-64.5	-64.5	-64.4	-62.0	-64.3	-82.9	-83.7	-92.5	-100.7	-108.4	-111.7
1934	-118.0	-119.8	-119.7	-119.6	-119.5	-119.2	-118.7	-118.1	-121.0	-130.2	-99.7	-44.6
1935	-42.2	-71.1	-80.7	-86.4	-86.3	-86.2	-86.0	-79.8	-47.9	-75.1	-41.6	-11.0
1936	20.4	50.4	50.3	50.3	50.3	50.2	48.6	44.5	78.5	59.8	57.4	57.5
1937	57.5	57.5	57.5	57.6	57.5	57.4	56.2	51.5	50.3	0.0	-3.5	-2.7
1938	-2.4	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	-4.3	-11.9	-16.9	-14.1	-14.0	-29.9	-28.2
1940	-29.6	-33.1	-33.0	-33.0	0.0	0.0	0.0	0.0	0.1	-3.5	-3.5	-3.4
1941	-3.4	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	-3.6	-3.5
1944	-4.8	-4.8	-4.8	-3.3	-3.3	-3.3	-3.1	-3.0	-2.8	-4.4	-4.3	-4.3
1945	-6.4	-7.8	-9.2	-9.2	0.0	8.1	7.8	7.1	7.0	3.3	3.0	3.1
1946	2.9	0.0	0.0	0.0	0.1	0.1	0.0	0.0	-0.1	-3.5	-2.5	-2.5
1947	-2.4	-10.9	-11.5	-11.9	-11.9	-11.9	-12.4	-11.5	-15.2	-16.0	-16.2	-25.5
1948	-25.7	-25.7	-20.1	-20.1	-20.3	-20.2	-19.8	-18.1	-16.6	-18.8	-18.9	0.0
1949	0.0	15.4	15.4	15.4	15.3	0.0	0.0	0.0	0.5	0.5	0.5	-44.0
1950	-41.7	-46.9	-46.9	-46.9	-38.5	-38.4	-36.9	-33.7	-33.2	40.7	40.5	40.5
1951	-22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-1.7	-1.8	-5.5	-15.9	-16.4
1955	0.0	0.0	0.0	-4.1	-3.9	-3.9	-6.1	-5.7	-8.7	-7.6	-5.0	-4.7
1956	-5.8	-6.2	0.0	0.0	0.0	0.0	-1.2	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-0.7	-0.6	-0.6	-12.4	-11.4
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-4.6	-4.5	-4.3	-13.9	-15.9	-25.6	-33.2
1960	-38.0	-29.6	-29.5	-29.5	-29.5	-29.4	-29.4	-26.9	-38.9	-43.0	-49.8	-46.6
1961	-46.4	-46.3	-22.9	-22.9	0.0	0.0	-0.6	-0.6	-1.0	0.0	-7.1	1.9
1962	25.2	20.8	20.8	20.6	0.0	0.0	0.1	0.2	0.2	-7.3	-12.9	-13.0
1963	0.0	0.0	0.0	0.0	0.0	9.5	0.0	0.0	2.6	-12.5	-12.7	0.0
1964	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	-6.2	-14.3	-14.4
1965	-8.3	-6.4	0.0	0.0	0.0	-7.0	0.0	-2.4	-2.5	-2.5	-2.2	-2.1
1966	-2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.3	0.0	-3.3	-2.0
1967	-4.6	-5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-1.0	-0.7	-0.7	0.0	0.0	-4.4	-4.7	-18.3	-28.1	-40.1	-40.6
1969	-47.2	-42.0	-37.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.9	-0.8	-3.7	-4.3	-4.3
1971	-8.5	0.0	0.0	0.0	-8.0	0.0	-3.7	0.0	0.0	-3.0	0.0	0.0
1972	0.0	-0.7	-0.7	0.0	0.0	0.0	-2.6	-2.8	-5.2	0.0	0.0	0.1
1973	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.9	-86.4	-88.4	-45.7
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	-1.0	-0.7	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	8.6	2.5	-10.9	-4.0	-16.3	-25.2	-23.0
1977	-24.2	-25.0	-27.7	-27.7	-16.3	-19.0	-19.2	-29.1	-36.4	-41.2	-37.6	-49.7
1978	0.0	-0.3	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	4.8	4.8	4.8	4.8	4.8	4.6	4.2	2.4	-6.9	-11.3	-11.4
1980	-56.6	-26.3	-12.9	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	-3.7	-3.6
1981	-3.3	-3.3	-3.3	-3.3	-3.3	0.0	0.0	0.0	-12.1	-12.0	-5.9	-13.0
1982	-14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.3	-2.3	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-1.1	-1.1	-0.8	-0.8
1985	0.0	0.0	0.0	0.0	0.0	4.9	4.9	4.9	0.6	-1.5	-3.4	-4.5
1986	-3.3	-18.1	-17.9	-17.9	0.0	0.0	7.7	7.6	7.1	4.7	4.3	4.3
1987	3.9	3.9	3.9	3.9	3.9	3.9	-7.5	-15.3	-11.4	-11.3	-19.1	-21.4
1988	-18.7	-18.2	-17.9	-17.7	-37.2	-43.3	-42.7	-40.2	-52.0	-60.8	-71.6	-73.5
1989	-70.4	-70.3	-70.3	-70.2	-70.2	-70.1	-67.8	-65.7	-64.3	-46.2	-36.8	-30.1
1990	-57.4	-16.7	-16.7	-16.7	-15.4	-15.4	-21.5	-19.8	-34.2	-30.3	-30.3	-48.4
1991	-38.3	-39.5	-39.5	-39.4	-35.2	-35.2	-32.4	-32.1	-32.0	-24.6	-19.4	-35.4
1992	-62.4	-81.5	-81.5	-81.4	-81.3	-81.2	-73.7	-42.8	-45.3	-36.7	-30.1	-66.5
1993	-56.8	-44.2	-44.2	-44.1	-44.1	-44.0	0.0	0.0	0.0	0.0	-0.4	0.0
AVG:	-14.7	-13.2	-12.4	-11.8	-10.8	-11.0	-11.6	-11.4	-12.1	-15.7	-16.4	-15.5
MIN:	-118.0	-119.8	-119.7	-119.6	-119.5	-119.2	-118.7	-118.1	-121.0	-152.1	-108.4	-111.7
MAX:	57.5	57.5	57.5	57.6	57.5	57.4	56.2	51.5	78.5	59.8	57.4	57.5

Table 3.4.3-24 Simulated Shasta Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.0	-6.3	-6.1
1923	-5.7	-5.7	-5.7	-5.7	-5.7	-5.6	-5.5	-5.4	-5.4	-8.4	-8.5	-8.4
1924	-8.3	-8.3	-8.3	-8.3	-8.3	-8.7	-8.6	-7.3	-9.4	-11.6	-11.5	-2.1
1925	-2.1	-2.1	-2.1	-3.3	-3.3	-0.9	-0.9	-0.8	-11.8	-16.9	-16.9	-16.6
1926	-16.4	-16.3	-16.3	-16.3	-16.2	-16.2	-15.8	-14.5	-12.4	-17.4	-17.3	-14.5
1927	-16.4	-16.4	-16.4	-16.4	0.0	0.0	0.0	0.0	0.0	-15.2	-15.8	-15.5
1928	-14.5	0.0	0.0	0.0	0.0	0.0	0.0	12.5	13.3	0.0	0.0	-0.1
1929	0.0	1.5	1.5	-1.8	-1.8	-1.8	0.2	0.6	9.5	13.0	4.8	-3.1
1930	4.1	8.1	8.1	8.1	8.1	8.1	7.9	7.2	6.9	1.6	1.1	1.1
1931	1.1	1.2	1.2	1.2	1.2	1.2	-1.0	-1.1	-3.4	-3.6	-10.1	-3.9
1932	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-3.9	-3.9	-3.8	-3.8
1933	-3.8	-3.8	-3.8	-3.8	-3.4	-3.8	-15.3	-16.0	-18.2	-19.9	-20.8	-20.5
1934	-20.7	-20.6	-20.6	-20.6	-20.6	-20.5	-20.3	-20.0	-22.3	-24.4	-23.4	-23.1
1935	-22.1	-22.0	-22.0	-22.0	-22.0	-21.9	-21.9	-20.3	10.0	42.7	74.6	104.8
1936	135.9	165.8	165.6	165.5	165.4	165.1	159.6	146.1	142.9	98.8	94.1	94.6
1937	94.7	94.8	95.0	95.1	95.1	94.9	92.9	85.2	83.2	0.0	-5.7	-4.2
1938	-3.8	-3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.8	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	-0.3	-1.4	-1.9	-3.0	-2.9	-5.6	-5.7
1940	-5.5	-5.6	-5.6	-5.6	0.0	0.0	0.0	0.0	0.0	-14.6	-15.1	-14.9
1941	-14.7	-14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.6	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.3	-6.6	-6.5
1944	-7.6	-7.6	-7.6	-5.2	-5.2	-5.2	-4.9	-4.6	-4.2	-5.5	-5.2	-5.1
1945	-6.1	-7.0	-8.0	-8.0	0.0	7.5	7.2	6.6	6.4	-8.0	-8.7	-8.5
1946	-7.8	0.0	0.0	0.0	-13.6	-13.6	-13.0	-12.4	-11.8	53.8	41.2	41.4
1947	-35.3	-40.7	-40.1	-40.5	-40.4	-40.4	-40.5	-39.0	-39.9	-32.4	-31.4	-31.1
1948	-29.2	-29.1	33.1	33.1	46.3	46.3	45.5	42.4	-2.9	-5.2	-5.3	0.0
1949	0.0	-12.6	-12.6	-12.6	-12.6	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3
1950	-2.8	-9.9	-9.9	-9.8	-1.5	-1.5	-1.4	-1.3	-1.6	-16.7	-17.7	-17.5
1951	-32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-1.7	-1.8	-4.4	-17.3	-17.9
1955	0.0	0.1	0.0	-5.0	-3.8	-3.8	-2.2	-2.0	-5.2	-3.2	-0.3	0.0
1956	-0.8	-0.6	0.0	0.0	0.0	0.0	-1.1	0.0	0.0	-45.8	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.7	-1.0	-0.9	-21.9	-20.1
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.3	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-1.9	1.4	-1.2	0.0
1960	0.5	0.4	0.4	0.4	0.4	0.4	-0.4	-0.4	-2.2	-3.0	-4.0	-4.1
1961	-4.5	-4.8	0.0	0.0	0.0	0.0	-0.9	-0.9	-3.2	0.0	-1.5	4.3
1962	4.2	2.2	2.2	4.3	0.0	0.0	0.0	0.0	0.0	-6.1	-7.0	-6.9
1963	0.0	0.0	0.0	0.0	0.0	-6.1	0.0	0.0	-0.1	-17.9	-18.6	0.0
1964	0.0	0.0	0.0	0.0	0.2	0.2	0.0	-0.2	-0.3	-2.5	-4.9	-5.0
1965	0.5	0.4	0.0	0.0	0.0	-5.5	0.0	-2.6	-2.7	-2.7	-2.2	-2.2
1966	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.2	0.0	-3.3	-1.9
1967	-3.7	-4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-0.9	-0.7	-0.7	0.0	0.0	-0.6	-0.7	-4.1	-6.7	-10.1	-10.2
1969	-12.0	-9.5	-7.0	0.0	0.0	0.0	0.0	0.0	0.0	-14.4	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.8	-0.8	-4.2	-4.6	-4.5
1971	-10.0	0.0	0.0	0.0	-9.1	0.0	-3.8	0.0	0.0	-3.6	0.0	0.0
1972	0.0	-0.7	-0.7	0.0	0.0	0.0	-5.6	-5.9	-8.3	0.0	5.9	9.8
1973	9.3	0.0	0.0	0.0	0.0	0.0	-26.4	-30.9	-37.6	-121.4	-123.7	-74.2
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	-1.0	-0.8	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	8.6	7.5	3.6	3.7	-5.1	8.2	7.1
1977	3.6	1.4	5.8	-3.4	-0.5	1.9	8.6	5.7	4.4	3.8	0.0	1.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	4.8	4.8	4.8	4.8	4.8	4.6	4.2	11.0	8.8	6.8	6.7
1980	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.1	-10.5	-10.3
1981	-9.5	-9.4	-9.4	-9.4	-9.4	0.0	0.0	-0.1	-3.2	-3.2	9.6	7.6
1982	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.7	-7.6	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-1.1	-1.1	-0.8	-0.8
1985	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	-2.1	-4.0	-4.3	-5.3
1986	-3.7	-18.4	-18.2	-18.2	0.0	0.0	8.3	8.2	7.6	5.1	4.7	4.6
1987	4.3	4.3	4.3	4.3	4.3	4.3	0.5	-1.6	0.0	0.0	1.5	2.6
1988	0.5	0.4	0.2	0.0	-1.4	-2.1	-2.2	-2.0	-3.4	-6.2	-9.5	-8.5
1989	-6.4	-6.4	-6.4	-6.4	-6.4	-6.4	-6.2	-7.6	-7.3	-8.3	-9.7	-8.2
1990	-7.6	-6.0	-6.0	-6.0	-5.3	-5.3	-0.2	-0.4	-3.7	7.9	7.8	3.2
1991	2.7	4.5	4.5	4.5	4.7	4.7	4.1	4.2	4.2	5.4	9.4	5.5
1992	2.9	-2.3	-2.3	-2.3	-2.3	-2.3	-2.0	-1.4	-6.1	-8.4	-9.7	-9.5
1993	-9.4	-9.0	-8.9	-8.9	-8.9	-8.9	0.0	0.0	0.0	68.8	70.2	0.0
AVG:	-0.7	-0.2	1.2	1.1	1.7	2.3	1.9	1.7	0.7	-3.1	-2.3	-1.5
MIN:	-35.3	-40.7	-40.1	-40.5	-40.4	-40.4	-40.5	-39.0	-39.9	-121.4	-123.7	-74.2
MAX:	135.9	165.8	165.6	165.5	165.4	165.1	159.6	146.1	142.9	98.8	94.1	104.8

The following figures and tables provide storage results for Folsom Reservoir, another major reservoir on the CVP system.

Figure 3.4.3-15. Exceedence for Simulated Folsom Reservoir End-of-September Storage, 2001 LOD

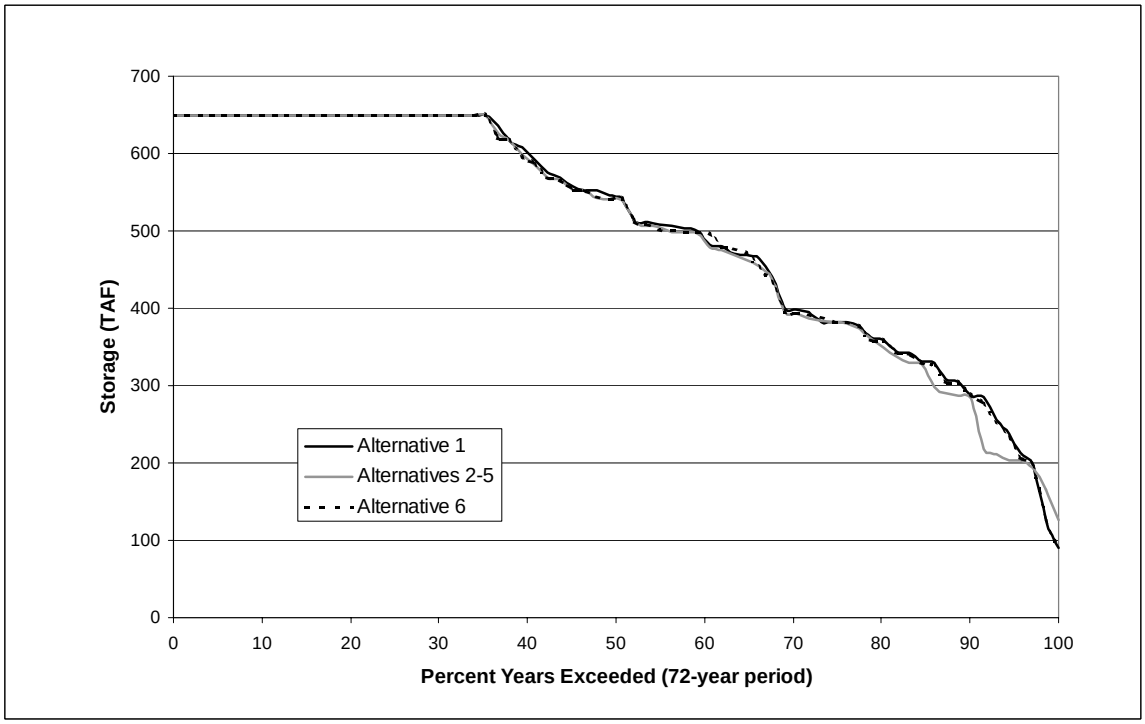


Figure 3.4.3-16. Simulated Folsom Reservoir End-of-September Storage, 2001 LOD

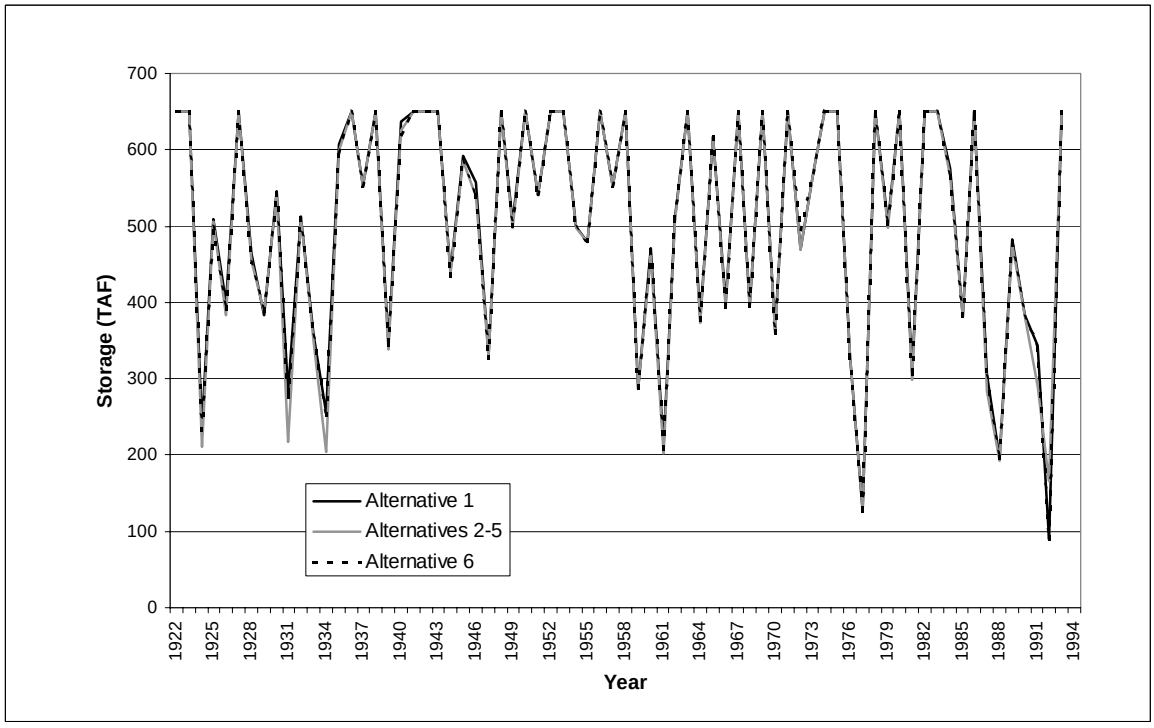


Figure 3.4.3-17. Simulated Folsom Reservoir Drought Period Storage, 2001 LOD (WY 1928-1934)

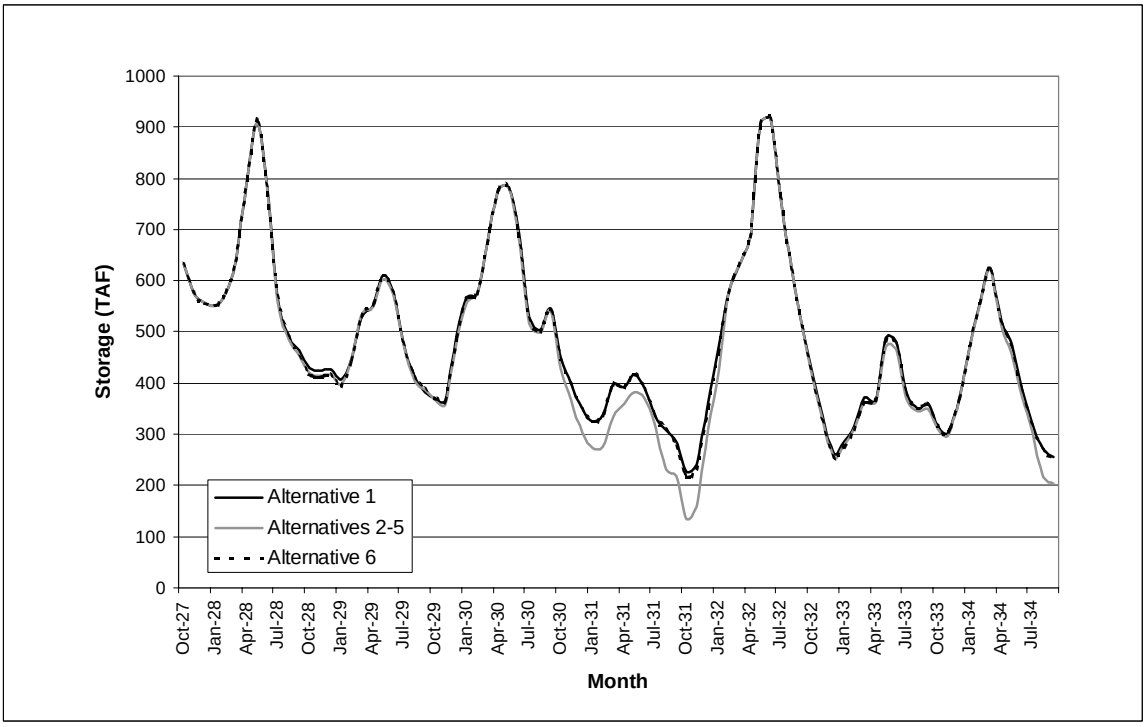


Figure 3.4.3-18. Simulated Folsom Reservoir Drought Period Storage, 2001 LOD (WY 1987-1992),

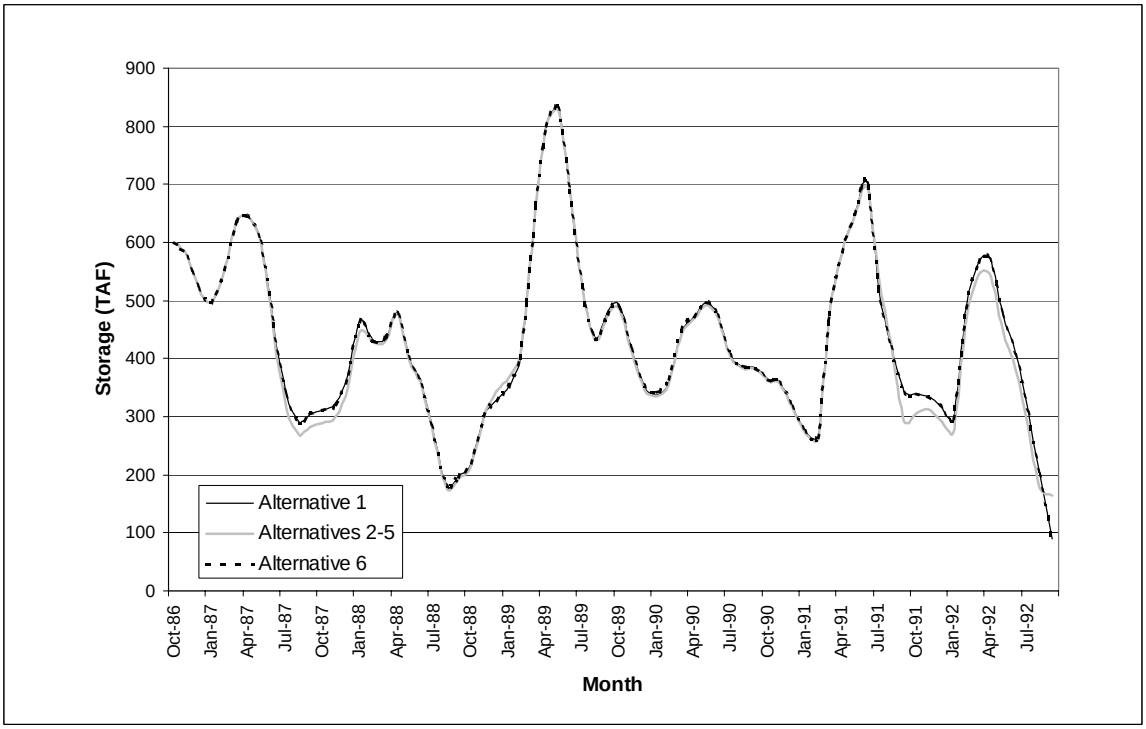


Table 3.4.3-25. Simulated Folsom Storage (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	510.4	519.6	575.0	575.0	575.0	674.0	800.0	975.0	975.0	824.8	774.0	650.0
1923	630.8	575.0	575.0	575.0	575.0	572.1	800.0	975.0	975.0	817.7	756.6	650.0
1924	626.0	575.0	531.9	488.2	516.7	393.6	404.5	400.1	349.7	282.9	259.6	237.2
1925	255.4	291.4	334.1	341.7	561.0	483.2	744.9	975.0	857.0	670.9	555.0	508.6
1926	457.8	427.4	412.8	397.2	575.0	611.4	800.0	753.8	564.9	448.1	392.4	400.4
1927	370.2	521.6	575.0	575.0	562.0	661.0	800.0	975.0	975.0	801.6	759.4	650.0
1928	633.0	575.0	555.7	551.6	575.0	638.0	800.0	908.4	776.8	566.6	489.0	464.2
1929	429.1	424.8	425.6	406.6	446.0	527.8	549.8	611.2	578.2	478.8	411.3	382.4
1930	370.6	365.5	492.6	569.2	572.0	672.0	780.3	782.1	695.0	528.4	502.8	545.5
1931	448.3	400.7	348.8	326.1	336.4	396.4	391.0	415.8	390.2	337.2	307.9	284.5
1932	224.9	239.6	361.2	466.8	575.0	627.1	684.4	905.8	918.3	764.7	621.1	511.8
1933	418.6	336.5	262.7	285.1	315.8	373.3	365.9	488.1	482.5	381.4	349.8	358.8
1934	316.3	302.5	371.6	472.5	556.7	624.2	521.0	476.1	390.2	323.3	270.7	255.9
1935	199.0	282.0	315.9	427.7	492.4	607.9	800.0	949.2	975.0	798.7	674.4	607.7
1936	595.0	575.0	559.9	575.0	570.0	667.0	800.0	975.0	975.0	817.2	716.3	650.0
1937	600.0	567.3	542.6	520.8	575.0	675.0	800.0	975.0	904.3	716.6	600.0	552.9
1938	549.8	575.0	575.0	575.0	575.0	674.0	800.0	975.0	975.0	864.5	800.0	650.0
1939	636.1	575.0	518.9	484.6	485.0	572.9	622.2	593.1	531.7	384.7	332.2	344.4
1940	342.9	335.3	338.4	572.0	559.0	618.0	800.0	975.0	913.0	712.6	680.6	636.8
1941	600.0	575.0	575.0	575.0	574.0	672.0	800.0	975.0	975.0	808.0	770.0	650.0
1942	633.7	575.0	575.0	572.0	563.0	633.4	800.0	975.0	975.0	950.0	800.0	650.0
1943	628.7	575.0	575.0	565.0	537.0	618.0	800.0	957.3	971.3	806.7	770.8	650.0
1944	600.0	575.0	536.0	521.1	575.0	675.0	653.2	716.9	649.6	527.2	510.5	441.1
1945	405.2	491.9	574.0	575.0	565.0	659.3	756.3	975.0	918.7	739.8	714.1	591.4
1946	600.0	575.0	575.0	571.0	515.6	618.3	800.0	975.0	871.3	674.5	647.0	557.0
1947	552.4	525.4	514.8	477.5	552.7	674.0	669.7	641.0	600.0	471.1	404.1	330.5
1948	381.6	418.6	388.3	462.8	422.8	480.8	800.0	975.0	975.0	806.6	751.4	650.0
1949	626.2	568.3	535.7	501.5	519.5	675.0	800.0	956.0	803.2	600.0	554.7	506.6
1950	478.8	468.7	457.4	575.0	572.0	672.0	800.0	975.0	975.0	807.7	760.9	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	800.0	975.0	912.4	645.8	607.0	540.3
1952	535.0	575.0	575.0	575.0	574.0	674.0	800.0	975.0	975.0	939.7	800.0	650.0
1953	647.6	575.0	575.0	574.0	568.0	646.0	787.8	962.5	975.0	873.8	800.0	650.0
1954	627.5	575.0	522.8	544.4	575.0	672.0	800.0	844.2	737.3	599.3	554.1	499.8
1955	467.1	468.7	549.7	575.0	519.9	520.6	582.8	641.7	584.2	494.0	452.0	480.2
1956	447.1	446.6	531.0	393.0	391.0	534.3	713.9	975.0	975.0	946.5	800.0	650.0
1957	648.8	575.0	519.1	490.4	571.0	667.0	674.4	962.5	904.3	668.8	600.0	551.7
1958	551.4	562.1	575.0	575.0	565.0	671.0	800.0	975.0	975.0	845.3	800.0	650.0
1959	625.0	575.0	514.9	575.0	575.0	590.4	634.3	594.6	554.8	295.7	269.2	286.2
1960	299.2	303.4	284.2	326.0	575.0	669.0	687.8	711.7	600.0	499.2	445.9	470.4
1961	431.3	443.5	455.0	433.5	474.1	503.2	525.3	535.1	522.5	383.5	304.7	213.0
1962	222.8	233.4	266.0	286.5	575.0	624.4	800.0	885.3	861.6	645.7	565.1	510.7
1963	720.0	575.0	575.0	554.0	475.0	589.3	887.5	975.0	975.0	787.4	741.2	650.0
1964	641.3	575.0	537.3	575.0	547.0	544.2	609.1	679.9	608.3	489.1	434.7	377.4
1965	394.1	445.8	364.0	360.0	377.0	516.5	805.2	953.7	975.0	733.9	710.7	617.0
1966	600.0	575.0	547.1	575.0	575.0	570.2	711.8	696.6	600.0	385.0	367.6	398.9
1967	404.1	462.0	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	642.9	575.0	532.2	550.0	646.5	650.0	706.7	689.6	600.0	336.0	370.1	395.0
1969	407.0	453.9	550.8	550.0	535.0	645.0	800.0	975.0	975.0	830.9	794.0	650.0
1970	646.6	575.0	575.0	387.0	380.0	594.0	617.6	727.3	613.0	412.2	407.8	363.0
1971	373.8	534.6	575.0	575.0	534.4	663.0	763.3	975.0	975.0	830.9	792.0	650.0
1972	630.0	574.5	575.0	575.0	575.0	660.0	767.8	866.1	657.7	426.8	427.3	469.2
1973	450.7	518.6	575.0	567.0	563.0	669.0	778.0	975.0	807.3	600.0	600.0	568.5
1974	574.7	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	857.0	800.0	650.0
1975	632.1	575.0	558.5	566.3	575.0	674.0	758.1	975.0	975.0	950.0	800.0	650.0
1976	679.0	575.0	506.1	435.4	411.0	423.4	452.2	477.4	433.6	372.7	351.3	330.3
1977	331.5	314.2	244.4	236.5	225.1	225.9	218.3	217.1	168.6	140.2	127.1	126.9
1978	90.0	101.1	249.6	569.0	557.0	623.0	800.0	975.0	975.0	814.5	760.1	650.0
1979	610.5	575.0	539.5	575.0	575.0	672.0	744.8	975.0	782.0	600.0	555.2	504.0
1980	506.0	547.5	575.0	433.0	390.0	602.0	780.4	962.2	975.0	836.5	800.0	650.0
1981	611.6	575.0	529.7	543.5	571.0	674.0	654.3	616.2	559.7	354.1	304.5	308.5
1982	351.5	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	851.0	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	720.0	377.0	329.0	338.0	360.0	589.0	759.8	975.0	947.5	617.6	615.5	574.9
1985	580.8	575.0	568.7	536.4	574.5	651.4	745.5	743.0	600.0	465.6	406.2	382.3
1986	381.7	440.4	542.5	559.0	357.0	570.0	800.0	975.0	975.0	788.0	747.2	650.0
1987	600.0	575.0	522.0	497.2	551.6	636.3	643.3	601.7	457.5	338.5	291.5	305.1
1988	312.0	323.2	374.2	465.5	432.6	433.8	480.3	402.9	356.0	261.9	178.8	196.4
1989	218.5	300.7	329.4	352.2	400.0	611.0	800.0	832.1	690.5	523.9	435.0	482.1
1990	492.5	416.5	349.7	337.0	356.6	441.5	472.1	497.4	474.6	405.4	386.4	382.5
1991	363.9	359.1	317.1	272.7	263.7	475.1	582.1	647.5	702.3	520.4	421.6	342.8
1992	339.1	335.4	316.7	296.0	486.7	568.1	574.5	477.6	409.8	310.6	203.6	90.0
1993	95.0	94.7	176.7	571.0	555.0	621.0	800.0	975.0	975.0	869.2	799.9	650.0
AVG:	490.9	474.3	474.7	487.8	506.6	595.1	709.2	819.2	772.7	627.2	568.9	502.6
MIN:	90.0	94.7	176.7	236.5	225.1	225.9	218.3	217.1	168.6	140.2	127.1	90.0
MAX:	720.0	575.0	575.0	575.0	646.5	675.0	887.5	975.0	975.0	950.0	800.0	650.0

Table 3.4.3-26. Simulated Folsom Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	510.4	519.6	575.0	575.0	575.0	674.0	800.0	975.0	975.0	824.8	774.0	650.0
1923	630.8	575.0	575.0	575.0	575.0	572.1	800.0	975.0	975.0	817.7	752.9	650.0
1924	626.0	575.0	531.9	488.2	516.7	393.0	403.9	399.5	349.2	282.3	259.0	211.0
1925	229.3	265.4	310.4	315.7	561.0	483.2	744.9	975.0	857.0	670.9	551.6	505.2
1926	457.8	427.4	412.9	397.3	575.0	611.4	800.0	750.8	562.7	443.9	376.0	383.2
1927	351.8	502.2	575.0	575.0	562.0	661.0	800.0	975.0	975.0	801.6	759.4	650.0
1928	633.0	575.0	555.7	551.6	575.0	638.0	800.0	908.0	773.5	558.7	485.1	454.3
1929	419.2	414.9	415.8	396.7	447.3	533.6	548.3	602.7	572.8	475.3	404.8	387.4
1930	366.4	357.5	482.4	559.0	572.0	672.0	780.3	782.1	683.3	517.0	498.4	541.1
1931	427.4	367.1	303.4	271.8	276.2	331.3	359.3	382.1	369.7	319.3	231.3	217.8
1932	133.6	158.2	310.6	416.2	575.0	627.1	684.4	905.8	918.3	764.7	621.0	511.6
1933	411.5	329.6	255.9	278.4	309.1	361.3	361.5	470.9	465.7	369.9	345.0	349.6
1934	310.0	298.3	369.4	470.4	554.5	622.0	510.4	456.1	375.0	308.3	215.2	203.3
1935	139.5	222.6	259.0	383.8	449.1	564.8	800.0	949.2	975.0	798.7	644.4	598.5
1936	575.1	567.4	552.0	575.0	570.0	667.0	800.0	975.0	975.0	817.1	712.9	650.0
1937	600.0	567.3	542.6	520.8	575.0	675.0	800.0	975.0	900.5	712.8	600.0	552.9
1938	549.8	575.0	575.0	575.0	575.0	674.0	800.0	975.0	975.0	864.5	800.0	650.0
1939	636.1	575.0	518.9	484.6	485.0	572.9	622.2	591.9	528.5	371.4	327.0	338.0
1940	339.2	331.2	334.3	572.0	559.0	618.0	800.0	975.0	905.5	705.1	669.7	625.9
1941	600.0	575.0	575.0	575.0	574.0	672.0	800.0	975.0	975.0	808.0	770.0	650.0
1942	633.7	575.0	575.0	572.0	563.0	633.4	800.0	975.0	975.0	950.0	800.0	650.0
1943	628.7	575.0	575.0	565.0	537.0	618.0	800.0	957.3	971.3	806.7	770.8	650.0
1944	600.0	575.0	536.0	521.1	575.0	675.0	653.2	716.9	649.6	526.7	508.0	437.1
1945	403.4	491.8	573.9	575.0	565.0	659.3	756.3	975.0	915.3	736.4	707.1	585.8
1946	600.0	575.0	575.0	571.0	515.7	618.3	800.0	975.0	868.2	671.4	640.7	538.9
1947	534.4	522.7	518.8	483.3	570.1	674.0	669.7	641.0	600.0	469.8	402.1	328.5
1948	378.4	416.6	385.8	460.5	420.9	478.0	800.0	975.0	975.0	806.6	749.0	650.0
1949	626.2	572.1	540.4	508.9	526.8	675.0	800.0	956.1	800.7	600.0	545.4	497.3
1950	469.5	457.0	445.7	575.0	572.0	672.0	800.0	975.0	975.0	807.7	758.7	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	800.0	975.0	912.4	648.5	609.6	543.0
1952	537.7	575.0	575.0	575.0	574.0	674.0	800.0	975.0	975.0	937.3	800.0	650.0
1953	647.6	575.0	575.0	574.0	568.0	646.0	787.8	962.5	975.0	873.8	800.0	650.0
1954	627.7	575.0	522.8	544.4	575.0	672.0	800.0	844.2	734.9	597.7	552.6	498.3
1955	465.5	467.2	548.2	575.0	519.5	519.9	582.1	641.0	583.6	492.4	450.8	478.9
1956	445.5	444.7	531.0	393.0	391.0	534.3	713.9	975.0	975.0	943.0	800.0	650.0
1957	648.8	575.0	519.1	490.4	571.0	667.0	674.4	962.5	900.0	661.5	600.0	551.7
1958	551.4	562.1	575.0	575.0	565.0	671.0	800.0	975.0	975.0	843.6	800.0	650.0
1959	625.0	575.0	514.9	575.0	575.0	590.4	634.3	594.6	554.8	295.7	269.2	286.2
1960	299.2	303.4	284.2	326.0	575.0	669.0	682.1	706.0	600.0	493.3	439.2	461.8
1961	422.8	435.0	446.5	424.9	465.5	494.7	516.8	526.7	514.2	373.2	294.6	203.0
1962	212.9	223.4	256.1	276.6	575.0	624.4	800.0	885.3	861.6	645.7	561.4	507.1
1963	720.0	575.0	575.0	554.0	475.0	589.3	887.5	975.0	975.0	787.4	741.2	650.0
1964	641.3	575.0	537.3	575.0	547.0	544.2	609.1	679.9	603.4	485.3	431.3	374.0
1965	390.7	444.3	364.0	360.0	377.0	516.5	805.2	953.2	975.0	729.9	706.7	616.6
1966	600.0	575.0	547.5	575.0	575.0	570.2	711.8	696.6	600.0	382.5	365.2	392.7
1967	400.0	455.8	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	642.9	575.0	532.2	550.0	646.5	650.0	706.7	689.6	600.0	336.0	370.1	395.0
1969	407.0	443.4	535.0	550.0	535.0	645.0	800.0	975.0	975.0	830.9	794.0	650.0
1970	646.6	575.0	575.0	387.0	380.0	594.0	617.6	727.3	608.5	407.7	405.1	360.3
1971	371.1	531.9	575.0	575.0	533.5	663.0	762.6	975.0	975.0	830.9	792.0	650.0
1972	628.5	574.3	575.0	575.0	575.0	660.0	767.8	866.1	657.7	426.8	427.3	469.0
1973	450.4	518.3	575.0	567.0	563.0	669.0	778.0	975.0	805.8	600.0	597.9	568.5
1974	574.7	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	857.2	800.0	650.0
1975	632.1	575.0	558.5	566.3	575.0	674.0	758.1	975.0	975.0	950.0	800.0	650.0
1976	679.0	575.0	506.1	435.4	411.0	423.4	452.2	477.4	433.6	372.6	351.2	330.2
1977	331.4	314.1	244.3	236.4	224.9	225.8	218.2	217.0	168.5	140.1	127.0	126.9
1978	90.0	100.6	249.1	569.0	557.0	623.0	800.0	975.0	975.0	814.5	760.1	650.0
1979	610.5	575.0	539.5	575.0	575.0	672.0	744.8	975.0	782.0	600.0	549.0	497.9
1980	499.9	541.5	575.0	433.0	390.0	602.0	780.4	962.2	975.0	836.5	800.0	650.0
1981	608.8	575.0	529.7	543.5	571.0	674.0	654.3	616.2	559.7	343.4	293.8	297.9
1982	341.0	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	851.0	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	720.0	377.0	329.0	338.0	360.0	589.0	759.6	975.0	947.5	611.8	606.9	566.4
1985	572.3	575.0	568.7	536.4	574.5	651.4	745.5	743.0	600.0	465.3	405.7	381.7
1986	381.3	435.0	537.1	559.0	357.0	570.0	800.0	975.0	975.0	787.9	747.2	650.0
1987	600.0	575.0	522.0	497.2	551.6	636.3	643.3	600.2	446.9	315.9	269.1	282.9
1988	289.9	301.1	352.1	445.7	428.8	430.0	476.6	399.3	352.5	258.5	175.5	193.2
1989	215.3	297.6	344.8	367.6	406.3	611.0	800.0	828.4	694.3	523.8	432.1	476.1
1990	486.5	412.4	346.6	334.6	354.7	439.7	467.9	493.2	470.1	402.3	384.0	380.9
1991	361.9	357.1	315.0	270.6	261.6	473.1	580.1	645.5	693.2	541.5	425.2	290.2
1992	306.3	314.1	293.2	273.9	464.7	546.1	546.0	449.4	382.0	283.3	176.6	165.2
1993	171.0	170.5	257.2	571.0	555.0	621.0	800.0	975.0	975.0	869.2	800.0	650.0
AVG:	486.1	470.0	471.7	484.4	504.9	592.9	707.8	817.2	770.3	624.4	563.8	498.1
MIN:	90.0	100.6	244.3	236.4	224.9	225.8	218.2	217.0	168.5	140.1	127.0	126.9
MAX:	720.0	575.0	575.0	575.0	646.5	675.0	887.5	975.0	975.0	950.0	800.0	650.0

Table 3.4.3-27 Simulated Folsom Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	510.4	519.6	575.0	575.0	575.0	674.0	800.0	975.0	975.0	824.8	774.0	650.0
1923	630.8	575.0	575.0	575.0	575.0	572.1	800.0	975.0	975.0	817.7	747.7	650.0
1924	626.0	575.0	531.9	488.2	516.7	393.1	404.1	399.6	349.3	282.4	259.2	232.8
1925	251.1	287.1	329.8	337.4	561.0	483.2	744.9	975.0	857.0	670.9	546.0	499.7
1926	446.6	416.2	401.7	386.1	575.0	611.4	800.0	753.8	564.3	445.8	381.1	391.3
1927	352.1	496.5	575.0	575.0	562.0	661.0	800.0	975.0	975.0	801.6	759.4	650.0
1928	633.0	575.0	555.7	551.6	575.0	638.0	800.0	912.0	770.7	569.8	490.6	452.1
1929	417.1	412.7	413.6	394.6	445.1	531.5	549.8	609.2	578.0	479.4	411.5	388.3
1930	370.8	364.6	489.5	566.1	572.0	672.0	780.3	782.1	693.0	526.7	501.1	543.8
1931	446.9	399.6	347.8	325.3	335.7	395.8	390.9	415.8	390.0	336.9	306.7	276.2
1932	216.5	231.2	352.8	458.4	575.0	627.1	684.4	905.8	918.3	764.7	621.0	511.6
1933	409.6	327.6	253.9	276.4	307.1	362.8	365.1	484.2	478.9	379.0	349.4	357.4
1934	315.2	301.6	370.8	471.8	555.9	623.4	518.6	471.4	386.9	320.0	267.4	252.7
1935	195.4	278.4	312.4	424.1	489.0	604.6	800.0	949.2	975.0	798.7	640.9	595.0
1936	550.7	526.8	508.0	575.0	570.0	667.0	800.0	975.0	975.0	817.0	700.1	650.0
1937	600.0	567.3	542.6	520.7	575.0	675.0	800.0	975.0	914.4	726.6	579.7	553.0
1938	549.8	575.0	575.0	575.0	575.0	674.0	800.0	975.0	975.0	864.5	800.0	650.0
1939	636.1	575.0	518.9	484.6	485.0	572.9	622.2	593.0	531.1	382.2	331.2	343.4
1940	342.2	334.6	337.6	572.0	559.0	618.0	800.0	975.0	909.4	709.0	663.4	619.7
1941	594.6	575.0	575.0	575.0	574.0	672.0	800.0	975.0	975.0	808.0	770.0	650.0
1942	633.7	575.0	575.0	572.0	563.0	633.4	800.0	975.0	975.0	950.0	800.0	650.0
1943	628.7	575.0	575.0	565.0	537.0	618.0	800.0	957.3	971.3	806.7	770.8	650.0
1944	600.0	575.0	536.0	521.1	575.0	675.0	653.2	717.0	649.6	526.7	508.1	434.9
1945	403.5	493.5	575.0	575.0	565.0	659.3	756.3	975.0	945.7	766.6	720.4	585.2
1946	600.0	575.0	575.0	571.0	514.2	616.9	800.0	975.0	860.3	663.7	625.3	540.5
1947	536.1	515.2	509.8	473.3	559.3	674.0	669.8	641.0	600.0	469.3	400.4	326.9
1948	378.0	415.0	404.2	480.1	427.2	487.2	800.0	975.0	975.0	806.6	749.0	650.0
1949	626.2	565.1	533.1	498.6	516.6	675.0	800.0	956.0	800.9	600.0	547.0	498.9
1950	471.1	466.2	455.0	575.0	572.0	672.0	800.0	975.0	975.0	807.7	750.4	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	800.0	975.0	912.4	647.1	608.2	541.6
1952	536.3	575.0	575.0	575.0	574.0	674.0	800.0	975.0	975.0	929.9	799.1	650.0
1953	647.6	575.0	575.0	574.0	568.0	646.0	787.8	962.5	975.0	873.8	800.0	650.0
1954	628.4	575.0	522.8	544.4	575.0	672.0	800.0	844.2	734.9	597.7	552.6	498.3
1955	465.5	467.2	548.2	575.0	519.5	519.9	582.2	641.1	583.7	493.2	451.6	479.8
1956	446.9	446.4	531.0	393.0	391.0	534.3	713.9	975.0	975.0	845.2	800.0	650.0
1957	648.8	575.0	519.1	490.4	571.0	667.0	674.4	962.5	899.3	653.2	600.0	551.7
1958	551.4	562.1	575.0	575.0	565.0	671.0	800.0	975.0	975.0	843.2	800.0	650.0
1959	625.0	575.0	514.9	575.0	575.0	590.4	634.3	594.6	554.8	295.7	269.2	286.2
1960	299.2	303.4	284.2	326.0	575.0	669.0	687.7	711.6	600.0	498.8	445.4	469.9
1961	430.8	443.0	454.5	432.9	473.5	502.7	524.7	534.5	522.0	377.1	298.4	206.8
1962	216.6	227.2	259.8	280.4	575.0	624.4	800.0	885.3	861.6	645.7	563.3	508.9
1963	720.0	575.0	575.0	554.0	475.0	589.3	887.5	975.0	975.0	787.4	733.4	650.0
1964	641.3	575.0	537.3	575.0	547.0	544.2	609.1	679.9	605.7	487.3	433.4	376.0
1965	392.7	446.0	364.0	360.0	377.0	516.5	805.2	953.2	975.0	729.7	706.5	616.8
1966	600.0	575.0	547.3	575.0	575.0	570.2	711.8	696.6	600.0	382.5	365.2	392.9
1967	400.0	456.0	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	642.9	575.0	532.2	550.0	646.5	650.0	706.7	689.6	600.0	336.0	370.1	395.0
1969	407.0	451.5	548.4	550.0	535.0	645.0	800.0	975.0	975.0	830.9	794.0	650.0
1970	646.6	575.0	575.0	387.0	380.0	594.0	617.6	727.3	607.5	406.8	404.5	359.8
1971	370.6	531.4	575.0	575.0	533.4	663.0	762.5	975.0	975.0	830.9	792.0	650.0
1972	628.1	574.3	575.0	575.0	575.0	660.0	767.8	866.1	657.7	479.8	456.3	495.1
1973	476.5	544.4	575.0	567.0	563.0	669.0	775.7	975.0	807.7	600.0	589.0	568.5
1974	574.7	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	873.3	800.0	650.0
1975	632.1	575.0	558.5	566.3	575.0	674.0	758.1	975.0	975.0	950.0	800.0	650.0
1976	679.0	575.0	506.1	435.4	411.0	423.4	452.1	477.3	433.5	372.5	351.0	330.0
1977	331.2	313.8	244.0	236.2	224.7	225.5	217.9	216.7	168.2	139.8	126.7	126.6
1978	90.0	101.2	249.7	569.0	557.0	623.0	800.0	975.0	975.0	814.5	760.1	650.0
1979	610.5	575.0	539.5	575.0	575.0	672.0	744.8	975.0	782.0	600.0	553.4	502.3
1980	504.2	545.8	575.0	433.0	390.0	602.0	780.4	962.2	975.0	836.5	800.0	650.0
1981	608.9	575.0	529.7	543.5	571.0	674.0	654.3	616.2	559.7	350.9	301.3	305.4
1982	348.4	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	851.0	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	720.0	377.0	329.0	338.0	360.0	589.0	759.6	975.0	947.5	611.8	605.7	565.1
1985	571.0	575.0	568.7	536.4	574.5	651.4	745.5	743.0	600.0	465.1	405.6	381.6
1986	381.2	434.7	536.7	559.0	357.0	570.0	800.0	975.0	975.0	787.9	747.2	650.0
1987	600.0	575.0	522.0	497.2	551.6	636.3	643.3	601.4	459.3	336.6	289.7	303.3
1988	310.2	321.3	372.3	463.6	432.5	433.6	480.1	402.7	355.8	261.7	178.5	196.2
1989	218.3	300.5	329.2	352.0	400.0	611.0	800.0	831.3	689.5	522.4	433.4	477.3
1990	487.7	415.0	351.8	341.7	363.2	448.1	472.1	497.4	474.3	405.9	386.9	382.3
1991	364.1	359.3	317.3	272.8	263.8	475.3	582.3	647.6	702.2	519.7	421.3	340.4
1992	339.3	335.3	316.6	295.9	486.6	568.0	572.5	475.6	407.8	308.7	202.4	90.0
1993	95.0	94.7	176.7	571.0	555.0	621.0	800.0	975.0	975.0	869.2	785.3	650.0
AVG:	488.6	472.2	473.1	487.2	506.6	595.1	709.0	819.0	772.5	626.0	566.0	500.7
MIN:	90.0	94.7	176.7	236.2	224.7	225.5	217.9	216.7	168.2	139.8	126.7	90.0
MAX:	720.0	575.0	575.0	575.0	646.5	675.0	887.5	975.0	975.0	950.0	800.0	650.0

Table 3.4.3-28. Simulated Folsom Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	0.0
1924	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-26.2
1925	-26.1	-26.1	-23.7	-26.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.4
1926	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-3.0	-2.2	-4.2	-16.5	-17.2
1927	-18.4	-19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-3.3	-7.8	-3.9	-9.9
1929	-9.9	-9.9	-9.9	-9.8	1.3	5.9	-1.4	-8.5	-5.5	-3.4	-6.5	5.0
1930	-4.1	-8.0	-10.3	-10.3	0.0	0.0	0.0	0.0	-11.7	-11.4	-4.4	-4.4
1931	-20.9	-33.6	-45.5	-54.3	-60.2	-65.1	-31.7	-33.7	-20.6	-18.0	-76.5	-66.7
1932	-91.3	-81.5	-50.6	-50.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
1933	-7.1	-6.9	-6.8	-6.8	-6.7	-12.0	-4.5	-17.1	-16.9	-11.5	-4.8	-9.2
1934	-6.4	-4.2	-2.2	-2.1	-2.1	-2.1	-10.6	-20.0	-15.2	-15.0	-55.5	-52.7
1935	-59.5	-59.4	-57.0	-43.9	-43.2	-43.2	0.0	0.0	0.0	0.0	-30.0	-9.3
1936	-19.8	-7.6	-7.9	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-3.5	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.8	-3.8	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-3.2	-13.3	-5.2	-6.4
1940	-3.7	-4.1	-4.1	0.0	0.0	0.0	0.0	0.0	-7.5	-7.5	-11.0	-10.9
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-2.5	-4.0
1945	-1.8	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	-3.4	-3.4	-6.9	-5.5
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.1	-3.1	-6.3	-18.1
1947	-18.0	-2.7	3.9	5.9	17.4	0.0	0.0	0.0	0.0	-1.3	-2.0	-2.0
1948	-3.2	-2.0	-2.5	-2.3	-1.9	-2.8	0.0	0.0	0.0	0.0	-2.5	0.0
1949	0.0	3.8	4.8	7.4	7.3	0.0	0.0	0.0	-2.5	0.0	-9.4	-9.3
1950	-9.3	-11.7	-11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	2.7
1952	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	-1.6	-1.6	-1.6
1955	-1.6	-1.5	-1.5	0.0	-0.4	-0.7	-0.7	-0.7	-0.6	-1.6	-1.3	-1.2
1956	-1.6	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.3	-7.4	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	-5.7	-5.7	0.0	-5.9	-6.8	-8.6
1961	-8.6	-8.6	-8.5	-8.5	-8.5	-8.5	-8.5	-8.4	-8.3	-10.3	-10.2	-10.1
1962	-10.0	-9.9	-9.9	-9.9	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-3.7
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.0	-3.8	-3.4	-3.4
1965	-3.4	-1.6	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	-4.0	-4.0	-0.4
1966	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.5	-6.2
1967	-4.1	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	-10.5	-15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.5	-4.5	-2.7	-2.7
1971	-2.7	-2.7	0.0	0.0	-0.9	0.0	-0.7	0.0	0.0	0.0	0.0	0.0
1972	-1.4	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
1973	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	0.0	-2.1	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
1977	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
1978	0.0	-0.5	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.1	-6.1
1980	-6.1	-6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	-2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.7	-10.6	-10.5
1982	-10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-5.7	-8.6	-8.5
1985	-8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.5	-0.6
1986	-0.4	-5.4	-5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.5	-10.7	-22.6	-22.4	-22.2
1988	-22.1	-22.1	-22.1	-19.7	-3.8	-3.8	-3.7	-3.6	-3.5	-3.4	-3.3	-3.2
1989	-3.1	-3.1	15.4	15.4	6.3	0.0	0.0	-3.7	3.8	-0.1	-2.9	-6.0
1990	-6.0	-4.2	-3.2	-2.4	-1.9	-1.9	-4.2	-4.2	-4.5	-3.2	-2.4	-1.5
1991	-2.1	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-9.1	21.1	3.6	-52.5
1992	-32.8	-21.3	-23.6	-22.0	-22.0	-21.9	-28.5	-28.1	-27.8	-27.3	-27.0	75.2
1993	76.0	75.8	80.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
AVG:	-4.8	-4.2	-3.1	-3.4	-1.7	-2.2	-1.4	-2.0	-2.5	-2.8	-5.2	-4.5
MIN:	-91.3	-81.5	-57.0	-54.3	-60.2	-65.1	-31.7	-33.7	-27.8	-27.3	-76.5	-66.7
MAX:	76.0	75.8	80.5	15.4	17.4	5.9	0.0	0.0	3.8	21.1	3.6	75.2

Table 3.4.3-29. Simulated Folsom Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.9	0.0
1924	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4	-4.4
1925	-4.4	-4.4	-4.4	-4.3	0.0	0.0	0.0	0.0	0.0	0.0	-8.9	-8.9
1926	-11.2	-11.2	-11.1	-11.1	0.0	0.0	0.0	0.0	-0.6	-2.3	-11.4	-9.1
1927	-18.1	-25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	-6.1	3.2	1.6	-12.1
1929	-12.0	-12.0	-12.0	-12.0	-0.9	3.7	0.0	-1.9	-0.3	0.6	0.2	5.8
1930	0.2	-0.9	-3.2	-3.2	0.0	0.0	0.0	0.0	-2.1	-1.7	-1.7	-1.7
1931	-1.4	-1.2	-1.0	-0.8	-0.7	-0.6	-0.1	-0.1	-0.3	-0.3	-1.1	-8.3
1932	-8.4	-8.4	-8.4	-8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
1933	-9.0	-8.9	-8.7	-8.7	-8.7	-10.4	-0.8	-3.9	-3.7	-2.4	-0.4	-1.4
1934	-1.1	-0.9	-0.8	-0.8	-0.7	-0.7	-2.3	-4.8	-3.4	-3.3	-3.2	-3.2
1935	-3.6	-3.6	-3.6	-3.6	-3.4	-3.4	0.0	0.0	0.0	0.0	-33.5	-12.7
1936	-44.3	-48.2	-51.9	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-16.3	0.0
1937	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	10.1	10.0	-20.3	0.1
1938	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.6	-2.5	-1.0	-1.0
1940	-0.7	-0.7	-0.8	0.0	0.0	0.0	0.0	0.0	-3.6	-3.6	-17.2	-17.1
1941	-5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-2.4	-6.2
1945	-1.7	1.6	1.0	0.0	0.0	0.0	0.0	0.0	27.0	26.8	6.3	-6.2
1946	0.0	0.0	0.0	0.0	-1.4	-1.4	0.0	0.0	-10.9	-10.9	-21.7	-16.4
1947	-16.4	-10.2	-5.0	-4.2	6.6	0.0	0.0	0.1	0.0	-1.8	-3.6	-3.6
1948	-3.6	-3.5	15.9	17.3	4.4	6.4	0.0	0.0	0.0	0.0	-2.5	0.0
1949	0.0	-3.1	-2.5	-2.9	-2.9	0.0	0.0	0.0	-2.4	0.0	-7.7	-7.7
1950	-7.7	-2.5	-2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.5	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
1952	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.8	-0.9	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	-1.6	-1.6	-1.6
1955	-1.5	-1.5	-1.5	0.0	-0.4	-0.7	-0.6	-0.6	-0.6	-0.9	-0.4	-0.4
1956	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-101.4	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.0	-15.7	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.1	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.4	-0.5	-0.5
1961	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-6.4	-6.3	-6.3
1962	-6.2	-6.2	-6.2	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	-1.8
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.8	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-1.8	-1.4	-1.4
1965	-1.4	0.1	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	-4.2	-4.2	-0.2
1966	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.4	-6.0
1967	-4.1	-6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	-2.4	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.5	-5.4	-3.2	-3.2
1971	-3.2	-3.2	0.0	0.0	-1.0	0.0	-0.7	0.0	0.0	0.0	0.0	0.0
1972	-1.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	29.0	25.9
1973	25.8	25.8	0.0	0.0	0.0	0.0	-2.3	0.0	0.5	0.0	-11.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3
1977	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3
1978	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	-1.7
1980	-1.7	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	-2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.1	-3.1	-3.1
1982	-3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-5.8	-9.9	-9.8
1985	-9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.6	-0.7
1986	-0.5	-5.8	-5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	1.8	-1.8	-1.8	-1.8
1988	-1.8	-1.8	-1.8	-1.8	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
1989	-0.2	-0.2	-0.2	-0.2	0.0	0.0	0.0	-0.8	-1.1	-1.5	-1.7	-4.8
1990	-4.8	-1.5	2.1	4.7	6.5	6.5	0.0	0.0	-0.3	0.5	0.5	-0.2
1991	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	-0.1	-0.7	-0.3	-2.4
1992	0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-2.0	-2.0	-2.0	-1.9	-1.2	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-14.6	0.0
AVG:	-2.3	-2.1	-1.6	-0.7	-0.1	0.0	-0.1	-0.2	-0.2	-1.2	-2.9	-1.9
MIN:	-44.3	-48.2	-51.9	-12.0	-8.7	-10.4	-2.3	-4.8	-10.9	-101.4	-33.5	-17.1
MAX:	25.8	25.8	15.9	17.3	6.6	6.5	0.2	3.6	27.0	53.0	29.0	25.9

The following figures and tables provide storage results for Oroville Reservoir, the major north-of-Delta storage facility for the SWP.

Figure 3.4.3-19. Exceedence for Simulated Oroville Reservoir End-of-September Storage, 2001 LOD

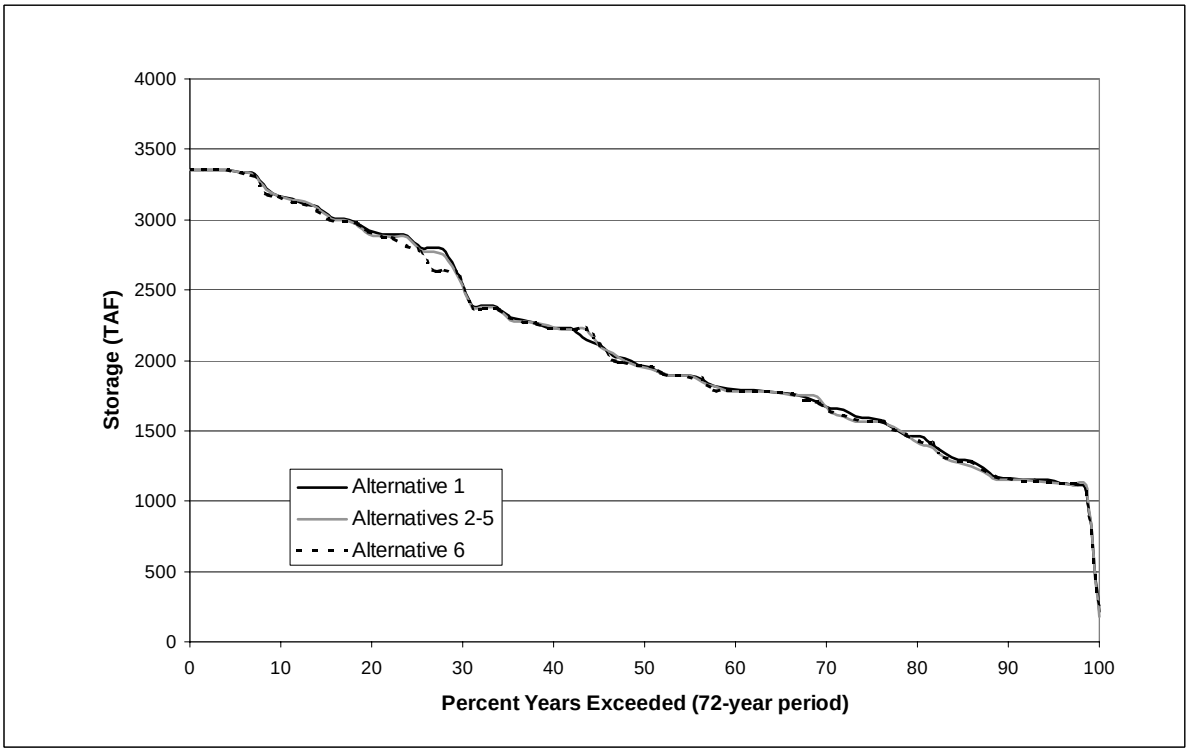


Figure 3.4.3-20. Simulated Oroville Reservoir End of September Storage, 2001 LOD

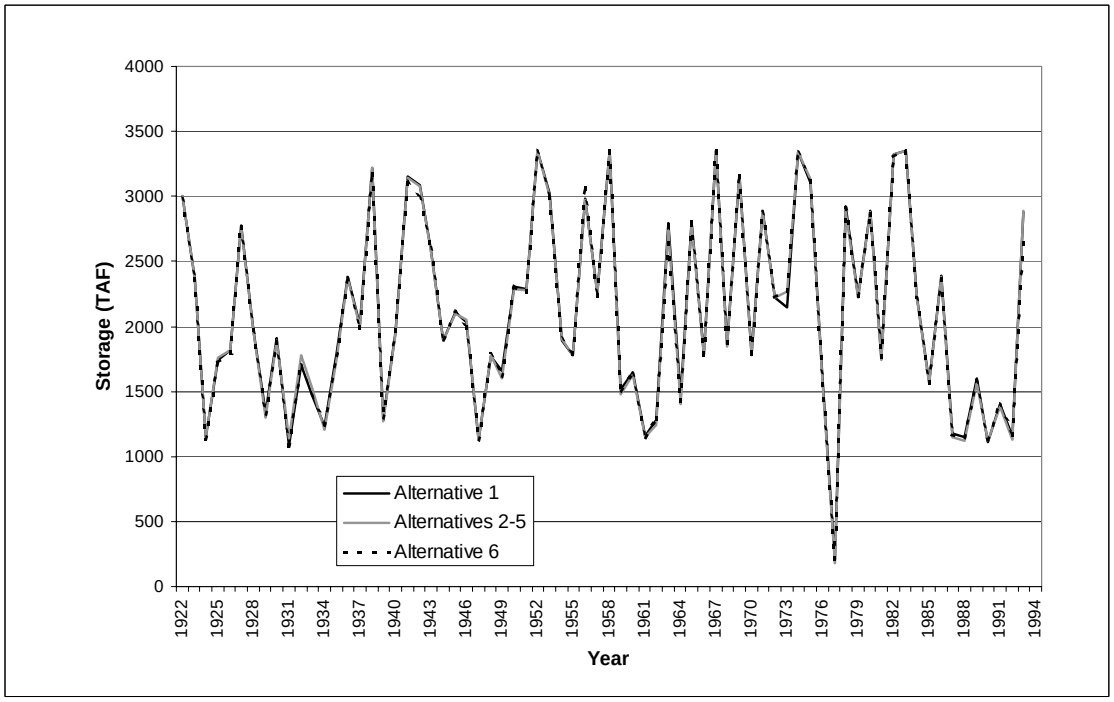


Figure 3.4.3-21. Simulated Oroville Reservoir Drought Period Storage, 2001 LOD (WY 1928-1934)

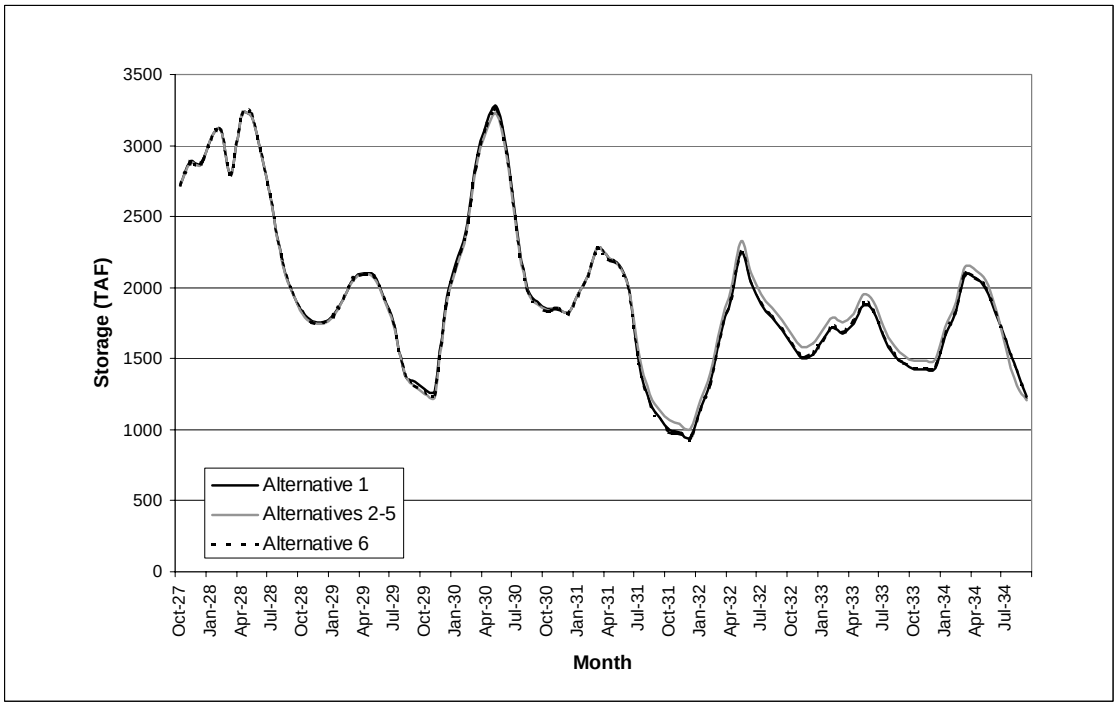


Figure 3.4.3-22. Simulated Oroville Reservoir Drought Period Storage, 2001 LOD (WY 1987-1992)

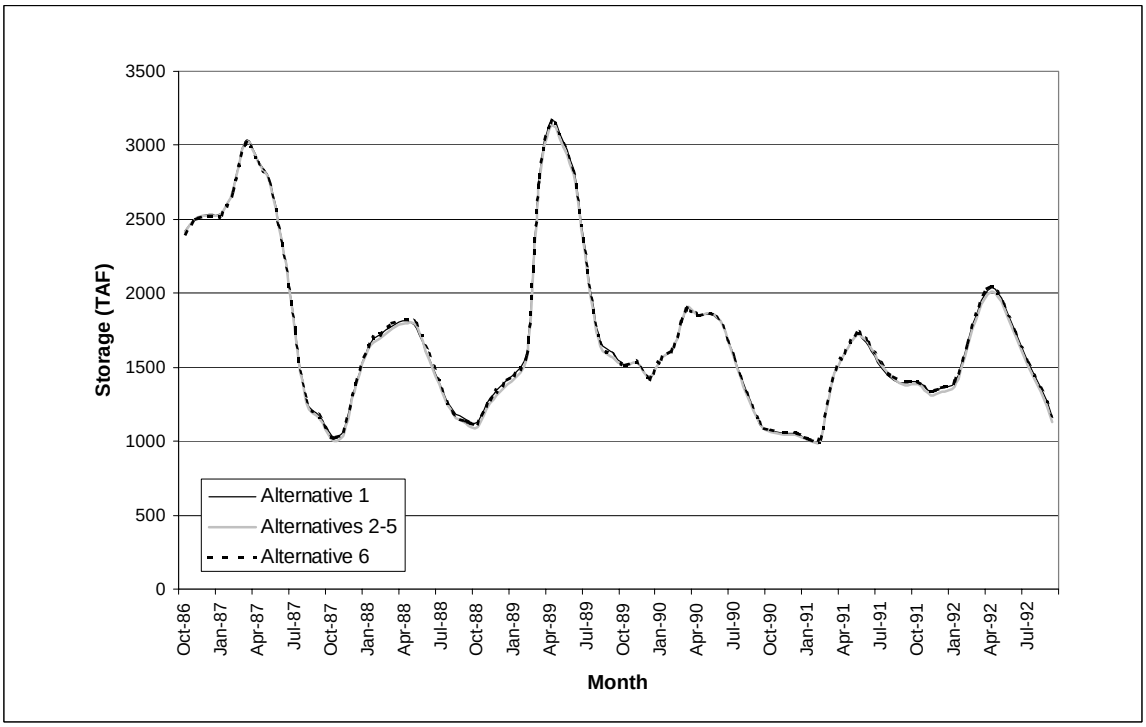


Table 3.4.3-30. Simulated Oroville Storage (TAF),Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2544.1	2549.8	2547.8	2681.3	2813.0	2922.0	3446.0	3538.0	3538.0	3410.9	3045.8	3007.0
1923	3048.1	3099.2	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3333.4	2890.1	2424.6	2375.1
1924	2294.7	2183.3	1977.7	2030.3	2214.6	2175.6	2109.2	1966.0	1779.9	1488.4	1238.9	1152.2
1925	1152.0	1196.7	1242.3	1380.4	1995.4	2148.4	2437.6	2567.0	2290.9	2138.2	1720.2	1744.4
1926	1707.5	1735.1	1735.4	1874.6	2374.8	2667.0	3290.4	3129.2	2812.5	2323.8	1914.7	1817.2
1927	1727.1	2041.9	2029.8	2331.5	2788.0	2999.0	3396.0	3538.0	3538.0	3274.9	2862.9	2774.0
1928	2722.3	2879.3	2872.3	3046.9	3108.0	2797.0	3222.8	3206.8	2925.6	2597.8	2168.5	1965.0
1929	1821.8	1761.5	1755.7	1806.2	1921.8	2058.9	2097.5	2081.0	1931.3	1742.2	1383.6	1338.4
1930	1283.6	1264.5	1887.4	2167.7	2389.9	2855.9	3160.7	3276.1	2977.8	2447.9	1991.4	1906.1
1931	1850.7	1859.0	1821.0	1955.0	2080.8	2281.6	2203.4	2158.7	1994.0	1485.2	1196.2	1085.5
1932	997.0	984.5	947.0	1150.5	1335.4	1659.3	1924.5	2253.3	2030.2	1884.4	1790.9	1706.5
1933	1595.5	1504.7	1528.1	1629.2	1717.0	1678.8	1743.8	1879.7	1831.7	1656.2	1520.1	1463.8
1934	1424.7	1424.3	1436.4	1662.9	1812.8	2086.5	2062.9	1993.1	1817.7	1633.7	1419.1	1232.2
1935	1120.1	1168.3	1232.7	1465.7	1661.4	1936.7	2945.7	3300.1	2917.9	2361.5	1901.1	1794.3
1936	1575.2	1483.9	1400.2	1911.3	2688.8	2954.0	3344.5	3524.1	3507.1	2947.7	2488.2	2385.2
1937	2205.7	2101.9	1990.3	2031.2	2202.7	2554.2	2934.8	3272.0	2965.5	2478.4	2064.3	2013.6
1938	1959.1	2137.6	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3503.5	3212.6	3220.5
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3045.1	2832.7	2565.4	2086.6	1546.8	1293.1
1940	1095.7	993.2	1017.9	1522.9	2513.7	2788.0	3238.0	3326.1	2996.8	2427.1	1991.1	1949.5
1941	1938.5	1910.2	2421.8	2788.0	2788.0	2918.0	3334.0	3538.0	3538.0	3456.4	3172.7	3149.1
1942	3163.0	3163.0	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3212.6	3073.9	3087.7
1943	3109.0	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3516.3	3309.2	3020.9	2636.2	2592.2
1944	2606.4	2648.8	2647.2	2749.2	2916.0	3069.0	3239.6	3491.5	3153.5	2606.9	2143.6	1889.4
1945	1701.4	1774.6	1942.9	2104.5	2708.5	3002.0	3236.3	3491.7	3171.0	2623.5	2177.0	2105.7
1946	2096.9	2184.4	2788.0	3007.0	3064.0	3063.0	3371.7	3538.0	3183.2	2643.5	2166.1	2030.1
1947	1862.5	1879.2	1968.6	2034.0	2310.4	2639.5	2750.0	2669.3	2358.5	1796.3	1305.0	1126.6
1948	1082.2	1056.9	971.6	1284.0	1342.0	1538.7	2195.8	2657.7	2810.9	2328.3	1865.6	1773.4
1949	1697.0	1681.2	1695.8	1748.1	1829.7	2116.8	2424.0	2622.8	2312.8	2004.1	1695.4	1656.9
1950	1592.1	1601.1	1622.4	1904.6	2365.5	2809.0	3300.8	3538.0	3359.8	2822.5	2367.7	2301.3
1951	2350.7	2788.0	2866.0	2846.0	2925.0	3105.0	3353.2	3538.0	3179.4	2737.1	2335.6	2290.3
1952	2337.6	2395.0	2788.0	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.9	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3307.2	3040.6	3020.6
1954	3049.8	3115.0	3163.0	2918.0	2903.0	2943.0	3292.0	3183.5	2950.3	2478.4	2073.6	1895.2
1955	1753.7	1776.7	1869.5	1997.6	2085.5	2212.2	2318.7	2497.7	2235.2	1972.7	1719.4	1778.5
1956	1702.8	1683.1	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3089.1	2995.0	2983.3
1957	3057.9	3142.5	3163.0	3116.0	2847.0	2990.0	2985.3	3269.0	2986.1	2590.5	2291.1	2262.6
1958	2279.8	2324.7	2544.9	2846.4	2788.0	2788.0	3235.0	3538.0	3538.0	3509.4	3434.5	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3159.2	3145.9	2697.3	2117.2	1641.2	1519.2
1960	1281.1	1179.3	1058.4	1183.6	1782.6	2347.7	2536.7	2635.8	2388.4	1971.1	1707.1	1647.6
1961	1597.4	1634.0	1728.0	1841.8	2140.9	2400.7	2460.4	2514.3	2376.7	1795.3	1266.5	1153.8
1962	963.2	885.9	973.3	1095.8	1666.6	2014.9	2517.1	2687.3	2512.8	1955.8	1490.4	1282.1
1963	1953.2	2080.0	2445.9	2746.6	3057.0	2927.0	3180.0	3538.0	3487.2	3227.1	2827.9	2796.4
1964	2800.9	2976.6	3024.1	3034.0	3163.0	3163.0	3137.4	3089.0	2815.0	2247.0	1756.4	1461.5
1965	1306.9	1321.0	2788.0	2788.0	2997.0	3096.0	3354.0	3419.4	3471.2	3140.7	2831.9	2803.1
1966	2856.1	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3317.8	2887.5	2374.0	1965.5	1785.6
1967	1546.2	1656.4	2025.4	2661.6	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.4	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3141.8	3230.8	2848.7	2432.3	2068.4	1866.7
1969	1767.4	1824.7	2047.2	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3461.0	3191.9	3162.0
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3128.9	3173.6	2873.8	2429.1	1989.6	1792.9
1971	1677.9	1943.0	2358.8	2732.4	3030.2	3162.0	3433.0	3538.0	3538.0	3100.9	2863.6	2890.1
1972	2956.6	3045.0	3029.0	3088.0	3058.0	3163.0	3320.6	3393.0	3074.5	2670.8	2307.9	2224.5
1973	2178.1	2339.0	2616.8	2788.0	2788.0	2951.0	3285.8	3538.0	3121.7	2618.5	2221.4	2149.3
1974	2177.1	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3422.9	3446.5	3422.3	3338.0
1975	3163.0	3163.0	3163.0	3163.0	2884.0	2833.0	3269.6	3538.0	3538.0	3121.2	3117.9	3105.5
1976	3140.0	3163.0	3163.0	3163.0	3162.0	3163.0	3076.0	2955.8	2669.1	2202.6	1799.7	1591.9
1977	1468.5	1382.7	1320.2	1301.6	1258.8	1226.6	1067.1	988.8	710.6	401.2	223.5	210.9
1978	174.2	198.5	403.1	1310.0	1824.6	2717.4	3218.0	3519.7	3446.5	3294.2	2898.0	2920.4
1979	2951.2	3009.9	3067.6	3111.0	2843.0	3001.0	3213.8	3496.2	3043.9	2682.7	2321.5	2233.1
1980	2286.8	2344.4	2467.4	2813.0	2788.0	3028.0	3282.4	3465.2	3425.3	3324.1	2961.3	2892.1
1981	2867.6	2892.5	3021.7	2947.0	3075.0	3024.0	3186.5	3168.7	2823.7	2305.0	1844.5	1760.6
1982	1653.3	2583.5	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3520.6	3290.9	3325.3
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3327.5	3470.9	3243.0	2827.0	2444.9	2227.6
1985	2278.0	2485.4	2647.2	2700.4	2891.7	3117.0	3353.8	3170.5	2819.6	2265.5	1783.6	1569.7
1986	1401.9	1329.7	1397.9	1723.1	2919.3	2788.0	3134.6	3213.3	3045.0	2503.7	2069.5	2389.5
1987	2421.0	2511.1	2529.2	2544.9	2705.4	3028.5	2893.3	2760.7	2344.9	1754.9	1264.9	1173.7
1988	1031.8	1061.1	1396.2	1645.4	1718.9	1781.0	1812.0	1765.6	1560.0	1349.9	1203.5	1148.7
1989	1128.2	1290.7	1386.0	1452.2	1592.2	2786.8	3169.3	3019.5	2743.3	2163.1	1678.6	1597.8
1990	1516.6	1531.6	1419.7	1554.0	1631.1	1890.4	1846.4	1860.1	1778.7	1560.0	1323.4	1113.4
1991	1067.3	1051.8	1052.7	1012.9	1003.6	1391.9	1588.6	1717.9	1641.3	1499.5	1409.5	1397.7
1992	1400.3	1333.6	1357.4	1396.0	1657.1	1900.6	2036.8	1922.6	1733.5	1529.6	1357.5	1160.9
1993	1157.3	1149.4	1313.7	1894.7	2405.3	2964.0	3456.0	3538.0	3538.0	3347.1	2941.4	2882.1
AVG:	2052.8	2103.1	2206.2	2346.2	2517.2	2690.1	2954.5	3064.5	2879.2	2531.0	2200.5	2113.1
MIN:	174.2	198.5	403.1	1012.9	1003.6	1226.6	1067.1	988.8	710.6	401.2	223.5	210.9
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.4.3-31 Simulated Oroville Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2541.2	2547.0	2544.9	2678.4	2813.0	2922.0	3446.0	3538.0	3538.0	3409.6	3039.9	3001.1
1923	3042.2	3093.3	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3328.0	2878.7	2412.0	2371.3
1924	2291.0	2179.6	1962.1	2014.7	2199.0	2157.3	2088.0	1934.3	1739.2	1452.5	1207.8	1152.7
1925	1149.7	1194.4	1240.0	1378.1	1993.1	2148.1	2437.3	2566.8	2290.7	2137.6	1715.3	1755.4
1926	1714.7	1742.2	1742.6	1881.8	2382.0	2674.2	3297.5	3133.7	2814.2	2324.5	1912.4	1814.8
1927	1714.2	2029.0	2016.9	2318.7	2788.0	2999.0	3396.0	3538.0	3538.0	3277.2	2860.4	2771.5
1928	2719.8	2876.8	2869.8	3044.4	3108.0	2797.0	3222.8	3205.3	2923.1	2596.9	2166.0	1959.5
1929	1815.4	1754.8	1749.0	1799.4	1915.1	2052.1	2090.8	2068.5	1921.3	1729.1	1392.2	1303.4
1930	1246.7	1227.6	1850.5	2130.7	2353.0	2818.9	3111.4	3221.5	2936.8	2412.8	1969.3	1888.2
1931	1839.4	1857.4	1820.3	1954.2	2080.0	2280.8	2202.2	2156.5	1995.6	1542.5	1249.0	1140.0
1932	1065.8	1043.7	1006.1	1209.7	1394.7	1718.5	1995.5	2324.1	2100.2	1953.4	1859.4	1774.6
1933	1670.4	1579.5	1602.9	1704.2	1792.0	1753.8	1818.7	1954.4	1903.2	1724.1	1585.2	1523.9
1934	1485.3	1484.8	1497.0	1723.5	1873.6	2147.2	2120.8	2047.9	1851.5	1580.6	1313.9	1206.3
1935	1091.4	1139.7	1204.0	1436.9	1632.6	1908.0	2917.0	3269.5	2893.0	2336.8	1878.1	1750.8
1936	1531.8	1440.4	1344.7	1855.8	2633.2	2954.0	3344.5	3524.1	3501.0	2940.8	2479.1	2376.1
1937	2177.5	2073.7	1962.7	2003.5	2175.0	2526.5	2907.2	3244.4	2935.9	2452.7	2055.6	1999.1
1938	1944.7	2123.2	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3502.4	3206.8	3214.8
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3047.8	2831.1	2560.2	2077.9	1534.7	1274.9
1940	1070.8	968.3	993.0	1498.0	2488.7	2788.0	3238.0	3324.4	2991.1	2420.2	1983.0	1941.4
1941	1923.7	1895.3	2407.0	2788.0	2788.0	2918.0	3334.0	3538.0	3538.0	3455.2	3166.3	3142.6
1942	3163.0	3163.0	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3210.4	3067.1	3078.6
1943	3099.8	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3514.3	3302.7	3014.4	2625.3	2581.4
1944	2595.6	2638.0	2636.3	2738.4	2906.8	3069.0	3239.6	3491.5	3153.6	2606.1	2142.0	1889.4
1945	1700.0	1773.3	1941.5	2103.1	2707.1	3000.6	3235.0	3490.4	3168.4	2619.6	2170.2	2100.4
1946	2091.7	2179.2	2788.0	3007.0	3064.0	3063.0	3371.7	3538.0	3182.1	2641.2	2162.6	2048.7
1947	1883.7	1900.3	1989.8	2055.2	2331.6	2660.7	2770.8	2689.9	2375.3	1812.4	1320.9	1128.1
1948	1082.8	1057.8	977.1	1289.6	1347.7	1544.4	2201.6	2663.4	2816.6	2332.7	1869.0	1776.8
1949	1700.5	1684.6	1699.2	1751.6	1833.2	2120.2	2427.5	2626.4	2312.6	2004.5	1696.5	1604.5
1950	1536.7	1545.7	1566.9	1849.0	2309.9	2753.3	3245.1	3538.0	3350.7	2812.1	2355.6	2289.1
1951	2332.9	2788.0	2866.0	2846.0	2925.0	3105.0	3353.2	3538.0	3179.4	2725.8	2319.5	2274.3
1952	2321.6	2378.9	2788.0	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.9	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3306.5	3035.0	3005.1
1954	3034.3	3115.0	3163.0	2918.0	2903.0	2943.0	3292.0	3182.6	2948.6	2476.3	2079.1	1897.3
1955	1755.8	1778.9	1871.6	1999.7	2087.7	2214.4	2320.8	2499.9	2237.1	1974.3	1721.2	1779.1
1956	1703.4	1683.7	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3087.9	2985.6	2973.9
1957	3048.5	3133.1	3163.0	3116.0	2847.0	2990.0	2984.5	3268.2	2983.9	2586.7	2286.8	2249.5
1958	2266.6	2311.5	2531.7	2833.2	2788.0	2788.0	3235.0	3538.0	3538.0	3508.3	3427.0	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3148.4	3121.9	2669.9	2068.1	1588.9	1473.7
1960	1232.9	1131.1	1008.5	1133.6	1732.6	2297.6	2482.1	2581.4	2361.5	1943.2	1682.5	1627.5
1961	1577.6	1614.3	1708.4	1822.1	2121.2	2380.9	2440.1	2496.4	2365.5	1783.1	1252.6	1152.6
1962	963.7	886.3	973.7	1096.2	1667.0	2015.3	2517.5	2682.6	2496.3	1923.4	1455.0	1245.1
1963	1916.3	2043.1	2409.0	2709.7	3057.0	2927.0	3180.0	3538.0	3481.1	3214.3	2810.1	2739.9
1964	2744.5	2920.2	2967.6	3034.0	3163.0	3163.0	3126.5	3050.7	2771.4	2200.2	1707.1	1406.0
1965	1256.5	1270.7	2788.0	2788.0	2997.0	3096.0	3354.0	3417.1	3461.5	3127.5	2814.5	2785.7
1966	2838.7	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3316.9	2884.9	2369.8	1961.8	1779.4
1967	1540.0	1650.2	2019.2	2655.4	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.4	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3136.8	3225.8	2838.3	2415.7	2050.7	1843.3
1969	1742.1	1796.6	2019.1	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3459.9	3183.4	3162.0
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3128.0	3172.7	2870.5	2429.1	1983.7	1782.4
1971	1672.4	1937.5	2353.4	2726.9	3024.7	3162.0	3433.0	3538.0	3538.0	3095.6	2850.4	2879.9
1972	2946.5	3026.9	3029.0	3088.0	3058.0	3163.0	3320.6	3390.3	3070.9	2666.8	2303.4	2216.9
1973	2170.6	2331.4	2609.2	2788.0	2788.0	2951.0	3285.8	3538.0	3088.9	2756.8	2357.9	2266.3
1974	2294.1	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3421.4	3442.9	3414.3	3338.0
1975	3163.0	3163.0	3163.0	3163.0	2884.0	2833.0	3269.6	3538.0	3538.0	3116.4	3113.1	3130.4
1976	3140.0	3163.0	3163.0	3163.0	3162.0	3163.0	3076.0	2955.8	2671.2	2187.2	1774.9	1566.3
1977	1435.1	1349.3	1288.9	1270.3	1231.2	1196.8	1034.4	952.9	671.5	374.8	194.5	178.1
1978	137.9	162.1	366.6	1273.4	1788.1	2680.8	3194.0	3495.7	3422.1	3140.7	2740.8	2880.2
1979	2910.9	2969.6	3027.3	3111.0	2843.0	3001.0	3211.0	3493.4	3036.9	2671.3	2305.7	2218.7
1980	2266.8	2324.3	2447.3	2813.0	2788.0	3028.0	3282.4	3465.2	3425.3	3321.2	2952.9	2883.8
1981	2859.2	2884.1	3013.3	2947.0	3075.0	3024.0	3186.5	3168.7	2819.2	2298.1	1834.6	1745.1
1982	1637.9	2568.1	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3520.6	3286.2	3320.7
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3326.4	3469.9	3241.3	2824.3	2439.9	2220.6
1985	2270.9	2478.3	2640.1	2693.5	2884.8	3117.0	3353.8	3170.6	2818.0	2262.6	1779.6	1564.2
1986	1396.3	1324.1	1392.4	1717.5	2913.9	2788.0	3134.6	3213.3	3044.4	2502.1	2068.1	2381.9
1987	2413.4	2503.5	2521.6	2537.3	2697.8	3020.9	2881.8	2747.4	2332.8	1739.7	1256.5	1151.3
1988	1009.5	1038.8	1373.8	1623.1	1696.5	1762.2	1793.2	1780.4	1551.2	1337.1	1177.1	1117.4
1989	1094.6	1257.2	1352.4	1418.5	1558.5	2753.1	3135.6	2985.3	2710.6	2129.2	1644.1	1565.0
1990	1512.7	1527.8	1425.0	1559.2	1636.3	1895.7	1848.8	1862.5	1776.1	1554.6	1313.4	1117.2
1991	1058.2	1045.2	1046.2	1009.5	1003.5	1391.8	1588.6	1717.9	1656.6	1515.8	1420.0	1380.3
1992	1383.0	1308.6	1332.4	1370.9	1632.0	1875.5	2011.7	1900.4	1710.0	1505.1	1330.7	1133.7
1993	1117.9	1099.0	1263.2	1844.1	2354.7	2964.0	3456.0	3538.0	3538.0	3349.2	2950.5	2891.2
AVG:	2044.2	2093.3	2198.2	2340.6	2512.8	2687.9	2951.8	3061.7	2874.6	2524.8	2192.0	2105.3
MIN:	137.9	162.1	366.6	1009.5	1003.5	1196.8	1034.4	952.9	671.5	374.8	194.5	178.1
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.4.3-32. Simulated Oroville Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2541.6	2547.4	2545.3	2678.8	2813.0	2922.0	3446.0	3538.0	3538.0	3405.1	3017.6	2978.9
1923	3020.0	3071.0	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3345.3	2889.6	2421.2	2369.6
1924	2289.3	2177.9	1965.0	2017.7	2201.9	2162.6	2095.7	1948.4	1761.1	1471.4	1221.9	1131.3
1925	1131.6	1176.3	1221.9	1359.9	1974.9	2129.9	2419.1	2548.6	2268.6	2112.5	1691.8	1718.1
1926	1683.2	1710.7	1711.0	1850.2	2350.3	2642.6	3266.0	3104.4	2787.7	2300.6	1886.3	1788.8
1927	1709.4	2024.3	2012.1	2313.8	2788.0	2999.0	3396.0	3538.0	3538.0	3290.9	2856.6	2767.8
1928	2716.0	2873.0	2866.0	3040.7	3108.0	2797.0	3222.8	3219.9	2935.8	2600.0	2172.4	1964.2
1929	1821.1	1756.9	1751.2	1801.6	1917.3	2054.3	2092.9	2075.2	1926.9	1737.1	1393.6	1315.7
1930	1262.1	1243.0	1865.9	2146.1	2368.4	2834.4	3137.0	3251.1	2955.4	2423.7	1967.6	1885.2
1931	1829.1	1850.2	1812.5	1946.4	2072.2	2273.0	2194.3	2148.7	1981.5	1464.5	1175.2	1071.8
1932	984.2	971.6	934.1	1137.5	1322.5	1646.4	1923.1	2251.9	2028.6	1882.1	1788.4	1704.0
1933	1602.0	1511.2	1534.6	1635.8	1723.6	1685.4	1750.3	1886.2	1837.5	1661.3	1524.9	1468.5
1934	1429.7	1429.2	1441.3	1667.8	1817.8	2091.4	2067.3	1996.8	1820.5	1635.6	1415.0	1228.7
1935	1116.4	1164.6	1229.0	1461.9	1657.6	1933.0	2942.0	3294.9	2921.3	2364.2	1903.9	1766.8
1936	1547.7	1456.3	1368.0	1879.1	2656.5	2954.0	3344.5	3524.1	3526.4	2962.3	2495.2	2367.8
1937	2162.0	2058.2	1947.9	1988.6	2160.1	2511.7	2892.3	3229.6	2927.4	2443.3	2051.2	1989.0
1938	1934.6	2113.0	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3498.2	3174.7	3182.7
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3047.1	2834.4	2562.3	2083.0	1542.7	1287.6
1940	1088.0	985.4	1010.2	1515.1	2505.9	2788.0	3238.0	3336.7	3010.3	2435.7	1994.9	1953.3
1941	1923.2	1894.8	2406.5	2788.0	2788.0	2918.0	3334.0	3538.0	3538.0	3450.7	3133.2	3109.6
1942	3163.0	3163.0	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3112.4	2950.9	2991.8
1943	3013.1	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3516.7	3308.1	3041.1	2650.3	2606.4
1944	2620.5	2662.9	2661.3	2763.3	2916.0	3069.0	3239.6	3491.5	3153.7	2606.2	2141.9	1893.8
1945	1710.3	1783.6	1951.9	2113.5	2717.5	3010.9	3245.3	3500.7	3188.8	2636.6	2174.4	2105.0
1946	2096.2	2183.7	2788.0	3007.0	3064.0	3063.0	3371.7	3538.0	3180.0	2636.6	2155.4	2008.5
1947	1853.7	1870.4	1959.8	2025.2	2301.6	2630.7	2741.1	2660.3	2362.5	1799.9	1308.0	1122.1
1948	1089.2	1066.4	990.5	1303.0	1361.3	1558.0	2215.1	2676.9	2830.1	2346.0	1882.2	1790.0
1949	1713.6	1697.8	1712.4	1764.8	1846.4	2133.4	2440.7	2639.6	2319.6	2011.4	1703.2	1612.8
1950	1549.4	1558.4	1579.6	1861.7	2322.6	2766.1	3257.9	3538.0	3379.9	2837.7	2374.4	2308.0
1951	2357.4	2788.0	2866.0	2846.0	2925.0	3105.0	3353.2	3538.0	3179.9	2719.6	2307.9	2262.7
1952	2310.0	2367.4	2788.0	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.9	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3307.0	3034.5	3001.0
1954	3030.2	3115.0	3163.0	2918.0	2903.0	2943.0	3292.0	3182.6	2948.6	2473.9	2079.1	1897.4
1955	1755.9	1778.9	1871.7	1999.8	2087.7	2214.4	2320.8	2499.9	2237.1	1974.3	1721.3	1778.9
1956	1703.2	1683.5	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3344.5	3078.8	3067.0
1957	3080.0	3163.0	3163.0	3116.0	2847.0	2990.0	2984.4	3268.0	3000.3	2632.6	2333.1	2231.1
1958	2248.2	2293.1	2513.3	2814.8	2788.0	2788.0	3235.0	3538.0	3538.0	3503.8	3397.8	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3157.6	3140.0	2691.4	2094.7	1617.9	1509.2
1960	1271.0	1169.3	1048.8	1174.0	1773.0	2338.0	2526.4	2625.5	2385.9	1967.8	1704.6	1638.9
1961	1588.7	1625.4	1719.4	1833.2	2132.3	2392.0	2451.0	2506.9	2371.2	1788.8	1259.0	1146.7
1962	956.1	878.7	966.2	1088.6	1659.5	2007.7	2510.0	2678.9	2501.1	1950.1	1483.7	1278.9
1963	1950.0	2076.9	2442.8	2743.5	3057.0	2927.0	3180.0	3538.0	3460.2	3143.5	2737.2	2643.6
1964	2648.3	2823.9	2871.2	3024.0	3156.4	3163.0	3127.6	3074.3	2792.6	2223.8	1732.8	1421.5
1965	1270.7	1284.8	2788.0	2788.0	2997.0	3096.0	3354.0	3417.0	3473.9	3160.5	2835.7	2806.9
1966	2859.9	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3317.0	2885.1	2369.9	1961.8	1779.7
1967	1540.3	1650.5	2019.5	2655.6	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.4	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3141.1	3230.1	2846.7	2428.6	2064.4	1861.1
1969	1762.3	1821.1	2043.6	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3455.7	3149.3	3162.0
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3128.1	3172.7	2870.0	2429.9	1982.9	1780.8
1971	1672.3	1937.4	2353.2	2726.7	3024.6	3162.0	3433.0	3538.0	3538.0	3095.5	2848.7	2878.7
1972	2945.2	3024.9	3029.0	3088.0	3058.0	3163.0	3320.6	3390.3	3070.9	2666.6	2303.0	2216.8
1973	2170.5	2331.3	2609.1	2788.0	2788.0	2951.0	3285.8	3538.0	3093.8	2759.0	2356.9	2265.4
1974	2293.1	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3429.0	3426.5	3400.7	3338.0
1975	3163.0	3163.0	3163.0	3163.0	2884.0	2833.0	3269.6	3538.0	3538.0	3105.9	3102.6	3122.2
1976	3140.0	3163.0	3163.0	3163.0	3162.0	3163.0	3076.0	2955.8	2677.6	2180.3	1776.1	1565.9
1977	1445.6	1359.9	1303.0	1284.5	1245.3	1216.3	1056.3	977.1	698.1	394.1	216.0	204.6
1978	167.9	192.1	396.7	1303.6	1818.3	2711.0	3218.0	3519.7	3445.2	3292.0	2892.4	2914.8
1979	2945.6	3004.3	3062.0	3111.0	2843.0	3001.0	3214.8	3497.2	3044.1	2681.8	2319.6	2231.0
1980	2283.2	2340.7	2463.7	2813.0	2788.0	3028.0	3282.4	3465.2	3425.3	3316.0	2938.0	2869.0
1981	2844.4	2869.3	2998.5	2947.0	3075.0	3024.0	3186.5	3168.7	2822.5	2303.6	1842.3	1757.5
1982	1650.2	2580.4	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3518.4	3270.8	3305.3
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3326.4	3469.9	3242.3	2828.7	2442.5	2221.8
1985	2272.1	2479.5	2641.3	2694.7	2886.0	3117.0	3353.8	3171.2	2818.5	2262.9	1779.9	1564.3
1986	1396.5	1324.3	1392.6	1717.7	2914.1	2788.0	3134.6	3213.3	3046.5	2500.5	2060.5	2374.6
1987	2406.1	2496.2	2514.3	2530.0	2690.5	3013.6	2877.0	2743.0	2335.3	1744.6	1270.9	1170.6
1988	1028.8	1058.1	1393.2	1642.5	1715.9	1795.0	1826.0	1801.0	1593.0	1350.1	1183.1	1141.8
1989	1119.4	1281.9	1377.2	1443.3	1583.4	2778.0	3160.4	3010.0	2733.4	2152.3	1666.8	1582.5
1990	1514.8	1529.7	1422.1	1556.3	1633.4	1892.7	1848.2	1862.0	1779.3	1559.9	1325.4	1121.0
1991	1077.6	1060.6	1061.6	1021.7	1012.5	1400.8	1597.6	1726.8	1667.8	1524.6	1433.4	1402.5
1992	1405.2	1338.0	1361.8	1400.3	1661.5	1905.0	2041.2	1926.3	1736.2	1531.5	1358.4	1161.7
1993	1157.4	1149.1	1313.4	1894.4	2405.0	2964.0	3456.0	3538.0	3538.0	3022.5	2617.1	2644.4
AVG:	2043.8	2094.0	2198.9	2341.7	2513.5	2687.6	2952.0	3062.8	2878.2	2526.9	2189.4	2100.1
MIN:	167.9	192.1	396.7	1021.7	1012.5	1216.3	1056.3	977.1	698.1	394.1	216.0	204.6
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.4.3-33. Simulated Oroville Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2.9	-2.9	-2.9	-2.9	0.0	0.0	0.0	0.0	0.0	-1.3	-5.9	-5.9
1923	-5.9	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-11.4	-12.6	-3.7
1924	-3.7	-3.7	-15.6	-15.6	-15.6	-18.3	-21.2	-31.7	-40.7	-35.9	-31.1	0.5
1925	-2.3	-2.3	-2.3	-2.3	-2.3	-0.2	-0.2	-0.2	-0.2	-0.5	-4.9	11.0
1926	7.1	7.2	7.2	7.2	7.2	7.2	7.2	4.5	1.7	0.7	-2.4	-2.4
1927	-12.9	-12.9	-12.9	-12.9	0.0	0.0	0.0	0.0	0.0	2.3	-2.5	-2.5
1928	-2.5	-2.5	-2.5	-2.5	0.0	0.0	0.0	-1.5	-2.5	-1.0	-2.5	-5.6
1929	-6.4	-6.7	-6.8	-6.8	-6.8	-6.8	-6.8	-12.4	-10.0	-13.1	8.6	-35.0
1930	-36.9	-36.9	-36.9	-37.0	-37.0	-37.0	-49.4	-54.6	-41.0	-35.1	-22.1	-17.9
1931	-11.3	-1.6	-0.8	-0.8	-0.8	-0.8	-1.2	-2.2	1.6	57.3	52.8	54.5
1932	68.7	59.2	59.1	59.2	59.3	59.2	71.0	70.9	70.0	69.0	68.5	68.2
1933	74.9	74.8	74.9	75.0	75.0	75.0	74.9	74.7	71.4	67.9	65.1	60.1
1934	60.6	60.5	60.5	60.7	60.7	60.8	58.0	54.8	33.9	-53.0	-105.2	-25.9
1935	-28.7	-28.7	-28.7	-28.7	-28.7	-28.8	-28.7	-30.6	-24.8	-24.7	-23.0	-43.5
1936	-43.4	-43.5	-55.5	-55.6	-55.6	0.0	0.0	0.0	-6.1	-6.9	-9.1	-9.1
1937	-28.2	-28.2	-27.7	-27.7	-27.7	-27.7	-27.7	-27.6	-29.6	-25.8	-8.7	-14.5
1938	-14.5	-14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-5.8	-5.8
1939	0.0	0.0	0.0	0.0	0.0	0.0	2.7	-1.6	-5.2	-8.7	-12.0	-18.2
1940	-24.8	-24.9	-24.9	-24.9	-24.9	0.0	0.0	-1.7	-5.7	-6.9	-8.1	-8.1
1941	-14.8	-14.8	-14.8	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-6.5	-6.5
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	-6.8	-9.2
1943	-9.2	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	-6.5	-6.5	-10.8	-10.8
1944	-10.8	-10.8	-10.8	-10.8	-9.2	0.0	0.0	0.0	0.1	-0.8	-1.6	-0.1
1945	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-2.6	-3.9	-6.8	-5.2
1946	-5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-2.3	-3.5	18.7
1947	21.1	21.2	21.2	21.2	21.2	21.2	20.8	20.6	16.8	16.1	16.0	1.5
1948	0.6	0.8	5.5	5.5	5.7	5.7	5.7	5.7	5.7	4.4	3.4	3.4
1949	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	-0.2	0.4	1.1	-52.4
1950	-55.5	-55.4	-55.5	-55.6	-55.6	-55.7	-55.6	0.0	-9.2	-10.4	-12.1	-12.1
1951	-17.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.3	-16.1	-16.0
1952	-16.0	-16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-5.6	-15.4
1954	-15.4	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-1.7	-2.1	5.5	2.2
1955	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.9	1.6	1.8	0.6
1956	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-9.4	-9.4
1957	-9.4	-9.4	0.0	0.0	0.0	0.0	-0.8	-0.8	-2.3	-3.7	-4.2	-13.2
1958	-13.2	-13.2	-13.2	-13.2	0.0	0.0	0.0	0.0	0.0	-1.2	-7.5	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	-10.8	-24.0	-27.4	-49.1	-52.2	-45.5
1960	-48.2	-48.2	-49.9	-50.0	-50.0	-50.0	-54.6	-54.4	-26.9	-27.9	-24.7	-20.1
1961	-19.8	-19.7	-19.7	-19.7	-19.7	-19.8	-20.2	-17.9	-11.2	-12.3	-13.9	-1.2
1962	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-4.7	-16.5	-32.4	-35.4	-36.9
1963	-36.9	-36.9	-36.9	-37.0	0.0	0.0	0.0	0.0	-6.1	-12.8	-17.8	-56.4
1964	-56.4	-56.4	-56.5	0.0	0.0	0.0	-10.9	-38.3	-43.6	-46.8	-49.3	-55.5
1965	-50.4	-50.3	0.0	0.0	0.0	0.0	0.0	-2.3	-9.7	-13.2	-17.4	-17.4
1966	-17.4	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-2.6	-4.2	-3.7	-6.2
1967	-6.2	-6.2	-6.2	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-5.0	-5.0	-10.5	-16.6	-17.6	-23.4
1969	-25.3	-28.1	-28.1	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-8.5	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-0.9	-3.3	0.0	-5.9	-10.5
1971	-5.5	-5.5	-5.5	-5.5	-5.5	0.0	0.0	0.0	0.0	-5.2	-13.2	-10.1
1972	-10.1	-18.1	0.0	0.0	0.0	0.0	0.0	-2.7	-3.6	-4.0	-4.6	-7.6
1973	-7.5	-7.6	-7.6	0.0	0.0	0.0	0.0	0.0	-32.7	138.3	136.6	117.1
1974	117.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.5	-3.6	-8.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.8	-4.8	24.9
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	-15.4	-24.9	-25.5
1977	-33.3	-33.3	-31.3	-31.3	-27.6	-29.8	-32.7	-35.9	-39.1	-26.4	-29.0	-32.8
1978	-36.4	-36.4	-36.5	-36.6	-36.6	-36.6	-24.0	-24.0	-24.4	-153.5	-157.3	-40.3
1979	-40.3	-40.3	-40.3	0.0	0.0	0.0	-2.9	-2.8	-7.1	-11.4	-15.8	-14.3
1980	-20.0	-20.0	-20.1	0.0	0.0	0.0	0.0	0.0	0.0	-2.9	-8.4	-8.4
1981	-8.4	-8.4	-8.4	0.0	0.0	0.0	0.0	0.0	-4.5	-6.8	-9.9	-15.5
1982	-15.4	-15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.7	-4.7
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.0	-1.7	-2.7	-5.0	-7.1
1985	-7.1	-7.1	-7.1	-6.9	-6.9	0.0	0.0	0.1	-1.6	-2.9	-4.0	-5.6
1986	-5.5	-5.5	-5.5	-5.6	-5.4	0.0	0.0	0.0	-0.7	-1.6	-1.4	-7.6
1987	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6	-11.6	-13.3	-12.1	-15.2	-8.4	-22.3
1988	-22.3	-22.3	-22.3	-22.4	-22.4	-18.8	-18.8	14.8	-8.8	-12.9	-26.4	-31.2
1989	-33.5	-33.5	-33.6	-33.6	-33.7	-33.7	-33.6	-34.2	-32.7	-34.0	-34.5	-32.8
1990	-3.9	-3.9	5.3	5.3	5.3	5.3	2.4	2.4	-2.6	-5.4	-10.1	3.8
1991	-9.0	-6.6	-6.6	-3.4	0.0	0.0	0.0	0.0	15.3	16.4	10.5	-17.4
1992	-17.3	-25.0	-25.1	-25.1	-25.1	-25.1	-25.1	-22.2	-23.5	-24.5	-26.8	-27.3
1993	-39.4	-50.4	-50.5	-50.6	-50.6	0.0	0.0	0.0	0.0	2.1	9.1	9.1
AVG:	-8.6	-9.8	-8.0	-5.6	-4.4	-2.2	-2.7	-2.8	-4.6	-6.2	-8.5	-7.7
MIN:	-56.4	-56.4	-56.5	-55.6	-55.6	-55.7	-55.6	-54.6	-43.6	-153.5	-157.3	-56.4
MAX:	117.0	74.8	74.9	75.0	75.0	75.0	74.9	74.7	71.4	138.3	136.6	117.1

Table 3.4.3-34. Simulated Oroville Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2.5	-2.5	-2.5	-2.5	0.0	0.0	0.0	0.0	0.0	-5.7	-28.2	-28.1
1923	-28.1	-28.1	0.0	0.0	0.0	0.0	0.0	0.0	11.9	-0.4	-3.5	-5.4
1924	-5.4	-5.4	-12.7	-12.7	-12.7	-13.0	-13.5	-17.5	-18.8	-16.9	-17.0	-20.9
1925	-20.4	-20.4	-20.4	-20.4	-20.5	-18.5	-18.5	-18.4	-22.4	-25.6	-28.4	-26.2
1926	-24.4	-24.4	-24.4	-24.4	-24.4	-24.4	-24.4	-24.7	-24.8	-23.2	-28.5	-28.4
1927	-17.7	-17.7	-17.7	-17.7	0.0	0.0	0.0	0.0	0.0	15.9	-6.3	-6.2
1928	-6.2	-6.2	-6.2	-6.2	0.0	0.0	0.0	13.2	10.2	2.2	3.9	-0.8
1929	-0.7	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-5.8	-4.4	-5.2	10.0	-22.7
1930	-21.5	-21.5	-21.5	-21.6	-21.6	-21.6	-23.7	-25.0	-22.4	-24.2	-23.8	-20.9
1931	-21.6	-8.8	-8.6	-8.6	-8.6	-8.6	-9.1	-10.0	-12.5	-20.6	-21.0	-13.7
1932	-12.8	-12.9	-12.9	-12.9	-12.9	-12.9	-1.4	-1.3	-1.6	-2.4	-2.5	-2.5
1933	6.5	6.5	6.6	6.6	6.6	6.6	6.6	6.5	5.8	5.0	4.8	4.7
1934	4.9	4.9	4.9	4.9	4.9	4.9	4.5	3.7	2.8	1.9	-4.1	-3.4
1935	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-5.2	3.4	2.8	2.8	-27.6
1936	-27.5	-27.6	-32.2	-32.2	-32.2	0.0	0.0	0.0	19.4	14.5	7.0	-17.4
1937	-43.6	-43.7	-42.5	-42.6	-42.6	-42.6	-42.5	-42.4	-38.1	-35.1	-13.1	-24.6
1938	-24.6	-24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-37.9	-37.8
1939	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.6	-3.2	-3.6	-4.0	-5.5
1940	-7.7	-7.7	-7.7	-7.8	-7.8	0.0	0.0	10.6	13.5	8.6	3.8	3.8
1941	-15.4	-15.4	-15.4	0.0	0.0	0.0	0.0	0.0	0.0	-5.7	-39.5	-39.4
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100.2	-122.9	-95.9
1943	-95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-1.0	20.2	14.1	14.1
1944	14.1	14.1	14.1	14.1	0.0	0.0	0.0	0.0	0.2	-0.8	-1.6	4.4
1945	8.9	8.9	9.0	9.0	9.0	9.0	9.0	9.0	17.8	13.0	-2.6	-0.7
1946	-0.7	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	-3.2	-7.0	-10.7	-21.6
1947	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.9	-9.0	4.0	3.6	3.0	-4.5
1948	7.0	9.5	19.0	19.0	19.3	19.3	19.3	19.2	19.2	17.7	16.7	16.6
1949	16.6	16.6	16.6	16.6	16.7	16.7	16.7	16.7	6.8	7.3	7.8	-44.1
1950	-42.8	-42.7	-42.8	-42.8	-42.9	-42.9	-42.9	0.0	20.0	15.2	6.7	6.7
1951	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-17.6	-27.7	-27.6
1952	-27.6	-27.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-6.0	-19.5
1954	-19.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-1.7	-4.5	5.6	2.2
1955	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.9	1.6	1.9	0.5
1956	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	255.3	83.8	83.6
1957	22.1	20.5	0.0	0.0	0.0	0.0	-0.9	-1.0	14.1	42.2	42.0	-31.5
1958	-31.5	-31.5	-31.6	-31.6	0.0	0.0	0.0	0.0	0.0	-5.6	-36.7	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	-5.9	-5.8	-22.5	-23.3	-10.1
1960	-10.0	-10.0	-9.6	-9.6	-9.6	-9.6	-10.3	-10.3	-2.5	-3.3	-2.6	-8.7
1961	-8.7	-8.6	-8.6	-8.7	-8.7	-8.7	-9.4	-7.4	-5.5	-6.5	-7.5	-7.1
1962	-7.1	-7.1	-7.1	-7.1	-7.2	-7.2	-7.2	-8.4	-11.7	-5.7	-6.6	-3.1
1963	-3.1	-3.2	-3.2	-3.2	0.0	0.0	0.0	0.0	-27.0	-83.7	-90.7	-152.8
1964	-152.6	-152.7	-152.9	-10.0	-6.6	0.0	-9.8	-14.8	-22.4	-23.2	-23.6	-40.0
1965	-36.2	-36.2	0.0	0.0	0.0	0.0	0.0	-2.5	2.7	19.8	3.8	3.8
1966	3.8	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-2.4	-4.1	-3.7	-5.9
1967	-5.9	-5.9	-5.9	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-0.7	-2.1	-3.8	-4.0	-5.5
1969	-5.1	-3.6	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	-5.2	-42.5	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-0.9	-3.8	0.8	-6.7	-12.1
1971	-5.6	-5.7	-5.7	-5.7	-5.7	0.0	0.0	0.0	0.0	-5.3	-14.9	-11.3
1972	-11.3	-20.1	0.0	0.0	0.0	0.0	0.0	-2.7	-3.5	-4.2	-5.0	-7.6
1973	-7.6	-7.6	-7.6	0.0	0.0	0.0	0.0	0.0	-27.9	140.5	135.6	116.1
1974	116.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	-20.0	-21.6	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.3	-15.3	16.7
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	-22.3	-23.7	-25.9
1977	-22.8	-22.8	-17.1	-17.2	-13.5	-10.3	-10.8	-11.7	-12.5	-7.1	-7.4	-6.3
1978	-6.4	-6.4	-6.4	-6.4	-6.4	-6.4	0.0	0.0	-1.3	-2.2	-5.6	-5.6
1979	-5.6	-5.6	-5.6	0.0	0.0	0.0	1.0	1.0	0.1	-0.9	-1.8	-2.0
1980	-3.6	-3.6	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	-8.0	-23.2	-23.2
1981	-23.2	-23.2	-23.2	0.0	0.0	0.0	0.0	0.0	-1.2	-1.4	-2.2	-3.1
1982	-3.1	-3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	-20.1	-20.1
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-0.6	1.6	-2.4	-5.8
1985	-5.8	-5.8	-5.9	-5.7	-5.7	0.0	0.0	0.8	-1.1	-2.5	-3.7	-5.4
1986	-5.4	-5.3	-5.3	-5.4	-5.2	0.0	0.0	0.0	1.5	-3.3	-9.0	-14.9
1987	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-16.3	-17.7	-9.5	-10.3	6.0	-3.1
1988	-3.0	-3.0	-3.0	-3.0	-3.0	14.0	14.0	35.4	33.0	0.2	-20.4	-6.9
1989	-8.8	-8.8	-8.8	-8.8	-8.8	-8.9	-8.8	-9.6	-9.9	-10.9	-11.7	-15.4
1990	-1.9	-1.9	2.3	2.3	2.3	2.3	1.9	1.9	0.6	-0.1	1.9	7.6
1991	10.3	8.8	8.8	8.8	9.0	9.0	8.9	8.9	26.6	25.1	23.9	4.8
1992	4.8	4.3	4.4	4.4	4.4	4.4	4.4	3.7	2.7	1.8	0.8	0.7
1993	0.1	-0.3	-0.3	-0.3	-0.3	0.0	0.0	0.0	0.0	-324.6	-324.3	-237.7
AVG:	-8.9	-9.1	-7.3	-4.5	-3.7	-2.5	-2.5	-1.7	-1.0	-4.0	-11.2	-12.9
MIN:	-152.6	-152.7	-152.9	-42.8	-42.9	-42.9	-42.9	-42.4	-38.1	-324.6	-324.3	-237.7
MAX:	116.0	20.5	19.0	19.0	19.3	19.3	19.3	35.4	33.0	255.3	135.6	116.1

The following series of tables display monthly data for CVP total upstream storage (the sum of storage in Shasta, Trinity, and Folsom Reservoirs), followed by CVP San Luis Reservoir and SWP San Luis Reservoir storage. Results from each alternative are presented, along with a comparison of each Action alternative to Alternative 1.

Table 3.4.3-35. Simulated CVP Total Upstream Storage (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5097.9	5084.6	5227.1	5328.3	5710.6	6241.2	6940.6	7317.8	7033.7	6141.2	5528.1	5091.2
1923	5016.4	5018.9	5159.5	5384.8	5535.9	5713.3	6359.7	6188.8	5749.4	4870.4	4250.0	3946.8
1924	3836.6	3698.9	3595.9	3558.9	3795.8	3680.5	3431.1	3011.3	2445.3	1807.9	1412.0	1213.1
1925	1217.4	1478.8	1664.1	1876.0	3604.1	3882.5	5094.9	5479.7	5113.2	4424.1	3838.5	3587.1
1926	3454.8	3416.4	3419.3	3447.4	4490.0	4830.9	5525.9	5227.9	4605.3	3878.1	3375.9	3186.6
1927	3128.1	3918.6	4676.1	5332.6	5355.1	6263.9	7084.3	7359.7	7202.5	6356.8	5790.2	5398.0
1928	5282.8	5360.2	5434.1	5752.0	6350.6	6527.1	7330.1	7304.9	6725.8	5632.6	4998.0	4692.8
1929	4505.4	4457.2	4446.2	4482.3	4733.0	5040.2	5145.7	5123.3	4759.9	4001.7	3396.9	3222.9
1930	3036.8	2920.9	3699.0	3999.5	4476.2	5179.7	5547.7	5350.8	4838.0	4111.7	3611.8	3461.8
1931	3286.9	3221.5	3146.7	3209.4	3325.8	3619.9	3422.4	3135.7	2685.4	1922.7	1427.6	1242.7
1932	1123.8	1118.6	1442.3	1704.6	1964.0	2590.3	2910.5	3366.7	3222.8	2701.9	2205.4	1939.9
1933	1778.7	1686.2	1598.3	1650.7	1719.1	2486.2	2768.1	2939.6	2909.2	2336.2	1903.8	1730.9
1934	1589.6	1531.2	1732.7	2189.7	2688.9	3173.2	3198.7	2975.1	2397.4	1816.4	1373.2	1185.7
1935	1086.9	1364.7	1476.3	1926.1	2403.6	2968.4	4369.5	4766.6	4468.3	3801.0	3181.7	2876.3
1936	2793.0	2706.5	2698.3	3454.6	4471.7	5046.2	5578.1	5635.3	5446.9	4762.4	4140.6	3829.6
1937	3637.8	3503.4	3385.9	3331.0	3481.8	4335.0	5342.9	5800.9	5631.9	4912.1	4284.9	3969.5
1938	3889.9	4615.4	4976.6	5431.7	5480.6	5696.5	6766.1	7711.3	7799.9	7190.1	6650.0	6025.0
1939	5736.1	5677.0	5727.7	5819.5	5948.3	6538.5	6457.8	6050.4	5369.0	4431.9	3691.7	3456.6
1940	3343.1	3234.1	3451.2	4739.6	5273.2	5817.5	6948.0	7108.4	6677.7	5789.3	5215.0	4922.3
1941	4814.5	4792.1	5372.3	5616.8	5971.6	6712.0	7556.0	7947.0	7922.0	7175.8	6620.0	6025.0
1942	5733.7	5677.0	5741.0	5861.0	6079.0	6558.0	7541.2	7885.4	7922.0	7370.0	6650.0	6025.0
1943	5728.7	5677.0	5781.0	6006.0	6385.0	6836.0	7630.3	7722.1	7499.3	6695.2	6146.8	5755.0
1944	5574.0	5542.9	5486.2	5550.3	5953.6	6431.9	6396.0	6369.0	5945.8	5107.1	4529.6	4187.6
1945	4035.6	4337.1	4799.2	5044.8	5912.0	6353.9	6760.5	7024.4	6723.5	5861.3	5293.0	4890.5
1946	4903.8	5057.6	5261.5	5745.2	5725.6	6353.3	6943.7	7144.1	6687.1	5880.3	5320.6	4978.9
1947	4839.0	4876.2	4970.5	4937.7	5333.1	6096.7	6314.4	5830.2	5486.4	4611.9	3953.4	3608.7
1948	3682.0	3780.1	3721.1	4530.7	4288.5	4715.1	6122.1	6731.2	6864.7	6221.7	5677.8	5332.0
1949	5150.2	5022.7	4995.2	4958.7	5212.8	6271.5	6983.0	7179.3	6631.1	5662.9	5077.8	4763.8
1950	4556.9	4444.7	4362.4	4776.4	5237.6	5907.9	6523.4	6633.1	6325.1	5565.2	5038.0	4731.2
1951	4984.9	4901.9	5152.6	5559.9	5971.5	6764.0	7237.5	7467.1	7000.8	5976.9	5402.2	5090.6
1952	5040.0	5288.2	5489.0	5846.2	6170.4	6719.6	7390.0	7947.0	7922.0	7359.7	6650.0	6025.0
1953	5747.6	5663.4	5770.0	5840.0	6264.8	6942.8	7612.6	7856.5	7922.0	7184.4	6650.0	6025.0
1954	5727.5	5677.0	5703.8	5996.4	6236.0	6878.0	7646.0	7538.7	7200.7	6242.7	5791.4	5566.8
1955	5470.7	5491.4	5759.7	5925.5	5988.0	6191.9	6354.6	6487.7	5993.0	5166.3	4578.0	4421.6
1956	4279.0	4283.8	5242.4	5437.9	5609.4	6576.5	7451.7	7947.0	7914.7	7366.5	6650.0	6025.0
1957	5748.8	5625.0	5572.6	5652.8	6203.0	6896.0	7005.6	7648.4	7388.0	6444.8	5832.6	5685.3
1958	5651.4	5664.1	5763.0	6006.0	5875.9	6187.0	7273.0	7947.0	7922.0	7265.3	6650.0	6025.0
1959	5725.0	5624.6	5591.3	6123.0	6352.0	6657.3	6875.2	6597.6	5854.7	4846.2	4199.7	4137.0
1960	4004.8	3728.3	3676.9	3919.8	5028.5	5998.4	6289.0	6324.4	5974.4	5146.9	4545.8	4372.4
1961	4231.3	4374.9	4929.5	5151.9	5766.6	6289.8	6497.6	6526.2	6208.3	5253.3	4470.2	4158.2
1962	3977.5	3857.9	4201.5	4343.8	5591.5	6247.9	6912.6	6900.2	6562.0	5616.9	5016.2	4749.2
1963	5289.6	5198.3	5469.2	5654.4	6299.8	6526.6	7246.6	7777.7	7582.4	6791.1	6315.6	6025.0
1964	5741.3	5677.0	5711.3	6180.0	6358.0	6549.2	6454.6	6211.4	5845.8	4990.2	4370.7	4112.5
1965	4035.2	4249.9	5273.2	5599.6	6128.6	6384.5	7482.1	7589.1	7346.0	6408.2	5990.2	5702.3
1966	5477.7	5588.0	5688.7	6183.9	6564.3	6899.2	7563.8	7496.8	6756.4	5819.6	5213.2	5016.1
1967	4798.4	5294.8	5692.0	6019.1	6480.0	6775.0	7485.4	7947.0	7922.0	7370.0	6650.0	6025.0
1968	5742.9	5639.9	5684.4	6008.6	6300.5	6998.0	7152.0	6983.7	6299.5	5284.4	4818.4	4539.4
1969	4499.6	4572.3	5039.8	5514.2	5746.3	6567.8	7456.0	7947.0	7922.0	7183.9	6644.0	6025.0
1970	5746.6	5677.0	5742.0	5539.0	5811.0	6777.7	6805.2	6790.8	6386.7	5245.1	4757.7	4501.7
1971	4521.1	5306.7	5545.1	5975.7	6145.2	6636.0	7404.2	7947.0	7922.0	7203.6	6642.0	6025.0
1972	5730.0	5621.5	5751.8	6189.0	6554.0	7009.0	7431.7	7428.1	6673.1	5715.6	5158.1	5037.2
1973	5045.6	5338.8	5598.6	5957.1	6191.3	6931.0	7494.3	7843.6	7332.4	6400.6	5940.7	5679.5
1974	5674.7	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7947.0	7922.0	7277.0	6650.0	6025.0
1975	5732.1	5637.3	5738.6	5906.5	6435.9	6530.0	7327.4	7947.0	7922.0	7370.0	6650.0	6025.0
1976	5779.0	5677.0	5671.9	5682.1	5871.8	6152.2	6341.3	6150.5	5614.4	4978.2	4709.1	4578.6
1977	4488.4	4501.0	4334.8	4326.6	4285.6	4262.2	3814.3	3601.7	2891.4	1832.0	1281.0	1184.6
1978	1037.5	1078.2	1869.1	4505.7	5331.4	6116.7	7039.7	7332.6	7194.9	6392.0	5889.8	5688.3
1979	5454.3	5400.5	5347.7	5564.9	5977.5	6738.9	7106.8	7449.4	6689.7	5770.7	5307.0	5057.3
1980	5075.9	5306.9	5519.3	5766.9	5682.0	6732.4	7355.0	7491.5	7170.1	6379.0	5869.5	5539.4
1981	5409.6	5327.0	5419.3	5847.9	6430.6	6940.1	7179.9	6836.7	6101.3	5109.2	4501.0	4292.7
1982	4308.0	5302.6	5479.0	5908.0	5868.0	6634.0	7194.0	7691.5	7621.8	7052.0	6622.4	6025.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5820.0	5479.0	5464.0	5888.0	6362.8	6935.0	7315.7	7562.8	7272.9	6242.2	5874.4	5688.0
1985	5592.4	5677.0	5778.7	5871.6	6129.6	6474.1	6820.3	6381.4	5655.3	4790.2	4169.4	3947.5
1986	3838.9	3903.8	4163.0	4876.0	5266.7	6103.9	6779.7	6896.0	6480.2	5775.3	5233.9	5040.8
1987	4973.4	4895.9	4827.5	4940.4	5420.4	6453.1	6387.4	5918.4	5056.0	4195.7	3597.7	3355.7
1988	3144.3	3109.3	3786.1	4383.8	4346.8	4507.3	4653.7	4523.1	4015.4	3357.6	2855.5	2633.4
1989	2454.5	2783.9	2927.5	3082.7	3270.6	5213.4	5997.2	5754.9	5223.1	4407.6	3857.4	3823.2
1990	3952.7	3765.9	3633.4	3916.3	4009.4	4424.8	4337.2	4448.5	4206.6	3480.9	3089.2	2909.3
1991	2729.2	2643.5	2570.2	2523.7	2533.4	3253.1	3567.2	3586.8	3354.2	2758.0	2293.4	2143.9
1992	2027.5	1938.9	1912.0	1944.7	2932.1	3602.3	4060.0	3690.3	3103.9	2420.0	1810.8	1582.3
1993	1464.4	1382.0	1718.0	2822.8	3681.9	5584.0	6547.6	7014.3	7161.0	6380.3	5925.3	5604.2
AVG:	4359.1	4399.0	4570.8	4882.1	5255.0	5822.1	6359.7	6495.0	6160.0	5370.3	4810.5	4491.9
MIN:	1037.5	1078.2	1442.3	1650.7	1719.1	2486.2	2768.1	2939.6	2397.4	1807.9	1281.0	1184.6
MAX:	5820.0	5677.0	5781.0	6189.0	6564.3	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.4.3-36. Simulated CVP Total Upstream Storage (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5097.9	5084.6	5227.1	5328.3	5710.6	6241.2	6940.6	7317.8	7033.7	6137.7	5524.5	5087.7
1923	5013.1	5015.7	5156.2	5381.6	5532.7	5710.1	6356.6	6185.7	5746.3	4866.0	4241.9	3942.4
1924	3832.3	3694.6	3591.6	3554.6	3791.5	3668.1	3415.8	2998.9	2421.6	1780.5	1385.0	1169.7
1925	1174.1	1435.6	1623.2	1832.9	3587.0	3867.9	5080.6	5466.5	5101.0	4411.9	3823.0	3571.6
1926	3442.8	3404.3	3407.3	3435.4	4478.0	4818.8	5514.1	5214.2	4585.7	3848.5	3334.0	3144.4
1927	3086.7	3876.3	4653.2	5309.7	5355.7	6264.5	7084.9	7360.3	7203.0	6355.7	5789.0	5396.8
1928	5281.7	5360.8	5434.8	5752.6	6351.2	6527.7	7330.7	7303.6	6721.7	5625.4	4988.3	4676.8
1929	4489.6	4440.6	4429.7	4466.1	4727.8	5039.6	5134.3	5105.0	4751.3	3991.5	3364.3	3189.9
1930	2999.4	2882.1	3657.9	3955.4	4439.6	5140.1	5507.5	5313.5	4790.1	4073.1	3581.4	3431.7
1931	3240.4	3162.2	3075.6	3129.4	3240.0	3523.2	3327.4	3037.0	2578.4	1762.0	1259.0	1125.5
1932	998.4	1002.9	1347.5	1607.4	1911.4	2526.2	2846.6	3302.9	3159.5	2636.3	2139.4	1874.0
1933	1706.2	1613.9	1526.3	1578.8	1649.5	2409.2	2680.0	2837.9	2799.1	2223.3	1789.9	1609.3
1934	1464.5	1406.4	1610.1	2067.2	2566.6	3051.1	3068.7	2836.2	2249.7	1659.7	1206.7	1077.1
1935	964.5	1213.5	1317.9	1775.2	2253.4	2818.4	4262.9	4666.2	4400.0	3767.0	3150.8	2896.7
1936	2834.0	2789.9	2781.2	3545.4	4562.4	5136.8	5661.0	5714.0	5529.8	4826.5	4198.9	3891.4
1937	3699.6	3565.2	3447.7	3392.8	3543.7	4396.8	5403.4	5856.7	5682.6	4912.5	4285.6	3971.0
1938	3891.7	4617.2	4980.8	5435.9	5484.8	5700.7	6770.3	7715.5	7804.1	7190.4	6650.0	6025.0
1939	5736.1	5677.0	5727.7	5819.5	5948.3	6538.5	6450.2	6030.7	5340.1	4393.0	3645.0	3410.5
1940	3287.6	3172.0	3389.1	4681.7	5248.3	5792.6	6923.1	7083.6	6645.5	5753.7	5176.0	4883.5
1941	4786.7	4764.3	5347.9	5592.4	5947.2	6712.0	7556.0	7947.0	7922.0	7174.0	6620.0	6025.0
1942	5733.7	5677.0	5741.0	5861.0	6079.0	6558.0	7541.2	7885.4	7922.0	7370.0	6650.0	6025.0
1943	5728.7	5677.0	5781.0	6006.0	6385.0	6836.0	7630.3	7722.1	7499.3	6691.7	6143.1	5751.4
1944	5569.3	5538.1	5481.4	5545.6	5948.8	6427.2	6391.4	6364.6	5941.5	5100.8	4521.3	4177.8
1945	4025.9	4327.7	4788.4	5034.1	5910.5	6360.6	6766.8	7030.1	6725.7	5859.8	5287.7	4886.6
1946	4905.2	5056.2	5260.1	5743.8	5724.2	6352.0	6942.3	7142.6	6682.5	5872.3	5309.2	4955.7
1947	4815.9	4860.0	4951.1	4919.9	5326.9	6073.0	6290.2	5807.0	5459.5	4583.9	3924.5	3570.5
1948	3642.5	3741.8	3687.8	4497.7	4255.7	4681.5	6091.8	6702.5	6837.6	6192.4	5646.0	5309.6
1949	5127.8	5019.5	4993.0	4959.1	5213.1	6249.2	6960.7	7157.1	6606.9	5641.4	5047.0	4733.2
1950	4528.6	4408.6	4326.4	4752.2	5213.4	5883.7	6500.7	6613.5	6306.0	5543.2	5014.0	4709.6
1951	4931.4	4870.6	5121.3	5528.6	5940.2	6732.7	7206.3	7435.9	6969.8	5948.7	5374.1	5062.5
1952	5012.0	5257.4	5458.2	5815.5	6139.6	6688.9	7390.0	7947.0	7922.0	7357.3	6650.0	6025.0
1953	5747.6	5661.4	5770.0	5840.0	6264.8	6942.8	7612.6	7856.5	7922.0	7184.4	6650.0	6025.0
1954	5727.7	5677.0	5703.9	5996.4	6236.0	6878.0	7646.0	7536.1	7195.6	6234.7	5773.0	5547.9
1955	5453.0	5473.7	5752.2	5919.6	5982.1	6185.7	6346.2	6479.8	5982.1	5155.5	4570.2	4414.1
1956	4270.0	4274.1	5240.8	5436.4	5607.8	6575.0	7450.1	7947.0	7914.7	7363.0	6650.0	6025.0
1957	5748.8	5625.0	5572.6	5652.8	6203.0	6896.0	7004.6	7647.5	7382.8	6436.5	5820.0	5673.7
1958	5651.4	5664.1	5763.0	6006.0	5875.9	6187.0	7273.0	7947.0	7922.0	7263.6	6650.0	6025.0
1959	5725.0	5624.6	5591.3	6123.0	6352.0	6651.3	6868.9	6591.5	5839.0	4828.5	4172.3	4102.1
1960	3965.1	3697.0	3645.6	3888.5	4997.3	5967.2	6252.1	6290.1	5933.7	5096.2	4487.5	4315.5
1961	4174.6	4318.3	4880.9	5103.4	5741.0	6264.2	6471.5	6500.2	6182.1	5226.1	4440.4	4137.5
1962	3980.1	3856.1	4199.7	4341.8	5578.9	6235.3	6900.2	6887.9	6549.7	5597.2	4987.2	4720.1
1963	5277.3	5186.0	5456.8	5642.0	6287.5	6523.7	7234.3	7765.4	7572.7	6778.6	6302.9	6025.0
1964	5741.3	5677.0	5711.3	6180.0	6358.1	6549.3	6454.8	6211.6	5841.1	4975.9	4348.7	4090.4
1965	4019.2	4237.5	5268.8	5595.2	6124.3	6375.8	7480.4	7584.6	7341.8	6400.0	5982.3	5698.0
1966	5473.5	5586.3	5687.4	6182.2	6562.6	6899.2	7563.8	7496.8	6753.2	5813.9	5204.2	5004.6
1967	4787.5	5281.0	5689.7	6016.8	6480.0	6775.0	7485.4	7947.0	7922.0	7370.0	6650.0	6025.0
1968	5742.9	5638.9	5683.4	6007.6	6300.5	6998.0	7146.0	6977.2	6279.6	5254.6	4776.6	4497.1
1969	4450.7	4518.1	4985.3	5512.5	5744.6	6566.1	7454.3	7947.0	7922.0	7182.1	6644.0	6025.0
1970	5746.6	5677.0	5742.0	5539.0	5811.0	6777.7	6804.1	6789.6	6381.1	5236.6	4750.4	4494.5
1971	4509.7	5295.3	5536.3	5966.9	6134.1	6636.0	7399.8	7947.0	7922.0	7200.6	6642.0	6025.0
1972	5728.5	5620.4	5750.9	6189.0	6554.0	7009.0	7429.1	7425.3	6667.9	5706.0	5148.8	5027.9
1973	5036.3	5329.3	5589.3	5947.9	6182.1	6931.0	7494.3	7843.6	7322.1	6314.2	5850.3	5633.9
1974	5674.7	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7947.0	7922.0	7277.2	6650.0	6025.0
1975	5732.1	5636.4	5737.6	5905.6	6435.8	6530.0	7327.4	7947.0	7922.0	7370.0	6650.0	6025.0
1976	5779.0	5677.0	5671.9	5682.1	5871.8	6165.3	6348.3	6144.2	5614.8	4966.3	4688.4	4559.9
1977	4468.6	4480.5	4311.5	4303.2	4265.4	4239.3	3782.9	3560.4	2840.5	1776.4	1235.8	1127.4
1978	973.9	1013.9	1804.8	4442.0	5268.0	6053.4	6976.5	7269.6	7132.1	6329.3	5827.4	5626.0
1979	5390.8	5341.8	5289.1	5506.2	5918.9	6680.3	7048.1	7390.5	6629.2	5701.1	5227.1	4977.5
1980	4997.0	5228.6	5460.5	5721.0	5682.0	6732.4	7355.0	7491.5	7170.0	6375.5	5865.9	5535.8
1981	5403.5	5323.7	5416.0	5844.6	6427.3	6940.1	7179.9	6836.6	6089.2	5086.5	4469.2	4253.8
1982	4267.7	5287.3	5463.7	5908.0	5868.0	6634.0	7194.0	7691.5	7621.8	7049.7	6620.1	6025.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5820.0	5479.0	5464.0	5888.0	6362.8	6935.0	7314.4	7561.7	7271.9	6235.4	5865.0	5678.6
1985	5583.9	5677.0	5778.7	5871.6	6129.6	6474.1	6820.3	6381.4	5651.0	4783.5	4160.9	3937.8
1986	3830.5	3890.6	4150.0	4868.4	5277.0	6114.2	6789.9	6906.1	6489.9	5784.4	5242.9	5049.8
1987	4982.0	4904.6	4836.2	4949.1	5429.1	6461.7	6384.6	5906.3	5034.9	4162.7	3557.1	3308.1
1988	3099.7	3065.2	3742.2	4342.5	4301.9	4456.4	4603.4	4475.4	3950.7	3284.3	2771.6	2547.7
1989	2371.9	2701.4	2863.6	3018.9	3197.8	5134.3	5920.4	5676.6	5153.7	4352.8	3809.1	3778.5
1990	3911.5	3743.5	3611.9	3895.7	3990.5	4406.0	4309.9	4423.0	4166.3	3430.6	3039.8	2842.7
1991	2672.1	2585.2	2512.0	2465.5	2479.5	3199.2	3516.1	3536.1	3296.6	2738.1	2261.3	2039.8
1992	1916.2	1825.8	1796.7	1831.1	2818.6	3489.0	3947.6	3609.2	3019.1	2345.3	1743.0	1580.4
1993	1473.1	1403.1	1743.9	2768.1	3627.3	5529.4	6537.2	7003.9	7150.6	6370.0	5914.8	5593.6
AVG:	4335.7	4377.1	4550.6	4862.3	5238.5	5805.3	6343.3	6478.1	6140.8	5346.6	4784.3	4467.7
MIN:	964.5	1002.9	1317.9	1578.8	1649.5	2409.2	2680.0	2836.2	2249.7	1659.7	1206.7	1077.1
MAX:	5820.0	5677.0	5781.0	6189.0	6562.6	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.4.3-37. Simulated CVP Total Upstream Storage (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5097.9	5084.6	5227.1	5328.3	5710.6	6241.2	6940.6	7317.8	7033.7	6135.1	5521.9	5085.1
1923	5010.7	5013.3	5153.8	5379.1	5530.2	5707.7	6354.2	6183.4	5744.0	4860.9	4231.5	3937.2
1924	3827.1	3689.5	3586.5	3549.5	3786.4	3670.2	3419.7	3001.2	2432.9	1793.2	1397.4	1204.1
1925	1208.4	1469.8	1655.1	1867.1	3599.5	3880.3	5092.7	5477.6	5100.1	4405.8	3811.4	3560.3
1926	3426.0	3387.6	3390.6	3418.8	4472.5	4813.4	5508.7	5212.1	4591.1	3857.1	3345.9	3161.7
1927	3092.2	3875.8	4658.4	5314.9	5353.9	6262.7	7083.1	7358.5	7201.2	6340.4	5773.2	5381.2
1928	5267.1	5359.0	5432.9	5750.7	6349.4	6525.9	7328.9	7319.7	6731.8	5634.6	4994.5	4675.5
1929	4488.3	4441.5	4430.6	4467.3	4729.1	5040.9	5144.7	5120.8	4768.0	4014.1	3400.7	3224.5
1930	3039.9	2927.0	3702.8	4003.3	4483.1	5186.6	5554.4	5356.9	4841.6	4110.4	3610.0	3460.0
1931	3285.5	3220.3	3145.7	3208.6	3325.1	3619.3	3420.3	3133.4	2680.6	1917.7	1415.2	1229.4
1932	1110.2	1105.1	1428.7	1691.1	1958.9	2585.1	2905.4	3361.6	3217.8	2696.9	2200.4	1934.8
1933	1764.8	1672.4	1584.7	1637.1	1706.0	2470.9	2750.9	2918.6	2886.3	2312.8	1881.6	1708.0
1934	1566.7	1508.6	1710.3	2167.3	2666.6	3150.9	3175.0	2949.3	2369.2	1786.1	1344.0	1156.8
1935	1058.6	1336.5	1448.1	1898.0	2375.7	2940.5	4345.1	4743.7	4475.7	3841.2	3220.2	2965.9
1936	2882.0	2821.6	2809.5	3617.6	4634.6	5208.9	5735.2	5779.0	5587.4	4858.6	4216.0	3921.7
1937	3730.0	3595.8	3478.5	3423.6	3574.5	4427.6	5433.4	5883.7	5722.8	4919.7	4256.5	3963.0
1938	3883.8	4609.3	4974.3	5429.3	5478.3	5694.2	6763.8	7708.9	7797.6	7180.3	6650.0	6025.0
1939	5736.1	5677.0	5727.7	5819.5	5948.3	6538.5	6456.8	6048.2	5363.1	4424.1	3682.7	3447.6
1940	3332.8	3223.6	3440.6	4729.9	5269.1	5813.3	6943.9	7104.3	6670.0	5767.1	5178.6	4886.3
1941	4790.4	4773.4	5368.2	5612.7	5967.6	6712.0	7556.0	7947.0	7922.0	7167.2	6620.0	6025.0
1942	5733.7	5677.0	5741.0	5861.0	6079.0	6558.0	7541.2	7885.4	7922.0	7370.0	6650.0	6025.0
1943	5728.7	5677.0	5781.0	6006.0	6385.0	6836.0	7630.3	7722.1	7499.3	6688.8	6140.1	5748.5
1944	5566.4	5535.3	5478.6	5542.8	5946.1	6424.4	6388.7	6362.1	5939.3	5098.8	4519.7	4173.9
1945	4025.5	4329.3	4789.9	5034.5	5909.7	6359.2	6765.4	7028.7	6754.7	5877.9	5288.3	4873.6
1946	4893.8	5055.4	5259.3	5743.0	5708.3	6336.1	6928.5	7129.4	6662.2	5844.3	5273.6	4937.5
1947	4797.9	4835.9	4926.7	4894.3	5300.6	6057.6	6275.2	5792.5	5447.8	4571.7	3912.4	3568.0
1948	3643.3	3741.5	3764.1	4575.2	4333.2	4761.8	6161.7	6767.7	6898.4	6252.8	5706.2	5362.9
1949	5181.0	5037.7	5010.9	4974.1	5228.2	6302.3	7013.7	7209.9	6659.0	5693.1	5100.1	4786.1
1950	4576.7	4462.6	4380.3	4796.8	5257.9	5928.2	6543.7	6653.5	6345.1	5570.0	5031.2	4735.1
1951	4973.9	4923.2	5173.9	5581.2	5992.8	6785.3	7258.7	7488.2	7021.9	5999.2	5424.5	5112.7
1952	5062.1	5308.0	5508.7	5866.0	6190.2	6739.4	7390.0	7947.0	7922.0	7349.9	6649.1	6025.0
1953	5747.6	5661.5	5770.0	5840.0	6264.8	6942.8	7612.6	7856.5	7922.0	7184.4	6650.0	6025.0
1954	5728.4	5677.0	5703.9	5996.4	6236.0	6878.0	7646.0	7536.1	7195.6	6235.7	5771.6	5546.4
1955	5451.6	5472.4	5750.8	5918.2	5982.3	6185.9	6350.2	6483.6	5985.7	5160.7	4575.8	4419.7
1956	4276.4	4281.5	5240.9	5436.4	5607.8	6575.0	7450.2	7947.0	7914.7	7219.3	6650.0	6025.0
1957	5748.8	5625.0	5572.6	5652.8	6203.0	6896.0	7004.4	7647.4	7381.7	6427.9	5810.4	5664.9
1958	5651.4	5664.1	5763.0	6006.0	5875.9	6187.0	7273.0	7947.0	7922.0	7256.9	6650.0	6025.0
1959	5725.0	5624.6	5591.3	6123.0	6352.0	6656.9	6874.8	6597.2	5852.7	4847.5	4198.4	4136.9
1960	4005.2	3728.6	3677.2	3920.0	5028.8	5998.7	6288.4	6323.9	5972.1	5143.3	4541.2	4367.6
1961	4226.2	4369.5	4928.8	5151.3	5766.0	6289.2	6496.1	6524.6	6204.4	5246.8	4461.2	4155.0
1962	3974.3	3852.7	4196.3	4340.7	5590.3	6246.7	6911.5	6899.1	6560.8	5609.7	5006.3	4739.3
1963	5288.5	5197.1	5468.0	5653.2	6298.6	6519.3	7245.5	7776.5	7581.1	6773.2	6289.2	6025.0
1964	5741.3	5677.0	5711.3	6180.0	6358.3	6549.5	6454.7	6211.3	5842.9	4984.3	4362.8	4104.5
1965	4032.8	4248.9	5271.6	5598.0	6127.1	6377.7	7480.8	7584.7	7342.0	6400.0	5982.4	5698.5
1966	5474.0	5586.7	5687.6	6182.6	6563.0	6899.2	7563.8	7496.8	6753.2	5814.0	5204.3	5005.0
1967	4788.7	5282.3	5690.1	6017.2	6480.0	6775.0	7485.4	7947.0	7922.0	7370.0	6650.0	6025.0
1968	5742.9	5639.0	5683.5	6007.7	6300.5	6998.0	7151.1	6982.7	6295.2	5277.4	4808.1	4528.9
1969	4487.3	4560.2	5030.1	5514.0	5746.1	6567.5	7455.7	7947.0	7922.0	7169.5	6644.0	6025.0
1970	5746.6	5677.0	5742.0	5539.0	5811.0	6777.7	6804.1	6789.6	6380.2	5235.1	4749.6	4493.7
1971	4507.7	5293.2	5534.8	5965.4	6132.6	6636.0	7399.7	7947.0	7922.0	7200.0	6642.0	6025.0
1972	5728.1	5620.4	5750.9	6189.0	6554.0	7009.0	7426.1	7422.2	6664.8	5702.8	5136.3	5016.4
1973	5024.3	5308.2	5542.1	5900.7	6134.9	6892.4	7453.4	7805.8	7295.3	6279.2	5806.0	5605.4
1974	5666.4	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7947.0	7922.0	7293.3	6650.0	6025.0
1975	5732.1	5636.3	5737.6	5905.6	6435.8	6530.0	7327.4	7947.0	7922.0	7370.0	6650.0	6025.0
1976	5779.0	5677.0	5671.9	5682.1	5871.8	6165.3	6353.4	6158.7	5622.5	4977.4	4721.5	4589.8
1977	4496.1	4506.6	4344.8	4336.5	4298.4	4277.5	3828.0	3612.6	2899.6	1839.6	1282.0	1186.6
1978	1039.5	1080.4	1871.3	4507.8	5333.5	6118.8	7041.7	7334.7	7197.0	6394.0	5891.8	5690.3
1979	5454.9	5406.0	5353.2	5570.3	5983.0	6744.4	7112.1	7454.3	6701.4	5780.1	5312.8	5062.9
1980	5081.0	5305.8	5519.9	5767.6	5682.0	6732.4	7355.0	7491.5	7170.1	6368.9	5859.1	5529.2
1981	5397.5	5317.6	5409.9	5838.5	6421.2	6940.1	7179.9	6836.6	6098.0	5102.9	4492.2	4281.9
1982	4296.4	5287.3	5463.7	5908.0	5868.0	6634.0	7194.0	7691.5	7621.8	7044.4	6614.7	6025.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5820.0	5479.0	5464.0	5888.0	6362.8	6935.0	7314.5	7561.7	7271.9	6235.3	5863.7	5677.4
1985	5582.6	5677.0	5778.7	5871.6	6129.6	6474.1	6820.3	6381.4	5650.7	4783.2	4160.8	3937.9
1986	3831.0	3890.8	4150.2	4868.9	5277.9	6115.1	6790.8	6907.0	6490.7	5785.2	5243.7	5050.6
1987	4982.8	4905.3	4836.9	4949.8	5429.8	6462.4	6392.9	5921.6	5061.3	4197.4	3601.0	3357.0
1988	3143.6	3108.5	3785.0	4382.6	4345.8	4505.7	4652.0	4521.5	4011.3	3350.8	2845.4	2624.2
1989	2447.4	2776.8	2920.4	3075.7	3263.8	5206.6	5990.6	5746.2	5214.3	4396.2	3844.3	3808.4
1990	3938.7	3756.8	3627.8	3913.4	4008.9	4424.3	4335.3	4446.4	4200.9	3472.3	3080.6	2895.5
1991	2715.3	2631.3	2558.0	2511.5	2521.4	3241.1	3554.7	3574.5	3341.8	2746.3	2286.1	2130.7
1992	2014.3	1926.2	1899.3	1932.0	2919.4	3589.6	4045.7	3676.7	3087.5	2402.3	1792.5	1565.5
1993	1447.7	1365.7	1701.8	2806.5	3665.7	5567.7	6540.3	7007.1	7153.8	6442.0	5973.8	5609.4
AVG:	4355.1	4395.9	4569.6	4882.2	5256.4	5824.5	6361.5	6496.5	6161.1	5364.3	4803.5	4486.9
MIN:	1039.5	1080.4	1428.7	1637.1	1706.0	2470.9	2750.9	2918.6	2369.2	1786.1	1282.0	1156.8
MAX:	5820.0	5677.0	5781.0	6189.0	6563.0	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.4.3-38. Simulated CVP Total Upstream Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.6	-3.5
1923	-3.3	-3.2	-3.2	-3.2	-3.2	-3.2	-3.1	-3.1	-3.1	-4.4	-8.1	-4.4
1924	-4.3	-4.3	-4.3	-4.3	-4.3	-12.3	-15.4	-12.4	-23.7	-27.3	-27.0	-43.5
1925	-43.3	-43.2	-40.9	-43.2	-17.1	-14.6	-14.3	-13.2	-12.2	-12.1	-15.5	-15.5
1926	-12.1	-12.0	-12.0	-12.0	-12.1	-12.0	-11.8	-13.7	-19.7	-29.5	-41.9	-42.2
1927	-41.4	-42.3	-22.9	-22.9	0.6	0.6	0.6	0.6	0.6	-1.1	-1.2	-1.2
1928	-1.1	0.6	0.6	0.6	0.6	0.6	0.6	-1.3	-4.1	-7.3	-9.7	-16.0
1929	-15.8	-16.6	-16.6	-16.3	-5.1	-0.5	-11.4	-18.3	-8.6	-10.2	-32.6	-33.0
1930	-37.4	-38.9	-41.1	-44.1	-36.6	-39.6	-40.3	-37.4	-47.9	-38.7	-30.4	-30.1
1931	-46.6	-59.3	-71.1	-79.9	-85.8	-96.7	-95.1	-98.7	-107.0	-160.7	-168.5	-117.2
1932	-125.4	-115.7	-94.8	-97.2	-52.6	-64.0	-63.9	-63.7	-63.3	-65.6	-66.0	-65.9
1933	-72.5	-72.2	-72.0	-72.0	-69.6	-77.0	-88.1	-101.6	-110.2	-112.9	-114.0	-121.7
1934	-125.1	-124.8	-122.6	-122.5	-122.4	-122.1	-130.0	-138.9	-147.7	-156.6	-166.5	-108.5
1935	-122.4	-151.2	-158.4	-151.0	-150.2	-150.0	-106.7	-100.3	-68.3	-34.1	-30.9	20.4
1936	41.0	83.3	82.9	90.8	90.7	90.6	82.9	78.7	82.9	64.1	58.3	61.8
1937	61.8	61.8	61.8	61.8	61.8	61.7	60.5	55.8	50.7	0.4	0.7	1.5
1938	1.8	1.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	0.3	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	-7.6	-19.8	-29.0	-38.9	-46.7	-46.2
1940	-55.5	-62.1	-62.1	-57.9	-24.9	-24.9	-24.8	-24.8	-32.2	-35.6	-39.0	-38.8
1941	-27.8	-27.8	-24.4	-24.4	-24.4	0.0	0.0	0.0	0.0	-1.8	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	-3.6	-3.5
1944	-4.8	-4.8	-4.8	-4.8	-4.8	-4.7	-4.6	-4.4	-4.2	-6.4	-8.2	-9.7
1945	-9.7	-9.4	-10.8	-10.6	-1.4	6.7	6.3	5.7	2.1	-1.5	-5.3	-3.9
1946	1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.4	-1.5	-4.6	-8.0	-11.5	-23.2
1947	-23.1	-16.2	-19.5	-17.9	-6.3	-23.7	-24.2	-23.2	-26.9	-28.0	-28.9	-38.2
1948	-39.5	-38.2	-33.3	-33.0	-32.8	-33.6	-30.4	-28.7	-27.2	-29.3	-31.8	-22.4
1949	-22.4	-3.1	-2.2	0.4	0.4	-22.3	-22.3	-22.2	-24.2	-21.6	-30.8	-30.6
1950	-28.3	-36.1	-36.0	-24.3	-24.2	-24.2	-22.6	-19.6	-19.1	-22.0	-24.0	-21.6
1951	-53.5	-31.3	-31.3	-31.3	-31.3	-31.3	-31.2	-31.1	-31.0	-28.2	-28.1	-28.1
1952	-28.0	-30.8	-30.8	-30.8	-30.7	-30.7	0.0	0.0	0.0	-2.4	0.0	0.0
1953	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.1	0.0	0.1	0.0	0.0	0.0	0.0	-2.6	-5.1	-8.0	-18.4	-18.9
1955	-17.7	-17.7	-7.5	-5.9	-5.9	-6.2	-8.4	-7.9	-10.9	-10.8	-7.8	-7.5
1956	-9.0	-9.7	-1.6	-1.6	-1.6	-1.6	-1.5	0.0	0.0	-3.5	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-0.9	-5.1	-8.2	-12.7	-11.6
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-6.0	-6.2	-6.1	-15.8	-17.7	-27.4	-35.0
1960	-39.8	-31.3	-31.3	-31.3	-31.3	-31.2	-36.8	-34.3	-40.7	-50.7	-58.3	-56.9
1961	-56.7	-56.6	-48.6	-48.6	-25.6	-25.6	-26.1	-26.1	-26.2	-27.2	-29.9	-20.8
1962	2.6	-1.8	-1.8	-1.9	-12.6	-12.6	-12.5	-12.4	-12.3	-19.7	-29.0	-29.1
1963	-12.4	-12.3	-12.3	-12.3	-12.3	-2.8	-12.3	-12.3	-9.6	-12.5	-12.7	0.0
1964	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	-4.6	-14.4	-22.0	-22.2
1965	-16.1	-12.4	-4.4	-4.4	-4.4	-8.7	-1.7	-4.5	-4.2	-8.2	-7.9	-4.3
1966	-4.2	-1.7	-1.3	-1.7	-1.7	0.0	0.0	0.0	-3.3	-5.8	-9.0	-11.5
1967	-10.9	-13.8	-2.3	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-1.0	-1.0	-1.0	0.0	0.0	-6.1	-6.4	-20.0	-29.8	-41.8	-42.3
1969	-48.9	-54.2	-54.5	-1.7	-1.7	-1.7	-1.7	0.0	0.0	-1.9	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-5.6	-8.5	-7.3	-7.3
1971	-11.4	-11.4	-8.8	-8.8	-11.0	0.0	-4.4	0.0	0.0	-3.0	0.0	0.0
1972	-1.4	-1.0	-0.9	0.0	0.0	0.0	-2.6	-2.7	-5.2	-9.6	-9.3	-9.4
1973	-9.4	-9.5	-9.2	-9.2	-9.2	0.0	0.0	0.0	-10.3	-86.4	-90.4	-45.7
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
1975	0.0	-1.0	-1.0	-1.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	13.1	7.0	-6.4	0.5	-11.9	-20.7	-18.6
1977	-19.8	-20.6	-23.3	-23.3	-20.2	-22.9	-31.4	-41.3	-50.9	-55.6	-45.2	-57.3
1978	-63.5	-64.3	-64.3	-63.7	-63.4	-63.3	-63.2	-63.1	-62.9	-62.6	-62.4	-62.2
1979	-63.5	-58.7	-58.7	-58.7	-58.6	-58.6	-58.7	-58.9	-60.5	-69.6	-80.0	-79.8
1980	-78.8	-78.2	-58.8	-45.9	0.0	0.0	0.0	0.0	0.0	-3.5	-3.7	-3.6
1981	-6.1	-3.3	-3.3	-3.3	-3.3	0.0	0.0	0.0	-12.1	-22.7	-31.8	-38.8
1982	-40.3	-15.3	-15.3	0.0	0.0	0.0	0.0	0.0	0.0	-2.3	-2.3	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-1.1	-1.1	-6.8	-9.4	-9.3
1985	-8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2	-6.7	-8.5	-9.7
1986	-8.3	-13.2	-13.0	-7.6	10.3	10.3	10.3	10.2	9.6	9.1	9.0	9.0
1987	8.7	8.7	8.7	8.7	8.6	8.6	-2.8	-12.1	-21.2	-33.0	-40.6	-47.5
1988	-44.7	-44.2	-43.8	-41.3	-44.9	-50.9	-50.3	-47.6	-64.6	-73.3	-83.9	-85.7
1989	-82.5	-82.4	-63.9	-63.8	-72.8	-79.0	-76.8	-78.3	-69.4	-54.9	-48.3	-44.7
1990	-41.2	-22.5	-21.4	-20.7	-18.8	-18.8	-27.3	-25.5	-40.3	-50.3	-49.4	-66.7
1991	-57.1	-58.2	-58.2	-58.2	-53.9	-53.9	-51.1	-50.7	-57.6	-19.9	-32.1	-104.1
1992	-111.3	-113.1	-115.3	-113.7	-113.5	-113.3	-112.4	-81.1	-84.8	-74.7	-67.7	-1.9
1993	8.7	21.1	25.8	-54.6	-54.6	-54.5	-10.5	-10.4	-10.4	-10.3	-10.6	-10.6
AVG:	-23.3	-21.9	-20.2	-19.8	-16.5	-16.7	-16.4	-16.9	-19.2	-23.6	-26.2	-24.1
MIN:	-125.4	-151.2	-158.4	-151.0	-150.2	-150.0	-130.0	-138.9	-147.7	-160.7	-168.5	-121.7
MAX:	61.8	83.3	82.9	90.8	90.7	90.6	82.9	78.7	82.9	64.1	58.3	61.8

Table 3.4.3-39. Simulated CVP Total Upstream Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.0	-6.3	-6.1
1923	-5.7	-5.7	-5.7	-5.7	-5.7	-5.6	-5.5	-5.4	-5.4	-9.5	-18.5	-9.5
1924	-9.4	-9.4	-9.4	-9.4	-9.4	-10.3	-11.4	-10.1	-12.4	-14.6	-14.5	-9.0
1925	-9.0	-9.0	-9.0	-9.0	-4.6	-2.2	-2.2	-2.1	-13.1	-18.2	-27.1	-26.8
1926	-28.9	-28.8	-28.7	-28.7	-17.5	-17.5	-17.1	-15.8	-14.3	-21.0	-30.0	-24.9
1927	-35.8	-42.8	-17.6	-17.6	-1.2	-1.2	-1.2	-1.2	-1.3	-16.4	-17.1	-16.8
1928	-15.7	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	14.8	6.0	2.0	-3.5	-17.3
1929	-17.1	-15.6	-15.6	-15.0	-3.9	0.7	-1.0	-2.5	8.0	12.4	3.8	1.6
1930	3.1	6.0	3.8	3.8	6.9	6.9	6.7	6.0	3.7	-1.3	-1.8	-1.8
1931	-1.4	-1.2	-1.0	-0.8	-0.7	-0.6	-2.2	-2.3	-4.8	-5.0	-12.3	-13.4
1932	-13.6	-13.5	-13.5	-13.5	-5.1	-5.1	-5.1	-5.1	-5.0	-5.0	-5.0	-5.1
1933	-13.9	-13.7	-13.6	-13.6	-13.1	-15.3	-17.3	-20.9	-22.9	-23.4	-22.2	-22.9
1934	-22.9	-22.6	-22.4	-22.4	-22.3	-22.3	-23.7	-25.8	-28.3	-30.3	-29.3	-28.9
1935	-28.3	-28.2	-28.2	-28.1	-27.9	-27.9	-24.5	-22.9	7.4	40.2	38.5	89.5
1936	89.1	115.0	111.2	163.0	162.9	162.7	157.1	143.7	140.4	96.1	75.4	92.1
1937	92.3	92.4	92.6	92.6	92.6	92.5	90.4	82.8	90.9	7.6	-28.3	-6.5
1938	-6.1	-6.1	-2.4	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	-9.8	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-2.2	-5.9	-7.9	-9.0	-9.0
1940	-10.3	-10.5	-10.5	-9.8	-4.1	-4.1	-4.1	-4.1	-7.7	-22.2	-36.4	-36.0
1941	-24.1	-18.6	-4.1	-4.1	-4.0	0.0	0.0	0.0	0.0	-8.6	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.3	-6.6	-6.5
1944	-7.6	-7.6	-7.6	-7.5	-7.5	-7.5	-7.2	-6.9	-6.5	-8.4	-9.9	-13.6
1945	-10.2	-7.8	-9.3	-10.2	-2.3	5.2	4.9	4.3	31.2	16.6	-4.6	-16.9
1946	-10.1	-2.2	-2.2	-2.2	-17.3	-17.2	-15.2	-14.6	-25.0	-36.0	-47.0	-41.4
1947	-41.1	-40.3	-43.9	-43.4	-32.5	-39.1	-39.2	-37.6	-38.6	-40.2	-41.0	-40.7
1948	-38.8	-38.6	43.1	44.5	44.8	46.7	39.5	36.4	33.7	31.1	28.4	30.9
1949	30.9	15.1	15.7	15.4	15.4	30.8	30.7	30.7	27.9	30.2	22.3	22.3
1950	19.8	17.9	17.9	20.3	20.3	20.3	20.3	20.4	20.1	4.8	-6.8	3.9
1951	-11.0	21.3	21.3	21.3	21.3	21.3	21.2	21.2	21.1	22.3	22.2	22.2
1952	22.2	19.8	19.8	19.8	19.8	19.8	0.0	0.0	0.0	-9.8	-0.9	0.0
1953	0.0	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.9	0.0	0.1	0.0	0.0	0.0	0.0	-2.6	-5.1	-7.0	-19.8	-20.4
1955	-19.1	-19.0	-8.9	-7.3	-5.7	-6.0	-4.3	-4.1	-7.3	-5.6	-2.2	-1.9
1956	-2.6	-2.3	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	0.0	-147.2	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.0	-6.2	-16.9	-22.2	-20.4
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.4	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	-2.0	1.3	-1.3	-0.1
1960	0.4	0.3	0.3	0.3	0.3	0.3	-0.6	-0.6	-2.3	-3.6	-4.6	-4.8
1961	-5.2	-5.4	-0.6	-0.6	-0.6	-0.6	-1.5	-1.6	-3.9	-6.5	-9.0	-3.2
1962	-3.2	-5.2	-5.1	-3.1	-1.2	-1.2	-1.2	-1.2	-1.2	-7.2	-10.0	-9.9
1963	-1.2	-1.2	-1.2	-1.2	-1.2	-7.3	-1.2	-1.2	-1.2	-17.9	-26.4	0.0
1964	0.0	0.0	0.0	0.0	0.3	0.4	0.2	0.0	-2.9	-5.9	-7.9	-8.0
1965	-2.5	-1.0	-1.6	-1.6	-1.6	-6.8	-1.3	-4.4	-4.0	-8.2	-7.7	-3.7
1966	-3.6	-1.3	-1.1	-1.3	-1.3	0.0	0.0	0.0	-3.2	-5.7	-8.9	-11.1
1967	-9.7	-12.5	-1.9	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-0.9	-0.9	-0.9	0.0	0.0	-0.9	-0.9	-4.3	-7.0	-10.3	-10.4
1969	-12.3	-12.1	-9.6	-0.2	-0.2	-0.2	-0.2	0.0	0.0	-14.4	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-6.5	-9.9	-8.0	-8.0
1971	-13.4	-13.4	-10.2	-10.2	-12.5	0.0	-4.6	0.0	0.0	-3.6	0.0	0.0
1972	-1.8	-1.1	-0.9	0.0	0.0	0.0	-5.6	-5.9	-8.3	-12.8	-21.8	-20.8
1973	-21.4	-30.6	-56.4	-56.4	-56.4	-38.6	-40.8	-37.7	-37.1	-121.4	-134.7	-74.1
1974	-8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0
1975	0.0	-1.0	-1.0	-1.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	13.1	12.0	8.1	8.1	-0.7	12.4	11.3
1977	7.7	5.5	10.0	9.9	12.8	15.3	13.7	10.8	8.2	7.6	1.0	2.0
1978	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
1979	0.7	5.5	5.5	5.5	5.5	5.5	5.3	4.9	11.7	9.4	5.7	5.6
1980	5.1	-1.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	-10.1	-10.5	-10.3
1981	-12.1	-9.4	-9.4	-9.4	-9.4	0.0	0.0	-0.1	-3.2	-6.4	-8.8	-10.7
1982	-11.7	-15.3	-15.3	0.0	0.0	0.0	0.0	0.0	0.0	-7.7	-7.6	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-1.1	-1.1	-6.9	-10.7	-10.6
1985	-9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.6	-7.0	-8.6	-9.6
1986	-7.9	-13.0	-12.8	-7.0	11.2	11.2	11.2	11.1	10.5	9.9	9.8	9.8
1987	9.4	9.4	9.4	9.4	9.4	9.3	5.5	3.2	5.3	1.7	3.2	1.4
1988	-0.7	-0.8	-1.0	-1.2	-1.0	-1.6	-1.7	-1.6	-4.1	-6.8	-10.1	-9.2
1989	-7.1	-7.1	-7.1	-7.1	-6.8	-6.8	-6.6	-8.8	-8.8	-11.5	-13.1	-14.7
1990	-14.0	-9.2	-5.6	-2.9	-0.5	-0.5	-1.9	-2.1	-5.7	-8.6	-8.7	-13.9
1991	-13.9	-12.2	-12.2	-12.2	-12.0	-11.9	-12.4	-12.3	-12.4	-11.7	-7.3	-13.2
1992	-13.2	-12.7	-12.7	-12.7	-12.7	-12.7	-14.3	-13.5	-16.4	-17.7	-18.2	-16.8
1993	-16.7	-16.2	-16.2	-16.2	-16.2	-16.2	-7.3	-7.2	-7.2	61.7	48.4	5.2
AVG:	-4.0	-3.0	-1.2	0.1	1.4	2.4	1.8	1.5	1.2	-6.0	-7.0	-5.0
MIN:	-41.1	-42.8	-56.4	-56.4	-56.4	-39.1	-40.8	-37.7	-38.6	-147.2	-134.7	-74.1
MAX:	92.3	115.0	111.2	163.0	162.9	162.7	157.1	143.7	140.4	96.1	75.4	92.1

Table 3.4.3-40. Simulated CVP San Luis Storage (TAF), Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	470.0	656.1	779.5	849.6	972.0	972.0	856.5	698.8	641.8	488.0	507.9
1923	579.7	716.6	921.2	972.0	972.0	972.0	925.4	721.5	437.8	235.3	82.3	155.3
1924	216.1	274.6	355.2	493.6	550.6	521.3	479.9	427.0	315.5	181.0	97.2	113.5
1925	149.3	175.5	364.9	562.6	798.5	717.0	726.4	611.1	447.7	262.8	256.7	326.6
1926	380.8	477.2	558.0	663.4	752.7	852.3	877.3	778.3	601.1	370.4	157.8	158.4
1927	162.0	325.9	559.0	810.0	972.0	972.0	949.3	759.5	502.1	301.8	130.1	141.7
1928	204.7	338.8	497.5	631.5	722.4	836.4	791.9	543.4	360.0	261.2	135.0	160.6
1929	210.2	323.7	462.0	617.0	685.9	660.6	590.1	466.5	344.4	205.5	117.7	116.1
1930	155.5	168.2	406.4	550.2	686.0	851.7	805.7	648.0	466.7	283.4	135.0	152.2
1931	207.6	256.5	265.0	463.6	504.4	477.1	438.2	362.6	263.3	146.9	90.0	90.0
1932	90.0	116.4	265.9	437.7	669.4	775.9	800.6	744.8	668.8	597.1	668.3	875.9
1933	972.0	972.0	972.0	972.0	972.0	930.6	889.5	811.0	699.0	577.6	474.2	510.9
1934	582.9	591.0	825.5	972.0	972.0	940.8	887.3	791.0	645.6	475.5	320.2	280.8
1935	256.3	360.5	511.2	798.2	867.4	972.0	972.0	851.1	740.6	511.3	489.1	563.5
1936	593.2	643.7	773.9	960.4	972.0	972.0	972.0	833.1	649.8	368.9	308.3	357.2
1937	435.3	453.9	637.0	828.0	972.0	972.0	972.0	972.0	843.6	659.9	649.3	698.1
1938	790.4	945.5	972.0	972.0	972.0	972.0	972.0	821.5	703.6	805.8	671.6	825.0
1939	898.6	972.0	972.0	972.0	972.0	971.8	890.2	736.3	474.4	287.2	135.0	129.3
1940	90.0	117.5	155.6	376.5	498.5	633.3	656.2	533.4	342.7	204.6	139.2	180.9
1941	279.6	394.9	585.9	773.7	934.2	972.0	925.3	830.4	664.7	588.5	434.5	466.5
1942	537.1	672.6	768.7	822.0	972.0	972.0	949.2	754.8	630.7	397.6	273.7	447.1
1943	519.8	657.3	821.3	972.0	972.0	972.0	965.0	815.4	530.1	314.5	174.8	195.9
1944	350.7	464.7	630.4	776.8	864.9	950.1	842.5	642.5	372.6	179.2	64.4	133.9
1945	159.5	301.8	503.1	658.1	802.2	893.0	819.6	627.6	407.5	183.0	46.7	124.2
1946	204.2	342.3	552.3	696.6	809.2	845.0	802.9	640.1	385.9	171.1	45.0	112.3
1947	160.9	322.7	521.2	668.3	760.5	892.0	810.4	582.2	304.0	137.5	45.0	135.0
1948	135.0	190.8	301.1	495.3	722.9	814.5	821.6	643.7	400.4	198.0	80.0	97.5
1949	175.4	323.7	473.8	569.1	599.9	772.0	696.8	529.0	335.0	271.4	135.0	166.0
1950	205.0	323.7	371.9	472.4	582.7	716.0	701.0	520.7	396.4	322.8	298.4	375.6
1951	502.8	662.5	917.1	972.0	972.0	972.0	903.3	656.5	362.8	232.2	109.4	141.4
1952	219.2	323.7	418.0	513.2	655.7	778.1	745.3	630.3	595.3	393.7	246.1	259.5
1953	331.6	521.8	592.8	827.5	844.5	787.6	656.7	465.1	250.8	124.3	45.0	62.2
1954	135.0	270.7	458.6	596.9	684.7	788.9	761.1	516.3	289.5	112.0	45.0	86.4
1955	159.9	321.7	485.1	631.0	674.7	667.4	594.3	446.5	305.5	148.9	135.0	152.6
1956	161.7	323.5	449.0	564.8	690.9	871.7	853.0	739.5	607.3	349.7	208.5	404.4
1957	473.9	660.5	820.1	955.9	972.0	972.0	933.7	737.0	446.8	264.6	177.6	210.4
1958	280.6	415.6	500.5	561.8	631.0	687.9	746.3	631.1	583.4	450.5	236.0	447.9
1959	519.3	707.8	870.5	972.0	972.0	971.0	879.2	685.1	411.5	181.6	45.0	135.0
1960	135.0	266.0	327.7	394.1	476.5	614.5	520.4	364.1	185.3	152.9	135.0	135.0
1961	185.6	327.6	523.6	693.6	882.7	971.0	870.9	665.8	354.0	144.6	45.0	135.0
1962	143.4	286.8	473.2	566.3	675.8	787.5	721.6	556.1	369.8	174.6	57.3	149.2
1963	225.4	365.0	560.4	709.3	831.2	939.5	929.8	727.4	492.1	284.7	118.1	136.1
1964	205.9	340.4	499.7	634.6	648.5	661.0	539.9	402.9	228.3	122.8	82.8	153.4
1965	143.5	293.9	519.2	713.8	845.8	971.0	964.3	771.4	469.8	287.2	110.2	135.0
1966	328.6	462.1	619.9	771.1	870.2	968.5	836.2	655.9	404.8	225.9	131.0	135.0
1967	161.8	304.1	503.6	591.9	719.3	761.5	794.9	645.1	571.8	510.5	371.4	402.8
1968	476.6	681.9	847.3	972.0	972.0	972.0	840.1	635.8	358.4	209.7	64.0	132.4
1969	159.3	321.1	513.2	670.6	798.7	972.0	939.3	823.6	695.6	806.9	551.3	876.5
1970	947.9	972.0	972.0	972.0	972.0	972.0	902.9	701.4	422.8	262.8	107.9	151.4
1971	164.4	300.8	462.8	604.7	809.2	916.7	888.4	641.3	393.7	192.1	45.0	63.6
1972	136.7	321.5	484.1	625.0	732.3	844.7	757.6	570.7	345.2	232.3	135.0	137.3
1973	196.9	340.2	437.1	536.0	641.5	704.9	674.5	469.1	366.7	181.7	76.6	128.8
1974	203.1	341.3	537.1	625.0	652.5	700.6	672.4	439.5	303.6	169.6	45.0	173.9
1975	249.5	428.1	595.0	668.5	768.2	922.0	814.0	593.9	338.1	106.9	45.0	221.6
1976	295.1	432.8	596.8	740.2	781.7	795.9	718.7	614.8	458.3	251.1	136.5	160.4
1977	167.8	177.8	175.3	277.9	262.0	227.5	179.5	91.9	45.0	90.0	90.0	116.6
1978	188.1	213.8	437.8	601.6	780.5	957.9	884.0	733.7	618.4	532.7	400.2	447.9
1979	584.1	727.5	861.5	972.0	972.0	972.0	935.9	755.7	462.3	284.1	135.0	146.8
1980	216.4	328.6	517.8	671.0	802.8	972.0	972.0	822.1	690.8	737.9	611.1	652.5
1981	743.8	873.0	972.0	972.0	972.0	972.0	840.4	640.7	374.9	168.1	51.0	135.0
1982	155.4	292.0	484.2	568.2	675.0	763.2	825.4	744.0	615.4	534.1	372.7	553.1
1983	621.2	789.4	891.0	832.1	814.6	843.1	783.1	664.8	598.6	578.4	653.6	756.7
1984	972.0	972.0	972.0	972.0	972.0	972.0	937.8	718.6	413.2	267.0	132.0	210.1
1985	284.1	422.1	586.6	730.9	789.2	808.0	670.1	495.0	286.3	96.9	45.0	73.8
1986	135.0	188.1	388.2	559.4	702.6	890.6	931.7	866.2	766.0	451.1	333.0	361.8
1987	480.7	623.2	794.3	950.7	972.0	972.0	897.4	730.4	533.8	307.5	135.0	135.0
1988	115.3	218.4	327.1	498.5	675.5	629.6	601.6	531.3	378.1	219.1	90.0	98.6
1989	141.6	203.7	329.3	503.5	531.9	726.2	700.7	576.6	405.9	220.2	135.0	135.0
1990	179.4	323.7	511.4	692.5	745.8	791.9	733.0	629.0	495.2	342.9	217.9	217.6
1991	210.1	271.7	232.9	321.3	323.2	524.6	468.4	367.7	241.2	117.1	90.0	196.4
1992	256.0	246.6	327.3	464.1	696.6	813.5	752.4	652.8	566.2	342.9	149.4	149.1
1993	259.3	260.5	461.3	600.7	819.0	897.7	866.0	741.6	618.2	494.4	358.8	379.9
AVG:	318.3	428.0	568.3	694.6	778.7	840.0	796.4	644.5	463.2	312.5	203.4	259.6
MIN:	90.0	116.4	155.6	277.9	262.0	227.5	179.5	91.9	45.0	90.0	45.0	62.2
MAX:	972.0	972.0	972.0	972.0	972.0	972.0	972.0	972.0	843.6	806.9	671.6	876.5

Table 3.4.3-41. Simulated CVP San Luis Storage (TAF), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	468.9	655.0	778.4	848.5	972.0	972.0	856.5	698.8	641.8	487.3	504.4
1923	576.3	713.1	917.8	972.0	972.0	972.0	925.4	721.5	437.8	232.9	80.3	157.3
1924	217.6	275.1	355.0	493.4	550.4	521.2	479.9	426.9	317.4	184.0	94.2	118.4
1925	157.3	190.7	381.4	581.2	817.2	735.8	745.4	630.1	461.2	275.5	259.3	329.1
1926	383.4	479.8	562.8	668.2	758.2	852.2	877.5	779.0	600.2	371.0	159.0	154.5
1927	155.5	319.5	552.8	804.0	972.0	972.0	949.3	759.5	502.1	301.8	130.1	141.7
1928	203.0	337.1	495.8	629.7	720.7	834.8	790.5	542.2	359.8	261.5	135.0	160.7
1929	209.3	323.7	461.5	616.4	683.6	645.4	575.8	453.3	329.9	188.1	116.4	106.6
1930	147.0	164.4	403.1	547.4	683.1	856.4	812.0	656.2	476.8	279.4	135.0	147.7
1931	204.3	268.4	278.3	480.6	516.2	488.9	450.0	374.3	267.0	149.9	90.0	90.2
1932	105.0	119.7	269.2	440.9	672.7	779.7	803.2	747.4	668.8	594.7	665.4	869.0
1933	972.0	972.0	972.0	972.0	972.0	930.7	889.8	811.6	697.4	574.5	476.1	513.0
1934	585.7	599.0	832.2	972.0	972.0	936.1	882.9	787.1	642.3	473.0	318.4	271.2
1935	246.4	349.6	502.1	789.3	858.5	972.0	972.0	847.0	736.3	485.5	470.1	527.7
1936	545.2	550.1	684.9	873.7	972.0	972.0	972.0	829.3	640.0	364.5	297.9	346.6
1937	420.5	437.0	618.7	807.7	969.3	972.0	972.0	972.0	839.5	695.8	674.4	722.3
1938	813.9	968.5	972.0	972.0	972.0	972.0	972.0	821.5	703.5	805.5	671.1	820.9
1939	894.5	972.0	972.0	972.0	972.0	967.9	886.3	733.3	472.6	286.6	135.0	125.5
1940	90.0	122.2	154.3	375.6	497.9	632.8	655.6	533.0	342.5	204.5	139.3	181.1
1941	268.9	381.3	572.4	760.2	920.8	972.0	925.3	830.4	664.7	590.3	435.9	466.5
1942	537.1	672.6	768.7	822.0	972.0	972.0	949.2	754.8	630.7	397.6	273.5	447.1
1943	519.8	657.3	821.3	972.0	972.0	972.0	965.0	815.4	530.1	314.5	174.8	195.9
1944	352.1	465.7	631.4	777.8	866.0	951.0	843.3	643.9	374.7	182.3	67.5	133.3
1945	158.3	300.8	502.4	657.7	802.1	894.2	821.0	629.4	409.3	185.1	49.2	129.6
1946	204.2	342.3	552.4	697.0	809.2	844.5	802.3	639.7	385.6	171.0	45.0	120.1
1947	165.4	323.7	522.2	670.2	761.8	893.3	811.7	583.5	305.7	140.5	45.0	135.0
1948	135.0	190.2	296.9	491.0	718.7	812.8	820.9	644.6	403.2	203.8	88.8	116.4
1949	194.6	323.7	473.9	568.6	600.6	772.5	696.9	528.5	335.9	251.8	135.0	165.9
1950	203.2	323.7	370.9	471.2	581.1	714.6	700.0	520.6	392.5	320.8	300.0	369.8
1951	521.7	681.6	936.4	972.0	972.0	972.0	903.1	656.4	362.3	226.8	105.3	141.3
1952	219.0	323.7	418.0	513.2	655.7	774.6	741.7	626.7	594.3	395.7	250.8	264.2
1953	336.2	527.5	598.3	833.1	849.5	792.3	661.3	469.8	253.1	122.3	45.0	62.3
1954	135.0	270.7	458.6	596.9	684.8	799.1	771.3	526.5	301.3	123.3	45.0	86.6
1955	160.0	321.8	485.3	631.2	674.8	667.4	595.0	447.7	316.6	158.6	135.0	151.9
1956	161.6	323.4	449.3	565.5	695.3	876.6	857.8	744.2	610.6	352.9	211.7	407.5
1957	476.9	663.5	823.1	959.0	972.0	972.0	933.7	737.1	446.8	264.9	180.4	197.1
1958	267.4	402.4	487.3	548.6	618.1	675.9	735.7	620.9	581.3	450.7	234.1	448.1
1959	519.5	708.1	870.9	972.0	972.0	971.0	879.2	685.2	411.9	174.6	45.0	135.0
1960	135.0	257.1	314.9	381.4	463.8	602.7	509.8	355.4	176.8	149.6	135.0	135.0
1961	190.0	330.2	526.9	698.1	888.4	971.0	870.9	667.6	358.3	153.1	45.0	154.0
1962	142.3	284.6	474.4	568.7	679.6	791.2	724.3	558.7	371.4	169.5	52.6	145.0
1963	221.1	360.8	556.1	705.0	826.9	935.4	925.8	723.4	489.2	281.8	115.4	135.1
1964	204.8	339.4	498.6	633.6	647.5	659.1	539.0	403.6	256.8	151.1	110.2	155.0
1965	140.6	288.6	514.0	708.7	840.8	971.0	964.9	771.9	470.2	287.3	110.1	135.0
1966	328.7	462.1	620.0	771.0	870.2	967.5	835.2	654.9	404.6	225.3	131.1	135.0
1967	161.8	304.8	504.3	592.6	720.0	762.7	796.2	646.4	572.6	511.2	372.1	403.8
1968	477.6	683.9	849.2	972.0	972.0	972.0	840.1	634.7	357.4	208.6	64.1	132.5
1969	159.4	321.2	513.3	670.7	798.8	972.0	939.3	823.6	695.6	808.2	552.9	876.8
1970	948.2	972.0	972.0	972.0	972.0	972.0	902.9	701.5	422.8	262.8	107.9	151.4
1971	163.0	299.4	461.4	603.3	809.2	916.7	888.3	641.3	393.2	189.4	45.0	63.6
1972	137.6	322.0	484.6	625.5	732.8	845.1	757.9	570.7	344.8	233.0	135.0	135.4
1973	194.2	337.4	434.2	533.0	637.2	701.7	671.4	466.1	355.4	246.5	109.7	135.0
1974	209.3	347.5	543.3	631.3	676.1	720.4	692.1	459.2	305.1	169.4	45.0	227.3
1975	302.7	482.2	649.1	722.6	824.7	972.0	864.0	643.8	376.0	142.8	45.0	237.5
1976	310.9	448.6	612.6	756.0	794.9	803.8	726.3	622.0	443.8	238.8	135.0	140.7
1977	141.1	152.8	150.1	254.7	238.5	204.2	156.5	69.3	45.0	90.0	90.0	116.8
1978	188.2	214.9	438.9	602.8	780.2	957.3	883.4	733.1	616.5	528.2	419.3	443.2
1979	580.7	719.2	853.3	972.0	972.0	972.0	935.6	755.5	463.2	283.9	135.0	146.8
1980	216.5	323.7	512.9	666.1	798.0	972.0	972.0	822.1	690.8	737.2	608.4	646.0
1981	740.2	863.4	972.0	972.0	972.0	972.0	840.4	639.6	374.1	167.9	50.9	135.0
1982	152.2	288.8	481.1	565.0	671.8	761.6	824.4	743.8	615.6	538.2	378.1	560.5
1983	628.8	797.2	897.0	838.6	821.1	849.1	788.4	669.3	601.7	579.7	653.5	756.1
1984	972.0	972.0	972.0	972.0	972.0	972.0	937.9	718.6	412.9	266.9	131.7	199.2
1985	273.2	411.3	575.8	720.1	778.4	796.9	660.0	486.6	285.2	99.0	45.0	74.5
1986	135.0	187.9	388.6	560.6	704.7	892.6	933.5	866.7	764.2	443.1	323.3	351.4
1987	470.0	612.2	782.7	938.4	972.0	972.0	897.2	729.1	533.1	307.4	135.0	135.0
1988	107.4	205.0	313.1	484.1	661.1	616.4	589.0	510.5	360.7	206.2	90.0	99.6
1989	138.4	205.2	325.5	501.9	540.6	734.8	711.1	590.0	415.1	220.3	135.0	135.0
1990	182.4	319.0	507.6	690.3	746.5	791.7	732.8	628.8	494.8	342.6	210.2	219.7
1991	199.0	260.2	232.2	322.1	324.0	525.4	469.4	368.9	240.9	97.2	90.0	190.2
1992	249.2	252.9	330.5	465.3	697.9	814.2	763.7	679.6	599.0	406.4	234.8	164.6
1993	279.3	259.2	465.4	612.9	841.0	915.2	880.7	752.4	626.5	499.3	357.8	376.9
AVG:	318.2	426.7	566.8	693.2	779.5	840.9	797.5	645.8	464.4	314.4	205.6	259.9
MIN:	90.0	119.7	150.1	254.7	238.5	204.2	156.5	69.3	45.0	90.0	45.0	62.3
MAX:	972.0	972.0	972.0	972.0	972.0	972.0	972.0	972.0	839.5	808.2	674.4	876.8

Table 3.4.3-42. Simulated CVP San Luis Storage (TAF), Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	469.2	655.2	778.6	848.8	972.0	972.0	856.5	698.8	631.0	476.1	491.2
1923	563.1	699.9	904.6	972.0	972.0	972.0	925.4	721.5	437.8	230.6	78.2	149.7
1924	210.0	265.4	351.9	490.3	547.2	518.0	476.8	424.1	312.0	177.8	93.8	105.2
1925	144.4	178.8	368.3	568.2	804.2	722.8	732.4	617.1	452.5	262.9	258.1	318.3
1926	372.9	469.3	549.5	654.9	742.5	841.1	866.8	768.9	595.2	371.6	160.4	161.3
1927	182.9	347.0	580.5	832.0	972.0	972.0	949.3	759.5	502.1	301.8	130.1	141.7
1928	202.2	336.3	495.0	628.9	719.9	834.1	790.7	542.6	356.8	258.5	135.0	160.8
1929	209.8	323.7	459.6	614.4	681.7	651.4	581.7	459.1	336.0	194.5	117.3	116.5
1930	156.2	172.5	411.1	555.4	691.5	855.5	809.2	650.9	468.4	286.1	135.0	151.0
1931	206.3	256.5	265.0	463.3	501.0	473.7	434.8	359.2	256.7	140.1	90.0	90.0
1932	90.0	116.6	266.1	437.8	669.6	774.7	798.3	742.5	663.8	589.9	660.6	868.1
1933	972.0	972.0	972.0	972.0	972.0	930.7	889.7	811.3	699.7	578.7	475.2	512.0
1934	584.0	592.6	827.0	972.0	972.0	940.4	887.3	791.5	647.0	478.0	323.6	284.2
1935	258.3	364.2	514.5	801.9	871.3	972.0	972.0	848.9	734.9	474.1	453.8	510.2
1936	544.2	560.2	693.8	880.9	972.0	972.0	972.0	826.1	631.9	360.8	289.4	337.2
1937	408.6	424.0	604.6	791.9	951.7	972.0	972.0	972.0	837.2	712.7	713.7	761.0
1938	852.3	972.0	972.0	972.0	972.0	972.0	972.0	821.5	703.5	814.3	679.8	826.0
1939	899.6	972.0	972.0	972.0	972.0	971.3	889.6	735.7	474.6	287.1	135.0	128.4
1940	90.0	121.0	159.4	380.4	502.5	637.3	660.2	537.5	346.8	208.7	143.3	185.1
1941	272.0	374.5	565.6	753.4	914.0	972.0	925.3	830.4	664.7	597.1	441.0	466.5
1942	537.1	672.6	768.7	822.0	972.0	972.0	949.2	754.8	630.7	397.6	277.3	447.1
1943	519.8	657.3	821.3	972.0	972.0	972.0	965.0	815.4	530.1	314.5	174.8	195.9
1944	352.2	464.3	630.0	776.4	864.5	949.8	842.2	643.4	374.9	183.6	69.8	134.5
1945	157.4	300.0	501.8	658.5	803.2	893.6	819.7	627.5	407.0	182.3	45.0	116.6
1946	190.5	328.6	538.5	682.7	809.2	844.2	801.9	639.4	385.4	170.8	45.0	109.5
1947	158.8	320.6	519.1	667.2	758.9	891.3	809.5	581.5	302.3	135.8	45.0	135.0
1948	135.0	188.4	223.9	418.1	645.9	740.1	748.0	572.3	342.7	148.9	45.0	68.8
1949	147.5	309.3	460.2	559.2	591.6	763.4	687.8	519.0	328.0	243.5	135.0	165.1
1950	202.1	323.7	370.8	470.8	580.5	712.0	695.5	514.5	382.4	307.4	292.7	359.4
1951	492.9	652.4	906.8	972.0	972.0	972.0	903.1	656.4	361.0	222.8	101.6	140.8
1952	218.5	323.7	418.0	513.2	655.7	778.9	746.1	631.1	595.4	403.4	236.0	289.8
1953	361.8	553.0	625.7	859.5	876.1	818.9	687.9	496.3	265.1	132.4	45.0	62.7
1954	135.0	270.7	458.6	596.9	684.8	799.7	771.9	527.1	302.5	123.4	45.0	86.7
1955	160.1	321.9	485.4	631.3	675.6	669.0	596.2	449.0	320.1	160.7	135.0	151.9
1956	161.6	323.5	449.3	565.5	696.0	877.4	858.6	745.0	611.3	483.9	328.5	416.7
1957	486.1	672.7	832.3	968.2	972.0	972.0	933.8	737.1	447.0	276.1	180.7	194.9
1958	265.3	400.2	485.2	546.4	616.7	674.9	735.0	620.8	569.4	447.4	222.8	458.7
1959	530.2	718.9	881.9	972.0	972.0	971.0	879.2	685.2	411.8	175.4	45.0	135.0
1960	135.0	266.0	328.5	395.0	477.3	615.5	521.4	365.2	185.8	152.7	135.0	135.0
1961	186.5	328.9	524.2	694.5	883.7	971.0	870.9	665.9	354.3	145.7	45.0	135.0
1962	143.1	286.3	476.0	570.3	680.0	791.8	725.7	560.1	372.7	180.5	64.8	147.7
1963	223.9	363.5	558.8	707.7	829.7	938.0	928.3	725.9	491.0	283.6	121.8	143.7
1964	213.5	348.0	507.3	642.2	656.1	666.9	544.8	407.4	263.0	156.1	115.4	153.2
1965	139.7	289.2	514.3	708.6	840.3	971.0	964.6	771.6	470.0	287.2	110.1	135.0
1966	328.7	462.1	620.0	771.0	870.2	967.6	835.3	655.0	404.6	225.4	131.1	135.0
1967	161.8	304.8	504.3	592.6	720.0	762.4	795.9	646.0	572.3	511.0	371.9	403.5
1968	477.3	683.5	848.8	972.0	972.0	972.0	840.1	635.5	358.2	209.5	64.2	132.5
1969	159.3	321.2	513.3	670.6	798.8	972.0	939.3	823.6	695.6	808.3	559.2	883.1
1970	954.5	972.0	972.0	972.0	972.0	972.0	902.9	701.5	422.8	262.8	107.9	151.4
1971	163.0	299.4	461.4	603.3	809.2	916.7	888.3	641.3	393.1	189.0	45.0	63.6
1972	137.8	322.2	484.8	625.8	733.1	845.3	758.2	570.9	345.0	233.2	135.0	135.0
1973	196.8	340.0	436.8	535.6	640.8	704.3	673.9	468.5	360.7	251.0	113.9	135.0
1974	209.2	347.4	543.3	631.2	685.3	726.7	698.4	465.5	310.6	160.2	45.0	268.2
1975	343.5	523.1	689.9	763.4	886.0	972.0	864.0	643.8	377.4	147.5	45.0	268.5
1976	341.9	479.6	643.6	786.9	820.7	834.9	756.5	650.9	479.8	273.5	135.9	154.6
1977	164.0	174.9	171.8	275.8	259.0	224.5	176.7	89.3	45.0	90.0	90.0	116.7
1978	188.3	214.6	438.3	602.2	781.2	958.6	884.7	734.3	618.5	530.1	397.5	445.1
1979	582.6	721.1	855.2	972.0	972.0	972.0	936.0	755.8	462.4	284.0	135.0	146.8
1980	216.4	334.9	524.1	677.3	809.1	972.0	972.0	822.1	690.8	735.9	606.7	643.3
1981	737.3	858.0	972.0	972.0	972.0	972.0	840.4	640.4	374.4	168.0	50.9	135.0
1982	156.0	292.6	484.8	568.8	675.6	763.9	826.0	744.5	615.8	542.0	380.7	568.4
1983	636.4	804.6	897.0	838.0	820.6	848.7	788.0	668.9	601.4	579.6	653.5	756.1
1984	972.0	972.0	972.0	972.0	972.0	972.0	937.9	718.6	413.3	267.1	131.8	196.1
1985	270.1	408.2	572.7	717.0	775.3	793.9	657.1	484.1	285.4	100.2	45.0	74.7
1986	135.0	188.0	388.8	561.2	705.5	893.3	934.1	867.1	765.5	432.5	312.5	340.5
1987	459.1	601.2	771.7	927.3	972.0	972.0	897.1	729.1	533.1	307.3	135.0	135.0
1988	116.2	219.1	330.1	501.0	677.2	631.1	602.7	529.7	375.7	215.9	90.0	97.0
1989	137.2	198.4	324.1	498.3	526.2	720.4	695.4	572.1	402.9	219.3	135.0	135.0
1990	181.5	323.7	511.6	693.1	747.5	794.4	735.5	631.4	498.4	346.1	218.4	217.4
1991	214.1	273.1	236.9	325.4	327.3	528.8	472.7	372.2	244.2	117.7	90.0	195.3
1992	255.0	246.9	327.7	463.9	696.5	813.4	753.6	655.8	570.5	350.9	159.9	158.0
1993	268.7	269.4	470.9	611.3	830.8	910.4	877.9	752.4	624.8	410.4	335.5	370.9
AVG:	319.4	428.2	567.3	693.9	780.0	840.8	797.3	645.3	463.4	314.4	205.2	260.3
MIN:	90.0	116.6	159.4	275.8	259.0	224.5	176.7	89.3	45.0	90.0	45.0	62.7
MAX:	972.0	972.0	972.0	972.0	972.0	972.0	972.0	972.0	837.2	814.3	713.7	883.1

Table 3.4.3-43. Simulated CVP San Luis Storage (TAF),Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-1.1	-1.1	-1.1	-1.1	0.0	0.0	0.0	0.0	0.0	-0.7	-3.5
1923	-3.5	-3.5	-3.5	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	-2.1	2.0
1924	1.4	0.5	-0.2	-0.2	-0.2	-0.1	0.0	0.0	1.9	3.0	-3.0	4.9
1925	8.0	15.2	16.4	18.7	18.8	18.9	19.0	19.0	13.5	12.7	2.6	2.6
1926	2.6	2.6	4.8	4.8	5.5	-0.2	0.2	0.6	-0.9	0.5	1.2	-3.9
1927	-6.5	-6.4	-6.2	-6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	-1.7	-1.7	-1.7	-1.7	-1.7	-1.6	-1.4	-1.2	-0.2	0.3	0.0	0.1
1929	-1.0	0.0	-0.5	-0.6	-2.3	-15.1	-14.4	-13.3	-14.5	-17.4	-1.3	-9.5
1930	-8.5	-3.7	-3.4	-2.8	-2.9	4.7	6.2	8.2	10.1	-4.0	0.0	-4.5
1931	-3.3	11.9	13.3	17.0	11.8	11.8	11.8	11.7	3.7	3.0	0.0	0.2
1932	15.0	3.3	3.3	3.3	3.3	3.8	2.6	2.6	0.0	-2.4	-3.0	-6.9
1933	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	-1.6	-3.1	1.9	2.1
1934	2.8	7.9	6.6	0.0	0.0	-4.7	-4.4	-3.9	-3.3	-2.5	-1.8	-9.6
1935	-9.9	-10.9	-9.1	-8.9	-8.9	0.0	0.0	-4.1	-4.3	-25.8	-19.0	-35.8
1936	-47.9	-93.6	-89.0	-86.7	0.0	0.0	0.0	-3.8	-9.8	-4.4	-10.3	-10.6
1937	-14.8	-16.9	-18.3	-20.3	-2.7	0.0	0.0	0.0	-4.2	35.8	25.2	24.2
1938	23.5	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.5	-4.1
1939	-4.1	0.0	0.0	0.0	0.0	-3.8	-3.9	-3.0	-1.8	-0.6	0.0	-3.8
1940	0.0	4.7	-1.3	-1.0	-0.6	-0.6	-0.5	-0.4	-0.2	0.0	0.1	0.2
1941	-10.7	-13.6	-13.5	-13.5	-13.4	0.0	0.0	0.0	0.0	1.8	1.3	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	1.5	1.0	1.0	1.0	1.0	0.9	0.8	1.4	2.0	3.1	3.1	-0.6
1945	-1.1	-1.0	-0.8	-0.4	0.0	1.3	1.4	1.8	1.8	2.1	2.4	5.4
1946	0.0	0.0	0.2	0.4	0.0	-0.5	-0.6	-0.5	-0.3	-0.1	0.0	7.8
1947	4.5	0.9	1.0	1.9	1.3	1.3	1.3	1.3	1.7	3.0	0.0	0.0
1948	0.0	-0.5	-4.2	-4.2	-4.2	-1.6	-0.8	0.9	2.8	5.8	8.8	18.9
1949	19.2	0.0	0.1	-0.5	0.7	0.6	0.1	-0.4	0.9	-19.6	0.0	-0.1
1950	-1.8	0.0	-1.0	-1.2	-1.5	-1.4	-1.0	-0.1	-3.9	-2.0	1.6	-5.8
1951	18.9	19.0	19.3	0.0	0.0	0.0	-0.1	-0.1	-0.5	-5.5	-4.1	-0.2
1952	-0.2	0.0	0.0	0.0	0.0	-3.6	-3.6	-3.5	-1.0	2.0	4.7	4.7
1953	4.7	5.6	5.5	5.6	4.9	4.7	4.6	4.6	2.2	-2.0	0.0	0.1
1954	0.0	0.0	0.0	0.0	0.0	10.2	10.2	10.1	11.8	11.3	0.0	0.1
1955	0.1	0.1	0.1	0.1	0.1	0.0	0.7	1.3	11.1	9.7	0.0	-0.7
1956	-0.1	-0.1	0.3	0.7	4.5	4.9	4.8	4.8	3.3	3.2	3.2	3.0
1957	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.2	2.8	-13.3
1958	-13.2	-13.2	-13.2	-13.2	-13.0	-11.9	-10.6	-10.2	-2.1	0.2	-1.8	0.1
1959	0.2	0.3	0.4	0.0	0.0	0.0	0.0	0.2	0.4	-7.0	0.0	0.0
1960	0.0	-9.0	-12.8	-12.7	-12.7	-11.9	-10.6	-8.7	-8.6	-3.3	0.0	0.0
1961	4.4	2.6	3.3	4.5	5.6	0.0	0.0	1.8	4.3	8.5	0.0	19.0
1962	-1.1	-2.2	1.1	2.4	3.8	3.7	2.7	2.6	1.6	-5.1	-4.7	-4.2
1963	-4.2	-4.3	-4.3	-4.3	-4.3	-4.0	-4.0	-4.0	-2.9	-2.9	-2.7	-1.0
1964	-1.0	-1.0	-1.0	-1.0	-1.0	-1.9	-0.9	0.7	28.5	28.3	27.4	1.6
1965	-2.9	-5.3	-5.2	-5.1	-4.9	0.0	0.6	0.5	0.3	0.1	-0.1	0.0
1966	0.1	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	-0.2	-0.6	0.1	0.0
1967	0.0	0.6	0.6	0.6	0.6	1.2	1.3	1.3	0.8	0.7	0.7	1.0
1968	1.0	2.0	2.0	0.0	0.0	0.0	0.0	-1.1	-0.9	-1.1	0.1	0.1
1969	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.3	1.6	0.3
1970	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-1.4	-1.4	-1.4	-1.4	0.0	0.0	0.0	0.0	-0.5	-2.7	0.0	0.0
1972	0.9	0.5	0.5	0.5	0.5	0.4	0.3	0.0	-0.3	0.7	0.0	-1.9
1973	-2.7	-2.8	-2.9	-3.0	-4.3	-3.1	-3.1	-3.0	-11.3	64.8	33.1	6.2
1974	6.2	6.2	6.3	6.3	23.6	19.8	19.8	19.7	1.4	-0.2	0.0	53.4
1975	53.2	54.1	54.1	54.1	56.5	50.0	50.0	49.9	37.9	35.9	0.0	15.9
1976	15.8	15.8	15.8	15.8	13.2	7.9	7.6	7.1	-14.5	-12.3	-1.5	-19.7
1977	-26.7	-25.0	-25.1	-23.2	-23.5	-23.3	-23.0	-22.6	0.0	0.0	0.0	0.1
1978	0.1	1.2	1.1	1.3	-0.4	-0.6	-0.6	-0.6	-1.9	-4.5	19.1	-4.7
1979	-3.4	-8.2	-8.2	0.0	0.0	0.0	-0.3	-0.2	0.9	-0.1	0.0	0.0
1980	0.0	-5.0	-4.9	-4.9	-4.9	0.0	0.0	0.0	0.0	-0.7	-2.7	-6.5
1981	-3.7	-9.6	0.0	0.0	0.0	0.0	0.0	-1.1	-0.8	-0.2	-0.1	0.0
1982	-3.2	-3.2	-3.2	-3.2	-3.2	-1.6	-1.0	-0.1	0.2	4.1	5.3	7.4
1983	7.6	7.8	6.0	6.5	6.5	6.0	5.4	4.5	3.0	1.3	-0.1	-0.6
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.3	-0.1	-0.2	-10.9
1985	-10.8	-10.8	-10.8	-10.8	-10.8	-11.1	-10.1	-8.5	-1.0	2.1	0.0	0.8
1986	0.0	-0.2	0.4	1.2	2.1	2.0	1.8	0.5	-1.8	-7.9	-9.7	-10.4
1987	-10.7	-11.1	-11.6	-12.4	0.0	0.0	-0.2	-1.3	-0.8	-0.1	0.0	0.0
1988	-7.9	-13.3	-14.0	-14.4	-14.3	-13.2	-12.6	-20.8	-17.4	-13.0	0.0	1.0
1989	-3.2	1.5	-3.8	-1.7	8.7	8.7	10.4	13.4	9.2	0.1	0.0	0.0
1990	2.9	-4.7	-3.8	-2.2	0.7	-0.2	-0.2	-0.2	-0.4	-0.3	-7.7	2.1
1991	-11.1	-11.5	-0.7	0.8	0.8	0.9	1.0	1.2	-0.3	-19.9	0.0	-6.2
1992	-6.8	6.3	3.2	1.2	1.3	0.7	11.3	26.8	32.8	63.5	85.5	15.5
1993	20.0	-1.3	4.0	12.2	22.0	17.5	14.7	10.8	8.3	4.9	-1.1	-3.0
AVG:	-0.2	-1.4	-1.5	-1.4	0.8	0.9	1.1	1.3	1.2	1.9	2.1	0.3
MIN:	-47.9	-93.6	-89.0	-86.7	-23.5	-23.3	-23.0	-22.6	-17.4	-25.8	-19.0	-35.8
MAX:	53.2	54.1	54.1	54.1	56.5	50.0	50.0	49.9	37.9	64.8	85.5	53.4

Table 3.4.3-44. Simulated CVP San Luis Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.8	-0.8	-0.8	-0.8	0.0	0.0	0.0	0.0	-10.8	-11.9	-16.7
1923	-16.7	-16.7	-16.7	0.0	0.0	0.0	0.0	0.0	0.0	-4.7	-4.1	-5.6
1924	-6.1	-9.2	-3.3	-3.3	-3.3	-3.2	-3.1	-2.9	-3.5	-3.2	-3.4	-8.4
1925	-4.9	3.3	3.4	5.7	5.8	5.8	6.0	6.0	4.8	0.0	1.4	-8.3
1926	-7.9	-7.9	-8.5	-8.4	-10.3	-11.2	-10.5	-9.4	-5.9	1.2	2.6	2.9
1927	20.9	21.1	21.4	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	-2.5	-2.5	-2.5	-2.5	-2.5	-2.3	-1.2	-0.8	-3.2	-2.7	0.0	0.2
1929	-0.4	0.0	-2.5	-2.6	-4.2	-9.2	-8.5	-7.4	-8.4	-11.0	-0.4	0.4
1930	0.7	4.3	4.7	5.3	5.5	3.8	3.4	2.9	1.7	2.7	0.0	-1.2
1931	-1.3	0.0	0.0	-0.3	-3.4	-3.4	-3.4	-3.4	-6.6	-6.8	0.0	0.0
1932	0.0	0.2	0.2	0.2	0.2	-1.2	-2.3	-2.3	-5.0	-7.2	-7.7	-7.9
1933	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.7	1.1	1.0	1.1
1934	1.1	1.6	1.5	0.0	0.0	-0.4	0.0	0.5	1.4	2.5	3.3	3.4
1935	2.0	3.7	3.3	3.6	3.9	0.0	0.0	-2.2	-5.7	-37.2	-35.3	-53.3
1936	-49.0	-83.4	-80.1	-79.5	0.0	0.0	0.0	-7.0	-17.9	-8.1	-18.9	-20.1
1937	-26.7	-29.9	-32.4	-36.2	-20.3	0.0	0.0	0.0	-6.4	52.8	64.5	62.9
1938	61.9	26.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.2	1.0
1939	1.0	0.0	0.0	0.0	0.0	-0.5	-0.6	-0.6	0.2	-0.1	0.0	-0.9
1940	0.0	3.5	3.8	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1
1941	-7.5	-20.3	-20.3	-20.3	-20.3	0.0	0.0	0.0	0.0	8.6	6.5	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	1.5	-0.4	-0.4	-0.4	-0.4	-0.3	-0.2	0.9	2.3	4.4	5.5	0.6
1945	-2.1	-1.8	-1.3	0.4	1.0	0.6	0.1	-0.1	-0.6	-0.8	-1.7	-7.6
1946	-13.7	-13.7	-13.8	-13.9	0.0	-0.8	-0.9	-0.8	-0.5	-0.3	0.0	-2.8
1947	-2.1	-2.1	-2.1	-1.1	-1.6	-0.8	-0.9	-0.7	-1.6	-1.7	0.0	0.0
1948	0.0	-2.4	-77.2	-77.1	-77.0	-74.4	-73.6	-71.4	-57.7	-49.1	-35.0	-28.7
1949	-27.9	-14.3	-13.6	-10.0	-8.3	-8.5	-9.0	-9.9	-7.0	-28.0	0.0	-1.0
1950	-2.8	0.0	-1.1	-1.6	-2.2	-4.1	-5.5	-6.3	-14.0	-15.4	-5.7	-16.2
1951	-9.9	-10.1	-10.3	0.0	0.0	0.0	-0.1	-0.1	-1.8	-9.4	-7.8	-0.7
1952	-0.7	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.1	9.7	-10.0	30.3
1953	30.2	31.1	32.9	32.0	31.6	31.3	31.2	31.2	14.2	8.1	0.0	0.6
1954	0.0	0.0	0.0	0.0	0.0	10.8	10.8	10.7	12.9	11.4	0.0	0.2
1955	0.2	0.2	0.2	0.2	0.9	1.6	1.9	2.5	14.6	11.8	0.0	-0.7
1956	0.0	0.0	0.2	0.7	5.1	5.7	5.6	5.6	4.0	134.2	119.9	12.2
1957	12.2	12.2	12.2	12.2	0.0	0.0	0.0	0.0	0.2	11.5	3.1	-15.4
1958	-15.4	-15.4	-15.4	-15.4	-14.3	-13.0	-11.3	-10.4	-14.0	-3.1	-13.2	10.7
1959	10.9	11.1	11.4	0.0	0.0	0.0	0.0	0.1	0.3	-6.2	0.0	0.0
1960	0.0	0.0	0.9	0.9	0.9	0.9	1.0	1.1	0.5	-0.2	0.0	0.0
1961	1.0	1.3	0.6	0.9	0.9	0.0	0.0	0.0	0.3	1.1	0.0	0.0
1962	-0.3	-0.5	2.8	4.0	4.3	4.2	4.1	4.1	2.9	5.8	7.5	-1.5
1963	-1.5	-1.5	-1.5	-1.6	-1.6	-1.5	-1.5	-1.5	-1.1	-1.1	3.7	7.6
1964	7.6	7.6	7.6	7.6	7.6	5.9	4.9	4.6	34.7	33.4	32.5	-0.2
1965	-3.8	-4.7	-4.9	-5.1	-5.5	0.0	0.3	0.3	0.2	0.1	-0.1	0.0
1966	0.0	0.0	0.0	0.0	0.0	-0.9	-0.9	-0.9	-0.2	-0.5	0.2	0.0
1967	0.0	0.7	0.7	0.7	0.7	0.9	0.9	0.9	0.5	0.5	0.5	0.7
1968	0.7	1.6	1.6	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.2	0.1	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.9	6.5
1970	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-1.4	-1.4	-1.4	-1.4	0.0	0.0	0.0	0.0	-0.5	-3.1	0.0	0.0
1972	1.2	0.8	0.8	0.8	0.8	0.6	0.5	0.3	-0.2	0.9	0.0	-2.3
1973	-0.1	-0.2	-0.3	-0.4	-0.8	-0.6	-0.6	-0.6	-6.0	69.2	37.3	6.2
1974	6.2	6.2	6.2	6.2	32.8	26.1	26.0	26.0	7.0	-9.4	0.0	94.3
1975	94.0	94.9	94.9	94.9	117.8	50.0	50.0	49.9	39.2	40.6	0.0	46.9
1976	46.8	46.8	46.8	46.8	38.9	39.0	37.8	36.1	21.5	22.4	-0.6	-5.8
1977	-3.7	-2.9	-3.5	-2.1	-3.1	-3.0	-2.8	-2.6	0.0	0.0	0.0	0.1
1978	0.2	0.8	0.5	0.6	0.6	0.6	0.6	0.6	0.1	-2.6	-2.7	-2.9
1979	-1.5	-6.4	-6.4	0.0	0.0	0.0	0.2	0.1	0.1	-0.1	0.0	0.0
1980	0.0	6.3	6.3	6.3	6.3	0.0	0.0	0.0	0.0	-2.0	-4.4	-9.2
1981	-6.5	-15.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.4	-0.1	-0.1	0.0
1982	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.4	7.9	8.0	15.3
1983	15.3	15.2	6.0	6.0	6.0	5.5	4.9	4.1	2.8	1.2	-0.1	-0.5
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	-0.2	-14.0
1985	-13.9	-13.9	-13.9	-13.9	-13.9	-14.0	-13.0	-10.9	-0.8	3.3	0.0	1.0
1986	0.0	-0.1	0.6	1.7	2.9	2.7	2.4	1.0	-0.5	-18.5	-20.6	-21.2
1987	-21.6	-22.0	-22.6	-23.5	0.0	0.0	-0.4	-1.3	-0.8	-0.2	0.0	0.0
1988	0.9	0.7	3.0	2.5	1.8	1.5	1.1	-1.6	-2.4	-3.2	0.0	-1.5
1989	-4.5	-5.2	-5.2	-5.3	-5.7	-5.7	-5.3	-4.5	-3.0	-1.0	0.0	0.0
1990	2.0	0.0	0.2	0.7	1.6	2.5	2.4	2.4	3.2	3.2	0.5	-0.2
1991	4.0	1.4	4.0	4.1	4.1	4.2	4.3	4.5	3.0	0.6	0.0	-1.1
1992	-1.0	0.2	0.4	-0.2	-0.1	-0.1	1.1	3.0	4.3	8.0	10.6	8.9
1993	9.4	8.9	9.6	10.5	11.7	12.7	11.9	10.8	6.6	-84.0	-23.3	-9.1
AVG:	1.1	0.1	-1.0	-0.6	1.4	0.9	0.9	0.8	0.2	1.9	1.7	0.7
MIN:	-49.0	-83.4	-80.1	-79.5	-77.0	-74.4	-73.6	-71.4	-57.7	-84.0	-35.3	-53.3
MAX:	94.0	94.9	94.9	94.9	117.8	50.0	50.0	49.9	39.2	134.2	119.9	94.3

Table 3.4.3-45. Simulated SWP San Luis Storage (TAF), Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	89.1	151.4	479.3	774.5	932.0	818.9	699.3	710.5	282.8	267.0	499.1
1923	593.6	674.9	762.0	970.0	850.1	829.8	710.1	495.9	318.5	169.1	143.3	251.8
1924	193.0	95.9	162.5	340.0	467.4	396.8	318.6	292.4	195.1	116.0	110.0	122.4
1925	176.4	243.0	389.3	550.5	749.5	642.0	670.7	648.1	828.6	606.5	736.5	812.7
1926	819.6	788.7	824.5	985.4	976.5	882.9	812.1	602.5	501.7	372.8	328.3	161.0
1927	129.5	306.5	386.5	574.7	803.4	884.2	788.9	652.8	562.4	230.3	177.7	331.7
1928	273.6	431.9	637.6	917.0	1067.0	1067.0	978.4	699.2	536.8	244.8	165.0	159.7
1929	142.9	130.0	142.7	399.5	521.3	529.6	469.5	376.2	376.0	277.0	265.6	243.1
1930	253.2	188.7	391.6	581.7	630.0	616.0	470.8	278.2	428.3	402.3	381.3	353.0
1931	262.5	132.6	67.1	206.7	220.6	184.5	97.2	55.0	55.0	115.8	110.0	110.7
1932	133.3	124.2	305.9	516.4	717.7	697.6	594.8	572.8	816.8	627.9	448.3	770.3
1933	825.3	892.6	923.5	1067.0	998.7	1060.0	967.9	859.5	689.5	508.3	353.8	284.1
1934	288.3	195.8	358.5	549.3	768.8	697.4	559.6	398.1	352.6	140.0	113.0	110.0
1935	110.0	171.3	226.7	473.0	603.5	917.0	814.0	429.9	400.6	328.6	255.3	149.2
1936	111.2	55.0	55.0	345.3	730.7	939.5	791.0	540.8	318.9	258.8	203.8	269.8
1937	165.0	55.0	55.0	290.1	673.0	949.4	806.2	659.7	497.8	359.0	271.6	230.7
1938	208.0	355.4	351.7	703.0	854.3	965.0	826.5	659.9	748.0	344.8	300.6	601.1
1939	790.6	912.9	1067.0	1067.0	1067.0	1067.0	880.1	666.5	337.3	174.2	143.8	110.0
1940	110.0	55.0	55.0	240.2	643.1	767.1	653.8	447.4	326.5	291.1	231.8	309.7
1941	141.5	55.0	237.0	603.7	898.4	1067.0	1013.1	945.1	913.8	573.9	582.2	704.7
1942	917.8	1067.0	1067.0	1067.0	1067.0	920.5	819.0	688.9	668.1	531.6	455.9	484.5
1943	660.8	820.5	1049.2	1067.0	1067.0	1067.0	938.1	754.1	668.7	359.3	322.7	393.4
1944	412.8	271.5	265.4	472.0	594.5	688.8	525.0	299.0	131.4	62.7	55.0	154.1
1945	136.0	284.4	334.9	482.1	834.9	896.4	714.6	478.8	303.3	292.3	248.8	208.6
1946	178.6	320.8	380.9	701.9	583.9	730.7	577.0	371.0	211.2	155.4	129.7	160.9
1947	148.7	128.1	157.8	278.7	414.2	528.2	382.8	94.6	55.0	55.0	85.0	110.0
1948	110.0	110.0	96.1	332.5	276.0	392.2	459.7	328.0	303.7	273.9	264.8	287.8
1949	288.7	175.3	178.7	310.5	394.0	597.2	526.2	436.0	485.6	343.2	296.1	400.1
1950	361.0	282.1	238.9	442.5	758.0	825.0	674.4	452.8	350.4	304.2	282.9	339.2
1951	384.5	536.2	608.2	945.5	1067.0	1067.0	906.8	698.2	526.4	328.2	270.8	252.3
1952	178.8	198.7	403.1	767.8	1067.0	1067.0	956.2	904.7	1038.9	1017.3	1009.2	1067.0
1953	1067.0	1067.0	1067.0	1067.0	972.2	1043.7	809.5	640.0	679.8	379.4	326.9	315.0
1954	403.1	544.8	642.3	919.5	1067.0	1067.0	961.9	648.8	406.2	240.4	165.0	136.2
1955	132.8	197.4	378.6	744.6	727.6	739.8	663.1	600.9	551.6	437.3	248.2	276.9
1956	261.3	339.3	495.8	615.3	763.3	859.9	718.6	560.0	691.0	633.6	553.8	530.4
1957	699.2	641.3	637.6	826.4	1037.7	1067.0	970.7	793.9	595.0	388.9	201.6	162.4
1958	346.9	510.7	554.0	859.5	963.2	1067.0	912.4	767.8	923.5	655.5	608.9	632.5
1959	811.4	800.3	862.1	1067.0	937.4	765.7	591.7	366.7	218.5	165.0	118.3	55.0
1960	110.0	55.0	55.0	223.2	431.4	633.2	485.4	398.3	330.1	299.7	196.8	277.5
1961	226.6	274.4	395.6	541.3	703.2	770.3	619.2	338.1	100.1	96.8	101.1	110.0
1962	110.0	78.5	154.1	254.3	660.8	931.3	761.1	432.6	204.3	138.4	87.2	110.0
1963	258.2	406.9	458.8	746.5	957.6	1039.6	922.4	761.6	484.6	223.0	169.3	187.2
1964	358.1	510.4	562.3	834.7	735.5	662.8	438.4	221.9	55.0	55.0	55.0	118.7
1965	110.0	181.9	258.2	620.3	886.7	921.3	818.0	632.9	493.1	242.6	236.5	347.6
1966	287.5	469.7	734.5	1056.6	975.4	1045.5	814.7	582.4	382.5	240.7	165.0	57.3
1967	55.0	195.2	297.1	662.3	931.3	1067.0	902.9	736.0	864.8	807.6	784.7	924.8
1968	1067.0	1067.0	1067.0	1067.0	973.2	1051.5	789.9	561.4	371.0	165.0	165.0	117.9
1969	134.0	125.0	192.2	595.8	921.4	1067.0	947.8	899.8	933.1	590.4	584.6	643.1
1970	839.8	1016.9	1067.0	1067.0	1067.0	1067.0	912.2	664.9	429.9	200.2	149.7	134.9
1971	127.4	275.0	478.3	745.7	547.2	754.7	621.2	312.9	288.2	165.0	113.9	178.0
1972	275.3	249.7	438.3	720.4	778.3	979.3	839.2	648.9	455.0	289.3	311.6	260.7
1973	277.1	473.4	543.2	858.9	993.9	1067.0	953.0	771.9	694.8	559.6	465.8	385.4
1974	509.9	662.2	719.6	974.6	1067.0	949.0	810.2	644.0	733.1	516.9	478.4	465.7
1975	635.3	709.7	908.9	1067.0	1067.0	1067.0	869.8	725.4	696.5	640.4	561.1	531.7
1976	687.5	835.5	1008.0	1067.0	1040.3	941.3	731.3	499.6	284.2	165.0	155.8	124.5
1977	110.0	71.5	55.0	74.7	74.5	85.2	61.1	55.0	80.6	110.0	110.0	122.6
1978	119.4	135.2	340.9	569.4	856.0	1059.7	877.8	851.8	896.8	486.5	493.2	669.9
1979	733.8	644.1	483.4	844.4	877.6	982.5	857.5	676.3	470.0	307.9	232.7	165.0
1980	165.7	193.4	257.3	640.9	942.4	1067.0	1017.6	892.3	753.6	383.0	390.5	550.2
1981	664.2	553.2	647.9	939.7	879.5	960.9	742.2	506.4	278.1	165.0	146.6	57.6
1982	101.6	255.6	313.2	662.8	935.6	1044.9	900.9	756.3	815.1	425.3	368.5	575.3
1983	760.4	925.7	1067.0	1067.0	1067.0	1067.0	1067.0	935.8	1020.1	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	949.4	734.4	458.5	235.4	165.0	142.4
1985	252.7	400.9	599.0	745.5	759.0	710.9	452.9	202.0	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	356.0	725.4	933.7	852.4	668.3	606.6	589.3	552.9	605.2
1987	680.5	535.6	460.1	676.9	770.3	705.2	548.2	246.6	151.7	134.7	123.9	110.0
1988	55.0	55.0	55.0	293.1	269.5	214.6	210.2	184.2	177.1	126.1	112.3	110.0
1989	110.0	190.5	288.8	425.7	407.3	613.9	474.0	245.2	55.0	55.0	55.0	55.0
1990	110.0	55.0	55.0	348.2	384.4	452.5	369.7	334.9	254.0	138.7	110.0	123.6
1991	110.0	110.0	55.0	110.0	110.0	341.2	289.1	233.0	371.4	251.5	139.7	110.0
1992	122.4	110.0	144.4	250.0	465.5	587.2	516.7	411.7	416.6	261.5	114.2	179.1
1993	189.3	115.6	270.6	492.7	574.0	661.5	561.4	412.2	700.5	318.9	295.6	321.4
AVG:	345.4	379.3	451.7	659.6	771.0	834.0	710.2	542.3	473.4	327.1	285.4	313.1
MIN:	55.0	55.0	55.0	74.7	74.5	85.2	61.1	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	945.1	1038.9	1067.0	1067.0	1067.0

Table 3.4.3-46. Simulated SWP San Luis Storage (TAF), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	88.2	150.5	478.7	774.0	932.0	818.8	699.1	710.2	282.7	267.4	496.0
1923	587.9	666.4	753.4	961.4	841.7	820.6	700.7	486.2	310.0	165.0	138.9	242.4
1924	183.1	83.8	162.2	339.3	467.1	396.9	319.3	293.7	195.1	114.8	110.0	113.6
1925	166.4	231.1	379.1	542.7	741.7	634.6	663.3	640.8	811.8	590.0	723.2	800.6
1926	814.3	776.9	815.0	985.3	974.9	876.0	818.6	608.9	513.5	380.8	326.9	153.4
1927	129.3	306.7	387.0	576.2	803.3	884.1	788.7	652.5	581.8	247.9	195.2	329.7
1928	270.2	428.3	633.9	913.6	1067.0	1067.0	978.4	699.2	537.8	243.8	165.0	159.3
1929	142.4	129.4	142.2	398.6	518.8	525.5	466.1	373.6	358.3	253.5	256.1	216.3
1930	225.6	161.6	365.0	556.0	609.4	603.0	460.6	270.7	387.5	357.5	335.3	362.4
1931	262.3	131.5	68.0	206.3	221.0	185.5	97.8	55.0	55.0	116.1	110.0	110.0
1932	115.8	112.5	291.0	500.8	712.0	701.6	580.7	551.6	782.1	584.1	395.8	711.4
1933	754.9	817.3	844.0	1067.0	952.4	1004.6	905.6	788.1	609.2	418.2	291.1	212.7
1934	209.7	110.8	266.6	454.8	677.1	603.9	469.2	311.7	239.9	116.6	110.0	110.0
1935	110.0	167.1	226.4	473.4	605.7	917.7	812.2	427.4	421.2	348.9	273.8	134.5
1936	102.0	55.0	55.0	345.1	733.6	945.0	795.8	544.7	330.7	270.4	216.3	256.9
1937	165.0	55.0	55.0	289.9	673.3	951.6	808.4	662.3	501.1	353.8	246.8	209.6
1938	187.2	335.4	324.8	676.9	846.4	957.0	818.5	651.8	746.5	343.9	299.7	601.8
1939	791.2	907.6	1067.0	1067.0	1067.0	1067.0	874.8	661.5	335.8	173.2	143.1	110.0
1940	110.0	55.0	55.0	238.3	641.7	765.1	651.7	444.9	325.2	290.0	230.6	305.6
1941	140.7	55.0	236.9	602.0	895.5	1067.0	1013.0	944.9	908.5	565.0	573.6	696.1
1942	909.1	1062.7	1067.0	1067.0	1067.0	920.5	819.0	688.9	668.1	529.2	453.8	484.5
1943	660.8	820.5	1049.2	1067.0	1067.0	1067.0	938.1	754.1	668.7	359.3	322.8	390.4
1944	407.0	264.1	258.9	465.7	589.6	680.9	517.2	291.3	123.3	55.0	55.0	153.2
1945	136.0	284.4	335.1	482.6	835.6	894.0	712.2	476.0	299.9	289.4	246.0	227.7
1946	197.1	339.3	399.4	720.3	601.9	748.0	594.2	387.6	222.8	171.7	145.8	160.6
1947	150.4	132.1	160.5	278.0	412.3	531.5	385.4	94.7	55.0	55.0	73.2	110.0
1948	110.0	110.0	91.6	328.0	271.5	387.5	454.7	322.9	297.7	267.9	258.7	262.8
1949	259.9	149.8	153.5	284.2	368.5	572.3	505.3	417.9	473.2	354.7	390.1	454.3
1950	418.6	342.8	300.5	504.0	819.1	885.4	734.1	506.3	364.0	317.5	291.3	399.0
1951	437.7	589.2	660.9	950.7	1067.0	1067.0	906.8	697.9	525.2	337.2	278.5	247.3
1952	173.5	192.9	395.9	760.6	1065.2	1067.0	956.2	904.7	1039.9	1013.0	1005.9	1067.0
1953	1067.0	1067.0	1067.0	1067.0	974.4	1046.0	811.8	641.9	678.5	378.3	325.7	316.8
1954	403.4	545.0	642.3	919.6	1067.0	1067.0	961.9	648.8	414.7	248.9	165.0	136.2
1955	129.7	192.9	374.0	740.0	723.0	735.1	657.9	595.3	547.1	432.8	243.1	271.0
1956	256.0	332.7	489.1	608.8	756.8	853.4	712.0	553.3	686.4	629.2	549.4	526.0
1957	694.8	635.0	621.7	812.8	1024.6	1067.0	970.7	793.4	594.7	388.7	200.4	162.4
1958	346.8	509.6	552.8	859.1	962.7	1067.0	911.8	767.2	928.4	656.9	610.5	634.1
1959	813.0	799.9	861.6	1057.6	916.3	739.8	566.2	341.7	202.6	164.3	114.4	55.0
1960	110.0	55.0	55.0	218.5	427.5	627.8	486.5	406.8	317.2	294.2	205.6	286.7
1961	243.7	294.2	420.8	566.1	726.7	798.1	646.4	360.6	116.1	111.8	111.9	110.0
1962	110.0	73.4	150.9	251.0	657.5	924.1	753.4	418.9	191.3	138.5	87.2	110.0
1963	259.1	408.0	460.0	748.2	956.6	1038.3	921.1	760.1	484.3	225.0	170.8	123.0
1964	293.3	445.5	496.7	775.5	678.7	608.2	388.0	176.9	55.0	55.0	55.0	117.7
1965	110.0	183.7	263.6	625.5	891.7	922.2	818.8	633.7	494.0	247.2	241.1	338.8
1966	277.6	459.8	724.7	1046.8	974.2	1043.5	812.6	580.3	383.2	242.0	165.0	57.1
1967	55.0	193.9	294.4	660.3	929.3	1067.0	902.4	735.5	863.4	806.2	783.1	925.3
1968	1067.0	1067.0	1067.0	1067.0	973.2	1051.5	789.9	560.3	370.7	165.0	165.0	117.8
1969	131.9	122.8	189.9	595.9	921.3	1067.0	947.6	899.3	932.7	587.1	579.2	637.5
1970	834.1	1011.0	1067.0	1067.0	1067.0	1067.0	912.2	664.6	430.5	197.8	147.2	134.9
1971	126.4	274.1	477.3	745.2	546.0	754.0	620.7	312.3	283.7	165.0	113.7	176.5
1972	271.6	249.7	438.2	720.3	778.3	979.3	839.2	649.0	456.5	290.5	312.1	262.9
1973	279.0	475.3	545.0	861.3	996.2	1067.0	952.8	771.5	714.8	404.4	369.2	288.9
1974	384.7	537.0	594.4	933.6	1054.6	918.1	779.3	612.9	687.2	472.8	434.5	418.0
1975	587.7	660.3	860.8	1067.0	1067.0	1067.0	870.0	725.4	657.8	604.5	525.2	495.8
1976	651.2	799.1	971.3	1067.0	1028.0	928.7	719.4	487.8	269.9	165.0	155.5	123.6
1977	110.0	71.5	55.0	77.1	76.1	86.7	62.6	55.0	97.6	110.0	110.0	122.6
1978	119.8	135.5	341.1	569.6	859.7	1066.1	883.7	857.0	897.3	486.2	596.5	667.5
1979	728.2	624.7	478.4	842.1	876.5	981.2	855.7	674.1	514.9	353.4	279.5	173.0
1980	165.0	191.0	254.7	641.0	943.5	1067.0	1017.1	891.0	750.2	380.6	389.7	548.5
1981	659.5	547.5	637.8	931.0	881.7	963.2	744.6	508.0	278.9	165.0	147.3	58.6
1982	98.8	252.8	310.5	660.0	932.9	1042.1	898.2	753.6	812.1	417.9	361.7	571.4
1983	756.5	921.8	1067.0	1067.0	1067.0	1067.0	1067.0	935.8	1020.1	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	949.5	734.1	457.7	235.1	165.0	141.1
1985	249.5	397.6	595.7	743.0	757.0	708.5	450.7	199.7	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	358.6	728.3	933.7	852.2	667.8	605.1	587.5	550.8	600.2
1987	674.5	527.4	454.0	671.6	767.4	717.9	561.8	259.4	158.5	144.1	122.6	110.0
1988	55.0	55.0	55.0	293.6	270.2	210.6	206.6	142.5	127.6	110.0	110.0	110.0
1989	110.0	193.4	286.6	424.8	406.9	613.8	476.6	251.7	55.0	55.0	55.0	55.0
1990	110.0	55.0	55.0	353.6	391.5	458.3	374.8	337.7	254.0	137.4	110.0	113.0
1991	110.0	110.0	55.0	110.0	110.0	341.2	289.1	233.1	351.5	231.9	120.3	110.0
1992	110.0	109.4	139.9	243.7	459.8	581.1	513.5	412.3	415.7	268.9	129.9	195.6
1993	222.6	151.5	308.9	531.2	612.9	699.4	599.2	449.8	735.6	354.0	328.0	341.5
AVG:	338.9	372.5	445.2	656.2	768.0	831.0	707.2	538.5	468.7	322.2	284.1	307.7
MIN:	55.0	55.0	55.0	77.1	76.1	86.7	62.6	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	944.9	1039.9	1067.0	1067.0	1067.0

Table 3.4.3-47. Simulated SWP San Luis Storage (TAF), Alternatives 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	88.4	150.7	478.8	774.2	932.0	818.8	699.1	710.3	282.7	267.9	494.9
1923	586.7	661.8	748.8	956.8	837.1	815.6	695.7	481.2	305.0	165.0	138.7	249.1
1924	189.8	88.3	162.0	336.2	464.1	394.1	316.7	291.7	194.4	115.3	110.0	128.6
1925	179.7	246.1	393.1	556.9	755.9	649.2	678.4	655.5	838.7	617.6	748.5	819.1
1926	823.3	795.6	831.3	985.3	980.8	888.4	825.0	617.3	524.8	394.3	336.9	166.9
1927	127.0	305.4	386.7	576.4	803.3	884.0	788.7	651.6	593.8	260.1	207.2	318.2
1928	258.8	416.8	622.4	902.7	1067.0	1067.0	978.4	699.2	535.1	250.7	165.0	160.4
1929	142.8	129.9	143.4	397.2	517.4	525.7	466.3	373.6	369.5	265.6	263.4	242.4
1930	251.1	187.0	390.3	580.8	630.7	618.9	475.6	285.2	417.7	395.9	376.4	359.9
1931	271.7	130.6	66.6	206.3	220.4	184.0	97.0	55.0	55.0	115.1	110.0	111.0
1932	132.7	124.0	305.9	516.6	717.6	699.5	585.4	564.8	810.1	623.3	445.7	767.6
1933	814.0	882.9	914.1	1067.0	998.4	1058.8	966.1	856.9	685.8	503.5	346.8	276.4
1934	279.9	186.9	348.9	539.1	759.1	687.4	550.1	389.1	344.3	132.6	113.2	110.0
1935	110.0	172.3	227.4	473.8	604.7	918.5	815.1	430.9	391.7	319.8	246.1	136.8
1936	101.7	55.0	55.0	333.3	721.2	932.1	782.1	533.8	310.9	250.7	197.9	251.6
1937	165.0	55.0	55.0	290.6	674.3	953.1	809.9	666.8	505.7	353.2	242.6	216.7
1938	195.6	344.9	335.0	686.6	845.2	955.9	817.4	650.8	735.8	315.8	270.4	582.9
1939	772.4	894.0	1067.0	1067.0	1067.0	1067.0	878.3	664.6	338.6	174.2	143.5	110.0
1940	110.0	55.0	55.0	240.8	643.7	767.6	654.3	449.5	326.6	289.4	229.2	293.7
1941	141.8	55.0	235.1	600.2	893.4	1067.0	1013.0	944.9	946.7	589.4	599.6	720.4
1942	933.4	1067.0	1067.0	1067.0	1067.0	1067.0	920.5	819.0	688.9	668.1	609.3	529.7	535.4
1943	711.6	871.3	1067.0	1067.0	1067.0	1067.0	938.1	771.5	686.0	367.9	331.3	390.7
1944	407.2	261.3	262.2	460.5	582.6	677.3	514.1	288.9	121.9	55.0	55.0	153.5
1945	136.4	285.6	336.7	484.1	836.2	895.1	713.1	476.7	297.2	286.3	253.9	212.1
1946	181.5	323.8	384.1	705.1	586.2	733.3	579.3	376.1	217.0	159.5	133.7	160.0
1947	146.8	126.4	154.7	274.6	411.0	529.2	386.0	98.3	55.0	55.0	77.4	110.0
1948	110.0	110.0	93.3	329.6	273.0	389.2	456.8	324.5	280.9	246.8	228.0	241.2
1949	239.4	130.8	133.8	268.5	352.9	556.5	488.8	400.3	452.6	336.2	372.2	446.0
1950	399.4	327.9	285.0	488.7	804.1	870.0	718.6	491.6	341.3	295.2	252.8	368.8
1951	407.3	559.2	631.3	950.8	1067.0	1067.0	906.7	700.1	523.5	340.7	281.8	260.9
1952	185.4	201.8	404.6	769.3	1067.0	1067.0	956.2	904.7	1038.7	997.8	987.8	1057.0
1953	1067.0	1067.0	1067.0	1067.0	973.8	1045.4	811.2	641.2	665.8	366.7	313.3	318.3
1954	404.9	546.5	643.8	921.0	1067.0	1067.0	962.5	649.4	415.3	251.8	165.0	136.2
1955	130.7	200.3	383.5	749.0	733.0	745.0	667.9	603.8	553.5	437.0	244.8	271.4
1956	254.6	332.1	487.7	607.5	755.5	852.1	710.6	552.0	703.1	385.1	320.0	372.4
1957	541.4	482.8	499.2	702.0	918.3	1047.1	937.8	759.1	561.5	356.5	171.6	162.4
1958	345.6	507.7	550.0	857.6	961.2	1065.9	910.1	765.5	903.5	618.0	571.7	595.4
1959	774.2	761.1	822.6	1057.7	916.2	744.1	570.4	345.7	205.5	165.0	117.1	55.0
1960	110.0	55.0	55.0	224.5	432.7	635.1	488.2	402.1	327.4	298.8	197.1	284.3
1961	234.4	281.9	403.2	549.0	710.7	778.2	627.3	343.0	95.9	93.1	97.4	110.0
1962	110.0	79.7	158.5	261.2	667.7	939.7	769.3	439.0	210.6	138.0	88.0	110.0
1963	257.8	406.4	458.2	746.1	957.6	1039.5	922.3	761.5	484.5	273.6	210.5	159.1
1964	330.0	482.3	534.1	816.0	714.5	642.3	419.6	203.5	73.1	55.0	55.0	119.3
1965	110.0	181.8	264.2	626.0	892.2	921.3	818.0	632.9	504.0	242.7	236.6	345.2
1966	284.1	466.3	731.2	1053.4	974.3	1043.7	812.9	580.5	383.1	241.9	165.0	57.1
1967	55.0	193.8	295.1	661.0	930.0	1067.0	902.7	735.8	863.9	806.7	783.7	925.0
1968	1067.0	1067.0	1067.0	1067.0	973.2	1051.5	789.9	561.2	370.9	165.0	165.0	117.9
1969	133.5	124.6	191.7	595.7	921.3	1067.0	947.8	899.7	933.0	587.7	580.1	638.5
1970	835.2	1012.3	1067.0	1067.0	1067.0	1067.0	912.2	664.5	430.7	197.4	146.8	134.9
1971	126.3	273.9	477.2	745.2	545.9	754.0	620.7	312.3	283.1	165.0	113.7	176.2
1972	271.3	249.7	438.2	720.3	778.3	979.3	839.2	649.0	456.6	290.8	312.1	263.2
1973	276.9	473.2	542.9	859.3	994.3	1067.0	952.8	773.3	718.7	408.2	373.0	282.9
1974	363.2	515.6	572.9	912.1	1033.1	901.0	762.2	597.3	677.5	496.7	451.6	435.0
1975	604.6	677.2	877.7	1067.0	1067.0	1067.0	860.8	716.2	657.2	601.5	522.3	492.9
1976	648.6	796.5	968.7	1067.0	1005.7	909.9	700.6	469.1	253.0	165.0	155.8	124.3
1977	110.0	75.3	55.0	80.9	79.6	89.0	64.8	55.0	87.3	110.0	110.0	122.6
1978	119.5	135.5	340.9	569.4	856.6	1060.8	878.8	852.7	896.3	485.9	492.6	669.5
1979	730.6	638.3	479.4	841.0	877.5	982.3	857.4	676.9	473.6	310.9	236.5	165.0
1980	165.0	191.3	255.1	638.7	940.0	1067.0	1016.6	889.4	745.0	378.5	388.4	546.4
1981	658.1	546.7	635.5	929.6	881.2	962.6	743.9	508.0	278.6	165.0	147.2	58.0
1982	101.6	255.5	313.1	662.6	935.5	1044.7	900.7	756.1	814.9	409.9	352.9	560.2
1983	745.3	910.6	1067.0	1067.0	1067.0	1067.0	1067.0	935.8	1020.1	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	949.5	734.0	457.9	234.9	165.0	141.1
1985	249.5	397.6	595.7	742.9	756.9	708.4	450.6	199.6	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	356.8	726.3	933.7	852.2	670.1	610.7	593.0	556.3	596.4
1987	670.8	518.8	451.7	668.4	765.8	732.5	577.1	277.9	158.2	157.4	123.0	110.0
1988	55.0	55.0	55.0	293.1	269.8	214.3	209.5	160.1	127.6	110.0	110.0	110.0
1989	110.0	190.7	289.0	426.2	407.9	614.6	475.3	247.5	55.0	55.0	55.0	55.0
1990	110.0	55.0	55.0	352.0	390.6	459.0	376.0	340.6	261.2	145.4	110.0	125.4
1991	110.0	110.0	55.0	110.0	110.0	341.2	289.0	232.6	354.3	234.3	122.4	110.0
1992	121.5	110.0	144.5	249.3	464.7	586.3	515.7	410.4	412.9	257.7	110.6	174.9
1993	185.5	111.6	266.6	488.8	570.3	657.7	557.6	408.4	686.8	623.4	526.6	436.1
AVG:	338.6	372.2	445.2	655.6	767.3	832.3	708.2	540.2	470.1	324.5	282.6	308.9
MIN:	55.0	55.0	55.0	80.9	79.6	89.0	64.8	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	944.9	1038.7	1067.0	1067.0	1067.0

Table 3.4.3-48. Simulated SWP San Luis Storage (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.9	-0.9	-0.6	-0.4	0.0	-0.1	-0.2	-0.2	-0.2	0.4	-3.1
1923	-5.7	-8.5	-8.5	-8.5	-8.4	-9.3	-9.4	-9.7	-8.5	-4.1	-4.4	-9.4
1924	-9.9	-12.1	-0.3	-0.7	-0.3	0.1	0.7	1.3	0.0	-1.2	0.0	-8.8
1925	-10.0	-11.9	-10.2	-7.8	-7.8	-7.4	-7.4	-7.3	-16.9	-16.5	-13.3	-12.1
1926	-5.3	-11.8	-9.5	-0.1	-1.7	-7.0	6.5	6.4	11.8	8.0	-1.4	-7.6
1927	-0.2	0.1	0.5	1.5	0.0	-0.1	-0.1	-0.3	19.4	17.7	17.5	-2.0
1928	-3.4	-3.6	-3.7	-3.4	0.0	0.0	0.0	0.0	0.9	-0.9	0.0	-0.4
1929	-0.5	-0.6	-0.5	-0.9	-2.5	-4.0	-3.4	-2.6	-17.7	-23.5	-9.5	-26.8
1930	-27.6	-27.1	-26.6	-25.7	-20.6	-13.0	-10.2	-7.6	-40.8	-44.8	-45.9	9.4
1931	-0.2	-1.0	0.9	-0.4	0.4	1.0	0.6	0.0	0.0	0.3	0.0	-0.7
1932	-17.5	-11.6	-15.0	-15.6	-5.6	4.1	-14.0	-21.2	-34.7	-43.8	-52.5	-58.9
1933	-70.4	-75.3	-79.5	0.0	-46.2	-55.4	-62.3	-71.4	-80.3	-90.1	-62.7	-71.4
1934	-78.6	-85.0	-91.9	-94.5	-91.7	-93.5	-90.5	-86.3	-112.7	-23.4	-3.0	0.0
1935	0.0	-4.1	-0.3	0.4	2.2	0.7	-1.8	-2.5	20.7	20.3	18.4	-14.8
1936	-9.2	0.0	0.0	-0.2	2.9	5.5	4.8	4.0	11.8	11.6	12.5	-12.9
1937	0.0	0.0	0.0	-0.2	0.3	2.2	2.2	2.6	3.3	-5.2	-24.8	-21.1
1938	-20.8	-20.0	-26.9	-26.1	-8.0	-8.0	-8.1	-8.0	-1.5	-0.9	-0.8	0.7
1939	0.6	-5.4	0.0	0.0	0.0	0.0	-5.4	-5.0	-1.5	-1.0	-0.6	0.0
1940	0.0	0.0	0.0	-1.9	-1.4	-1.9	-2.1	-2.5	-1.3	-1.1	-1.2	-4.1
1941	-0.7	0.0	-0.1	-1.7	-2.9	0.0	-0.1	-0.1	-5.3	-8.9	-8.5	-8.6
1942	-8.7	-4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	-2.1	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-2.9
1944	-5.7	-7.5	-6.5	-6.3	-4.9	-7.9	-7.8	-7.7	-8.1	-7.7	0.0	-0.9
1945	0.0	0.0	0.2	0.6	0.7	-2.4	-2.5	-2.8	-3.3	-2.9	-2.8	19.1
1946	18.5	18.5	18.4	18.4	18.0	17.3	17.2	16.6	11.6	16.4	16.1	-0.3
1947	1.7	4.0	2.7	-0.7	-1.8	3.3	2.6	0.2	0.0	0.0	-11.8	0.0
1948	0.0	0.0	-4.4	-4.5	-4.5	-4.7	-5.1	-5.1	-6.1	-6.1	-6.1	-25.0
1949	-28.8	-25.5	-25.1	-26.2	-25.5	-24.9	-20.9	-18.1	-12.4	11.5	94.0	54.2
1950	57.5	60.7	61.7	61.5	61.2	60.3	59.7	53.6	13.6	13.2	8.4	59.8
1951	53.2	53.0	52.7	5.3	0.0	0.0	0.0	-0.2	-1.2	9.0	7.7	-5.0
1952	-5.3	-5.8	-7.2	-7.2	-1.8	0.0	0.0	0.0	1.0	-4.3	-3.3	0.0
1953	0.0	0.0	0.0	0.0	2.2	2.2	2.2	1.8	-1.3	-1.2	-1.2	1.8
1954	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	8.5	8.5	0.0	0.0
1955	-3.2	-4.5	-4.5	-4.6	-4.6	-4.7	-5.2	-5.6	-4.5	-4.5	-5.1	-5.9
1956	-5.4	-6.7	-6.7	-6.5	-6.5	-6.5	-6.6	-6.6	-4.6	-4.4	-4.4	-4.4
1957	-4.4	-6.3	-16.0	-13.6	-13.1	0.0	0.0	-0.5	-0.4	-0.3	-1.2	0.0
1958	-0.1	-1.2	-1.2	-0.4	-0.5	0.0	-0.6	-0.6	4.9	1.4	1.6	1.6
1959	1.6	-0.4	-0.6	-9.4	-21.1	-26.0	-25.6	-25.0	-15.9	-0.7	-3.9	0.0
1960	0.0	0.0	0.0	-4.7	-3.9	-5.5	1.1	8.5	-12.9	-5.5	8.8	9.3
1961	17.1	19.8	25.3	24.7	23.6	27.9	27.2	22.5	16.0	15.1	10.8	0.0
1962	0.0	-5.2	-3.2	-3.3	-3.3	-7.2	-7.8	-13.7	-13.0	0.0	-0.1	0.0
1963	0.9	1.1	1.3	1.7	-1.0	-1.3	-1.3	-1.5	-0.3	2.0	1.6	-64.2
1964	-64.8	-64.9	-65.6	-59.2	-56.8	-54.6	-50.4	-45.0	0.0	0.0	0.0	-1.0
1965	0.0	1.8	5.4	5.2	5.1	0.8	0.8	0.8	0.9	4.6	4.6	-8.8
1966	-9.9	-9.9	-9.8	-9.8	-1.2	-2.0	-2.0	-2.1	0.7	1.3	0.0	-0.1
1967	0.0	-1.3	-2.7	-2.0	-2.0	0.0	-0.5	-0.5	-1.4	-1.4	-1.5	0.5
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-0.3	0.0	0.0	0.0
1969	-2.1	-2.3	-2.3	0.1	-0.1	0.0	-0.2	-0.4	-0.4	-3.3	-5.4	-5.6
1970	-5.7	-5.9	0.0	0.0	0.0	0.0	0.0	-0.3	0.6	-2.4	-2.4	0.0
1971	-0.9	-0.9	-0.9	-0.4	-1.2	-0.6	-0.5	-0.6	-4.5	0.0	-0.3	-1.5
1972	-3.8	0.0	-0.1	-0.1	0.0	0.0	0.1	0.1	1.5	1.2	0.5	2.2
1973	1.9	1.9	1.9	2.4	2.3	0.0	-0.1	-0.4	20.0	-155.2	-96.5	-96.5
1974	-125.2	-125.1	-125.2	-41.0	-12.4	-30.9	-30.8	-31.1	-45.9	-44.1	-43.8	-47.7
1975	-47.6	-49.5	-48.1	0.0	0.0	0.0	0.1	0.0	-38.8	-36.0	-35.9	-35.9
1976	-36.2	-36.4	-36.7	0.0	-12.4	-12.6	-11.9	-11.9	-14.3	0.0	-0.3	-0.8
1977	0.0	-0.1	0.0	2.4	1.6	1.6	1.6	0.0	17.0	0.0	0.0	0.0
1978	0.4	0.3	0.2	0.2	3.8	6.4	5.9	5.3	0.5	-0.3	103.3	-2.5
1979	-5.7	-19.4	-5.0	-2.3	-1.2	-1.4	-1.9	-2.3	44.9	45.5	46.8	8.0
1980	-0.7	-2.5	-2.6	0.0	1.1	0.0	-0.5	-1.2	-3.4	-2.4	-0.8	-1.8
1981	-4.8	-5.7	-10.1	-8.7	2.1	2.3	2.5	1.6	0.8	0.0	0.7	1.0
1982	-2.8	-2.8	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-3.0	-7.3	-6.8	-3.9
1983	-3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-0.8	-0.3	0.0	-1.3
1985	-3.2	-3.2	-3.2	-2.5	-1.9	-2.4	-2.2	-2.3	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	2.5	2.9	0.0	-0.2	-0.5	-1.5	-1.8	-2.1	-5.0
1987	-6.0	-8.1	-6.1	-5.3	-2.9	12.7	13.6	12.9	6.8	9.4	-1.4	0.0
1988	0.0	0.0	0.0	0.4	0.6	-4.0	-3.6	-41.7	-49.5	-16.1	-2.3	0.0
1989	0.0	2.9	-2.2	-1.0	-0.4	-0.1	2.6	6.5	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	5.4	7.1	5.8	5.1	2.8	0.0	-1.3	0.0	-10.7
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-19.9	-19.6	-19.4	0.0
1992	-12.4	-0.6	-4.6	-6.3	-5.7	-6.1	-3.2	0.6	-0.9	7.5	15.7	16.5
1993	33.3	35.9	38.4	38.5	38.9	37.9	37.8	37.6	35.0	35.1	32.4	20.1
AVG:	-6.5	-6.8	-6.5	-3.4	-3.0	-3.0	-3.0	-3.8	-4.7	-5.0	-1.2	-5.4
MIN:	-125.2	-125.1	-125.2	-94.5	-91.7	-93.5	-90.5	-86.3	-112.7	-155.2	-96.5	-96.5
MAX:	57.5	60.7	61.7	61.5	61.2	60.3	59.7	53.6	44.9	45.5	103.3	59.8

Table 3.4.3-49. Simulated SWP San Luis Storage (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.7	-0.7	-0.4	-0.3	0.0	-0.1	-0.2	-0.2	-0.2	0.9	-4.2
1923	-6.9	-13.1	-13.1	-13.1	-13.0	-14.2	-14.3	-14.7	-13.5	-4.1	-4.6	-2.7
1924	-3.2	-7.7	-0.5	-3.9	-3.3	-2.7	-1.9	-0.7	-0.7	-0.7	0.0	6.2
1925	3.3	3.1	3.8	6.3	6.4	7.2	7.7	7.4	10.1	11.1	12.0	6.4
1926	3.7	7.0	6.9	-0.1	4.3	5.4	12.9	14.8	23.1	21.5	8.6	5.9
1927	-2.6	-1.1	0.2	1.7	-0.1	-0.2	-0.2	-1.3	31.4	29.9	29.5	-13.5
1928	-14.9	-15.0	-15.2	-14.3	0.0	0.0	0.0	0.0	-1.7	5.9	0.0	0.7
1929	-0.1	-0.1	0.7	-2.3	-4.0	-3.8	-3.3	-2.6	-6.5	-11.4	-2.2	-0.7
1930	-2.1	-1.6	-1.3	-0.9	0.8	2.9	4.7	7.0	-10.6	-6.4	-4.9	6.9
1931	9.2	-1.9	-0.6	-0.4	-0.1	-0.5	-0.2	0.0	0.0	-0.7	0.0	0.3
1932	-0.6	-0.2	0.0	0.2	0.0	1.9	-9.3	-8.0	-6.7	-4.6	-2.6	-2.6
1933	-11.3	-9.7	-9.4	0.0	-0.2	-1.1	-1.8	-2.6	-3.7	-4.9	-7.0	-7.7
1934	-8.4	-9.0	-9.6	-10.1	-9.7	-10.0	-9.5	-8.9	-8.3	-7.4	0.2	0.0
1935	0.0	1.0	0.7	0.8	1.1	1.5	1.1	1.0	-8.9	-8.8	-9.2	-12.4
1936	-9.5	0.0	0.0	-12.0	-9.5	-7.5	-8.9	-7.0	-8.0	-8.1	-5.9	-18.2
1937	0.0	0.0	0.0	0.5	1.3	3.7	3.7	7.1	7.9	-5.8	-29.0	-13.9
1938	-12.4	-10.6	-16.7	-16.4	-9.1	-9.1	-9.1	-9.1	-12.2	-29.0	-30.2	-18.2
1939	-18.2	-18.9	0.0	0.0	0.0	0.0	-1.8	-2.0	1.3	0.0	-0.2	0.0
1940	0.0	0.0	0.0	0.5	0.6	0.5	0.5	2.1	0.0	-1.7	-2.6	-16.0
1941	0.3	0.0	-2.0	-3.5	-4.9	0.0	-0.1	-0.1	32.9	15.5	17.4	15.7
1942	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	73.8	50.9
1943	50.8	50.8	17.8	0.0	0.0	0.0	0.0	17.5	17.3	8.6	8.6	-2.7
1944	-5.6	-10.3	-3.2	-11.5	-11.9	-11.5	-10.9	-10.0	-9.6	-7.7	0.0	-0.6
1945	0.4	1.2	1.8	2.1	1.2	-1.3	-1.5	-2.1	-6.1	-6.0	5.1	3.5
1946	2.9	3.0	3.2	3.2	2.3	2.5	2.3	5.1	5.8	4.2	4.0	-1.0
1947	-1.9	-1.7	-3.1	-4.1	-3.1	1.0	3.2	3.7	0.0	0.0	-7.6	0.0
1948	0.0	0.0	-2.7	-2.9	-3.0	-3.0	-2.9	-3.6	-22.8	-27.2	-36.8	-46.6
1949	-49.3	-44.4	-44.8	-41.9	-41.1	-40.7	-37.4	-35.7	-32.9	-7.0	76.1	45.9
1950	38.4	45.8	46.2	46.2	46.2	45.0	44.1	38.8	-9.1	-9.0	-30.1	29.6
1951	22.8	23.0	23.1	5.4	0.0	0.0	-0.1	1.9	-3.0	12.5	11.0	8.6
1952	6.7	3.2	1.5	1.5	0.0	0.0	0.0	0.0	-0.1	-19.6	-21.4	-10.0
1953	0.0	0.0	0.0	0.0	1.6	1.7	1.7	1.2	-14.0	-12.7	-13.6	3.3
1954	1.7	1.7	1.5	1.5	0.0	0.0	0.6	0.6	9.1	11.3	0.0	0.0
1955	-2.1	2.9	5.0	4.5	5.4	5.2	4.7	2.9	1.9	-0.3	-3.4	-5.5
1956	-6.7	-7.3	-8.1	-7.8	-7.8	-7.8	-8.0	-8.0	12.1	-248.5	-233.8	-158.0
1957	-157.8	-158.6	-138.4	-124.5	-119.4	-19.9	-32.9	-34.7	-33.6	-32.4	-30.0	0.0
1958	-1.3	-3.1	-4.0	-1.9	-2.0	-1.1	-2.3	-2.3	-19.9	-37.5	-37.2	-37.1
1959	-37.2	-39.2	-39.5	-9.3	-21.2	-21.6	-21.4	-20.9	-13.0	0.0	-1.2	0.0
1960	0.0	0.0	0.0	1.3	1.4	1.9	2.8	3.8	-2.7	-0.9	0.4	6.8
1961	7.8	7.6	7.6	7.7	7.5	7.9	8.1	4.9	-4.1	-3.7	-3.7	0.0
1962	0.0	1.1	4.4	6.9	6.9	8.4	8.2	6.4	6.3	-0.4	0.8	0.0
1963	-0.4	-0.5	-0.6	-0.5	0.0	-0.1	-0.1	-0.1	-0.1	50.6	41.3	-28.1
1964	-28.1	-28.1	-28.2	-18.7	-21.1	-20.4	-18.9	-18.4	18.1	0.0	0.0	0.6
1965	0.0	-0.1	6.1	5.8	5.6	0.0	0.0	0.0	10.8	0.1	0.2	-2.4
1966	-3.4	-3.4	-3.3	-3.3	-1.1	-1.8	-1.8	-1.9	0.6	1.2	0.0	-0.2
1967	0.0	-1.4	-2.0	-1.4	-1.3	0.0	-0.1	-0.1	-0.8	-0.9	-1.0	0.2
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.0	0.0
1969	-0.5	-0.5	-0.5	-0.1	-0.2	0.0	0.0	-0.1	-0.1	-2.7	-4.5	-4.6
1970	-4.6	-4.6	0.0	0.0	0.0	0.0	0.0	-0.4	0.8	-2.8	-2.8	0.0
1971	-1.1	-1.1	-1.1	-0.5	-1.3	-0.6	-0.4	-0.6	-5.1	0.0	-0.3	-1.8
1972	-4.1	0.0	-0.1	-0.1	-0.1	0.0	0.1	0.1	1.6	1.5	0.4	2.6
1973	-0.2	-0.2	-0.2	0.4	0.3	0.0	-0.1	1.4	24.0	-151.4	-92.8	-102.4
1974	-146.6	-146.6	-146.6	-62.4	-33.9	-48.0	-47.9	-46.7	-55.6	-20.2	-26.8	-30.7
1975	-30.6	-32.6	-31.2	0.0	0.0	0.0	-9.1	-9.1	-39.3	-38.9	-38.8	-38.7
1976	-38.9	-39.0	-39.3	0.0	-34.6	-31.4	-30.6	-30.6	-31.2	0.0	0.0	-0.2
1977	0.0	3.7	0.0	6.2	5.0	3.8	3.8	0.0	6.7	0.0	0.0	0.0
1978	0.1	0.3	0.0	0.0	0.7	1.1	1.0	0.9	-0.5	-0.6	-0.6	-0.4
1979	-3.3	-5.8	-4.0	-3.4	-0.2	-0.2	-0.1	0.5	3.5	3.0	3.8	0.0
1980	-0.7	-2.1	-2.2	-2.2	-2.5	0.0	-1.0	-2.9	-8.6	-4.5	-2.1	-3.9
1981	-6.1	-6.4	-12.4	-10.1	1.7	1.8	1.8	1.6	0.5	0.0	0.6	0.4
1982	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-15.4	-15.7	-15.1
1983	-15.1	-15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	-0.6	-0.5	0.0	-1.3
1985	-3.2	-3.2	-3.2	-2.6	-2.1	-2.4	-2.3	-2.4	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.8	0.9	0.0	-0.2	1.8	4.1	3.8	3.4	-8.8
1987	-9.8	-16.7	-8.3	-8.5	-4.4	27.3	28.9	31.4	6.5	22.7	-0.9	0.0
1988	0.0	0.0	0.0	-0.1	0.3	-0.3	-0.7	-24.1	-49.5	-16.1	-2.3	0.0
1989	0.0	0.2	0.1	0.4	0.6	0.7	1.3	2.3	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	3.8	6.1	6.5	6.3	5.7	7.2	6.7	0.0	1.8
1991	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.4	-17.1	-17.2	-17.3	0.0
1992	-0.9	0.0	0.1	-0.7	-0.8	-0.9	-1.1	-1.3	-3.7	-3.8	-3.6	-4.2
1993	-3.8	-4.0	-4.0	-3.9	-3.8	-3.8	-3.8	-3.8	-13.8	304.6	231.0	114.7
AVG:	-6.8	-7.1	-6.5	-4.1	-3.7	-1.8	-2.0	-2.0	-3.3	-2.6	-2.7	-4.2
MIN:	-157.8	-158.6	-146.6	-124.5	-119.4	-48.0	-47.9	-46.7	-55.6	-248.5	-233.8	-158.0
MAX:	50.8	50.8	46.2	46.2	46.2	45.0	44.1	38.8	32.9	304.6	231.0	114.7

3.4.4 River Flows

This section provides absolute and comparative results for key river flows in the CVP/SWP system under the FRWP alternatives. Flows and comparisons are provided for the Trinity River, Sacramento River below Keswick Dam, Sacramento River at the Navigation Control Point, Sacramento River at Freeport, Feather River below Thermalito Afterbay, Feather River at the mouth, American River at Nimbus, American River at H Street, Mokelumne River below Camanche Reservoir, and Mokelumne River at Woodbridge.

Absolute simulated results are provided for each flow location, followed by a comparison of the flow in each Action alternative to Alternative 1. Figures describing average monthly flows are sometimes provided at key flow points.

Table 3.4.4-1. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	540	2924	783	450	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	540	2924	783	450	450	450
1928	373	300	300	300	300	300	540	2924	783	450	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	540	2924	783	450	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	540	2924	783	450	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	540	2924	783	450	450	450
1941	373	300	300	300	300	4032	2722	3294	1793	1949	450	450
1942	373	300	4480	2667	2418	300	540	2924	783	450	450	450
1943	373	300	300	1148	300	300	540	2924	783	450	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	540	2924	783	450	450	450
1946	373	300	300	300	300	300	540	2924	783	450	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	540	2924	783	450	450	450
1949	373	300	300	300	300	300	540	2924	783	450	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	540	2924	783	450	450	450
1952	373	300	300	300	300	300	540	2924	783	646	450	450
1953	373	300	300	4554	300	300	540	2924	783	1068	450	450
1954	373	300	300	300	2339	300	540	2924	783	450	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	300	300	300	540	2924	783	450	450	450
1957	373	300	300	300	300	300	540	2924	783	450	450	450
1958	373	300	300	300	6000	3066	1714	3651	1053	879	450	450
1959	373	300	300	300	300	300	540	2924	783	450	450	450
1960	373	300	300	300	300	300	540	2924	783	450	450	450
1961	373	300	300	300	300	300	540	2924	783	450	450	450
1962	373	300	300	300	300	300	540	2924	783	450	450	450
1963	373	300	300	300	300	300	540	2924	783	450	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	300	300	300	540	2924	783	450	450	450
1966	373	300	300	300	300	300	540	2924	783	450	450	450
1967	373	300	300	300	300	300	540	2924	783	505	450	450
1968	373	300	300	300	2596	300	540	2924	783	450	450	450
1969	373	300	300	300	300	300	540	2924	783	450	450	450
1970	373	300	1125	6000	1276	300	540	2924	783	450	450	450
1971	373	300	300	300	300	300	540	2924	783	450	450	450
1972	373	300	300	300	300	749	540	2924	783	450	450	450
1973	373	300	300	300	300	300	540	2924	783	450	450	450
1974	373	6000	4247	6000	300	3596	540	2924	805	641	450	450
1975	373	300	300	300	300	1551	540	2924	828	487	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	540	2924	783	450	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	2185	300	540	2924	783	450	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	300	300	3170	300	1011	2924	783	450	450	450
1983	373	300	2568	2936	3257	6000	540	4371	4942	3439	450	450
1984	373	300	5094	300	300	300	540	2924	783	450	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	540	2924	783	450	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	540	2924	783	450	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	540	2924	783	450	450	450
AVG:	373	379	524	599	589	539	600	2801	859	534	450	450
MIN:	373	300	300	300	300	300	540	1498	783	450	450	450
MAX:	373	6000	5094	6000	6000	6000	2722	4371	4942	3439	450	450

Table 3.4.4-2. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	540	2924	783	450	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	540	2924	783	450	450	450
1928	373	300	300	300	300	300	540	2924	783	450	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	540	2924	783	450	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	540	2924	783	450	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	540	2924	783	450	450	450
1941	373	300	300	300	300	3635	2722	3294	1793	1949	450	450
1942	373	300	4480	2667	2418	300	540	2924	783	450	450	450
1943	373	300	300	1148	300	300	540	2924	783	450	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	540	2924	783	450	450	450
1946	373	300	300	300	300	300	540	2924	783	450	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	540	2924	783	450	450	450
1949	373	300	300	300	300	300	540	2924	783	450	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	540	2924	783	450	450	450
1952	373	300	300	300	300	300	540	2924	783	646	450	450
1953	373	300	300	4554	300	300	540	2924	783	1068	450	450
1954	373	300	300	300	2339	300	540	2924	783	450	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	300	300	300	540	2924	783	450	450	450
1957	373	300	300	300	300	300	540	2924	783	450	450	450
1958	373	300	300	300	6000	3066	1714	3651	1053	879	450	450
1959	373	300	300	300	300	300	540	2924	783	450	450	450
1960	373	300	300	300	300	300	540	2924	783	450	450	450
1961	373	300	300	300	300	300	540	2924	783	450	450	450
1962	373	300	300	300	300	300	540	2924	783	450	450	450
1963	373	300	300	300	300	300	540	2924	783	450	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	300	300	300	540	2924	783	450	450	450
1966	373	300	300	300	300	300	540	2924	783	450	450	450
1967	373	300	300	300	300	300	540	2924	783	505	450	450
1968	373	300	300	300	2592	300	540	2924	783	450	450	450
1969	373	300	300	300	300	300	540	2924	783	450	450	450
1970	373	300	1125	6000	1276	300	540	2924	783	450	450	450
1971	373	300	300	300	300	300	540	2924	783	450	450	450
1972	373	300	300	300	300	749	540	2924	783	450	450	450
1973	373	300	300	300	300	300	540	2924	783	450	450	450
1974	373	6000	4247	6000	300	3596	540	2924	805	641	450	450
1975	373	300	300	300	300	1548	540	2924	828	487	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	540	2924	783	450	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	1387	300	540	2924	783	450	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	300	300	3170	300	1011	2924	783	450	450	450
1983	373	300	2568	2936	3257	6000	540	4371	4942	3439	450	450
1984	373	300	5094	300	300	300	540	2924	783	450	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	540	2924	783	450	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	540	2924	783	450	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	540	2924	783	450	450	450
AVG:	373	379	524	599	578	533	600	2801	859	534	450	450
MIN:	373	300	300	300	300	300	540	1498	783	450	450	450
MAX:	373	6000	5094	6000	6000	6000	2722	4371	4942	3439	450	450

Table 3.4.4-3. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	540	2924	783	450	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	540	2924	783	450	450	450
1928	373	300	300	300	300	300	540	2924	783	450	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	540	2924	783	450	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	540	2924	783	450	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	540	2924	783	450	450	450
1941	373	300	300	300	300	3966	2722	3294	1793	1949	450	450
1942	373	300	4480	2667	2418	300	540	2924	783	450	450	450
1943	373	300	300	1148	300	300	540	2924	783	450	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	540	2924	783	450	450	450
1946	373	300	300	300	300	300	540	2924	783	450	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	540	2924	783	450	450	450
1949	373	300	300	300	300	300	540	2924	783	450	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	540	2924	783	450	450	450
1952	373	300	300	300	300	300	540	2924	783	646	450	450
1953	373	300	300	4554	300	300	540	2924	783	1068	450	450
1954	373	300	300	300	2339	300	540	2924	783	450	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	300	300	300	540	2924	783	450	450	450
1957	373	300	300	300	300	300	540	2924	783	450	450	450
1958	373	300	300	300	6000	3066	1714	3651	1053	879	450	450
1959	373	300	300	300	300	300	540	2924	783	450	450	450
1960	373	300	300	300	300	300	540	2924	783	450	450	450
1961	373	300	300	300	300	300	540	2924	783	450	450	450
1962	373	300	300	300	300	300	540	2924	783	450	450	450
1963	373	300	300	300	300	300	540	2924	783	450	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	300	300	300	540	2924	783	450	450	450
1966	373	300	300	300	300	300	540	2924	783	450	450	450
1967	373	300	300	300	300	300	540	2924	783	505	450	450
1968	373	300	300	300	2593	300	540	2924	783	450	450	450
1969	373	300	300	300	300	300	540	2924	783	450	450	450
1970	373	300	1125	6000	1276	300	540	2924	783	450	450	450
1971	373	300	300	300	300	300	540	2924	783	450	450	450
1972	373	300	300	300	300	749	540	2924	783	450	450	450
1973	373	300	300	300	300	300	540	2924	783	450	450	450
1974	373	6000	4247	6000	300	3596	540	2924	805	641	450	450
1975	373	300	300	300	300	1548	540	2924	828	487	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	540	2924	783	450	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	2196	300	540	2924	783	450	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	300	300	3170	300	1011	2924	783	450	450	450
1983	373	300	2568	2936	3257	6000	540	4371	4942	3439	450	450
1984	373	300	5094	300	300	300	540	2924	783	450	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	540	2924	783	450	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	540	2924	783	450	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	540	2924	783	450	450	450
AVG:	373	379	524	599	590	538	600	2801	859	534	450	450
MIN:	373	300	300	300	300	300	540	1498	783	450	450	450
MAX:	373	6000	5094	6000	6000	6000	2722	4371	4942	3439	450	450

Table 3.4.4-4. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	-397	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	-4	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	-3	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	-798	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	-11	-6	0	0	0	0	0	0
MIN:	0	0	0	0	-798	-397	0	0	0	0	0	0
MAX:	0	0	0	0	0	0	0	0	0	0	0	0

Table 3.4.4-5. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	-66	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	-4	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	-3	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	11	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	-1	0	0	0	0	0	0
MIN:	0	0	0	0	-4	-66	0	0	0	0	0	0
MAX:	0	0	0	0	11	0	0	0	0	0	0	0

Figure 3.4.4-1. Average Simulated Monthly Sacramento River Flow Below Keswick Dam (Dry and Critical Years), 2001 LOD

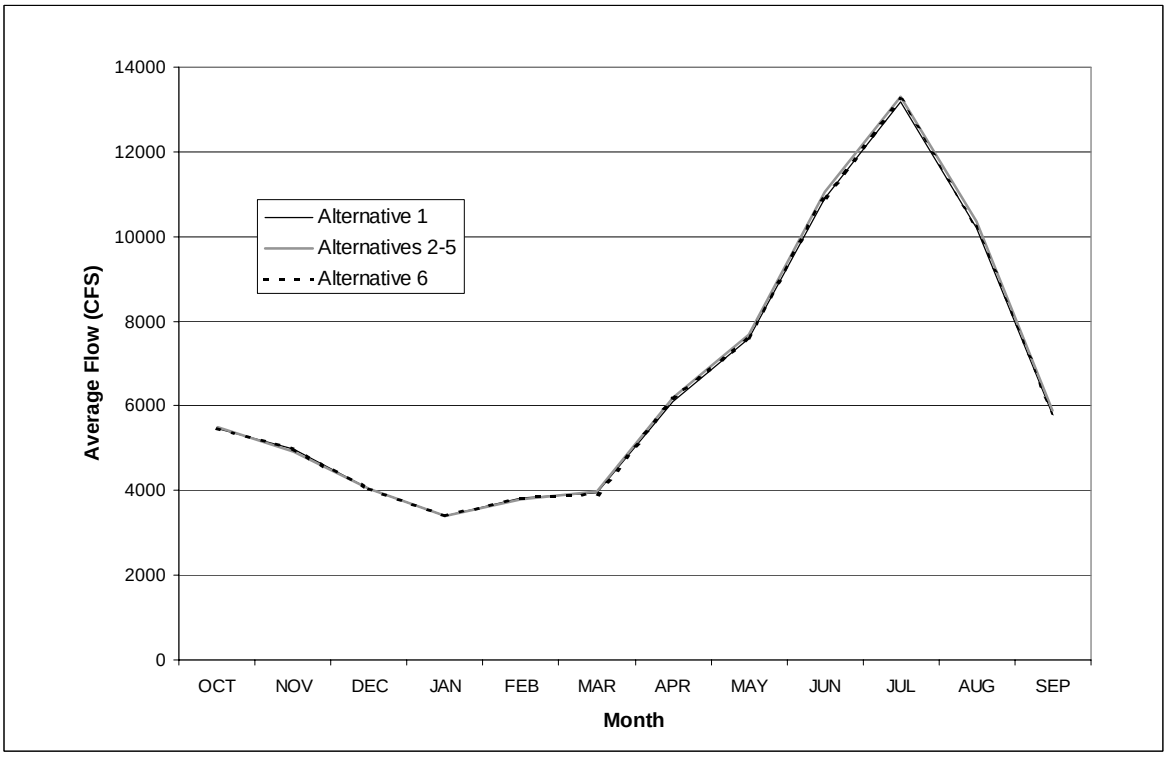


Table 3.4.4-6. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6058	4255	4042	3250	3250	3250	4555	7743	10757	14902	11475	7726
1923	4525	3250	3250	3250	3250	3250	4471	10598	11570	14479	11379	5944
1924	4914	4767	4275	3420	3250	3731	7707	8082	10381	11228	8076	5156
1925	3674	3250	3250	3250	3250	5027	4015	6298	9743	10945	9823	6241
1926	4915	4252	4040	3250	3250	3250	4235	6666	9587	11879	9099	5507
1927	3560	3250	3250	3250	29769	3600	9889	8606	10300	14510	11127	7505
1928	4715	6380	4275	3420	3250	17700	4643	8560	11129	17125	11384	7277
1929	5386	4795	4275	3511	3250	3250	5499	6985	9091	12919	10682	5789
1930	5545	4676	3250	3250	3250	3250	4348	6812	10194	11299	9728	5599
1931	4082	3342	3250	3250	3250	3250	7972	7499	9314	13257	9440	4990
1932	3750	3250	3250	3250	3250	3250	4344	3772	6475	8405	7761	4759
1933	3626	3250	3250	3250	3250	3250	5712	5643	7255	10431	8583	5418
1934	4282	3561	3250	3250	3250	3250	5080	6550	10543	10379	8192	4953
1935	3406	3250	3250	3250	3250	3250	3250	5834	9920	10659	10149	6327
1936	4048	4088	3250	3250	3250	3250	4432	7119	8446	11348	10477	6246
1937	4753	4311	4095	3276	3250	3250	4161	6858	8771	11735	10395	6652
1938	4169	3250	16136	4008	30136	33840	12271	7885	9000	12638	10869	10998
1939	8691	4707	4275	3420	3250	3250	9026	9591	12944	15000	13164	6549
1940	4692	4683	3250	3250	28522	20737	4343	7548	10861	14108	11335	6976
1941	4563	4285	11505	24464	22703	12933	13240	14649	11733	14569	12319	11591
1942	8331	4604	16733	17912	27053	3600	4879	11253	9778	13210	12507	11252
1943	8223	5494	6409	12039	8086	12366	4969	8000	9868	14016	11314	7554
1944	5641	4424	4154	3323	3250	3250	7455	7885	10830	14659	11577	7037
1945	5269	3425	3253	3250	4449	3560	4828	7882	10010	14049	11335	7371
1946	4643	6149	22448	7259	8266	3250	6577	8562	11268	13519	11605	7015
1947	5441	4242	3614	3582	3250	3250	4917	10132	11583	15000	12079	7023
1948	4938	3250	4263	3600	8677	3250	4195	7327	8829	11463	10587	7010
1949	5970	5331	4275	3420	3250	8788	4714	7867	11106	15000	11107	6777
1950	5817	5093	4275	3420	3250	3250	4572	7586	9269	12078	10005	5699
1951	5729	9916	15008	7454	15457	3600	6809	7767	11135	15000	11064	6530
1952	4447	3714	17146	7927	18376	10783	18391	10668	9264	13297	12229	11068
1953	8010	4046	9836	28398	3600	3250	4912	10710	11165	15000	10614	11172
1954	8314	8079	5474	13325	18089	10991	12299	11447	9690	16987	10066	6359
1955	4759	6501	6190	3600	4475	3250	8692	7147	12097	14888	11376	6049
1956	4847	5113	23019	30353	21696	3600	4645	11133	9000	12608	12444	11247
1957	8973	5207	4116	3293	10694	9991	10473	7549	9671	15000	11688	5470
1958	8672	7811	10843	13862	53770	20634	11699	10037	12643	14016	13135	11647
1959	8680	5146	4058	11483	13885	7449	8432	9222	16384	15286	12767	5290
1960	5866	8315	4275	3420	3250	3250	5130	7303	10561	14818	11501	6086
1961	5176	3365	3380	3250	9804	5974	7538	7932	11868	16232	13989	6393
1962	6457	8001	4275	3492	8852	3250	5470	8283	10693	14668	11204	6218
1963	7333	5254	8819	3600	9092	10149	25726	7516	9581	13634	10033	6511
1964	8533	10364	4275	4330	3756	3250	9391	8234	10106	14499	11520	5972
1965	4874	3511	18158	20889	3250	6502	7493	8850	9678	15000	9469	6328
1966	6817	8460	4275	5959	6056	12862	8204	8602	15360	15000	12319	7217
1967	6862	3988	12901	8967	7917	15911	10011	14449	12471	13233	12871	11494
1968	8766	4957	4116	3293	18222	3410	7361	7826	14244	15376	11413	8505
1969	4819	4735	4052	19048	21308	5686	11792	13976	9610	13877	11163	11647
1970	8727	4416	17538	52774	13169	3600	8372	8232	10479	18742	11034	6694
1971	4054	3250	15666	14317	9308	14929	5879	9016	10696	14217	11468	11210
1972	8858	6025	4275	3734	5622	14623	8767	8188	14428	15108	12217	6098
1973	4301	4779	6943	14513	18779	7267	4775	7934	10848	15134	10050	6932
1974	5703	29490	20315	38498	5479	35234	6809	7876	10932	13860	13133	11867
1975	8624	5660	4275	3420	8430	27500	4504	9903	11742	13202	12731	11714
1976	9869	5636	4275	3420	3320	3464	5115	8055	11655	12124	7471	5065
1977	5142	3342	5034	3600	4494	4220	10335	6296	13805	19137	11544	5645
1978	6396	3894	3250	3300	8372	14247	6418	9054	10382	15000	10293	5549
1979	6505	4170	3824	3250	3250	3250	4837	7924	13131	14735	9186	6008
1980	4504	3789	3808	18089	30104	3600	4698	7794	10874	14222	10275	6246
1981	4626	5038	4275	3420	3250	8530	4837	8939	14560	15000	10939	5950
1982	4295	9255	22223	7448	23313	13536	24662	7459	8771	11608	9332	10809
1983	9583	6832	12847	19127	34947	45897	10023	12922	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7743	8357	10944	15000	9177	5848
1985	5967	11204	6499	3600	3250	3250	5404	10173	13238	14621	11754	6642
1986	5767	4110	3905	3250	44457	19820	4392	8245	11697	11893	11022	5302
1987	4347	4686	4275	3420	3250	3250	9804	10843	15000	15000	10971	7062
1988	6641	4502	4257	3405	8021	4544	5005	5961	12734	11482	9131	6691
1989	6296	3250	3250	3250	3250	3250	4378	9241	9894	12750	9676	4421
1990	3900	5769	4275	3420	4039	3600	6895	5909	9812	13401	8451	5522
1991	5680	4546	3250	3250	3635	3250	3590	6690	7951	9143	8162	4639
1992	4790	3836	3250	3250	3250	3250	3925	8829	12037	12251	10082	4534
1993	5333	4773	3250	3250	3250	3250	5384	10713	10003	15000	9198	5783
AVG:	5900	5492	7163	7890	10232	8137	7241	8514	10922	13758	10833	7207
MIN:	3406	3250	3250	3250	3250	3250	3250	3772	6475	8405	7471	4421
MAX:	9869	29490	24635	52774	53770	45897	25726	14649	16384	19137	14243	12549

Table 3.4.4-7. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6058	4255	4042	3250	3250	3250	4555	7743	10757	14958	11477	7725
1923	4521	3250	3250	3250	3250	3250	4469	10598	11570	14500	11380	5943
1924	4914	4767	4275	3420	3250	3852	7713	8078	10572	11289	8073	4998
1925	3674	3250	3250	3250	3250	4987	4010	6281	9727	10945	9824	6241
1926	4915	4252	4040	3250	3250	3250	4231	6650	9701	12010	9101	5501
1927	3527	3250	3250	3250	29346	3600	9889	8606	10300	14538	11128	7505
1928	4713	6352	4275	3420	3250	17700	4643	8583	11129	17102	11487	7283
1929	5383	4809	4275	3506	3250	3250	5559	6983	8980	12978	10998	5812
1930	5420	4636	3250	3250	3250	3250	4311	6715	10127	11155	9709	5596
1931	4083	3342	3250	3250	3250	3250	8506	7531	9570	14387	8629	4781
1932	3574	3250	3250	3250	3250	3250	4344	3772	6461	8405	7773	4760
1933	3626	3250	3250	3250	3250	3250	6027	5661	7410	10573	8718	5512
1934	4392	3596	3250	3250	3250	3250	5077	6547	10782	10541	7709	4915
1935	3399	3250	3250	3250	3250	3250	3250	5736	9388	10106	9611	5813
1936	3538	3583	3250	3250	3250	3250	4457	7184	8469	11647	10511	6241
1937	4752	4310	4094	3275	3250	3250	4180	6931	8789	12550	10452	6638
1938	4165	3250	16097	4008	30136	33840	12271	7885	9000	12701	10874	10998
1939	8691	4707	4275	3420	3250	3250	9154	9769	13068	15000	13425	6561
1940	4890	4788	3250	3250	27948	20737	4343	7548	10860	14165	11336	6974
1941	4563	4284	11451	24464	22703	12933	13240	14649	11733	14598	12291	11591
1942	8331	4604	16733	17912	27053	3600	4879	11253	9778	13210	12507	11252
1943	8223	5494	6409	12039	8086	12366	4969	8000	9867	14073	11317	7553
1944	5661	4425	4153	3323	3250	3250	7453	7883	10826	14686	11576	7036
1945	5305	3448	3276	3250	4284	3427	4833	7892	10012	14108	11339	7370
1946	4647	6197	22448	7259	8265	3250	6578	8563	11269	13575	11609	7014
1947	5440	4385	3775	3587	3250	3250	4927	10118	11646	15000	12083	7182
1948	4941	3250	4173	3600	8680	3250	4189	7300	8805	11500	10589	6894
1949	5970	5073	4275	3420	3250	9038	4714	7867	11097	15000	11107	6776
1950	5782	5182	4275	3420	3250	3250	4546	7537	9262	12126	10004	5696
1951	6249	9544	15008	7454	15457	3600	6808	7767	11134	15000	11064	6530
1952	4447	3715	17146	7927	18376	10783	17875	10668	9264	13297	12229	11068
1953	8010	4079	9804	28398	3600	3250	4912	10710	11165	15000	10614	11172
1954	8314	8079	5472	13327	18089	10991	12299	11490	9692	17047	10236	6368
1955	4741	6501	6023	3600	4468	3250	8728	7140	12148	14871	11334	6044
1956	4865	5121	22918	30353	21696	3600	4645	11108	9000	12608	12444	11247
1957	8973	5207	4116	3293	10694	9991	10490	7548	9670	15000	11881	5453
1958	8483	7811	10843	13862	53770	20634	11699	10037	12643	14016	13135	11647
1959	8680	5146	4058	11483	13885	7547	8435	9221	16546	15320	12927	5419
1960	5945	8174	4275	3420	3250	3250	5129	7263	10766	14888	11614	6035
1961	5175	3364	3250	3250	9392	5974	7548	7933	11873	16216	14036	6242
1962	6077	8076	4275	3494	9222	3250	5468	8282	10692	14790	11296	6221
1963	7122	5254	8819	3600	9092	9994	25885	7516	9537	13681	10036	6298
1964	8533	10364	4275	4330	3754	3250	9390	8233	10105	14677	11653	5976
1965	4775	3479	18054	20889	3250	6573	7374	8889	9681	15000	9464	6327
1966	6824	8418	4275	5959	6056	12835	8204	8602	15415	15000	12373	7240
1967	6887	4002	12814	8967	7876	15911	10011	14449	12471	13233	12871	11494
1968	8766	4973	4116	3293	18209	3410	7463	7832	14473	15537	11610	8624
1969	4928	4648	3971	18446	21308	5686	11792	13948	9610	13908	11132	11647
1970	8727	4416	17538	52774	13169	3600	8390	8233	10478	18789	11045	6693
1971	4122	3250	15666	14317	9333	14764	5941	8957	10696	14266	11419	11210
1972	8858	6039	4275	3720	5622	14623	8812	8190	14470	15180	12211	6095
1973	4302	4781	6943	14513	18779	7117	4775	7934	10998	16398	10087	6218
1974	4961	29490	20315	38498	5479	35234	6809	7876	10932	13860	13133	11867
1975	8624	5676	4275	3420	8416	27500	4504	9903	11742	13202	12731	11714
1976	9869	5636	4275	3420	3320	3250	5217	8274	11540	12325	7616	5030
1977	5162	3355	5079	3600	4438	4264	10480	6458	13970	19219	11380	5725
1978	6501	3898	3250	3300	8368	14247	6418	9054	10382	15000	10293	5549
1979	6527	4089	3824	3250	3250	3250	4840	7930	13161	14886	9259	6009
1980	4491	3780	3591	17879	30104	3600	4698	7794	10875	14279	10277	6245
1981	4622	5038	4275	3420	3250	8477	4837	8940	14762	15000	11090	6070
1982	4320	9011	22223	7200	23313	13536	24662	7459	8771	11646	9332	10770
1983	9583	6832	12847	19127	34947	45897	10023	12922	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7761	8358	10943	15000	9172	5848
1985	5954	11204	6499	3600	3250	3250	5404	10173	13309	14656	11780	6661
1986	5748	4108	3902	3250	44135	19820	4392	8246	11705	11901	11023	5302
1987	4352	4686	4275	3420	3250	3250	9995	10971	15000	15000	11099	7182
1988	6597	4494	4252	3402	8362	4644	4997	5922	13025	11631	9311	6728
1989	6249	3250	3250	3250	3250	3250	4343	9209	9875	12455	9527	4310
1990	3845	5485	4275	3420	4016	3600	6999	5882	10057	13590	8453	5830
1991	5518	4566	3250	3250	3560	3250	3545	6687	7952	9025	8078	4636
1992	5232	4060	3250	3250	3250	3250	3803	8330	12109	12100	9977	5121
1993	5178	4562	3250	3250	3250	3250	4645	10713	10003	15000	9204	5782
AVG:	5883	5471	7150	7875	10212	8133	7247	8513	10952	13828	10838	7199
MIN:	3399	3250	3250	3250	3250	3250	3250	3772	6461	8405	7616	4310
MAX:	9869	29490	24635	52774	53770	45897	25885	14649	16546	19219	14243	12549

Table 3.4.4-8. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6058	4255	4042	3250	3250	3250	4555	7743	10757	15000	11479	7724
1923	4518	3250	3250	3250	3250	3250	4468	10598	11570	14546	11382	5942
1924	4913	4767	4275	3420	3250	3738	7707	8081	10421	11265	8076	5001
1925	3674	3250	3250	3250	3250	4988	4015	6297	9929	11030	9824	6237
1926	4912	4251	4038	3250	3250	3250	4230	6646	9552	11961	9100	5503
1927	3592	3250	3250	3250	29474	3600	9889	8606	10300	14757	11138	7501
1928	4699	6137	4275	3420	3250	17700	4643	8357	11114	17341	11447	7279
1929	5384	4770	4275	3502	3250	3250	5466	6977	8942	12861	10815	5797
1930	5429	4607	3250	3250	3250	3250	4352	6822	10198	11386	9735	5598
1931	4082	3341	3250	3250	3250	3250	8008	7501	9353	13260	9546	4873
1932	3751	3250	3250	3250	3250	3250	4344	3772	6473	8405	7761	4759
1933	3626	3250	3250	3250	3250	3250	5907	5654	7294	10461	8598	5423
1934	4286	3561	3250	3250	3250	3250	5077	6547	10609	10416	8179	4949
1935	3390	3250	3250	3250	3250	3250	3250	5809	9412	10124	9627	5814
1936	3539	3583	3250	3250	3250	3250	4520	7332	8492	12055	10546	6232
1937	4748	4307	4091	3273	3250	3250	4193	6979	8799	13084	10488	6626
1938	4163	3250	16075	4008	30136	33840	12271	7885	9000	12760	10710	10998
1939	8691	4707	4275	3420	3250	3250	9043	9608	12999	15000	13207	6551
1940	4718	4686	3250	3250	28424	20737	4343	7548	10861	14345	11345	6972
1941	4561	4283	11268	24464	22703	12933	13240	14649	11733	14709	12181	11591
1942	8331	4604	16733	17912	27053	3600	4879	11253	9778	13210	12507	11252
1943	8223	5494	6409	12039	8086	12366	4969	8000	9867	14120	11319	7552
1944	5660	4425	4153	3322	3250	3250	7451	7880	10823	14681	11573	7036
1945	5285	3440	3268	3250	4306	3438	4833	7891	10012	14284	11347	7367
1946	4633	6018	22448	7259	8511	3250	6568	8554	11259	13700	11608	7010
1947	5438	4334	3756	3587	3250	3250	4921	10109	11600	15000	12066	7021
1948	4906	3250	3250	3600	8447	3250	4208	7376	8874	11502	10588	7008
1949	5970	5543	4275	3420	3250	8584	4714	7867	11110	15000	11107	6777
1950	5857	5213	4275	3420	3250	3250	4571	7584	9274	12325	10022	5695
1951	5972	9374	15008	7454	15457	3600	6809	7767	11135	15000	11064	6530
1952	4447	3732	17146	7927	18376	10783	18723	10668	9264	13297	12229	11068
1953	8010	4078	9806	28398	3600	3250	4912	10710	11165	15000	10614	11172
1954	8314	8079	5472	13327	18089	10991	12299	11490	9692	17030	10276	6370
1955	4740	6499	6025	3600	4440	3250	8664	7144	12151	14856	11329	6044
1956	4861	5109	23009	30353	21696	3600	4645	11109	9000	13354	11700	11247
1957	8973	5207	4116	3293	10694	9991	10492	7548	9675	15000	12030	5441
1958	8341	7811	10843	13862	53770	20634	11699	10037	12643	14119	13033	11647
1959	8680	5146	4058	11483	13885	7455	8432	9222	16411	15233	12810	5269
1960	5858	8317	4275	3420	3250	3250	5144	7302	10593	14831	11516	6089
1961	5183	3369	3302	3250	9804	5974	7553	7933	11906	16179	14031	6297
1962	6458	8034	4275	3458	8929	3250	5470	8283	10693	14767	11219	6217
1963	7222	5254	8819	3600	9092	10249	25622	7516	9582	13906	10045	6311
1964	8533	10364	4275	4330	3751	3250	9394	8237	10109	14562	11560	5974
1965	4785	3512	18165	20889	3250	6587	7401	8892	9681	15000	9462	6327
1966	6820	8421	4275	5959	6056	12841	8204	8602	15414	15000	12372	7238
1967	6871	4003	12826	8967	7883	15911	10011	14449	12471	13233	12871	11494
1968	8766	4972	4116	3293	18210	3410	7376	7827	14301	15420	11467	8537
1969	4849	4692	4012	18933	21308	5686	11792	13972	9610	14112	10929	11647
1970	8727	4416	17538	52774	13169	3600	8389	8233	10478	18798	11040	6693
1971	4144	3250	15666	14317	9331	14742	5943	8955	10696	14276	11409	11210
1972	8858	6039	4275	3720	5622	14623	8862	8193	14469	16044	11976	6073
1973	4310	4934	6943	14513	18779	6977	4775	7923	10848	16502	10096	6105
1974	4633	29350	20315	38498	5479	35234	6809	7876	10932	13860	13133	11867
1975	8624	5676	4275	3420	8416	27500	4504	9903	11742	13202	12731	11714
1976	9869	5636	4275	3420	3320	3250	5132	8119	11653	12267	7256	5083
1977	5199	3379	4961	3600	4441	4180	10361	6342	13848	19146	11651	5675
1978	6400	3893	3250	3300	8373	14247	6418	9054	10382	15000	10293	5549
1979	6527	4089	3824	3250	3250	3250	4840	7930	13016	14771	9217	6010
1980	4512	3892	3808	18089	30104	3600	4698	7794	10874	14386	10282	6243
1981	4614	5037	4275	3420	3250	8378	4837	8940	14613	15000	10980	5982
1982	4311	9367	22223	7200	23313	13536	24662	7459	8771	11733	9332	10681
1983	9583	6832	12847	19127	34947	45897	10023	12922	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7760	8358	10943	15000	9172	5848
1985	5955	11204	6499	3600	3250	3250	5404	10173	13315	14652	11778	6659
1986	5742	4107	3902	3250	44129	19820	4392	8246	11706	11902	11023	5302
1987	4353	4686	4275	3420	3250	3250	9868	10876	15000	15000	10945	7093
1988	6675	4503	4260	3408	8046	4554	5007	5958	12776	11527	9185	6676
1989	6262	3250	3250	3250	3250	3250	4375	9264	9891	12787	9700	4396
1990	3890	5742	4275	3420	4027	3600	6809	5913	9868	13462	8453	5599
1991	5687	4516	3250	3250	3631	3250	3598	6689	7950	9123	8096	4634
1992	4832	3822	3250	3250	3250	3250	3921	8818	12087	12273	10104	4529
1993	5332	4765	3250	3250	3250	3250	5235	10713	10003	13878	9172	6752
AVG:	5876	5479	7140	7884	10219	8122	7249	8518	10927	13858	10821	7193
MIN:	3390	3250	3250	3250	3250	3250	3250	3772	6473	8405	7256	4396
MAX:	9869	29350	24635	52774	53770	45897	25622	14649	16411	19146	14243	12549

Table 3.4.4-9. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	56	3	-1
1923	-4	0	0	0	0	0	-2	0	0	21	1	0
1924	0	0	0	0	0	121	6	-4	191	62	-3	-158
1925	0	0	0	0	0	-41	-5	-17	-16	0	1	0
1926	0	0	0	0	0	0	-4	-16	114	131	2	-6
1927	-33	0	0	0	-423	0	0	0	1	28	1	0
1928	-2	-28	0	0	0	0	0	23	0	-24	103	6
1929	-2	13	0	-5	0	0	60	-2	-112	60	316	22
1930	-125	-40	0	0	0	0	-37	-96	-67	-144	-19	-2
1931	0	1	0	0	0	0	535	32	255	1130	-810	-209
1932	-175	0	0	0	0	0	1	0	-14	-1	12	1
1933	0	0	0	0	0	0	315	17	154	142	135	94
1934	110	35	0	0	0	0	-3	-3	239	162	-484	-38
1935	-7	0	0	0	0	0	0	-98	-532	-553	-539	-514
1936	-510	-505	0	0	0	0	25	65	23	298	34	-5
1937	-1	-1	-1	-1	0	0	19	73	18	815	57	-14
1938	-4	0	-39	0	0	0	0	0	0	63	5	0
1939	0	0	0	0	0	0	129	178	123	0	261	11
1940	198	105	0	0	-574	0	0	0	-1	57	1	-2
1941	-1	0	-54	0	0	0	0	0	0	29	-29	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	57	3	-1
1944	20	1	0	0	0	0	-2	-3	-3	27	-1	-1
1945	36	23	22	0	-165	-132	5	10	2	60	4	-1
1946	4	48	0	0	-1	0	1	1	1	55	4	-1
1947	-1	142	161	6	0	0	9	-14	63	0	3	159
1948	3	0	-89	0	2	0	-7	-26	-24	37	3	-116
1949	0	-258	0	0	0	249	0	0	-8	0	-1	-1
1950	-36	89	0	0	0	0	-26	-49	-7	49	-1	-3
1951	520	-372	0	0	0	0	0	0	0	0	0	0
1952	0	2	0	0	0	0	-516	0	0	0	0	0
1953	0	33	-32	0	0	0	0	0	0	0	0	0
1954	0	0	-2	2	0	0	0	43	2	60	170	9
1955	-18	0	-167	0	-7	0	37	-7	51	-17	-42	-5
1956	18	8	-101	0	0	0	0	-25	0	0	0	0
1957	0	0	0	0	0	0	17	-1	-1	0	192	-17
1958	-189	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	98	4	-1	162	33	159	129
1960	80	-141	0	0	0	0	-1	-39	205	70	113	-51
1961	-1	-1	-130	0	-412	0	10	1	5	-16	47	-151
1962	-379	75	0	3	370	0	-2	-1	-1	122	92	3
1963	-212	0	0	0	0	-154	159	0	-44	48	3	-213
1964	0	0	0	0	-2	0	-1	-1	-1	178	132	4
1965	-99	-32	-104	0	0	71	-118	38	2	0	-5	-1
1966	6	-42	0	0	0	-27	0	0	55	0	54	23
1967	25	14	-88	0	-41	0	0	0	0	0	0	0
1968	0	16	0	0	-13	0	102	6	229	162	197	119
1969	109	-87	-81	-601	0	0	0	-27	0	31	-31	0
1970	0	0	0	0	0	0	18	1	-1	47	11	0
1971	68	0	0	0	25	-165	62	-59	0	49	-49	0
1972	0	15	0	-14	0	0	44	2	42	72	-6	-2
1973	0	2	0	0	0	-150	0	0	150	1264	37	-713
1974	-742	0	0	0	0	0	0	0	0	0	0	0
1975	0	16	0	0	-14	0	0	0	0	0	0	0
1976	0	0	0	0	0	-214	102	218	-115	201	145	-34
1977	20	13	45	0	-56	44	145	163	165	82	-164	80
1978	105	4	0	0	-5	0	0	0	0	0	0	0
1979	22	-81	0	0	0	0	3	6	30	152	73	1
1980	-13	-9	-217	-210	0	0	0	0	0	57	3	-1
1981	-4	-1	0	0	0	-53	0	0	203	0	151	121
1982	25	-244	0	-248	0	0	0	0	0	37	0	-38
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	1	-1	0	-4	0
1985	-13	0	0	0	0	0	0	0	71	35	26	19
1986	-19	-2	-2	0	-322	0	0	1	8	8	1	0
1987	5	0	0	0	0	0	191	128	0	0	128	120
1988	-44	-8	-5	-4	341	100	-8	-39	291	150	180	37
1989	-47	0	0	0	0	0	-35	-32	-19	-295	-149	-111
1990	-55	-284	0	0	-23	0	104	-27	245	188	2	308
1991	-162	20	0	0	-75	0	-45	-3	0	-118	-84	-2
1992	442	224	0	0	0	0	-122	-499	72	-151	-104	587
1993	-154	-210	0	0	0	0	-739	0	0	0	6	0
AVG:	-17	-20	-12	-15	-19	-4	6	-1	31	70	5	-8
MIN:	-742	-505	-217	-601	-574	-214	-739	-499	-532	-553	-810	-713
MAX:	520	224	161	6	370	249	535	218	291	1264	316	587

Table 3.4.4-10. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	98	4	-2
1923	-7	0	0	0	0	0	-3	-1	0	68	3	-1
1924	-1	0	0	0	0	7	0	-1	40	37	0	-155
1925	0	0	0	0	0	-39	0	-1	185	85	0	-4
1926	-2	-1	-1	0	0	0	-5	-21	-35	82	1	-4
1927	32	0	0	0	-295	0	0	0	0	247	11	-4
1928	-16	-244	0	0	0	0	0	-203	-15	216	63	2
1929	-2	-25	0	-9	0	0	-33	-7	-149	-57	133	8
1930	-116	-69	0	0	0	0	4	10	4	87	8	-1
1931	-1	-1	0	0	0	0	36	2	39	3	107	-117
1932	1	0	0	0	0	0	0	0	-1	0	0	0
1933	0	0	0	0	0	0	195	11	39	30	15	5
1934	4	-1	0	0	0	0	-3	-3	66	37	-13	-4
1935	-15	0	0	0	0	0	0	-25	-508	-535	-523	-513
1936	-509	-505	0	0	0	0	87	213	46	706	70	-14
1937	-5	-4	-4	-3	0	0	32	121	28	1349	93	-26
1938	-6	0	-62	0	0	0	0	0	0	121	-159	0
1939	0	0	0	0	0	0	18	17	55	0	44	2
1940	26	3	0	0	-98	0	0	0	0	237	11	-4
1941	-2	-1	-237	0	0	0	0	0	0	139	-139	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	104	5	-2
1944	18	1	-1	-1	0	0	-4	-5	-6	22	-4	-1
1945	16	16	15	0	-143	-122	5	10	2	236	12	-4
1946	-10	-131	0	0	245	0	-10	-9	-9	181	3	-5
1947	-3	92	141	6	0	0	4	-23	17	0	-14	-2
1948	-31	0	-1013	0	-231	0	13	49	45	39	2	-2
1949	0	212	0	0	0	-204	0	0	5	0	0	0
1950	40	119	0	0	0	0	-1	-2	4	247	18	-4
1951	242	-543	0	0	0	0	0	0	0	0	0	0
1952	0	18	0	0	0	0	332	0	0	0	0	0
1953	0	31	-30	0	0	0	0	0	0	0	0	0
1954	0	0	-2	2	0	0	0	43	2	43	209	11
1955	-20	-2	-165	0	-35	0	-28	-3	55	-33	-48	-5
1956	14	-3	-11	0	0	0	0	-24	0	747	-744	0
1957	0	0	0	0	0	0	19	-1	4	0	342	-29
1958	-331	0	0	0	0	0	0	0	0	103	-102	0
1959	0	0	0	0	0	6	0	0	27	-54	43	-21
1960	-8	2	0	0	0	0	13	0	31	13	16	2
1961	7	4	-78	0	0	0	15	1	39	-53	42	-97
1962	1	32	0	-33	77	0	0	0	0	99	15	-1
1963	-112	0	0	0	0	100	-103	0	1	272	12	-200
1964	0	0	0	0	-5	0	3	3	3	63	39	2
1965	-89	0	7	0	0	85	-92	42	2	0	-7	-1
1966	3	-39	0	0	0	-21	0	0	54	0	53	21
1967	9	15	-75	0	-34	0	0	0	0	0	0	0
1968	0	15	0	0	-12	0	15	1	57	44	54	32
1969	30	-43	-40	-114	0	0	0	-4	0	235	-234	0
1970	0	0	0	0	0	0	18	1	-1	56	6	-1
1971	89	0	0	0	23	-187	64	-62	0	59	-59	0
1972	0	15	0	-14	0	0	94	5	41	937	-240	-25
1973	9	156	0	0	0	-289	0	-11	0	1368	46	-827
1974	-1069	-140	0	0	0	0	0	0	0	0	0	0
1975	0	16	0	0	-14	0	0	0	0	0	0	0
1976	0	0	0	0	0	-214	17	63	-2	143	-215	18
1977	57	37	-73	0	-52	-40	26	47	43	9	106	30
1978	4	-1	0	0	1	0	0	0	0	0	0	0
1979	23	-81	0	0	0	0	3	6	-115	37	31	2
1980	8	103	0	0	0	0	0	0	0	164	7	-3
1981	-12	-2	0	0	0	-152	0	1	54	0	41	33
1982	15	112	0	-248	0	0	0	0	0	125	0	-128
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	1	-1	0	-4	0
1985	-12	0	0	0	0	0	0	0	78	31	24	17
1986	-25	-3	-3	0	-328	0	0	1	9	9	1	0
1987	5	0	0	0	0	0	64	33	0	0	-26	31
1988	34	1	4	3	25	10	2	-2	42	45	54	-15
1989	-34	0	0	0	0	0	-3	23	-3	38	24	-25
1990	-11	-26	0	0	-12	0	-86	3	56	60	2	77
1991	8	-30	0	0	-4	0	8	0	-1	-20	-66	-4
1992	42	-14	0	0	0	0	-3	-11	50	23	22	-6
1993	-1	-7	0	0	0	0	-150	0	0	-1122	-26	970
AVG:	-24	-13	-23	-6	-12	-15	8	4	5	100	-12	-14
MIN:	-1069	-543	-1013	-248	-328	-289	-150	-203	-508	-1122	-744	-827
MAX:	242	212	141	6	245	100	332	213	185	1368	342	970

Table 3.4.4-11. Simulated Sacramento River Flow Below Navigation Control Point (CFS), Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10154	7271	17416	10533	7319	7006	5000	7683	5000	5000
1923	5946	5922	13848	10330	7322	5311	8385	5000	5000	7552	5000	5000
1924	5000	5000	5244	5671	8285	4018	3250	3250	4491	5198	3261	3404
1925	4141	5161	7611	6492	21296	10297	11975	5942	5704	4500	4500	4500
1926	4500	4500	6037	8052	19644	5762	8539	3559	3556	5518	3500	3500
1927	3996	10458	13373	14720	22855	16427	17241	7539	5000	7876	5000	5000
1928	5196	11461	8827	9416	16697	21064	11635	5653	5000	10516	5236	5000
1929	5000	6882	7010	5918	10088	5374	3306	3250	4855	6519	4815	3250
1930	4948	5192	11760	9528	13455	14967	4426	4667	4000	4823	4000	4000
1931	4000	4000	4313	8403	6040	4961	3738	3250	4348	7053	4172	3382
1932	3424	4481	13185	8042	6749	8234	3250	3250	3264	3250	3250	3250
1933	3250	3567	4834	7616	5419	10042	4437	3250	3522	5236	3909	3900
1934	3812	4257	8955	9167	10752	7448	3250	3250	5662	4871	3734	3250
1935	3264	7462	5971	15239	9967	13414	19118	5914	4500	4500	4500	4500
1936	4500	4500	5397	18147	19333	8373	5811	4603	4500	4852	4500	4500
1937	4500	4500	5452	5893	13584	16727	9184	5454	4500	5502	4500	4500
1938	5352	16527	20959	12062	22759	22756	18744	15356	5746	7031	5232	9620
1939	9355	5474	7260	5805	6038	5068	4570	4899	5953	7863	6498	4500
1940	4642	4606	5651	18322	21018	21325	17525	6260	5000	7218	5000	5000
1941	5000	5000	20911	22152	22176	21326	20885	17076	8128	8524	6325	9027
1942	8193	5644	21211	20975	22482	8720	14635	13436	7185	7196	6636	8790
1943	8294	6821	11190	20990	19638	20161	9312	7285	5000	7311	5000	5000
1944	5856	5000	5550	6859	11535	9329	5000	5000	5000	7308	5000	5000
1945	5265	7053	8870	6410	18728	10421	5207	6257	5000	6788	5000	5000
1946	5229	9388	21659	19566	11849	7194	5000	5000	5000	6189	5000	5000
1947	5000	5768	7885	5000	9377	9598	4861	4500	6618	8179	5965	5186
1948	6477	5393	5780	10206	10208	8921	15372	13390	8150	5618	5000	6171
1949	6447	6354	6539	5436	6221	20896	5110	5624	5000	7917	5000	5000
1950	5306	5709	5349	10410	15741	8664	5667	4281	4000	5535	4000	4000
1951	7015	15537	20547	18813	20800	10725	5000	7384	5000	7710	5000	5000
1952	5325	6713	20948	20600	21098	20338	18192	12675	7358	8383	7128	10295
1953	8327	5733	20229	22265	10673	8944	6085	12211	8617	9323	5744	10351
1954	8979	10223	7583	18520	21253	19651	17569	9494	5000	10938	5477	5000
1955	5331	11848	14201	10023	7593	5797	8129	5105	6346	8347	5550	4500
1956	5040	7982	21896	22457	21207	13770	7233	13069	5366	7108	7397	9863
1957	9677	6786	5711	6864	16381	18558	10513	7048	5043	8808	6055	5458
1958	14219	11385	17032	20396	23484	21352	20104	12439	11790	8797	8539	10647
1959	8750	6135	5971	18499	20517	12907	5000	5000	9508	7781	7218	5469
1960	5832	8963	5016	7429	18467	12262	4194	6214	4564	8769	5755	4204
1961	5023	6521	12135	6086	20246	15522	7752	5000	6766	9401	8397	5152
1962	6393	9815	12663	7022	20368	14033	5000	5000	5000	8071	5130	5000
1963	14786	6989	15889	7652	20273	17062	21005	7988	5715	7893	5000	5504
1964	10803	14994	6810	10128	7305	5111	4500	4500	4500	7746	5956	4500
1965	5080	8709	21593	21564	11184	10703	17605	6976	5000	8412	5143	5000
1966	7474	13423	6263	17922	15305	18093	7178	5000	8405	7683	6753	5607
1967	6566	7946	19728	19630	19211	19514	18093	16578	11137	7103	7838	9841
1968	9256	6888	7654	13378	21227	14210	5984	5000	8135	7739	7327	6619
1969	6359	7612	16925	21880	21694	18446	16847	14021	5421	7764	5360	10430
1970	10142	6140	21113	23482	20573	14895	6366	5000	5000	12298	5195	5000
1971	5317	10969	21001	20717	15520	19414	5569	8452	6535	8151	6383	10359
1972	9743	7292	8267	8434	10049	18049	6088	5000	8290	8314	6893	5000
1973	6659	10866	15321	21072	21131	19273	7225	6488	5000	8433	5016	5899
1974	8033	21670	21073	22855	15932	22173	18805	6979	6990	10222	8368	11555
1975	10019	7499	8903	7419	20596	21853	9720	9717	6950	7501	7791	10724
1976	11609	6620	6567	5799	5000	7442	3808	4395	6168	6017	4490	3992
1977	4687	3900	5472	4815	5386	4708	5727	3861	6926	12292	6909	5697
1978	5926	5378	10930	21065	20494	21138	17342	8906	5000	8662	5000	6136
1979	6604	5082	5158	9831	15716	12110	7174	6454	6501	8335	5000	5000
1980	6613	7909	11764	21365	21904	17699	5857	5773	5000	7587	5000	5000
1981	5424	5000	8675	14237	13339	18169	6745	5000	7032	7733	6171	5187
1982	6217	19231	21305	19205	21353	20055	20593	8223	6376	6797	5257	11965
1983	11429	11787	20839	21306	22824	23302	19255	17740	15531	11297	10909	13548
1984	10934	19841	22213	17920	10980	16261	8030	5000	5000	8427	5052	5000
1985	7607	18705	13849	6889	7631	7194	5000	5000	5952	7847	5484	5569
1986	6015	5000	8526	11237	23524	21633	6372	5000	5000	5000	5000	5000
1987	5136	5000	6055	7684	11364	15631	7122	5336	7811	8303	5941	4887
1988	6357	4500	12828	17755	11359	5714	3250	3275	7000	5943	4297	3987
1989	5511	6593	5930	7991	4855	19321	7138	5159	4500	6807	4757	5829
1990	6663	7001	5975	10409	7340	7896	3513	4718	5453	7001	3250	4162
1991	5394	5208	4735	4698	5155	16515	5906	3500	3500	3617	4207	3500
1992	4813	4415	4712	6591	17995	12876	5793	4000	7070	5914	5425	4000
1993	5552	5548	8674	20665	20147	17597	15153	12164	11524	8521	5530	5101
AVG:	6577	7867	11381	13037	15210	13823	9310	6931	6076	7457	5509	5886
MIN:	3250	3567	4313	4698	4855	4018	3250	3250	3264	3250	3250	3250
MAX:	14786	21670	22213	23482	23524	23302	21005	17740	15531	12298	10909	13548

Table 3.4.4-12. Simulated Sacramento River Flow Below Navigation Control Point (CFS), Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10154	7271	17416	10533	7319	7006	5000	7739	5000	5000
1923	5942	5923	13848	10330	7322	5311	8384	5000	5000	7574	5000	5000
1924	5000	5000	5244	5672	8285	4139	3250	3250	4685	5251	3260	3250
1925	4152	5158	7610	6492	21296	10256	11972	5924	5689	4500	4500	4500
1926	4500	4500	6037	8052	19644	5762	8536	3545	3673	5644	3500	3500
1927	3966	10461	13373	14720	22839	16433	17240	7538	5000	7903	5000	5000
1928	5194	11433	8828	9415	16697	21064	11636	5677	5000	10494	5340	5000
1929	5000	6896	7010	5914	10088	5374	3371	3250	4751	6592	5131	3258
1930	4880	5161	11763	9578	13501	15017	4445	4631	4000	4692	4000	4000
1931	4000	4000	4312	8403	6040	4961	4273	3250	4616	8175	3322	3250
1932	3250	4483	13179	8039	6747	8233	3250	3250	3250	3250	3261	3250
1933	3250	3567	4834	7616	5419	10042	4754	3250	3685	5375	4044	3993
1934	3923	4292	8958	9171	10755	7449	3250	3250	5904	5022	3250	3250
1935	3250	7458	5969	15237	9966	13414	19125	5837	4000	4000	4000	4000
1936	4000	4000	5401	18131	19324	8366	5820	4647	4500	5130	4500	4500
1937	4500	4500	5452	5893	13584	16727	9195	5513	4500	6304	4500	4500
1938	5359	16532	20958	12064	22760	22756	18745	15356	5746	7094	5234	9621
1939	9355	5474	7260	5805	6038	5068	4701	5072	6072	7864	6767	4500
1940	4848	4702	5653	18326	20987	21327	17525	6260	5000	7277	5000	5000
1941	5000	5000	20908	22152	22176	21326	20885	17076	8128	8553	6295	9030
1942	8193	5644	21211	20975	22482	8720	14635	13436	7185	7196	6636	8790
1943	8294	6821	11190	20990	19638	20161	9312	7285	5000	7367	5000	5000
1944	5876	5000	5550	6859	11536	9330	5000	5000	5000	7338	5000	5000
1945	5301	7074	8892	6410	18687	10292	5216	6264	5000	6846	5000	5000
1946	5233	9436	21657	19566	11849	7194	5000	5000	5000	6243	5000	5000
1947	5000	5911	8037	5000	9383	9601	4884	4500	6698	8192	5985	5347
1948	6472	5398	5692	10212	10210	8922	15365	13364	8127	5655	5000	6056
1949	6454	6093	6554	5429	6217	20917	5110	5625	5000	7925	5000	5000
1950	5271	5800	5343	10412	15742	8664	5645	4238	4000	5587	4000	4000
1951	7535	15133	20562	18814	20801	10726	5000	7384	5000	7710	5000	5000
1952	5325	6714	20948	20600	21099	20338	18064	12684	7354	8381	7127	10294
1953	8327	5766	20220	22266	10673	8944	6085	12211	8617	9324	5744	10351
1954	8979	10223	7581	18520	21253	19651	17569	9537	5000	10999	5645	5000
1955	5318	11852	14035	10029	7584	5797	8169	5100	6403	8332	5515	4500
1956	5058	7988	21890	22457	21207	13770	7233	13044	5366	7108	7397	9863
1957	9677	6786	5711	6864	16381	18558	10530	7046	5043	8808	6247	5430
1958	14035	11393	17031	20395	23484	21352	20104	12439	11790	8797	8539	10647
1959	8750	6135	5971	18499	20517	13006	5000	5000	9671	7808	7379	5591
1960	5909	8823	5030	7427	18467	12262	4201	6184	4783	8838	5880	4155
1961	5031	6521	12006	6091	20143	15528	7772	5000	6791	9404	8447	5000
1962	6025	9909	12647	7022	20459	14025	5000	5000	5000	8194	5217	5000
1963	14578	6998	15887	7651	20273	16907	21017	7984	5671	7943	5000	5291
1964	10816	14989	6808	10127	7301	5111	4500	4500	4500	7926	6082	4500
1965	4986	8685	21588	21563	11183	10774	17574	7018	5000	8413	5139	5000
1966	7480	13380	6265	17921	15305	18086	7179	5000	8460	7680	6808	5627
1967	6592	7960	19707	19631	19201	19515	18093	16578	11137	7103	7838	9841
1968	9256	6904	7653	13379	21227	14211	6086	5000	8366	7892	7522	6733
1969	6469	7525	16855	21848	21695	18445	16847	13993	5421	7794	5327	10432
1970	10142	6140	21113	23482	20573	14895	6385	5000	5000	12345	5205	5000
1971	5386	10965	21002	20717	15545	19372	5634	8388	6539	8199	6332	10363
1972	9742	7307	8266	8420	10050	18049	6132	5000	8333	8386	6886	5000
1973	6660	10868	15322	21072	21131	19235	7228	6487	5149	9689	5000	5210
1974	7345	21690	21061	22850	15925	22171	18804	6978	6989	10221	8367	11555
1975	10019	7515	8902	7419	20593	21853	9719	9717	6950	7501	7791	10724
1976	11609	6620	6567	5799	5000	7227	3921	4599	6037	6228	4622	3953
1977	4715	3913	5519	4814	5333	4757	5870	4018	7087	12373	6749	5791
1978	6024	5378	10933	21066	20494	21139	17343	8906	5000	8662	5000	6136
1979	6626	5000	5163	9829	15715	12110	7177	6460	6531	8486	5067	5000
1980	6603	7903	11548	21358	21902	17698	5855	5772	5000	7644	5000	5000
1981	5420	5000	8675	14237	13339	18156	6746	5000	7234	7724	6325	5301
1982	6239	19173	21308	19144	21355	20055	20593	8223	6376	6835	5255	11928
1983	11431	11787	20840	21306	22825	23302	19255	17740	15531	11297	10909	13548
1984	10934	19841	22213	17920	10981	16261	8048	5000	5000	8428	5048	5000
1985	7594	18705	13849	6889	7631	7194	5000	5000	6024	7879	5510	5588
1986	5996	5000	8524	11237	23512	21634	6367	5000	5000	5000	5000	5000
1987	5140	5000	6055	7684	11364	15631	7309	5449	7804	8303	6067	4998
1988	6310	4500	12825	17755	11700	5803	3250	3250	7308	6093	4486	4025
1989	5472	6601	5931	7992	4856	19321	7115	5147	4500	6530	4639	5719
1990	6609	6714	5987	10399	7312	7895	3615	4684	5702	7176	3250	4476
1991	5217	5248	4734	4699	5081	16520	5860	3500	3500	3500	4131	3500
1992	5251	4610	4709	6601	17998	12880	5727	3598	7260	5846	5416	4635
1993	5364	5362	8688	20663	20146	17596	14413	12187	11514	8516	5534	5099
AVG:	6562	7851	11375	13036	15212	13821	9323	6932	6110	7529	5513	5881
MIN:	3250	3567	4312	4699	4856	4139	3250	3250	3250	3250	3250	3250
MAX:	14578	21690	22213	23482	23512	23302	21017	17740	15531	12373	10909	13548

Table 3.4.4-13. Simulated Sacramento River Flow Below Navigation Control Point (CFS), Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10154	7271	17416	10533	7319	7006	5000	7781	5000	5000
1923	5939	5923	13848	10330	7322	5311	8382	5000	5000	7620	5000	5000
1924	5000	5000	5244	5672	8285	4025	3250	3250	4532	5234	3260	3250
1925	4151	5157	7609	6492	21296	10257	11977	5940	5889	4574	4500	4500
1926	4500	4500	6036	8053	19644	5762	8535	3543	3528	5607	3500	3500
1927	4029	10456	13374	14721	22844	16431	17240	7539	5000	8123	5000	5000
1928	5182	11220	8835	9412	16696	21064	11636	5450	5000	10730	5290	5000
1929	5000	6858	7012	5908	10088	5374	3277	3250	4711	6476	4952	3250
1930	4834	5131	11761	9525	13453	14967	4427	4674	4000	4906	4000	4000
1931	4000	4000	4313	8404	6041	4961	3775	3250	4387	7054	4280	3258
1932	3435	4480	13185	8042	6749	8234	3250	3250	3263	3250	3250	3250
1933	3250	3567	4834	7616	5419	10042	4633	3250	3566	5267	3926	3906
1934	3817	4257	8955	9168	10752	7448	3250	3250	5732	4907	3724	3250
1935	3250	7463	5971	15239	9967	13414	19119	5895	4000	4000	4000	4000
1936	4000	4000	5401	18131	19324	8366	5872	4777	4500	5524	4500	4500
1937	4500	4500	5451	5892	13585	16727	9203	5553	4500	6830	4500	4500
1938	5363	16535	20958	12066	22760	22756	18745	15356	5746	7153	5067	9632
1939	9352	5473	7260	5805	6038	5068	4588	4916	6007	7861	6544	4500
1940	4670	4608	5652	18323	21013	21325	17525	6260	5000	7455	5000	5000
1941	5000	5000	20895	22152	22176	21326	20885	17076	8127	8664	6180	9038
1942	8191	5643	21210	20975	22482	8720	14635	13436	7185	7196	6636	8790
1943	8294	6821	11190	20990	19638	20161	9312	7285	5000	7414	5000	5000
1944	5875	5000	5550	6859	11536	9330	5000	5000	5000	7336	5000	5000
1945	5281	7068	8885	6410	18693	10302	5216	6263	5000	7022	5000	5000
1946	5222	9259	21663	19564	12092	7186	5000	5000	5000	6379	5000	5000
1947	5000	5862	8021	5000	9382	9601	4886	4500	6662	8204	5976	5187
1948	6447	5395	4766	10264	9951	8920	15374	13434	8191	5653	5000	6171
1949	6448	6566	6527	5442	6223	20846	5112	5622	5000	7913	5000	5000
1950	5346	5826	5343	10413	15743	8664	5663	4276	4000	5778	4000	4000
1951	7260	14981	20561	18811	20799	10724	5000	7384	5000	7710	5000	5000
1952	5325	6731	20947	20601	21099	20338	18274	12669	7360	8384	7128	10295
1953	8328	5765	20220	22266	10673	8944	6086	12211	8617	9324	5744	10352
1954	8979	10223	7581	18520	21253	19651	17569	9537	5000	10982	5685	5000
1955	5317	11850	14037	10029	7556	5799	8104	5107	6404	8316	5509	4500
1956	5054	7977	21896	22457	21207	13770	7233	13045	5366	7855	6617	9922
1957	9665	6782	5709	6863	16380	18558	10532	7046	5047	8808	6397	5409
1958	13898	11399	17030	20395	23483	21352	20104	12439	11790	8900	8432	10653
1959	8749	6135	5971	18499	20517	12914	5000	5000	9535	7727	7263	5445
1960	5826	8965	5016	7429	18467	12262	4208	6214	4596	8782	5772	4206
1961	5030	6525	12057	6089	20246	15521	7768	5000	6806	9348	8443	5053
1962	6401	9845	12660	6989	20389	14031	5000	5000	5000	8171	5141	5000
1963	14676	6993	15888	7651	20273	17162	20997	7991	5716	8165	5000	5308
1964	10818	14990	6809	10128	7299	5111	4500	4500	4500	7806	5990	4500
1965	4992	8716	21592	21563	11183	10788	17580	7021	5000	8413	5137	5000
1966	7477	13384	6264	17921	15305	18088	7179	5000	8459	7681	6807	5625
1967	6575	7962	19709	19631	19203	19515	18093	16578	11137	7103	7838	9841
1968	9256	6903	7653	13379	21227	14211	5999	5000	8192	7781	7381	6649
1969	6390	7569	16890	21874	21694	18446	16847	14017	5421	7999	5115	10448
1970	10139	6139	21113	23481	20573	14894	6384	5000	5000	12354	5200	5000
1971	5407	10964	21002	20717	15544	19367	5636	8386	6539	8209	6321	10363
1972	9742	7307	8266	8420	10050	18049	6182	5000	8333	9251	6612	5009
1973	6671	11022	15317	21074	21132	19201	7231	6476	5000	9800	5000	5097
1974	7025	21692	21056	22847	15922	22170	18803	6977	6989	10221	8367	11555
1975	10019	7515	8902	7419	20593	21853	9720	9717	6950	7501	7791	10724
1976	11609	6620	6568	5799	5000	7226	3832	4444	6153	6153	4261	4024
1977	4738	3932	5398	4821	5332	4671	5755	3905	6967	12301	7017	5722
1978	5931	5379	10931	21065	20494	21139	17343	8906	5000	8662	5000	6136
1979	6627	5000	5163	9829	15715	12110	7177	6460	6386	8379	5027	5000
1980	6621	8013	11758	21367	21905	17700	5857	5773	5000	7752	5000	5000
1981	5413	5000	8675	14237	13339	18131	6748	5000	7085	7730	6212	5218
1982	6232	19259	21305	19144	21355	20055	20593	8223	6376	6922	5250	11840
1983	11435	11786	20839	21306	22824	23302	19255	17740	15531	11297	10909	13548
1984	10934	19841	22213	17920	10981	16261	8048	5000	5000	8428	5048	5000
1985	7594	18705	13849	6889	7631	7194	5000	5000	6030	7874	5509	5586
1986	5990	5000	8523	11237	23512	21634	6366	5000	5000	5000	5000	5000
1987	5141	5000	6055	7684	11365	15631	7182	5360	7806	8299	5911	4917
1988	6389	4500	12833	17756	11384	5723	3250	3271	7040	5984	4347	3969
1989	5479	6596	5929	7991	4855	19321	7138	5187	4500	6850	4783	5804
1990	6655	6975	5976	10408	7328	7896	3427	4726	5507	7058	3250	4240
1991	5398	5181	4738	4698	5152	16516	5915	3500	3500	3599	4144	3500
1992	4854	4398	4713	6591	17995	12877	5796	4000	7131	5946	5459	4000
1993	5553	5541	8675	20665	20147	17597	15003	12169	11522	7398	5554	6050
AVG:	6555	7856	11364	13036	15208	13817	9317	6934	6081	7557	5492	5875
MIN:	3250	3567	4313	4698	4855	4025	3250	3250	3263	3250	3250	3250
MAX:	14676	21692	22213	23481	23512	23302	20997	17740	15531	12354	10909	13548

Table 3.4.4-14. Simulated Sacramento River Flow Below Navigation Control Point (CFS), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	56	0	0
1923	-4	1	0	0	0	0	-1	0	0	22	0	0
1924	0	0	0	0	0	121	0	0	194	53	0	-154
1925	11	-3	-1	-1	0	-41	-3	-18	-15	0	0	0
1926	0	0	0	0	0	0	-3	-14	118	126	0	0
1927	-30	3	0	0	-16	5	-1	-1	0	28	0	0
1928	-2	-28	1	0	0	0	1	24	0	-22	104	0
1929	0	15	0	-4	1	0	65	0	-105	73	316	8
1930	-68	-31	3	49	46	49	19	-36	0	-131	0	0
1931	0	0	0	0	0	0	535	0	268	1122	-851	-132
1932	-174	2	-7	-3	-2	-1	0	0	-14	0	11	0
1933	0	0	0	0	0	0	317	0	164	138	135	93
1934	111	35	4	4	2	1	0	0	242	151	-484	0
1935	-14	-4	-2	-1	-1	0	8	-77	-500	-500	-500	-500
1936	-500	-500	4	-16	-9	-7	9	44	0	278	0	0
1937	0	0	-1	-1	0	0	11	59	0	801	0	0
1938	6	5	-1	2	0	0	0	0	0	63	1	1
1939	1	0	0	0	0	0	131	172	119	1	269	0
1940	206	97	1	4	-31	2	0	0	0	59	0	0
1941	0	0	-3	0	0	0	0	0	0	29	-30	2
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	57	0	0
1944	21	0	0	0	0	0	0	0	0	30	0	0
1945	36	21	22	0	-40	-129	9	7	0	59	0	0
1946	4	48	-1	1	-1	0	0	0	0	54	0	0
1947	0	143	152	0	6	3	23	0	80	13	20	161
1948	-5	5	-87	7	1	1	-7	-26	-23	38	0	-115
1949	7	-261	14	-7	-3	21	0	1	0	8	0	0
1950	-35	91	-6	2	1	1	-21	-43	0	52	0	0
1951	520	-404	15	1	1	1	0	0	0	0	0	0
1952	0	2	0	0	0	0	-128	9	-4	-2	-1	-1
1953	0	33	-9	1	0	0	0	0	0	0	0	0
1954	0	0	-2	1	0	0	0	43	0	61	169	0
1955	-14	3	-166	6	-9	0	39	-5	57	-15	-35	0
1956	18	7	-6	0	0	0	0	-25	1	0	0	0
1957	0	0	0	0	0	0	17	-1	-1	0	192	-28
1958	-183	8	-1	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	98	0	0	163	26	161	122
1960	77	-140	13	-1	0	0	7	-31	219	69	125	-49
1961	8	0	-129	5	-104	6	20	0	25	3	50	-152
1962	-368	95	-16	0	91	-7	0	0	0	122	87	0
1963	-209	8	-2	-1	0	-155	12	-4	-44	50	0	-213
1964	13	-5	-2	-1	-3	0	0	0	0	179	125	0
1965	-94	-24	-6	0	-1	71	-31	42	0	1	-4	0
1966	7	-43	1	0	0	-7	0	0	55	-3	55	21
1967	26	14	-21	1	-10	0	0	0	0	0	0	0
1968	0	16	-1	0	-1	0	102	0	231	153	195	114
1969	110	-87	-70	-32	1	-1	0	-28	0	30	-32	2
1970	-1	0	0	0	0	0	19	0	0	48	9	0
1971	69	-4	1	1	26	-41	65	-64	4	48	-51	4
1972	-1	15	-1	-14	1	0	45	0	43	71	-7	0
1973	1	3	0	0	0	-37	3	-1	149	1256	-16	-689
1974	-688	20	-12	-5	-7	-1	-1	-1	-1	0	0	0
1975	0	16	-1	0	-3	0	0	0	0	0	0	0
1976	0	0	0	0	0	-215	114	204	-130	211	132	-39
1977	28	14	46	-1	-54	48	143	156	161	82	-160	94
1978	99	0	3	1	0	0	0	0	0	0	0	0
1979	22	-82	5	-2	-1	0	3	6	29	150	67	0
1980	-10	-6	-216	-8	-1	-1	-1	-1	0	57	0	0
1981	-4	0	0	0	0	-13	1	0	202	-9	155	114
1982	23	-58	3	-61	2	-1	0	0	0	37	-2	-37
1983	2	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	0	0	-4	0
1985	-13	1	0	0	0	0	0	0	71	32	26	19
1986	-19	0	-2	0	-12	1	-6	0	0	0	0	0
1987	4	0	0	0	0	0	187	113	-7	0	126	112
1988	-48	0	-3	0	341	90	0	-25	308	150	189	38
1989	-39	8	2	1	1	0	-23	-13	0	-277	-118	-109
1990	-54	-286	13	-10	-28	-1	102	-34	249	175	0	314
1991	-177	40	-1	1	-74	5	-46	0	0	-117	-76	0
1992	439	195	-3	10	3	3	-66	-402	190	-69	-10	635
1993	-188	-186	14	-2	-1	-1	-740	23	-10	-4	4	-2
AVG:	-15	-17	-6	-1	2	-2	13	1	35	72	5	-5
MIN:	-688	-500	-216	-61	-104	-215	-740	-402	-500	-500	-851	-689
MAX:	520	195	152	49	341	121	535	204	308	1256	316	635

Table 3.4.4-15. Simulated Sacramento River Flow Below Navigation Control Point (CFS), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	98	0	0
1923	-6	1	0	0	0	0	-3	0	0	68	0	0
1924	0	0	0	0	0	7	0	0	41	36	0	-154
1925	10	-4	-1	-1	0	-40	2	-2	185	74	0	0
1926	0	0	-1	0	0	0	-3	-16	-28	89	0	0
1927	33	-1	1	0	-11	4	0	-1	0	247	0	0
1928	-14	-241	9	-3	-1	0	1	-203	0	213	54	0
1929	0	-24	2	-10	1	0	-29	0	-145	-43	137	0
1930	-114	-61	1	-3	-2	-1	2	7	0	84	0	0
1931	0	0	0	0	0	0	36	0	39	1	108	-123
1932	11	-1	0	0	0	0	0	0	-1	0	0	0
1933	0	0	0	0	0	0	195	0	44	31	17	7
1934	6	0	1	0	0	0	0	0	70	37	-11	0
1935	-14	1	0	0	0	0	2	-19	-500	-500	-500	-500
1936	-500	-500	4	-16	-9	-7	61	175	0	671	0	0
1937	0	0	-2	-2	1	0	19	99	0	1328	0	0
1938	11	9	-1	3	1	0	0	0	0	122	-165	12
1939	-3	-1	0	0	0	0	18	16	55	-2	46	0
1940	28	2	1	0	-5	0	0	0	0	237	0	0
1941	0	0	-16	1	0	0	0	0	0	139	-145	11
1942	-2	-1	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	104	0	0
1944	20	0	0	0	0	0	0	0	0	28	0	0
1945	17	15	15	0	-35	-119	8	7	0	235	0	0
1946	-8	-129	5	-2	243	-8	0	0	0	189	0	0
1947	0	93	137	0	5	2	25	0	45	25	11	1
1948	-30	2	-1013	58	-257	-1	2	44	40	35	0	-1
1949	1	212	-13	6	3	-50	2	-1	0	-4	0	0
1950	39	117	-6	4	2	1	-4	-6	0	243	0	0
1951	245	-556	15	-3	-1	-1	0	0	0	0	0	0
1952	0	18	-1	0	0	0	82	-6	3	1	1	0
1953	0	32	-9	1	0	0	0	0	0	0	0	0
1954	0	0	-2	1	0	0	0	43	0	44	208	0
1955	-15	2	-164	6	-37	2	-26	2	59	-31	-41	0
1956	13	-4	0	0	0	0	0	-24	1	746	-781	59
1957	-12	-4	-2	-1	-1	0	19	-2	4	0	342	-49
1958	-321	14	-3	-1	0	0	0	0	0	103	-107	7
1959	-1	0	0	0	0	6	0	0	28	-55	46	-24
1960	-6	2	0	0	0	0	14	-1	33	12	17	2
1961	8	4	-78	3	-1	0	15	0	40	-54	46	-99
1962	8	30	-3	-33	21	-2	0	0	0	99	11	0
1963	-110	4	-1	0	0	100	-8	3	1	272	0	-196
1964	15	-4	-1	-1	-6	0	0	0	0	60	34	0
1965	-88	7	-1	0	0	85	-25	45	0	1	-6	0
1966	3	-39	1	0	0	-5	0	0	54	-2	54	18
1967	9	16	-19	1	-8	0	0	0	0	0	0	0
1968	0	15	-1	0	-1	0	15	0	57	42	54	30
1969	31	-43	-35	-6	0	0	0	-4	0	235	-245	18
1970	-4	-1	0	0	0	0	18	0	0	57	5	0
1971	90	-5	1	1	24	-47	68	-67	4	58	-62	5
1972	-1	15	-1	-14	1	0	95	0	43	937	-281	9
1973	12	157	-5	2	1	-71	6	-13	0	1367	-16	-802
1974	-1008	22	-16	-8	-10	-2	-2	-2	-1	-1	0	0
1975	0	16	-1	0	-3	0	0	0	0	0	0	0
1976	0	0	0	0	0	-216	24	50	-15	136	-229	32
1977	51	32	-74	5	-54	-37	28	44	41	10	108	25
1978	6	1	1	0	0	0	0	0	0	0	0	0
1979	23	-82	5	-2	-1	0	3	6	-116	43	27	0
1980	8	103	-6	2	1	1	1	0	0	165	0	0
1981	-10	0	0	0	0	-38	3	0	53	-3	42	31
1982	15	28	0	-61	2	0	0	0	0	125	-7	-125
1983	5	-1	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	0	0	-4	0
1985	-12	1	0	0	0	0	0	0	78	27	25	17
1986	-25	0	-3	0	-13	1	-6	0	0	0	0	0
1987	5	0	0	0	0	0	60	24	-6	-4	-30	30
1988	32	0	5	1	25	9	0	-4	40	41	50	-18
1989	-31	3	0	0	0	0	0	27	0	43	26	-25
1990	-8	-25	2	-1	-12	1	-86	8	54	56	0	78
1991	4	-28	3	0	-3	0	9	0	0	-19	-63	0
1992	41	-17	2	0	0	0	3	0	61	32	33	0
1993	1	-6	1	0	0	0	-150	5	-2	-1123	24	949
AVG:	-21	-11	-18	-1	-2	-6	7	3	5	100	-16	-11
MIN:	-1008	-556	-1013	-61	-257	-216	-150	-203	-500	-1123	-781	-802
MAX:	245	212	137	58	243	100	195	175	185	1367	342	949

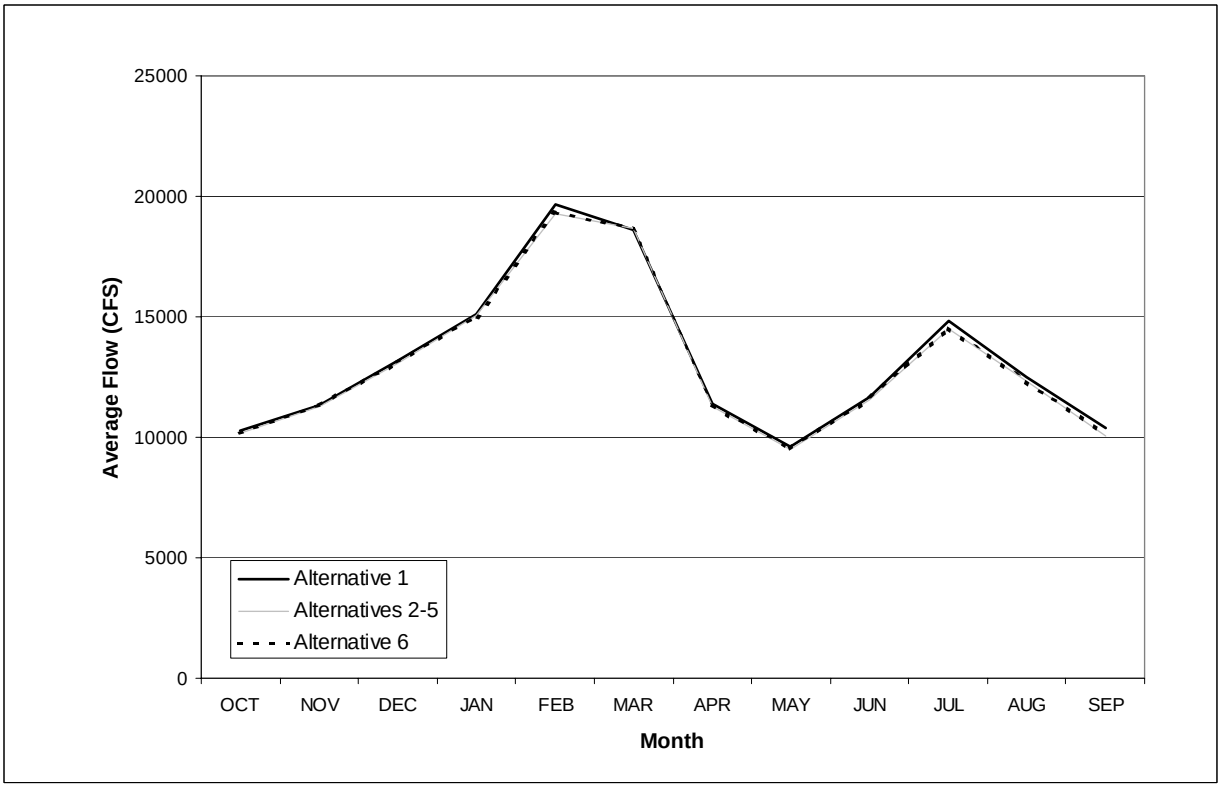


Figure 3.4.4-2. Average Simulated Monthly Sacramento River Flow Below Freeport Upstream of DSA 70 Return Flow (Dry and Critical Years), 2001 LOD

Table 3.4.4-16. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	9837	9802	17158	15977	35437	29288	22304	46801	34961	17515	14401	13235
1923	10424	13056	31444	28427	14511	13619	22656	15843	13934	18316	14636	12703
1924	9725	10169	11441	12510	15398	9763	6700	6992	8141	10070	10005	6852
1925	7423	7771	12480	12092	64458	25566	20380	13780	14790	11032	14681	10766
1926	8777	8317	9419	16868	39426	13164	19301	11711	11309	14895	11105	8324
1927	8941	22859	18581	30754	74819	42582	44836	24793	17139	18469	15071	12768
1928	9747	19678	15209	22321	25558	74092	25307	14925	12665	18859	15699	13183
1929	10281	11984	11781	12737	15640	10796	6341	6846	9641	11654	11617	7462
1930	7406	6972	17602	21620	18370	31328	11389	11110	12388	15966	13923	9189
1931	8814	8625	9109	13181	10455	7214	7654	6524	8686	15014	11143	7035
1932	7449	6902	18730	20395	17240	12981	8905	12185	16362	10241	9156	10583
1933	8639	8288	9452	12746	10563	13068	9618	5594	8971	10769	7445	6478
1934	7498	6975	14104	19223	14379	12173	10601	6937	10131	9757	7267	7760
1935	7428	10303	9663	28621	13774	25453	47703	22835	20987	17507	15646	11525
1936	11831	9848	10573	39635	60780	30455	19978	14172	14161	17319	15198	11240
1937	10415	9118	11410	12540	35509	38846	21328	15052	17143	17033	14815	11173
1938	9430	23433	64108	30811	74053	74435	59625	54669	33711	15619	14560	17809
1939	15703	12211	14489	13222	11283	13291	9365	11579	10816	17396	15205	11773
1940	9726	8439	8605	32937	56817	73626	64110	17796	15922	21043	14956	11824
1941	9326	11975	45626	72988	73576	70162	60474	39644	18346	17108	14696	17148
1942	13004	13408	64084	68657	74179	22460	42588	33372	26226	18072	14496	17348
1943	12819	17094	28456	71620	51256	66904	25004	17404	15623	16682	14847	12850
1944	11000	9365	10637	13804	23795	20684	9811	10041	15313	18191	15266	14311
1945	11451	14143	16098	13065	46141	21981	10647	13072	16971	19527	14840	12910
1946	9357	17168	64781	49499	24785	20248	11012	13366	15915	19322	15619	13383
1947	10744	12678	15423	11329	17726	20126	13056	9713	14416	18743	16521	13962
1948	10698	10206	11194	17115	16138	14590	25575	27634	20420	20135	16214	14680
1949	11133	11334	13269	11039	11249	45638	11607	12941	15140	17191	12951	11765
1950	8820	9219	8643	20855	34557	19708	18117	15870	16740	19990	15845	12793
1951	12856	49197	74219	61840	63974	27466	13984	18152	15497	19884	15895	12676
1952	9833	13302	46761	73099	72077	55242	59442	60410	37081	18324	14885	21925
1953	16081	12284	43331	72893	22510	21008	15190	24066	24872	20660	15077	19105
1954	13283	16902	14061	33451	61385	48791	38844	20623	12874	20887	15811	14688
1955	12437	16093	22853	19484	13977	10557	12115	11491	14609	14959	12210	10343
1956	8952	11722	74026	75058	68947	34125	17765	37318	19202	19704	14644	18800
1957	14048	11745	11684	15238	35044	45420	19621	15510	16535	19759	14889	12705
1958	19127	14497	23502	38423	75081	73080	73225	43822	32679	17359	14316	20489
1959	16691	11892	12143	36371	52866	21110	9141	11381	18121	20209	16260	12952
1960	10886	12122	9955	11825	30055	21491	10293	11700	12083	17586	12490	9090
1961	8743	11366	15658	11622	35489	18259	12644	10516	11153	19242	17793	13104
1962	10478	13040	15961	10283	47141	25118	10800	11774	14389	20700	16385	14508
1963	34626	15834	26903	15011	69978	32608	69637	29825	15325	16973	14914	13642
1964	16089	27504	12643	24463	14356	12113	11135	12288	13842	18865	16754	13636
1965	9621	14182	71998	74069	30847	22707	40448	21563	12524	20264	14865	12266
1966	11443	21788	15271	29053	24481	27658	12679	13633	17048	19366	14939	12040
1967	11903	14625	40220	40459	53885	53844	36874	43235	39178	15321	15549	21023
1968	17559	13403	15469	28339	59967	35775	11266	10222	17419	19346	15443	13921
1969	11366	12745	23523	74013	73677	46269	41057	48242	20929	14931	14724	20963
1970	16259	13890	59055	76230	70801	32810	13824	10443	14566	23228	15349	14142
1971	10586	16536	60824	46965	28380	44434	20642	25357	20689	22976	15140	18932
1972	13901	12459	18756	17893	24690	34924	10865	10325	18007	18874	15016	10564
1973	10827	19378	25978	73137	72774	51640	15544	16543	18312	20453	14573	13128
1974	12851	61527	66825	74306	39575	73545	65012	21813	22333	19126	14805	21904
1975	16848	13526	16094	15104	64316	70591	19952	27762	23867	19328	15354	19716
1976	17529	16361	15775	13404	12178	14573	8638	6748	9588	13076	11530	9945
1977	7427	7481	8410	7923	7625	7383	7991	5308	10174	15392	10581	6608
1978	7400	6954	14553	63954	50379	60890	31482	19557	15929	15780	15551	14664
1979	10407	10062	9305	23951	41248	29696	14878	15254	19404	18677	14900	11936
1980	11204	13077	19115	74007	73967	44145	17135	14977	11684	15182	14470	13629
1981	9859	9360	14196	24350	26196	32032	14774	10262	13362	18831	16169	12427
1982	11920	35670	73591	68656	73579	68144	74128	34579	22239	15191	14114	21150
1983	22456	35991	64207	71044	74691	77099	61093	55592	54350	23109	20506	26298
1984	19214	64252	74826	50375	33735	35023	16247	11761	13695	21685	15321	13621
1985	11521	31398	22389	13858	15039	12962	10814	12381	13412	18544	15814	14834
1986	11762	10805	17165	24949	78221	74070	17468	11173	12678	17849	16068	13753
1987	11038	9121	10722	13535	19430	23789	13134	9618	14332	17047	13657	11975
1988	10685	8828	18241	27527	16215	8772	8613	8712	10555	10075	7004	7356
1989	7416	9108	9959	12337	8579	46739	20891	14298	11696	17890	16316	12014
1990	13114	12807	12671	19528	14233	12900	10034	6516	7558	9298	10726	10376
1991	7825	7013	6596	7178	7981	31584	11617	8125	7301	12100	9287	8673
1992	7358	6974	6687	10599	32785	19119	10613	7810	10015	9690	7451	8842
1993	7474	6978	12302	57234	56680	42954	37941	30903	25491	17063	15175	12137
AVG:	11677	15210	25305	33050	39318	34121	23826	18955	17133	17198	14174	13324
MIN:	7358	6902	6596	7178	7625	7214	6341	5308	7301	9298	7004	6478
MAX:	34626	64252	74826	76230	78221	77099	74128	60410	54350	23228	20506	26298

Table 3.4.4-17. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	9762	9698	17078	15922	35310	29191	22200	46668	34830	17469	14353	13103
1923	10298	12953	31270	28374	14436	13533	22548	15726	13898	18313	14592	12534
1924	9688	10131	11625	12509	15326	9677	6471	6874	8206	9779	9729	6425
1925	7416	7757	12468	12081	63895	25404	20267	13639	14643	10920	14710	10745
1926	8774	8316	9423	16873	39349	12919	19030	11527	11174	14815	11180	8158
1927	8938	22593	18031	30671	74724	42491	44712	24674	17012	18337	15025	12636
1928	9623	19521	15131	22266	25514	73993	25187	14861	12604	18763	15639	13110
1929	10207	11993	11773	12735	15367	10477	6267	6774	9175	11493	11444	6239
1930	7406	6973	17519	21611	18153	31126	11353	10883	12073	15533	13272	8911
1931	8811	8520	9280	13327	10568	7193	7557	6411	8552	15176	11200	6968
1932	7446	6896	18134	20333	16281	12894	8592	12058	16224	10152	9100	10574
1933	8640	8289	9452	12687	10484	12905	9543	5521	8910	10621	7322	6480
1934	7501	6977	14078	19169	14384	11920	10518	6856	10355	11061	8040	7506
1935	7424	10223	9659	28306	13767	25353	46855	22674	20260	16881	15489	10917
1936	11483	9141	10784	39423	60692	29445	19882	14091	14130	17483	15179	11099
1937	10715	9115	11403	12544	35430	38747	21223	14988	17111	17647	14353	11132
1938	9390	23307	63753	30757	73975	74338	59503	54536	33579	15577	14513	17671
1939	15470	12110	14408	13168	11216	13045	9190	11562	10743	17337	15147	11623
1940	9828	8377	8452	32663	56020	73518	63991	17705	15992	20997	14908	11692
1941	9145	11914	45491	72926	73500	70067	60351	39511	18221	17034	14629	17016
1942	12758	13306	64006	68603	74102	22364	42464	33239	26095	17986	14448	17213
1943	12680	16811	28378	71566	51181	66808	24883	17320	15573	16617	14794	12718
1944	10905	9301	10626	13804	23695	20448	9707	9921	15185	18130	15213	14252
1945	11455	14007	16057	13052	45904	21764	10553	12963	16924	19484	14821	12782
1946	9232	17088	64612	49448	24784	20161	10910	13249	15861	19271	15567	13141
1947	10666	12525	15422	11218	17579	20323	12979	9598	14430	18682	16448	14075
1948	10695	10195	11037	17123	16138	14501	25428	27473	20272	20070	16148	14417
1949	11079	10970	13243	11007	11171	45907	11503	12824	15122	17025	12970	11652
1950	8793	9313	8625	20611	34483	19621	17989	14803	16770	19947	15810	12738
1951	13455	48363	74138	61785	63898	27370	13881	18033	15371	19900	15848	12547
1952	9747	13310	46419	73043	72006	55147	58807	60288	36947	18239	14721	21786
1953	15941	12214	43219	72839	22506	20926	15070	23949	24741	20548	15033	18967
1954	13180	16516	14049	33401	61311	48695	38723	20564	12803	20817	15744	14615
1955	12307	16031	22606	19408	13977	10476	12048	11365	14540	14839	12059	10262
1956	8966	11732	73938	75001	68874	34030	17661	37159	19073	19657	14596	18660
1957	13907	11644	11459	15192	34971	45325	19548	15390	16506	19710	14846	12697
1958	18802	14401	23421	38370	74999	72983	73100	43690	32549	17284	14268	20170
1959	16552	11791	12072	36318	52792	20965	9064	11322	18057	20310	16191	13033
1960	10816	11790	9831	11667	29828	21250	10215	11393	11465	17519	12424	9059
1961	8739	11366	15533	11631	34996	18173	12566	10358	10937	19136	17742	12925
1962	10044	13121	15937	10271	47251	24868	10546	11583	14306	20803	16305	14349
1963	34061	15559	26669	14799	69081	32379	69551	29691	15261	17008	14872	13951
1964	15958	27370	12573	23491	14359	11870	11058	12459	13728	18797	16715	13650
1965	9433	14128	70969	74012	30770	22694	40205	21533	12516	20264	14806	12086
1966	11371	21324	15187	28991	24421	27545	12563	13531	17003	19306	14860	11975
1967	11891	14539	39952	40407	53656	53748	36754	43107	39050	15190	15418	20886
1968	17419	13317	15392	28288	59884	35526	11195	9950	17464	19320	15375	13849
1969	11266	12689	23304	73898	73601	46172	40939	48084	20800	14876	14688	20723
1970	16118	13761	58975	76174	70729	32716	13757	10327	14558	23097	15301	14091
1971	10492	16404	60702	46910	28360	44072	20620	25149	20566	22986	15094	18797
1972	13802	12485	18376	17825	24623	34832	10808	10251	17938	18830	14892	10502
1973	10782	19251	25893	73077	72704	51396	15445	16426	18909	18775	14505	12307
1974	12076	63397	66711	74251	39497	73448	64892	21697	22235	19032	14755	21480
1975	16709	13440	16017	15056	64229	70496	19833	27631	23737	19283	15223	19578
1976	17792	16230	15703	13407	12116	14099	8479	6667	9130	13170	11667	9722
1977	7422	7333	8406	7916	7497	7207	7903	5226	10100	15268	9991	6599
1978	7393	6944	14546	63875	50282	60728	31148	19426	15810	17759	15484	14528
1979	10315	9916	9300	23238	41176	29443	14668	14987	19224	18620	14860	11630
1980	11054	12878	18710	73938	73893	44056	17036	14864	11563	15161	14435	13513
1981	9817	9275	14186	24157	26127	31729	14503	9991	13357	18764	16092	12354
1982	11699	35046	73503	68351	73501	68049	74002	34450	22110	15107	14067	20977
1983	22242	35865	64128	70990	74615	77002	60970	55462	54221	22980	20377	26162
1984	19076	64125	74745	50321	33663	34929	16185	11641	13579	21673	15275	13525
1985	11419	31128	22309	13851	14967	12763	10713	12264	13385	18478	15739	14775
1986	11703	10850	17081	24805	78138	73970	17362	11054	12563	17740	15939	13641
1987	10997	9111	10713	13539	19358	23532	13122	9502	14168	17005	13401	11889
1988	10466	8669	18084	27306	16209	8554	8331	7858	10976	10026	7208	7350
1989	7410	9109	9654	12335	8736	46739	20750	14236	11417	17573	16177	11868
1990	12580	12492	12526	19452	14202	12644	9956	6198	7611	9239	10564	10409
1991	7858	7012	6596	7119	7847	31336	11306	7832	6890	11189	9338	9340
1992	7357	6974	6691	10587	32715	18860	10459	7245	10095	9512	7374	7399
1993	7465	6973	12225	58475	56581	42032	37086	30791	25347	16901	14939	12005
AVG:	11585	15114	25190	32980	39200	33957	23673	18799	17035	17143	14101	13169
MIN:	7357	6896	6596	7119	7497	7193	6267	5226	6890	9239	7208	6239
MAX:	34061	64125	74745	76174	78138	77002	74002	60288	54221	23097	20377	26162

Table 3.4.4-18. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	9756	9698	17078	15922	35317	29191	22200	46668	34830	17583	14643	13101
1923	10296	12953	30908	28376	14436	13533	22546	15726	13607	18463	14705	12445
1924	9688	10131	11550	12509	15326	9677	6585	6924	8078	9965	9961	6847
1925	7416	7757	12468	12081	64285	25403	20272	13654	14910	11044	14774	10744
1926	8774	8316	9422	16873	39148	13076	19184	11580	11163	14889	11274	8314
1927	8938	22845	18091	30702	74725	42489	44713	24674	17012	18334	15309	12634
1928	9611	19308	15138	22263	25447	73993	25186	14330	12754	18925	15627	13137
1929	10192	12013	11774	12729	15366	10631	6267	6774	9330	11511	11481	7594
1930	7406	6973	17519	21559	18232	31228	11317	11017	12248	15940	13830	9084
1931	8811	8407	9107	13182	10457	7110	7569	6403	8652	15038	11234	7036
1932	7445	6895	18637	20327	17016	12888	8599	12058	16234	10153	9090	10574
1933	8638	8288	9452	12687	10483	13003	9540	5518	8908	10693	7398	6477
1934	7499	6976	14104	19165	14382	12073	10519	6858	10058	9703	7295	7734
1935	7424	10301	9660	28556	13767	25353	47519	22718	20211	16892	15571	11082
1936	11824	9411	10715	38708	60699	29824	19929	14218	13698	17942	15469	11292
1937	10830	9114	11392	12543	35430	38747	21235	15028	16773	18191	14830	11343
1938	9394	23312	63569	30759	73975	74338	59507	54538	33581	15723	14802	17680
1939	14945	12111	14407	13169	11217	13200	9244	11479	10828	17306	15114	11697
1940	9772	8431	8604	32867	56643	73525	63992	17505	15810	21236	15131	11690
1941	9333	11823	45310	72926	73500	70067	60351	39511	18221	17218	14978	17022
1942	12221	13308	64005	68602	74102	22364	42464	33239	26095	19582	14738	17213
1943	12681	15355	28386	71566	51181	66807	24882	17281	15522	16317	14823	12718
1944	10904	9300	10625	13804	23969	20596	9707	9922	15184	18130	15213	14215
1945	11303	13974	16060	13070	45925	21774	10553	12962	16242	19721	15246	13011
1946	9208	16911	64698	49444	25054	20153	10886	13249	16028	19447	15734	13594
1947	10497	12631	15429	11237	17592	20147	12979	9599	14116	18682	16486	13868
1948	10470	10156	9710	17158	16108	14496	25542	27542	20336	20070	16148	14531
1949	11073	11561	13245	11042	11177	45291	11506	12821	15221	17016	12945	11652
1950	8793	9210	8626	20763	34482	19621	18007	15048	16278	20197	16055	12599
1951	13090	48623	74138	61781	63896	27369	13881	18033	15363	20033	15934	12547
1952	9747	13303	46231	73043	72006	55147	59655	60273	36953	18363	14615	21773
1953	15941	12213	43221	72839	22506	20926	15070	23949	24742	20540	15048	18967
1954	13168	16460	14049	33401	61311	48695	38724	20564	12803	20839	15744	14615
1955	12306	16030	22608	19408	13948	10477	11983	11373	14541	14811	12051	10263
1956	8953	11716	73944	75000	68874	34031	17661	37160	19073	17822	14885	18716
1957	14895	11661	11943	15189	34972	45326	19553	15390	16245	19570	14638	13553
1958	18659	14408	23420	38370	74990	72983	73100	43690	32549	17466	14558	20226
1959	16552	11791	12072	36318	52792	21028	9064	11333	18018	20300	16191	12884
1960	10843	12086	9936	11823	29979	21404	10216	11579	11856	17518	12438	9081
1961	8741	11370	15584	11629	35410	18166	12564	10360	11031	19159	17726	12943
1962	10446	13056	15950	10238	47029	25027	10702	11675	14318	20628	16319	14446
1963	34344	15709	26822	14954	69845	32630	69497	29698	15658	18043	15088	14233
1964	15959	27373	12575	22086	14305	11916	11193	12247	13882	18798	16681	13821
1965	9458	14164	71334	74012	30771	22709	40230	21539	12303	19934	14995	12078
1966	11370	21684	15188	28994	24416	27552	12564	13530	17001	19307	14861	11971
1967	11875	14541	39967	40407	53669	53748	36754	43107	39050	15190	15418	20886
1968	17419	13316	15392	28288	59885	35681	11192	10105	17375	19291	15375	13849
1969	11304	12679	23406	73948	73601	46175	40940	48108	20800	15149	14962	20380
1970	16118	13760	58974	76174	70729	32716	13756	10327	14583	23085	15315	14105
1971	10490	16402	60694	46910	28360	44045	20624	25146	20566	22997	15109	18798
1972	13809	12491	18345	17825	24623	34832	10858	10251	17937	18834	15014	10502
1973	10793	19405	26311	73077	72705	51258	15448	16414	18646	18961	14702	12192
1974	11756	63258	66703	74250	39494	73448	64892	21697	22107	19160	14974	20955
1975	16712	13440	16016	15056	64229	70496	19834	27631	23737	19454	15222	19578
1976	17659	16231	15703	13407	12116	14253	8543	6666	9292	13339	11357	9975
1977	7422	7507	8237	7923	7497	7188	7903	5230	10094	15197	10646	6599
1978	7393	6944	14545	63884	50286	60793	31251	19425	15824	15671	15484	14526
1979	10314	9914	9299	23802	41172	29598	14758	15142	19177	18613	14848	11813
1980	11159	13142	19000	73950	73893	44060	17038	14865	11563	15354	14592	13512
1981	9807	9279	14187	23917	26129	31785	14659	10146	13307	18764	16098	12354
1982	11846	35601	73508	68351	73501	68049	74002	34450	22110	15230	14277	20889
1983	21996	35866	64128	70990	74615	77002	60970	55462	54221	22980	20377	26162
1984	19076	64125	74745	50321	33663	34929	16185	11641	13562	21620	15324	13547
1985	11419	31106	22309	13851	14967	12783	10713	12253	13395	18478	15737	14775
1986	11696	10856	17080	24799	78137	73970	17362	11054	12526	17802	16035	13641
1987	10998	9111	10713	13539	19358	23687	13106	9543	14019	16982	13136	11829
1988	10700	8823	18244	27467	16209	8405	8494	8222	10503	10537	7335	7423
1989	7410	9104	9951	12331	8567	46640	20783	14231	11576	17830	16267	12042
1990	12875	12728	12552	19431	14196	12801	9954	6395	7505	9252	10622	10376
1991	7783	7012	6600	7182	7976	31486	11516	7987	6890	11986	9133	8895
1992	7357	6974	6692	10602	32709	19012	10530	7689	9957	9604	7377	8743
1993	7466	6974	12213	57169	56594	42851	37672	30774	25356	21034	15419	12708
AVG:	11587	15135	25198	32952	39241	33995	23725	18822	16999	17242	14192	13251
MIN:	7357	6895	6600	7182	7497	7110	6267	5230	6890	9252	7295	6477
MAX:	34344	64125	74745	76174	78137	77002	74002	60273	54221	23085	20377	26162

Table 3.4.4-19.Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternatives 2-5 minus Alt. 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-74	-105	-80	-55	-127	-97	-104	-133	-131	-47	-48	-132
1923	-126	-104	-175	-54	-75	-86	-109	-117	-36	-3	-44	-169
1924	-37	-38	184	-1	-72	-86	-229	-118	65	-291	-276	-427
1925	-7	-14	-11	-11	-563	-162	-113	-142	-147	-112	29	-21
1926	-3	-1	4	4	-77	-245	-271	-184	-135	-80	75	-166
1927	-3	-266	-550	-83	-95	-92	-124	-119	-126	-132	-46	-132
1928	-124	-157	-78	-55	-44	-98	-120	-64	-62	-96	-60	-73
1929	-74	8	-8	-3	-273	-319	-74	-72	-467	-160	-173	-1222
1930	0	0	-82	-9	-217	-203	-36	-228	-315	-433	-651	-278
1931	-3	-105	171	147	114	-21	-97	-113	-133	162	57	-67
1932	-3	-6	-596	-62	-959	-87	-313	-126	-138	-89	-55	-9
1933	1	1	0	-59	-79	-163	-75	-73	-61	-149	-123	2
1934	3	2	-26	-54	5	-253	-83	-81	224	1305	773	-254
1935	-4	-80	-4	-315	-7	-100	-848	-161	-727	-627	-157	-608
1936	-348	-708	210	-212	-87	-1010	-96	-81	-32	164	-19	-140
1937	300	-2	-6	4	-79	-100	-106	-64	-33	614	-462	-41
1938	-40	-125	-355	-54	-78	-98	-122	-133	-131	-42	-47	-138
1939	-234	-101	-81	-54	-66	-246	-175	-16	-73	-59	-58	-151
1940	102	-63	-153	-274	-796	-108	-119	-91	69	-46	-48	-132
1941	-181	-61	-135	-62	-76	-95	-123	-133	-125	-74	-67	-132
1942	-246	-102	-79	-54	-76	-96	-124	-133	-130	-86	-48	-135
1943	-140	-283	-78	-54	-75	-96	-121	-84	-50	-65	-53	-131
1944	-95	-64	-11	0	-100	-236	-104	-119	-128	-61	-53	-59
1945	4	-136	-42	-13	-237	-217	-93	-110	-47	-43	-19	-128
1946	-125	-80	-169	-51	-1	-87	-102	-118	-54	-51	-53	-242
1947	-78	-153	-2	-110	-148	197	-77	-116	14	-61	-73	113
1948	-3	-11	-157	8	0	-89	-147	-160	-149	-65	-66	-263
1949	-53	-364	-26	-32	-78	269	-104	-117	-18	-166	20	-114
1950	-27	94	-17	-245	-74	-87	-128	-1068	30	-43	-35	-55
1951	600	-834	-81	-54	-76	-96	-103	-119	-126	17	-47	-129
1952	-86	8	-342	-56	-70	-95	-635	-122	-134	-85	-164	-139
1953	-140	-70	-112	-53	-4	-82	-119	-117	-131	-112	-45	-139
1954	-102	-386	-11	-51	-74	-95	-121	-59	-71	-70	-67	-74
1955	-130	-62	-247	-76	0	-81	-67	-125	-69	-120	-152	-80
1956	14	10	-88	-57	-73	-95	-104	-159	-130	-47	-48	-139
1957	-141	-101	-226	-46	-73	-95	-73	-120	-29	-49	-42	-7
1958	-326	-96	-81	-53	-82	-97	-125	-132	-130	-75	-48	-320
1959	-139	-101	-70	-54	-74	-145	-77	-59	-64	101	-69	81
1960	-71	-332	-124	-158	-227	-241	-79	-307	-618	-67	-67	-30
1961	-4	-1	-125	9	-492	-86	-77	-158	-216	-105	-51	-179
1962	-434	81	-24	-13	111	-250	-253	-190	-83	103	-79	-160
1963	-565	-274	-235	-211	-897	-229	-86	-134	-64	36	-42	309
1964	-132	-134	-70	-972	3	-243	-77	170	-114	-68	-39	15
1965	-188	-54	-1029	-57	-77	-13	-243	-30	-9	0	-60	-180
1966	-72	-464	-84	-62	-60	-113	-116	-101	-45	-60	-78	-65
1967	-12	-87	-268	-53	-229	-96	-120	-128	-128	-131	-131	-137
1968	-140	-86	-77	-52	-83	-249	-71	-272	44	-26	-67	-72
1969	-99	-57	-218	-115	-76	-96	-118	-158	-129	-55	-36	-241
1970	-141	-129	-81	-55	-73	-95	-66	-116	-8	-131	-48	-51
1971	-94	-132	-122	-55	-21	-363	-22	-208	-123	10	-46	-135
1972	-98	26	-379	-68	-67	-92	-57	-74	-70	-45	-123	-62
1973	-46	-126	-85	-59	-70	-244	-98	-116	598	-1678	-68	-821
1974	-775	1870	-114	-56	-78	-97	-120	-116	-98	-94	-49	-424
1975	-139	-86	-78	-48	-87	-95	-119	-131	-130	-44	-132	-138
1976	263	-131	-72	2	-62	-474	-159	-81	-458	95	137	-223
1977	-5	-148	-4	-7	-128	-176	-87	-82	-74	-124	-591	-9
1978	-8	-10	-7	-79	-97	-163	-334	-132	-118	1979	-67	-136
1979	-92	-146	-4	-713	-73	-253	-210	-267	-180	-57	-40	-306
1980	-150	-200	-404	-69	-74	-89	-99	-113	-121	-21	-35	-116
1981	-42	-85	-10	-192	-68	-302	-271	-271	-5	-67	-76	-73
1982	-221	-623	-88	-305	-78	-95	-125	-128	-129	-84	-47	-173
1983	-214	-127	-79	-54	-76	-97	-123	-131	-130	-129	-129	-136
1984	-138	-127	-81	-54	-72	-94	-62	-120	-115	-12	-47	-95
1985	-102	-271	-80	-7	-73	-199	-101	-118	-27	-66	-75	-58
1986	-60	45	-84	-143	-84	-100	-106	-118	-115	-109	-129	-112
1987	-41	-10	-9	3	-72	-257	-12	-116	-164	-41	-257	-86
1988	-220	-159	-157	-221	-6	-218	-282	-854	421	-49	204	-6
1989	-6	1	-305	-2	156	0	-142	-63	-280	-316	-139	-146
1990	-534	-315	-145	-76	-31	-257	-78	-319	53	-59	-162	33
1991	33	-1	0	-59	-134	-249	-311	-292	-411	-911	51	666
1992	0	0	4	-12	-70	-259	-154	-565	79	-178	-77	-1443
1993	-9	-5	-76	1242	-100	-922	-855	-112	-143	-163	-236	-132
AVG:	-92	-97	-116	-71	-118	-164	-153	-156	-98	-55	-74	-155
MIN:	-775	-834	-1029	-972	-959	-1010	-855	-1068	-727	-1678	-651	-1443
MAX:	600	1870	210	1242	156	269	-12	170	598	1979	773	666

Table 3.4.4-20. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-81	-105	-80	-55	-120	-97	-104	-133	-131	68	242	-133
1923	-128	-103	-536	-52	-75	-86	-110	-117	-326	147	69	-258
1924	-37	-38	109	-1	-72	-86	-114	-68	-64	-105	-44	-5
1925	-7	-14	-12	-11	-173	-163	-108	-126	120	12	93	-22
1926	-3	-1	3	5	-278	-88	-117	-131	-146	-6	169	-11
1927	-3	-14	-490	-52	-94	-93	-124	-119	-127	-135	238	-133
1928	-136	-370	-70	-58	-111	-98	-121	-595	88	66	-72	-47
1929	-89	29	-6	-9	-274	-164	-74	-72	-311	-143	-136	132
1930	0	0	-83	-61	-137	-100	-72	-93	-140	-26	-94	-104
1931	-3	-218	-2	1	3	-105	-85	-121	-34	25	90	1
1932	-4	-7	-93	-68	-224	-92	-306	-126	-129	-88	-65	-9
1933	-1	0	0	-59	-80	-66	-78	-76	-63	-76	-47	0
1934	0	0	1	-58	3	-100	-82	-80	-73	-53	29	-27
1935	-4	-2	-3	-65	-7	-100	-184	-117	-776	-615	-74	-443
1936	-8	-437	142	-927	-81	-631	-49	46	-463	623	271	52
1937	414	-3	-18	3	-80	-100	-93	-24	-371	1158	15	170
1938	-36	-121	-540	-52	-78	-98	-118	-131	-130	105	242	-129
1939	-758	-99	-82	-53	-66	-91	-121	-100	12	-90	-91	-77
1940	46	-9	-1	-70	-174	-101	-118	-291	-112	193	175	-134
1941	7	-152	-316	-62	-76	-95	-123	-133	-125	110	282	-126
1942	-784	-99	-79	-54	-76	-96	-124	-133	-130	1510	243	-135
1943	-138	-1739	-69	-54	-75	-97	-122	-124	-101	-365	-24	-132
1944	-97	-65	-11	0	175	-88	-104	-119	-129	-61	-53	-97
1945	-148	-169	-39	5	-216	-207	-94	-110	-730	194	406	101
1946	-149	-258	-83	-56	269	-96	-125	-117	113	125	114	210
1947	-247	-47	6	-92	-134	21	-77	-115	-300	-61	-35	-94
1948	-228	-50	-1484	43	-29	-94	-33	-92	-85	-65	-66	-148
1949	-60	227	-24	4	-72	-347	-101	-120	81	-175	-6	-114
1950	-27	-9	-16	-93	-74	-87	-110	-822	-462	208	210	-194
1951	234	-574	-81	-59	-78	-97	-102	-119	-134	150	39	-129
1952	-86	1	-531	-56	-70	-95	213	-137	-128	39	-270	-152
1953	-139	-71	-110	-53	-4	-82	-119	-117	-131	-120	-30	-139
1954	-114	-442	-11	-50	-74	-95	-120	-59	-71	-48	-67	-74
1955	-131	-64	-245	-75	-28	-80	-132	-118	-68	-148	-160	-80
1956	0	-6	-82	-57	-72	-95	-103	-158	-129	-1882	241	-84
1957	847	-84	259	-48	-72	-94	-69	-120	-290	-189	-251	848
1958	-468	-89	-82	-53	-91	-97	-125	-132	-130	107	242	-263
1959	-140	-101	-70	-53	-74	-82	-77	-48	-103	91	-68	-68
1960	-44	-36	-19	-2	-76	-87	-77	-121	-228	-67	-53	-9
1961	-2	4	-74	7	-79	-93	-79	-155	-122	-83	-67	-161
1962	-32	16	-11	-45	-111	-91	-98	-98	-71	-72	-65	-63
1963	-282	-124	-82	-56	-134	23	-140	-126	333	1070	174	591
1964	-130	-131	-68	-2377	-50	-197	59	-41	40	-67	-72	186
1965	-163	-18	-664	-57	-76	2	-218	-24	-221	-331	130	-188
1966	-73	-104	-83	-59	-65	-107	-116	-103	-47	-59	-78	-69
1967	-28	-84	-253	-53	-217	-96	-120	-128	-128	-131	-130	-137
1968	-140	-87	-77	-52	-82	-95	-74	-117	-45	-54	-67	-72
1969	-62	-67	-116	-65	-76	-94	-117	-134	-129	218	238	-583
1970	-141	-130	-81	-55	-72	-95	-67	-116	17	-142	-34	-37
1971	-96	-133	-130	-54	-20	-390	-19	-211	-123	21	-31	-135
1972	-92	32	-411	-68	-67	-92	-7	-74	-70	-40	-2	-62
1973	-34	28	334	-60	-70	-382	-95	-129	335	-1492	130	-936
1974	-1096	1731	-122	-56	-81	-97	-121	-116	-226	34	169	-948
1975	-136	-86	-78	-49	-87	-95	-119	-131	-130	127	-132	-138
1976	130	-130	-72	3	-62	-320	-95	-82	-296	263	-172	30
1977	-5	26	-173	0	-127	-195	-87	-78	-79	-195	65	-9
1978	-8	-10	-8	-70	-93	-97	-231	-132	-104	-109	-67	-138
1979	-93	-148	-5	-149	-76	-98	-120	-112	-227	-64	-52	-123
1980	-45	65	-114	-57	-74	-85	-96	-112	-121	172	122	-117
1981	-52	-82	-10	-433	-66	-247	-115	-117	-55	-67	-70	-73
1982	-73	-69	-84	-304	-77	-94	-125	-128	-129	39	163	-261
1983	-460	-126	-79	-54	-76	-97	-123	-131	-130	-129	-129	-136
1984	-138	-127	-80	-54	-72	-94	-62	-120	-133	-65	2	-73
1985	-102	-292	-79	-7	-73	-179	-101	-129	-17	-65	-78	-58
1986	-66	51	-85	-149	-84	-100	-106	-118	-151	-47	-33	-112
1987	-40	-10	-9	4	-72	-102	-28	-75	-313	-64	-521	-146
1988	14	-5	3	-60	-6	-367	-120	-489	-52	462	331	67
1989	-5	-4	-7	-7	-12	-100	-108	-67	-120	-60	-49	28
1990	-238	-80	-119	-97	-38	-100	-80	-121	-53	-47	-104	0
1991	-42	-1	4	4	-5	-98	-100	-138	-411	-115	-153	221
1992	0	0	5	3	-76	-107	-83	-121	-58	-86	-74	-99
1993	-8	-4	-89	-65	-86	-102	-270	-129	-135	3971	244	571
AVG:	-90	-76	-108	-99	-77	-125	-101	-133	-134	44	18	-73
MIN:	-1096	-1739	-1484	-2377	-278	-631	-306	-822	-776	-1882	-521	-948
MAX:	847	1731	334	43	269	23	213	46	335	3971	406	848

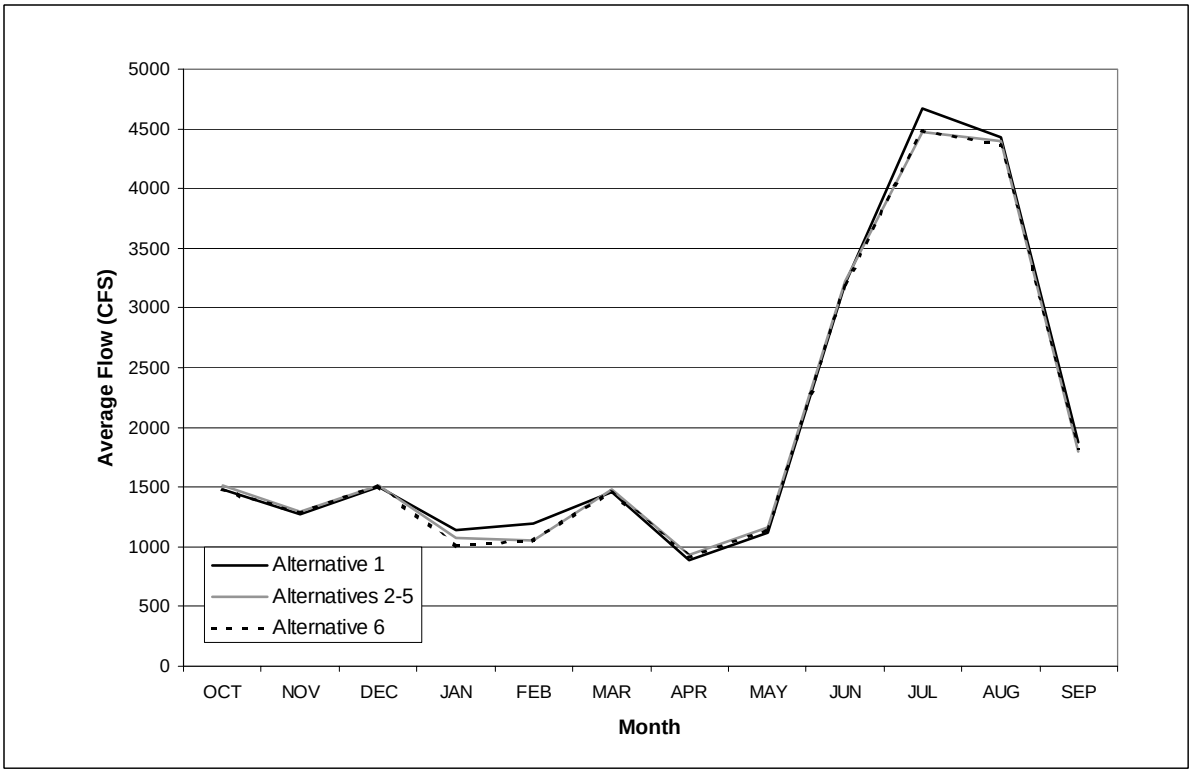


Figure 3.4.4-3. Average Simulated Monthly Feather River Flow Below Thermalito (Dry and Critical Years), 2001 LOD

Table 3.4.4-21. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1368	1900	2888	1108	4796	4201	604	16069	5860	2358	5912	408
1923	1108	1097	7406	4332	1093	3008	1288	1088	3178	5449	6149	408
1924	1108	1900	3603	1108	1034	2522	1633	2360	2800	3882	3744	2458
1925	414	308	649	294	300	2085	156	148	4053	508	5541	156
1926	363	308	1243	294	300	148	156	3616	3925	6109	5349	224
1927	1669	308	3522	294	11768	6513	4066	3279	1316	3855	6310	408
1928	1108	1097	2165	1108	4689	24397	408	2487	4031	4402	6017	2024
1929	1959	1560	1108	1108	1093	1108	156	1546	2424	1114	4454	1344
1930	724	433	1496	294	2229	148	647	470	4321	6866	6187	225
1931	551	584	1344	294	300	148	2069	1472	2732	7331	4216	2576
1932	1550	793	3785	294	269	1382	402	148	4667	755	447	156
1933	1406	1900	294	294	300	4190	156	148	1277	1128	940	700
1934	648	308	1890	294	1997	148	2220	1838	2661	1990	2957	3103
1935	1921	308	294	294	300	148	408	2266	7538	7202	6133	408
1936	3400	1900	2277	1108	1034	3339	408	392	1122	7251	6158	408
1937	2488	1900	2430	1108	1093	1108	408	392	6305	6257	5612	693
1938	1108	1097	3828	4726	13937	18805	12427	16547	7459	1199	4788	408
1939	3060	2320	2747	3143	2075	4231	2552	3659	3249	6079	7548	3153
1940	2994	1900	603	603	565	16054	3165	1706	5491	8608	6601	408
1941	1280	1900	1108	4434	17039	10874	3145	7813	2333	1407	4383	408
1942	1765	2580	18371	13774	17043	2209	9895	5082	5211	5578	2219	408
1943	1108	4183	8134	18184	6903	15504	3526	399	4941	4384	5972	408
1944	1108	1097	1108	1108	1063	2552	408	392	6025	7308	6489	2899
1945	3291	1097	1108	1108	1093	1108	408	392	6037	7663	6322	408
1946	1108	1097	1822	4082	3772	5881	408	908	6093	8237	7283	1261
1947	2485	1900	1108	1108	1093	1108	1110	1126	4682	7399	6991	2511
1948	1692	1334	2214	603	1241	392	408	392	408	7554	6632	408
1949	1108	1097	1108	1108	1093	1108	156	148	4578	3574	3943	156
1950	537	308	294	294	300	148	408	1389	4390	8264	7039	408
1951	1108	3256	14186	11091	10255	3948	408	865	6198	6573	6166	408
1952	1108	1097	2487	8331	11557	6514	16816	19473	8235	1579	392	2962
1953	4282	2243	8508	20423	1093	5597	3877	2562	4880	4539	4633	408
1954	1108	2194	2436	9210	7990	9562	5536	4984	4206	6959	6276	2652
1955	3400	1097	1108	1108	1093	1108	408	392	4314	2852	3159	408
1956	1108	1097	8149	20407	10756	5856	2555	10118	3713	8311	1543	408
1957	1108	1097	2324	3666	15335	6348	3324	392	5471	5618	3860	944
1958	1108	1097	1108	1108	22837	11341	7056	9826	6032	1097	1179	1657
1959	4298	2232	2768	9399	8984	1678	776	1666	6502	8001	6648	2628
1960	3400	1900	2756	603	565	392	1484	392	3577	5380	3091	408
1961	603	593	718	603	606	477	1557	866	2187	7916	7570	2097
1962	2767	1900	294	294	300	148	156	995	4481	7896	6606	3320
1963	603	593	603	1319	12325	7733	12484	2428	2088	3713	5828	408
1964	1108	1097	1108	3433	1093	3167	2624	2709	4489	7534	6828	3876
1965	2698	1097	3750	18581	4273	4689	7042	4541	496	5049	5347	408
1966	1108	2380	3046	2928	1202	3732	441	3851	5887	7660	5979	2330
1967	3400	1097	1108	1108	3852	13838	1535	8464	7815	799	392	2511
1968	4602	2186	3054	7543	11193	6064	1994	392	5937	5827	5810	2944
1969	2814	1134	1108	11906	11887	5892	6840	12033	2993	830	4475	2255
1970	2776	3227	15801	35278	10069	3552	2640	392	3860	5768	6835	3143
1971	3241	1097	1108	1108	1093	11003	3024	7786	4817	7614	4311	408
1972	1108	1170	3371	3376	5977	6251	408	487	3768	4752	4980	706
1973	1108	1097	1108	8193	9524	5538	408	1715	6059	6165	5294	408
1974	1108	3903	9626	19970	5192	25693	7729	4976	5539	821	858	1675
1975	4290	2905	2263	2365	12636	12332	408	7477	5396	6645	392	408
1976	1252	3326	3404	3026	3388	2912	408	516	1999	4393	4642	3639
1977	1839	1900	1106	603	1087	837	1119	676	2902	3247	2469	868
1978	770	308	294	294	300	148	619	392	1982	527	6039	408
1979	603	593	603	3253	11109	3847	573	392	6743	4752	5249	433
1980	1108	1097	1108	14514	17552	4742	408	392	408	743	4854	408
1981	1108	1097	1108	4712	3116	6386	408	392	4339	6242	5953	2234
1982	3400	593	15189	7743	17397	12836	18383	7330	3009	392	3723	408
1983	5836	8103	10401	12097	21136	31245	8145	11232	11036	2156	816	4480
1984	4477	13969	23745	5012	8009	8447	802	392	4426	6448	5915	3544
1985	1108	1097	1108	1736	1093	1275	408	3238	3723	7554	6228	3157
1986	3400	1900	1108	1108	20644	23421	408	392	2838	7835	6516	408
1987	1108	1097	1108	1108	1093	1108	2916	444	4077	6709	5779	3278
1988	3400	1900	603	603	565	1144	156	1293	2438	2207	1599	1054
1989	1269	308	294	294	300	148	156	2409	3097	7467	6741	1703
1990	3226	1900	3795	294	300	148	739	148	178	1416	2543	2862
1991	1378	1185	956	903	732	148	156	148	1093	1836	1112	742
1992	294	1787	294	294	269	148	156	265	810	1021	1143	2272
1993	1191	970	294	294	300	10306	2866	7020	3683	2871	6359	472
AVG:	1897	1728	3338	4571	5415	5643	2550	3118	4123	4742	4701	1404
MIN:	294	308	294	294	269	148	156	148	178	392	392	156
MAX:	5836	13969	23745	35278	22837	31245	18383	19473	11036	8608	7570	4480

Table 3.4.4-22. Simulated Feather River Flow Below Thermalito (CFS)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1415	1900	2888	1108	4744	4201	604	16069	5860	2379	5987	408
1923	1108	1097	7310	4332	1093	3008	1288	1088	3267	5548	6169	408
1924	1108	1900	3795	1108	1034	2566	1683	2532	2952	3807	3668	1906
1925	460	308	650	294	300	2052	156	148	4053	512	5613	156
1926	426	308	1243	294	300	148	156	3660	3972	6126	5400	224
1927	1840	308	3521	294	11536	6513	4066	3279	1316	3818	6388	408
1928	1108	1097	2165	1108	4646	24397	408	2512	4047	4377	6041	2076
1929	1973	1565	1108	1108	1093	1108	156	1638	2384	1165	4102	1567
1930	756	433	1496	294	2229	148	856	557	4095	6772	5978	156
1931	444	422	1331	294	300	148	2075	1488	2668	6425	4286	2486
1932	1317	955	3787	294	269	1382	202	148	4676	767	449	156
1933	1292	1900	294	294	300	4190	156	148	1326	1181	978	770
1934	636	308	1890	294	1997	148	2266	1889	3012	3404	3811	3029
1935	1969	308	294	294	300	148	408	2297	7442	7201	6107	753
1936	3400	1900	2471	1108	1034	2435	408	392	1223	7265	6194	408
1937	2800	1900	2420	1108	1093	1108	408	392	6339	6196	5336	755
1938	1108	1097	3592	4726	13937	18805	12427	16547	7459	1218	4863	408
1939	2966	2320	2747	3143	2075	4231	2507	3728	3310	6136	7603	3258
1940	3102	1900	603	603	565	15648	3165	1733	5559	8627	6621	408
1941	1390	1900	1108	4192	17039	10874	3145	7813	2333	1426	4470	408
1942	1659	2580	18371	13774	17043	2209	9895	5082	5211	5614	2294	408
1943	1108	4029	8134	18184	6903	15504	3526	431	5016	4385	6043	408
1944	1108	1097	1108	1108	1034	2403	408	392	6024	7322	6502	2874
1945	3312	1097	1108	1108	1093	1108	408	392	6057	7685	6368	408
1946	1108	1097	1737	4082	3772	5881	408	908	6111	8256	7302	925
1947	2445	1900	1108	1108	1093	1108	1118	1128	4745	7409	6993	2481
1948	1706	1331	2137	603	1237	392	408	392	408	7574	6648	408
1949	1108	1097	1108	1108	1093	1108	156	148	4642	3565	3934	156
1950	592	308	294	294	300	148	408	484	4544	8285	7067	408
1951	1199	2957	14186	11090	10255	3948	408	865	6198	6757	6244	408
1952	1108	1097	2226	8331	11557	6514	16816	19473	8235	1579	392	2962
1953	4282	2243	8508	20423	1093	5597	3877	2562	4880	4550	4713	408
1954	1108	1934	2436	9210	7990	9562	5536	4998	4220	6965	6153	2709
1955	3400	1097	1108	1108	1093	1108	408	392	4319	2856	3155	408
1956	1108	1097	8159	20407	10756	5856	2555	10118	3713	8330	1677	408
1957	1108	1097	2171	3666	15335	6348	3338	392	5496	5642	3868	1093
1958	1108	1097	1108	1108	22599	11341	7056	9826	6032	1116	1282	1474
1959	4298	2232	2768	9399	8984	1678	958	1881	6559	8356	6701	2851
1960	3400	1900	2782	603	565	392	1561	392	3119	5399	3041	408
1961	603	593	718	603	606	477	1565	829	2075	7933	7597	2180
1962	2740	1900	294	294	300	148	156	1078	4679	8155	6656	3420
1963	603	593	603	1319	11659	7733	12484	2428	2191	3822	5909	1059
1964	1108	1097	1108	2514	1093	3167	2808	3156	4581	7588	6872	3985
1965	2618	1097	2931	18581	4273	4689	7042	4579	621	5107	5417	408
1966	1108	2087	3046	2928	1202	3732	441	3866	5915	7686	5972	2351
1967	3400	1097	1108	1108	3740	13838	1535	8464	7815	799	392	2511
1968	4602	2186	3054	7543	11193	6064	2077	392	6030	5928	5828	3042
1969	2845	1180	1108	11449	11887	5892	6840	12033	2993	848	4596	2150
1970	2776	3227	15801	35278	10069	3552	2655	392	3901	5714	6931	3220
1971	3160	1097	1108	1108	1093	10913	3024	7786	4817	7699	4441	408
1972	1108	1303	3076	3376	5977	6251	408	530	3783	4760	4989	756
1973	1108	1097	1108	8070	9524	5538	408	1715	6610	3381	5318	408
1974	1108	5869	9626	19970	5192	25693	7729	4976	5565	855	929	1390
1975	4290	2905	2263	2366	12636	12332	408	7477	5395	6724	392	408
1976	1656	3326	3404	3026	3388	2912	408	516	1963	4679	4796	3651
1977	1966	1900	1071	603	1020	873	1168	731	2957	3042	2514	935
1978	828	308	294	294	300	148	408	392	1991	2630	6106	408
1979	603	593	603	2597	11109	3847	621	392	6815	4823	5320	408
1980	1201	1097	1108	14188	17552	4742	408	392	408	789	4944	408
1981	1108	1097	1108	4576	3116	6386	408	392	4415	6281	6004	2333
1982	3400	593	14938	7743	17397	12836	18383	7330	3009	392	3799	408
1983	5760	8103	10401	12097	21136	31245	8145	11232	11036	2156	816	4480
1984	4477	13969	23745	5012	8009	8447	819	392	4436	6465	5952	3580
1985	1108	1097	1108	1734	1093	1162	408	3237	3752	7575	6246	3185
1986	3400	1900	1108	1108	20640	23334	408	392	2849	7851	6513	408
1987	1108	1097	1108	1108	1093	1108	2984	472	4058	6761	5668	3362
1988	3400	1900	603	603	565	1086	156	747	2835	2274	1821	1076
1989	1309	308	294	294	300	148	156	2419	3074	7489	6752	1678
1990	2758	1900	3651	294	300	148	787	148	262	1461	2620	2746
1991	1586	1144	955	852	671	148	156	148	835	1818	1208	1150
1992	294	1900	294	294	269	148	156	220	833	1040	1182	2273
1993	1389	1156	294	294	300	9483	2866	7020	3683	2837	6245	471
AVG:	1908	1748	3310	4531	5394	5607	2559	3119	4153	4769	4739	1422
MIN:	294	308	294	294	269	148	156	148	262	392	392	156
MAX:	5760	13969	23745	35278	22599	31245	18383	19473	11036	8627	7603	4480

Table 3.4.4-23. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1408	1900	2888	1108	4752	4201	604	16069	5860	2451	6278	408
1923	1108	1097	6949	4332	1093	3008	1288	1088	2977	5650	6198	408
1924	1108	1900	3720	1108	1034	2527	1642	2427	2821	3854	3746	2541
1925	407	308	649	294	300	2053	156	148	4120	562	5587	156
1926	334	308	1243	294	300	148	156	3623	3928	6085	5437	224
1927	1496	308	3522	294	11449	6513	4066	3279	1316	3596	6671	408
1928	1108	1097	2164	1108	4580	24397	408	2273	4081	4531	5989	2103
1929	1958	1624	1108	1108	1093	1108	156	1566	2402	1126	4207	1590
1930	706	433	1496	294	2229	148	684	493	4278	6898	6182	177
1931	563	370	1340	294	300	148	2078	1487	2774	7464	4222	2576
1932	1536	794	3785	294	269	1382	208	148	4672	768	450	156
1933	1260	1900	294	294	300	4190	156	148	1288	1141	943	699
1934	643	308	1890	294	1997	148	2228	1850	2676	2005	3056	3091
1935	1927	308	294	294	300	148	408	2290	7393	7212	6133	919
1936	3400	1900	2351	1108	1034	2815	408	392	795	7329	6280	819
1937	2915	1900	2410	1108	1093	1108	408	392	6235	6211	5257	970
1938	1108	1097	3427	4726	13937	18805	12427	16547	7459	1285	5319	408
1939	2445	2320	2747	3143	2075	4231	2520	3664	3330	6086	7555	3178
1940	3030	1900	603	603	565	15928	3165	1533	5443	8687	6679	408
1941	1592	1900	1108	4184	17039	10874	3145	7813	2333	1500	4934	408
1942	1124	2580	18371	13774	17043	2209	9895	5082	5211	7210	2594	408
1943	1108	2571	8134	18184	6903	15504	3526	392	4965	4038	6070	408
1944	1108	1097	1108	1108	1309	2552	408	392	6022	7323	6503	2799
1945	3216	1097	1108	1108	1093	1108	408	392	5887	7741	6576	408
1946	1108	1097	1811	4082	3772	5881	408	908	6147	8298	7344	1665
1947	2278	1900	1108	1108	1093	1108	1113	1128	4464	7406	7001	2435
1948	1506	1293	2061	603	1236	392	408	392	408	7577	6649	408
1949	1108	1097	1108	1108	1093	1108	156	148	4745	3566	3936	156
1950	518	308	294	294	300	148	408	692	4053	8342	7177	408
1951	1108	3368	14186	11091	10255	3948	408	865	6189	6867	6331	408
1952	1108	1097	2038	8331	11557	6514	16816	19473	8235	1579	392	2962
1953	4282	2243	8508	20423	1093	5597	3877	2562	4880	4542	4728	408
1954	1108	1900	2436	9210	7990	9562	5536	4998	4220	7004	6113	2709
1955	3400	1097	1108	1108	1093	1108	408	392	4318	2856	3155	408
1956	1108	1097	8155	20407	10756	5856	2555	10118	3713	4153	4326	408
1957	2108	1125	2657	3666	15337	6349	3340	392	5217	5160	3861	1967
1958	1108	1097	1108	1108	22267	11341	7056	9826	6032	1188	1685	1526
1959	4298	2232	2768	9399	8984	1678	803	1737	6501	8272	6662	2694
1960	3400	1900	2748	603	565	392	1496	392	3447	5393	3080	408
1961	603	593	717	603	606	477	1569	834	2156	7932	7586	2146
1962	2767	1900	294	294	300	148	156	1015	4536	7799	6621	3362
1963	603	593	603	1319	12268	7733	12484	2428	2543	4636	5945	1455
1964	1108	1097	1108	1108	1034	3059	2789	2791	4617	7548	6837	4154
1965	2637	1097	3160	18581	4273	4689	7042	4582	408	4771	5607	408
1966	1108	2444	3046	2928	1202	3732	441	3864	5914	7687	5973	2349
1967	3400	1097	1108	1108	3745	13838	1535	8464	7815	799	392	2511
1968	4602	2186	3054	7543	11193	6064	2006	392	5959	5855	5814	2971
1969	2807	1108	1108	11848	11887	5892	6840	12033	2993	916	5082	1794
1970	2776	3227	15801	35278	10069	3552	2655	392	3910	5693	6957	3234
1971	3137	1097	1108	1108	1093	10911	3024	7786	4817	7700	4467	408
1972	1108	1316	3044	3376	5977	6251	408	530	3782	4763	4992	751
1973	1108	1097	1108	8068	9524	5538	408	1715	6529	3424	5369	408
1974	1108	5853	9626	19970	5192	25693	7729	4976	5437	1245	886	867
1975	4290	2905	2263	2365	12636	12332	408	7477	5395	6895	392	408
1976	1524	3326	3404	3026	3388	2912	408	516	1856	4895	4664	3677
1977	1789	1900	1013	603	1021	784	1128	692	2916	3159	2476	850
1978	771	308	294	294	300	148	512	392	2005	542	6095	408
1979	603	593	603	3161	11109	3847	556	392	6758	4768	5265	436
1980	1133	1097	1108	14454	17552	4742	408	392	408	874	5101	408
1981	1108	1097	1108	4335	3116	6386	408	392	4359	6246	5967	2261
1982	3400	593	15139	7743	17397	12836	18383	7330	3009	427	4014	408
1983	5510	8103	10401	12097	21136	31245	8145	11232	11036	2156	816	4480
1984	4477	13969	23745	5012	8009	8447	819	392	4419	6411	5981	3602
1985	1108	1097	1108	1734	1093	1182	408	3226	3755	7577	6247	3186
1986	3400	1900	1108	1108	20641	23337	408	392	2813	7913	6609	408
1987	1108	1097	1108	1108	1093	1108	2941	467	3941	6722	5514	3207
1988	3400	1900	603	603	565	868	156	944	2478	2739	1935	1099
1989	1301	308	294	294	300	148	156	2421	3102	7484	6756	1765
1990	3007	1900	3728	294	300	148	747	148	199	1428	2510	2767
1991	1333	1210	956	904	729	148	156	148	796	1858	1130	1048
1992	294	1795	294	294	269	148	156	276	826	1035	1159	2273
1993	1201	976	294	294	300	10301	2866	7020	3683	8157	6366	467
AVG:	1886	1731	3309	4526	5400	5623	2550	3105	4111	4792	4817	1453
MIN:	294	308	294	294	269	148	156	148	199	427	392	156
MAX:	5510	13969	23745	35278	22267	31245	18383	19473	11036	8687	7586	4480

Table 3.4.4-24. Simulated Feather River Flow Below Thermalito (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	47	0	0	0	-52	0	0	0	0	21	76	0
1923	0	0	-96	0	0	0	0	0	89	99	20	0
1924	0	0	192	0	0	44	49	171	152	-76	-76	-552
1925	46	0	0	0	0	-33	0	0	0	5	72	0
1926	63	0	0	0	0	0	0	44	47	17	50	0
1927	171	0	0	0	-232	0	0	0	0	-37	77	0
1928	0	0	0	0	-43	0	0	25	16	-25	24	53
1929	14	6	0	0	0	0	0	92	-40	51	-352	223
1930	32	0	0	0	0	0	209	87	-226	-93	-209	-68
1931	-106	-162	-13	0	0	0	6	16	-64	-907	70	-90
1932	-233	162	2	0	0	0	-200	0	9	12	3	0
1933	-114	0	0	0	0	0	0	0	50	53	39	70
1934	-12	0	0	0	0	0	46	51	351	1414	853	-74
1935	47	0	0	0	0	0	0	32	-96	-1	-26	345
1936	0	0	194	0	0	-904	0	0	102	14	36	0
1937	312	0	-10	0	0	0	0	0	34	-60	-276	62
1938	0	0	-236	0	0	0	0	0	0	19	75	0
1939	-94	0	0	0	0	0	-45	69	61	57	55	105
1940	108	0	0	0	0	-406	0	27	68	20	19	0
1941	110	0	0	-242	0	0	0	0	0	19	86	0
1942	-105	0	0	0	0	0	0	0	0	36	75	0
1943	0	-154	0	0	0	0	0	32	75	1	71	0
1944	0	0	0	0	-29	-149	0	0	-1	15	13	-25
1945	21	0	0	0	0	0	0	0	20	22	46	0
1946	0	0	-85	0	0	0	0	0	19	19	19	-336
1947	-40	0	0	0	0	0	7	2	62	10	2	-30
1948	14	-4	-76	0	-3	0	0	0	0	20	16	0
1949	0	0	0	0	0	0	0	0	64	-9	-9	0
1950	54	0	0	0	0	0	0	-904	154	21	28	0
1951	92	-298	0	0	0	0	0	0	0	184	78	0
1952	0	0	-261	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	11	80	0
1954	0	-259	0	0	0	0	0	14	14	6	-124	57
1955	0	0	0	0	0	0	0	0	4	4	-4	0
1956	0	0	10	0	0	0	0	0	0	19	134	0
1957	0	0	-153	0	0	0	14	0	24	24	8	149
1958	0	0	0	0	-238	0	0	0	0	19	103	-183
1959	0	0	0	0	0	0	182	216	57	355	53	224
1960	0	0	27	0	0	0	78	0	-458	19	-50	0
1961	0	0	0	0	0	0	8	-37	-112	17	27	83
1962	-27	0	0	0	0	0	0	83	199	259	51	100
1963	0	0	0	0	-666	0	0	0	103	110	81	650
1964	0	0	0	-919	1	0	183	448	92	54	44	109
1965	-80	0	-819	0	0	0	0	37	124	57	70	0
1966	0	-292	0	0	0	0	0	15	28	26	-7	20
1967	0	0	0	0	-112	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	83	0	93	100	18	98
1969	31	46	0	-457	0	0	0	0	0	17	121	-104
1970	0	0	0	0	0	0	15	0	41	-54	97	77
1971	-81	0	0	0	0	-89	0	0	0	85	130	0
1972	0	134	-295	0	0	0	0	43	15	8	9	51
1973	0	0	0	-123	0	0	0	0	550	-2784	23	0
1974	0	1967	0	0	0	0	0	0	26	34	72	-285
1975	0	0	0	0	0	0	0	0	0	79	0	0
1976	405	0	0	0	0	0	0	0	-35	286	154	12
1977	127	0	-34	0	-67	36	48	54	55	-205	44	67
1978	58	0	0	0	0	0	-211	0	8	2102	67	0
1979	0	0	0	-656	0	0	48	0	72	71	71	-24
1980	93	0	0	-326	0	0	0	0	0	46	90	0
1981	0	0	0	-136	0	0	0	0	75	39	50	99
1982	0	0	-251	0	0	0	0	0	0	0	76	0
1983	-76	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	10	17	37	36
1985	0	0	0	-3	0	-113	0	-2	29	21	18	27
1986	0	0	0	0	-3	-87	0	0	11	16	-3	0
1987	0	0	0	0	0	0	67	29	-20	52	-111	84
1988	0	0	0	0	0	-58	0	-546	396	67	222	23
1989	39	0	0	0	0	0	0	10	-22	22	11	-26
1990	-468	0	-144	0	0	0	48	0	84	45	76	-116
1991	208	-41	-1	-51	-61	0	0	0	-258	-19	96	407
1992	0	113	0	0	0	0	0	-46	23	19	40	1
1993	199	186	0	0	0	-823	0	0	0	-35	-114	0
AVG:	12	19	-28	-40	-21	-36	9	1	30	27	38	18
MIN:	-468	-298	-819	-919	-666	-904	-211	-904	-458	-2784	-352	-552
MAX:	405	1967	194	0	1	44	209	448	550	2102	853	650

Table 3.4.4-25. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	40	0	0	0	-44	0	0	0	0	93	366	0
1923	0	0	-458	0	0	0	0	0	-201	201	49	0
1924	0	0	118	0	0	5	9	67	21	-28	2	83
1925	-7	0	0	0	0	-32	0	0	67	55	45	0
1926	-30	0	0	0	0	0	0	7	2	-24	87	0
1927	-173	0	0	0	-319	0	0	0	0	-259	360	0
1928	0	0	0	0	-108	0	0	-214	50	130	-28	79
1929	-1	64	0	0	0	0	0	20	-22	12	-247	246
1930	-18	0	0	0	0	0	36	23	-43	32	-5	-48
1931	12	-214	-4	0	0	0	9	15	43	133	7	0
1932	-14	1	0	0	0	0	-194	0	6	12	4	0
1933	-146	0	0	0	0	0	0	0	12	12	3	0
1934	-5	0	0	0	0	0	8	12	14	15	99	-11
1935	5	0	0	0	0	0	0	24	-145	10	0	510
1936	0	0	74	0	0	-524	0	0	-326	78	122	411
1937	427	0	-20	0	0	0	0	0	-70	-45	-354	277
1938	0	0	-400	0	0	0	0	0	0	86	531	0
1939	-615	0	0	0	0	0	-32	5	81	7	7	25
1940	36	0	0	0	0	-126	0	-173	-49	79	78	0
1941	312	0	0	-250	0	0	0	0	0	93	550	0
1942	-641	0	0	0	0	0	0	0	0	1632	374	0
1943	0	-1611	0	0	0	0	0	-7	24	-346	98	0
1944	0	0	0	0	246	0	0	0	-3	16	14	-100
1945	-75	0	0	0	0	0	0	0	-150	78	254	0
1946	0	0	-11	0	0	0	0	0	54	61	61	404
1947	-208	0	0	0	0	0	3	2	-218	7	10	-76
1948	-186	-41	-153	0	-5	0	0	0	0	23	17	0
1949	0	0	0	0	0	0	0	0	167	-7	-7	0
1950	-20	0	0	0	0	0	0	-697	-337	78	137	0
1951	0	113	0	0	0	0	0	0	-9	294	165	0
1952	0	0	-449	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	3	95	0
1954	0	-294	0	0	0	0	0	14	14	45	-163	57
1955	0	0	0	0	0	0	0	0	4	4	-4	0
1956	0	0	6	0	0	0	0	0	0	-4158	2783	0
1957	1001	27	333	1	1	1	16	0	-254	-458	1	1023
1958	0	0	0	0	-569	0	0	0	0	92	506	-131
1959	0	0	0	0	0	0	27	71	-1	271	14	66
1960	0	0	-8	0	0	0	12	0	-130	13	-11	0
1961	0	0	0	0	0	0	12	-33	-31	17	16	49
1962	0	0	0	0	0	0	0	20	56	-97	15	42
1963	0	0	0	0	-57	0	0	0	455	923	118	1046
1964	0	0	0	-2325	-59	-108	164	82	129	14	8	278
1965	-61	0	-590	0	0	0	0	40	-88	-278	260	0
1966	0	64	0	0	0	0	0	14	27	27	-6	19
1967	0	0	0	0	-106	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	12	0	23	27	4	26
1969	-7	-26	0	-58	0	0	0	0	0	85	608	-460
1970	0	0	0	0	0	0	15	0	50	-75	122	91
1971	-104	0	0	0	0	-92	0	0	0	87	156	0
1972	0	146	-326	0	0	0	0	43	15	11	12	45
1973	0	0	0	-124	0	0	0	0	469	-2741	75	0
1974	0	1950	0	0	0	0	0	0	-102	423	28	-808
1975	0	0	0	0	0	0	0	0	0	250	0	0
1976	272	0	0	0	0	0	0	0	-143	502	23	39
1977	-51	0	-93	0	-66	-53	9	16	14	-87	6	-18
1978	0	0	0	0	0	0	-107	0	22	14	56	0
1979	0	0	0	-92	0	0	-17	0	15	16	16	4
1980	26	0	0	-59	0	0	0	0	0	131	247	0
1981	0	0	0	-377	0	0	0	0	20	4	14	27
1982	0	0	-51	0	0	0	0	0	0	35	292	0
1983	-326	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	-7	-37	66	58
1985	0	0	0	-3	0	-93	0	-13	32	23	19	29
1986	0	0	0	0	-3	-84	0	0	-25	78	93	0
1987	0	0	0	0	0	0	24	23	-136	13	-264	-71
1988	0	0	0	0	0	-276	0	-349	39	532	336	46
1989	32	0	0	0	0	0	0	12	6	17	15	62
1990	-219	0	-67	0	0	0	8	0	20	12	-33	-95
1991	-45	25	0	1	-3	0	0	0	-297	22	18	306
1992	0	8	0	0	0	0	0	10	17	14	16	1
1993	10	7	0	0	0	-5	0	0	0	5286	7	-5
AVG:	-11	3	-29	-46	-15	-19	0	-13	-11	50	116	49
MIN:	-641	-1611	-590	-2325	-569	-524	-194	-697	-337	-4158	-354	-808
MAX:	1001	1950	333	1	246	5	164	82	469	5286	2783	1046

Table 3.4.4-26. Simulated Feather River Flow at the Mouth (CFS)
Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3061	2777	1708	5278	8624	13295	10520	28356	20704	5784	6765	3347
1923	2070	1892	6606	12115	3116	5175	9437	5680	6312	6473	6689	2620
1924	2462	2764	4012	4522	3607	2767	3715	2984	3098	4144	6301	2893
1925	1376	1166	894	4178	12107	8934	4443	3278	6084	2254	6404	2549
1926	1810	1247	894	5670	5968	5238	5263	6025	4551	7495	5519	2493
1927	2669	6988	894	9876	32757	18440	14467	11303	7031	6334	7350	2895
1928	2431	2686	1708	8858	3691	44273	7881	6520	4947	4695	7423	4484
1929	3663	2876	1813	4822	3006	3480	1745	2458	3231	3674	4795	1863
1930	1572	908	894	8302	900	10303	5289	4165	6349	8249	7641	3165
1931	1843	1944	2593	1786	2367	1004	3907	2293	3432	7524	6456	3009
1932	2206	1258	894	9659	5748	748	3351	5129	8685	2907	1609	2778
1933	2729	1970	1616	2229	3883	748	3204	759	2981	3734	1633	1887
1934	1666	1272	894	7001	900	2610	5289	2182	3168	4219	2980	3437
1935	2344	1042	1604	8843	1488	6889	9573	11207	12926	8984	7236	3098
1936	5017	3028	2924	9717	14736	16411	8951	5293	5046	8468	7176	2811
1937	3757	2517	3508	3514	13044	13830	7606	6059	9390	7560	6650	3025
1938	2333	3249	15150	11963	25885	36192	27152	27309	19459	4704	6190	2658
1939	4035	3385	4024	4941	3177	5764	3884	4682	4040	7513	7749	5268
1940	3768	2454	1250	6633	5488	39483	32564	8066	8511	9733	7528	3034
1941	2352	4408	5667	14119	28481	23501	6518	15622	6986	4336	5611	2958
1942	2631	4042	21077	18610	34503	10439	22414	14346	12996	8362	3166	2838
1943	2578	5969	11525	25555	16725	25929	11920	7165	7989	5186	6963	2639
1944	2750	2000	2415	4122	7033	7761	1961	2014	7791	8122	7869	5279
1945	4095	3891	3981	3585	11310	7316	3339	2812	8311	8465	7275	2732
1946	1933	3419	6230	16585	8849	9489	3886	3747	7452	8877	8116	3800
1947	4025	3511	3725	2965	4450	5489	4156	2012	5647	7773	7288	4886
1948	2767	2486	3112	3267	2407	2068	7710	9729	5326	9485	8231	3529
1949	2881	1851	2680	2879	2778	7721	3276	2391	5590	4894	4655	2809
1950	1908	1236	1131	4997	8196	4624	5464	5407	7907	9337	8187	3328
1951	2062	13577	32198	26090	20921	11682	5515	5019	7166	6562	7573	3286
1952	2700	3544	4704	25080	21893	16556	27795	35001	17892	5188	2548	5510
1953	5990	3190	10716	21817	8627	9467	6003	8254	9988	6481	5435	3345
1954	2672	3684	3723	9497	15615	17388	13174	7858	5274	6799	7374	5404
1955	5105	2227	4355	5289	2634	2230	2132	2070	4836	3616	3259	2872
1956	2113	1847	8510	43053	19059	16965	7883	17700	8654	9582	1792	2971
1957	2099	2210	2928	5901	14704	18278	6441	4959	8371	5732	5269	3142
1958	2754	1700	3446	4365	28203	31102	25302	20259	12264	3765	2218	4454
1959	6027	3042	3329	12290	18000	5338	2710	3259	7367	7694	7076	4333
1960	4320	2536	3633	2551	6183	4539	2837	1667	4354	6853	3718	2735
1961	2140	2358	1203	2262	5545	992	3788	2498	2994	7796	7412	4589
1962	3868	2517	1115	1943	12202	6973	3097	2760	6049	7708	7808	5721
1963	10583	4062	6085	1203	26999	12795	26600	12648	6411	4673	7088	3251
1964	2743	5433	1977	9392	2980	4267	5274	4425	5783	8410	7950	6303
1965	3685	3217	6263	43831	12625	9096	12753	10593	4734	6244	7370	3553
1966	2967	4890	5651	7814	5737	6473	4535	6257	6884	8401	6546	4627
1967	4719	2825	7984	4898	21337	20562	9089	15192	17277	5158	3039	4793
1968	5969	2844	4364	11212	15801	16953	3535	1860	6786	6648	5566	4426
1969	3733	2347	3619	31739	31277	19425	15575	23380	7878	2156	5780	4950
1970	3808	3917	23250	62905	40242	13856	4537	1659	5005	6347	7997	5493
1971	4254	2108	14867	9076	7302	15315	11787	12547	9471	10628	6291	3896
1972	3169	2280	6069	6861	11156	10325	3912	3065	5454	6590	6962	4275
1973	2952	5360	5986	23223	25474	20362	6183	6183	9055	7884	7620	3866
1974	2886	10666	19679	36532	15687	36109	31037	9711	10915	3943	2950	5319
1975	5091	3327	4062	4924	25350	20547	6970	12790	10924	9504	2802	4176
1976	3356	4596	5464	5217	5074	4692	4097	992	2433	6526	6590	4967
1977	2813	2710	2300	2676	1873	2054	2663	1259	2873	3789	3798	1306
1978	1294	1334	2468	12360	8556	9472	6091	5622	6422	2865	8145	3646
1979	2348	2092	1921	9406	19124	11662	3635	5053	8292	6229	7350	3906
1980	2785	2855	3732	34055	37356	22219	8353	5994	4086	3039	6218	2993
1981	2817	1946	2269	6343	9616	10221	4933	3050	5364	7487	7542	4905
1982	4523	5804	30642	31647	36911	28442	52040	16195	9924	4326	5796	3619
1983	8496	12918	20780	16772	36643	53959	23787	22617	24021	6939	5005	7216
1984	6682	22679	46696	23812	16327	15454	6677	5369	7227	7638	8120	5682
1985	1786	3373	3938	3925	4994	3757	3555	5345	4994	9234	8255	6963
1986	4887	3676	5356	7500	41524	55071	7597	3054	4733	8908	8340	3855
1987	3126	1853	2173	3877	5902	4552	4856	2816	4573	7180	6496	5645
1988	4477	2869	2254	4640	2312	1468	3690	3120	2748	3947	2211	3043
1989	2178	1485	1635	2590	2409	13619	9801	5855	3855	8201	8293	4087
1990	4583	2879	4223	5747	4731	3421	5004	1196	1792	2357	6476	4969
1991	1709	1621	894	2150	1945	8806	4217	2822	3299	5365	2742	2715
1992	1920	2032	1298	3182	9956	3377	3686	2064	2212	2982	838	2502
1993	1730	1748	1889	13377	12948	16236	14632	11540	7919	4361	6910	2501
AVG:	3315	3506	6182	11522	13180	13278	9120	7563	7285	6320	5973	3804
MIN:	1294	908	894	1203	900	748	1745	759	1792	2156	838	1306
MAX:	10583	22679	46696	62905	41524	55071	52040	35001	24021	10628	8340	7216

Table 3.4.4-27. Simulated Feather River Flow at the Mouth (CFS)
Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3108	2776	1708	5279	8572	13296	10520	28356	20704	5804	6840	3347
1923	2070	1892	6510	12116	3116	5175	9437	5680	6401	6572	6709	2620
1924	2462	2764	4205	4521	3608	2811	3764	3155	3249	4068	6226	2342
1925	1425	1166	894	4178	12107	8900	4443	3278	6084	2259	6476	2549
1926	1873	1246	894	5670	5968	5238	5263	6070	4597	7511	5569	2493
1927	2840	6987	894	9876	32525	18441	14467	11303	7031	6297	7428	2895
1928	2431	2686	1708	8858	3648	44273	7881	6545	4963	4670	7447	4536
1929	3676	2881	1813	4822	3006	3480	1745	2550	3191	3725	4443	2088
1930	1603	908	894	8302	900	10303	5498	4251	6123	8233	7357	3098
1931	1737	1782	2580	1786	2367	1004	3913	2309	3368	6672	6476	2919
1932	1973	1421	894	9658	5747	748	3151	5130	8694	2918	1611	2778
1933	2615	1970	1616	2229	3883	748	3205	759	3030	3786	1671	1956
1934	1653	1272	894	7001	900	2610	5335	2233	3519	5632	3826	3359
1935	2392	1044	1606	8844	1489	6890	9574	11239	12830	8984	7210	3442
1936	5016	3029	3119	9716	14736	15507	8957	5293	5148	8481	7211	2811
1937	4069	2515	3498	3515	13044	13830	7606	6059	9424	7500	6375	3089
1938	2332	3249	14914	11964	25885	36192	27152	27309	19459	4723	6264	2658
1939	3942	3386	4024	4941	3177	5764	3839	4751	4100	7569	7804	5373
1940	3875	2454	1250	6633	5488	39077	32565	8093	8579	9753	7548	3034
1941	2462	4407	5668	13878	28482	23500	6518	15622	6986	4355	5698	2958
1942	2526	4043	21077	18610	34503	10439	22414	14346	12996	8398	3241	2838
1943	2578	5815	11526	25554	16725	25929	11920	7198	8064	5186	7034	2638
1944	2750	2001	2415	4122	7004	7612	1961	2014	7790	8137	7882	5253
1945	4117	3891	3981	3585	11310	7316	3339	2812	8332	8487	7321	2732
1946	1933	3419	6145	16585	8849	9489	3886	3747	7471	8896	8136	3464
1947	3986	3511	3724	2965	4450	5489	4163	2014	5709	7783	7290	4856
1948	2782	2482	3036	3267	2404	2068	7710	9729	5326	9506	8247	3529
1949	2881	1852	2680	2879	2778	7721	3276	2391	5654	4884	4646	2809
1950	1962	1236	1131	4997	8196	4624	5464	4503	8066	9356	8214	3327
1951	2154	13277	32200	26090	20921	11682	5514	5019	7165	6746	7650	3285
1952	2700	3544	4443	25081	21893	16556	27795	35001	17891	5188	2548	5510
1953	5990	3190	10716	21817	8627	9467	6003	8254	9988	6492	5516	3345
1954	2672	3424	3725	9497	15615	17387	13174	7873	5288	6804	7262	5462
1955	5104	2227	4355	5289	2634	2230	2132	2071	4841	3620	3255	2872
1956	2113	1847	8520	43053	19060	16965	7883	17700	8654	9602	1926	2971
1957	2099	2210	2775	5902	14704	18278	6455	4959	8395	5756	5277	3291
1958	2753	1700	3446	4365	27965	31103	25301	20259	12264	3784	2321	4270
1959	6028	3042	3329	12290	18000	5338	2892	3474	7423	8049	7128	4557
1960	4319	2536	3660	2552	6183	4539	2916	1666	3896	6875	3668	2735
1961	2140	2358	1203	2262	5545	992	3796	2461	2883	7779	7439	4671
1962	3841	2517	1115	1943	12202	6973	3097	2844	6247	7966	7857	5821
1963	10583	4062	6085	1203	26333	12799	26600	12647	6514	4782	7169	3901
1964	2740	5434	1978	8474	2986	4267	5457	4871	5873	8464	7994	6412
1965	3605	3218	5445	43835	12625	9095	12752	10631	4858	6300	7439	3553
1966	2967	4598	5653	7814	5736	6473	4535	6272	6912	8427	6539	4647
1967	4719	2825	7984	4898	21226	20563	9089	15192	17277	5158	3039	4793
1968	5969	2844	4364	11212	15801	16953	3618	1860	6879	6748	5583	4524
1969	3764	2393	3619	31282	31279	19425	15575	23380	7877	2192	5901	4845
1970	3809	3918	23250	62905	40242	13856	4552	1659	5046	6293	8094	5569
1971	4173	2109	14867	9076	7303	15226	11787	12547	9471	10713	6421	3896
1972	3169	2415	5773	6863	11156	10325	3912	3108	5469	6598	6971	4325
1973	2952	5360	5986	23100	25475	20362	6183	6183	9606	5098	7658	3864
1974	2884	12631	19667	36533	15688	36110	31037	9712	10942	3977	3022	5034
1975	5093	3327	4062	4924	25350	20547	6970	12790	10924	9583	2802	4176
1976	3760	4594	5464	5217	5074	4692	4097	992	2398	6694	6861	4978
1977	2940	2709	2266	2677	1806	2090	2711	1313	2928	3850	3576	1374
1978	1352	1333	2468	12360	8557	9472	5880	5623	6431	4967	8201	3648
1979	2350	2093	1922	8751	19128	11662	3683	5053	8364	6300	7421	3882
1980	2878	2855	3732	33729	37357	22219	8353	5994	4086	3085	6308	2992
1981	2817	1946	2269	6206	9617	10221	4933	3050	5440	7534	7592	5004
1982	4522	5805	30391	31648	36911	28443	52040	16195	9924	4326	5872	3619
1983	8420	12918	20780	16772	36643	53959	23787	22617	24021	6939	5005	7216
1984	6683	22679	46696	23812	16327	15454	6695	5369	7237	7655	8157	5718
1985	1786	3373	3938	3922	4994	3644	3555	5343	5023	9255	8273	6990
1986	4887	3676	5356	7500	41521	54984	7597	3054	4744	8924	8336	3855
1987	3126	1853	2173	3877	5902	4552	4924	2844	4553	7232	6381	5684
1988	4477	2869	2254	4640	2312	1410	3690	2574	3147	4012	2432	3065
1989	2218	1485	1635	2590	2409	13619	9802	5865	3833	8224	8324	4061
1990	4115	2882	4078	5748	4731	3421	5052	1195	1876	2401	6552	4852
1991	1918	1579	894	2099	1884	8806	4217	2822	3049	5347	2838	3122
1992	1918	2145	1298	3182	9956	3378	3687	2020	2236	3002	878	2502
1993	1929	1934	1889	13378	12949	15413	14637	11539	7919	4326	6796	2501
AVG:	3326	3525	6153	11482	13160	13242	9130	7564	7315	6350	6007	3822
MIN:	1352	908	894	1203	900	748	1745	759	1876	2192	878	1374
MAX:	10583	22679	46696	62905	41521	54984	52040	35001	24021	10713	8336	7216

Table 3.4.4-28. Simulated Feather River Flow at the Mouth (CFS)
Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3101	2777	1708	5279	8580	13296	10520	28356	20704	5877	7130	3346
1923	2070	1893	6149	12118	3116	5175	9437	5680	6111	6675	6737	2620
1924	2462	2764	4130	4521	3608	2772	3724	3051	3119	4116	6303	2976
1925	1368	1166	894	4178	12107	8901	4443	3278	6151	2308	6450	2549
1926	1781	1247	894	5670	5968	5238	5263	6032	4553	7471	5607	2493
1927	2496	6989	894	9875	32438	18441	14467	11303	7030	6075	7712	2893
1928	2432	2686	1708	8858	3583	44273	7881	6306	4998	4824	7394	4564
1929	3661	2940	1813	4822	3006	3480	1745	2478	3209	3686	4548	2110
1930	1552	908	894	8302	900	10303	5325	4188	6306	8273	7645	3117
1931	1855	1729	2590	1786	2367	1004	3916	2308	3474	7656	6462	3009
1932	2192	1259	894	9659	5748	748	3157	5130	8690	2919	1613	2779
1933	2583	1970	1616	2229	3883	748	3204	759	2992	3746	1636	1886
1934	1661	1272	894	7001	900	2610	5297	2194	3183	4234	3079	3425
1935	2349	1042	1605	8843	1488	6889	9573	11231	12781	8995	7235	3608
1936	5015	3029	2999	9717	14736	15887	8954	5293	4720	8548	7297	3221
1937	4182	2515	3488	3515	13044	13831	7606	6059	9321	7515	6296	3305
1938	2331	3249	14749	11965	25885	36192	27151	27309	19459	4808	6720	2655
1939	3420	3389	4024	4941	3177	5764	3852	4687	4121	7520	7757	5293
1940	3804	2454	1250	6633	5488	39357	32564	7893	8464	9813	7605	3034
1941	2664	4406	5668	13869	28482	23500	6518	15622	6986	4429	6161	2955
1942	1991	4046	21076	18610	34503	10439	22414	14346	12996	9994	3532	2838
1943	2580	4359	11535	25554	16725	25928	11919	7159	8013	4839	7063	2638
1944	2750	2000	2415	4122	7279	7759	1961	2014	7789	8138	7883	5178
1945	4022	3891	3980	3585	11310	7316	3339	2812	8162	8543	7469	2731
1946	1933	3419	6219	16585	8849	9489	3886	3747	7506	8938	8177	4204
1947	3815	3512	3725	2966	4451	5490	4158	2014	5429	7781	7298	4810
1948	2582	2446	2959	3267	2402	2068	7710	9729	5326	9508	8247	3529
1949	2881	1851	2680	2879	2778	7721	3276	2391	5757	4886	4648	2809
1950	1888	1236	1131	4997	8196	4624	5464	4711	7574	9416	8323	3326
1951	2062	13689	32197	26090	20921	11682	5515	5020	7157	6856	7736	3285
1952	2701	3544	4255	25083	21893	16556	27794	35000	17891	5188	2547	5510
1953	5990	3190	10716	21817	8627	9467	6003	8254	9988	6484	5531	3344
1954	2672	3390	3725	9497	15615	17387	13174	7873	5287	6843	7223	5462
1955	5104	2227	4355	5289	2634	2230	2132	2071	4840	3620	3255	2872
1956	2113	1847	8517	43053	19060	16965	7883	17700	8654	5425	4597	2952
1957	3099	2231	3262	5901	14706	18279	6457	4959	8117	5493	5055	4166
1958	2748	1700	3446	4365	27634	31105	25301	20259	12264	3856	2724	4320
1959	6028	3042	3330	12290	18000	5338	2737	3330	7365	7965	7089	4399
1960	4320	2536	3626	2552	6183	4539	2849	1667	4224	6867	3707	2736
1961	2140	2358	1203	2262	5545	992	3801	2465	2964	7798	7429	4638
1962	3868	2517	1115	1943	12202	6973	3097	2781	6104	7660	7823	5763
1963	10583	4062	6085	1203	26942	12796	26600	12648	6866	5594	7260	4298
1964	2739	5435	1979	7068	2935	4159	5438	4505	5911	8423	7958	6581
1965	3623	3218	5674	43834	12625	9095	12752	10634	4646	5966	7631	3552
1966	2967	4954	5651	7814	5737	6473	4536	6271	6911	8428	6540	4646
1967	4719	2825	7984	4898	21231	20563	9089	15192	17277	5158	3039	4793
1968	5969	2844	4364	11212	15801	16953	3547	1860	6809	6676	5570	4452
1969	3726	2321	3619	31681	31278	19425	15575	23380	7878	2260	6387	4487
1970	3811	3918	23250	62905	40242	13856	4551	1659	5055	6272	8119	5583
1971	4149	2109	14867	9076	7303	15224	11788	12547	9471	10714	6447	3895
1972	3169	2427	5742	6863	11156	10325	3912	3108	5468	6602	6974	4320
1973	2952	5360	5986	23098	25475	20362	6183	6183	9525	5141	7710	3864
1974	2885	12615	19668	36533	15688	36110	31037	9712	10814	4367	2976	4511
1975	5096	3327	4061	4924	25350	20546	6970	12790	10923	9754	2801	4176
1976	3628	4595	5464	5217	5074	4692	4097	992	2290	6784	6758	5005
1977	2763	2710	2207	2677	1807	2001	2671	1275	2887	3697	3809	1288
1978	1295	1334	2468	12360	8557	9472	5984	5623	6445	2879	8201	3646
1979	2348	2092	1922	9315	19124	11662	3618	5053	8307	6245	7366	3910
1980	2810	2855	3732	33996	37356	22219	8353	5994	4086	3170	6465	2992
1981	2817	1946	2269	5966	9619	10221	4933	3050	5384	7497	7555	4932
1982	4523	5804	30592	31647	36911	28443	52040	16195	9924	4362	6087	3618
1983	8170	12920	20780	16772	36643	53959	23787	22617	24021	6939	5005	7216
1984	6683	22679	46696	23812	16327	15454	6695	5369	7220	7601	8186	5740
1985	1786	3373	3938	3922	4994	3664	3555	5332	5027	9257	8274	6992
1986	4887	3676	5356	7500	41521	54987	7597	3054	4708	8986	8433	3855
1987	3126	1853	2173	3877	5902	4552	4881	2839	4437	7194	6117	5552
1988	4477	2869	2254	4639	2312	1192	3691	2771	2789	4478	2544	3087
1989	2210	1485	1635	2590	2409	13619	9802	5867	3861	8218	8312	4149
1990	4364	2880	4156	5748	4731	3421	5013	1196	1812	2368	6443	4875
1991	1665	1646	894	2151	1942	8806	4217	2822	3009	5388	2760	3021
1992	1919	2040	1298	3182	9956	3377	3687	2074	2228	2996	854	2502
1993	1740	1755	1890	13377	12948	16231	14633	11540	7919	9577	7014	2501
AVG:	3304	3509	6153	11477	13165	13259	9121	7550	7273	6369	6088	3853
MIN:	1295	908	894	1203	900	748	1745	759	1812	2260	854	1288
MAX:	10583	22679	46696	62905	41521	54987	52040	35000	24021	10714	8433	7216

Table 3.4.4-29. Simulated Feather River Flow at the Mouth (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	47	0	0	0	-52	0	0	0	0	21	75	0
1923	0	0	-96	1	0	0	0	0	89	99	20	0
1924	0	0	192	-1	0	44	49	171	151	-76	-76	-551
1925	49	0	0	0	0	-34	0	0	0	5	72	0
1926	63	0	0	0	0	0	0	45	46	16	50	0
1927	171	-1	0	0	-232	1	0	0	0	-37	77	0
1928	0	0	0	0	-43	0	0	25	16	-25	24	52
1929	13	6	0	0	0	0	0	92	-40	51	-352	225
1930	30	0	0	0	0	0	209	86	-227	-16	-285	-67
1931	-106	-162	-13	0	0	0	6	16	-64	-852	21	-91
1932	-233	163	0	-1	-1	0	-200	1	9	11	2	-1
1933	-114	1	0	0	0	0	0	0	50	52	37	69
1934	-12	0	0	0	0	0	46	51	351	1413	846	-78
1935	48	2	2	1	1	1	1	32	-96	0	-26	345
1936	-2	0	194	-1	0	-903	5	-1	102	13	35	0
1937	311	-2	-9	0	0	0	0	0	34	-60	-275	64
1938	0	0	-236	1	0	0	0	0	0	19	74	0
1939	-94	1	0	0	0	0	-45	70	60	56	55	104
1940	107	0	0	0	0	-405	2	27	68	19	19	0
1941	110	-1	0	-241	2	0	0	0	0	19	86	0
1942	-105	1	0	0	0	0	0	0	0	36	75	0
1943	0	-154	1	0	0	0	0	32	75	0	71	0
1944	0	0	0	0	-29	-149	1	0	-1	15	13	-25
1945	21	0	0	0	0	0	0	0	20	22	46	0
1946	0	0	-85	1	0	0	0	0	19	19	19	-336
1947	-39	0	0	0	0	0	7	2	62	10	2	-30
1948	14	-4	-76	0	-3	0	0	0	0	20	16	0
1949	0	0	0	0	0	0	0	0	64	-9	-9	0
1950	54	0	0	0	0	0	0	-904	159	19	27	-1
1951	91	-299	1	-1	0	0	0	0	0	184	77	0
1952	0	0	-261	1	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	11	80	0
1954	0	-259	1	0	0	0	0	14	14	6	-112	58
1955	0	0	0	0	0	0	0	0	5	4	-4	0
1956	0	0	10	0	0	0	0	0	0	19	134	-1
1957	0	0	-153	1	0	0	14	0	24	24	8	149
1958	-1	0	0	0	-238	1	0	0	0	19	103	-183
1959	1	0	0	0	0	0	182	215	56	355	52	224
1960	-1	1	27	0	0	0	78	0	-458	21	-50	0
1961	0	0	0	0	0	0	8	-37	-111	-17	27	82
1962	-28	0	0	0	0	0	0	83	198	258	49	100
1963	0	0	0	0	-665	4	0	0	103	109	81	650
1964	-3	1	1	-918	6	0	183	446	89	54	44	109
1965	-81	1	-819	4	-1	0	0	37	124	57	70	0
1966	0	-292	2	0	0	0	0	15	28	26	-7	21
1967	0	0	0	0	-112	1	0	0	0	0	0	0
1968	0	0	0	0	0	0	83	0	93	100	17	98
1969	31	47	0	-457	2	0	0	0	0	36	121	-105
1970	1	0	0	0	0	0	15	0	41	-54	97	76
1971	-81	1	0	0	0	-89	1	0	0	85	130	-1
1972	0	134	-295	2	0	0	0	43	15	8	9	51
1973	0	0	0	-123	1	0	0	0	550	-2786	39	-2
1974	-2	1965	-11	1	1	1	1	0	26	34	72	-285
1975	2	0	0	0	0	0	0	0	0	79	0	0
1976	405	-2	1	1	0	0	0	0	-35	168	271	11
1977	127	0	-34	1	-67	36	48	54	55	61	-221	68
1978	58	0	0	0	0	0	-211	1	8	2102	56	2
1979	2	1	1	-655	5	0	48	0	72	71	71	-25
1980	94	0	0	-326	1	0	0	0	0	46	90	0
1981	0	0	0	-136	1	0	0	0	76	47	50	99
1982	0	0	-251	1	0	0	0	0	0	0	76	0
1983	-76	1	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	10	17	37	35
1985	0	0	0	-3	0	-112	1	-2	29	21	18	27
1986	0	0	0	0	-3	-87	0	0	11	16	-3	0
1987	0	0	0	0	0	0	68	28	-20	52	-114	39
1988	0	0	0	0	0	-58	0	-546	400	65	222	21
1989	39	0	0	0	0	0	0	11	-22	23	31	-26
1990	-468	3	-144	1	0	0	48	0	84	44	76	-117
1991	209	-42	0	-51	-61	0	0	0	-251	-17	96	407
1992	-2	113	-1	0	0	1	0	-44	24	20	40	0
1993	199	186	0	1	1	-823	5	0	0	-35	-114	0
AVG:	12	20	-28	-40	-21	-36	9	1	30	30	34	17
MIN:	-468	-299	-819	-918	-665	-903	-211	-904	-458	-2786	-352	-551
MAX:	405	1965	194	4	6	44	209	446	550	2102	846	650

Table 3.4.4-30. Simulated Feather River Flow at the Mouth (CFS) Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	40	0	0	0	-44	0	0	0	0	93	365	-2
1923	0	0	-457	3	0	0	0	0	-201	202	48	0
1924	0	0	118	-1	0	5	9	67	21	-28	2	83
1925	-8	0	0	0	0	-32	0	0	67	54	45	0
1926	-30	0	0	0	0	0	0	7	2	-24	88	0
1927	-173	1	0	0	-319	1	0	0	0	-259	362	-2
1928	0	0	0	0	-108	1	0	-214	51	129	-29	80
1929	-2	64	0	0	0	0	0	20	-22	12	-247	247
1930	-20	0	0	0	0	0	36	23	-44	23	4	-47
1931	12	-214	-3	0	0	0	9	15	43	132	6	0
1932	-14	1	0	0	0	0	-194	1	5	12	4	0
1933	-146	1	0	0	0	0	0	0	12	12	3	0
1934	-5	0	0	0	0	0	8	12	14	15	99	-12
1935	5	0	0	0	0	0	0	24	-145	11	-1	510
1936	-3	0	74	0	0	-524	3	0	-326	80	121	410
1937	425	-2	-19	1	0	0	0	0	-69	-45	-354	280
1938	-2	0	-401	2	-1	0	0	0	0	104	530	-3
1939	-615	4	0	0	0	0	-33	5	81	7	7	25
1940	36	0	0	0	0	-126	0	-173	-48	79	77	-1
1941	312	-2	0	-250	2	0	0	0	0	93	550	-3
1942	-640	4	0	0	0	0	0	0	0	1632	366	0
1943	2	-1610	9	-1	-1	0	0	-7	24	-346	100	-1
1944	0	0	0	0	246	-1	0	0	-3	16	14	-100
1945	-74	0	0	0	0	0	0	0	-150	78	195	-1
1946	0	0	-11	0	0	0	0	0	54	61	61	404
1947	-210	2	0	0	0	0	3	2	-218	8	10	-76
1948	-186	-40	-153	1	-5	0	0	0	0	23	16	0
1949	0	0	0	0	0	0	0	0	167	-8	-7	0
1950	-20	0	0	0	0	0	0	-697	-333	79	136	-1
1951	0	112	-1	0	0	0	0	0	-9	294	164	-1
1952	0	0	-449	3	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	3	95	0
1954	0	-294	2	0	0	0	0	14	14	45	-152	57
1955	0	0	0	0	0	0	0	0	4	4	-4	0
1956	0	0	6	0	0	0	0	0	0	-4158	2805	-19
1957	1000	21	334	0	2	1	16	0	-254	-239	-214	1024
1958	-6	1	1	0	-569	3	0	0	0	92	506	-134
1959	1	0	0	0	0	0	27	71	-2	271	13	66
1960	0	0	-7	0	0	0	12	0	-130	14	-11	0
1961	0	0	0	0	0	0	12	-33	-30	3	16	49
1962	0	0	0	0	0	0	0	20	56	-48	15	42
1963	0	0	0	0	-57	0	0	0	455	921	172	1047
1964	-4	2	2	-2324	-45	-109	164	80	128	13	8	277
1965	-63	1	-589	3	-1	0	0	40	-88	-278	261	-2
1966	0	64	0	0	0	0	0	14	27	27	-6	19
1967	0	0	0	0	-106	1	0	0	0	0	0	0
1968	0	0	0	0	0	0	12	0	23	27	4	26
1969	-7	-25	0	-58	0	0	0	0	0	104	607	-463
1970	3	0	0	0	0	0	15	0	50	-75	122	90
1971	-105	1	0	0	0	-92	1	0	0	87	156	-1
1972	0	147	-327	2	0	0	0	43	15	11	12	45
1973	0	0	0	-124	1	0	0	0	0	469	-2743	90	-3
1974	-2	1949	-11	1	1	1	1	0	-102	424	26	-808
1975	5	0	0	0	0	0	0	0	0	250	-1	0
1976	272	-1	0	1	0	0	0	0	-143	258	168	38
1977	-50	1	-93	1	-66	-52	9	15	14	-92	11	-18
1978	1	0	0	0	0	0	-107	1	22	14	56	0
1979	0	0	0	-91	1	0	-17	0	15	16	16	4
1980	26	0	0	-59	0	0	0	0	0	131	247	-1
1981	0	0	0	-377	3	0	0	0	20	10	14	27
1982	0	0	-50	0	0	0	0	0	0	36	292	-1
1983	-326	2	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18	0	-7	-36	66	57
1985	0	0	0	-3	0	-92	1	-13	32	23	19	29
1986	0	0	0	0	-3	-84	0	0	-25	78	93	0
1987	0	0	0	0	0	0	25	23	-136	14	-379	-94
1988	0	0	0	0	0	-276	1	-349	41	532	333	44
1989	31	0	0	0	0	1	1	13	6	17	19	62
1990	-219	1	-67	0	0	0	8	0	20	12	-33	-94
1991	-44	25	0	1	-3	0	0	0	-290	24	18	306
1992	-2	8	0	0	0	0	0	11	17	14	16	0
1993	10	7	0	0	0	-5	0	0	0	5217	105	0
AVG:	-11	3	-29	-45	-15	-19	1	-13	-11	49	116	48
MIN:	-640	-1610	-589	-2324	-569	-524	-194	-697	-333	-4158	-379	-808
MAX:	1000	1949	334	3	246	5	164	80	469	5217	2805	1047

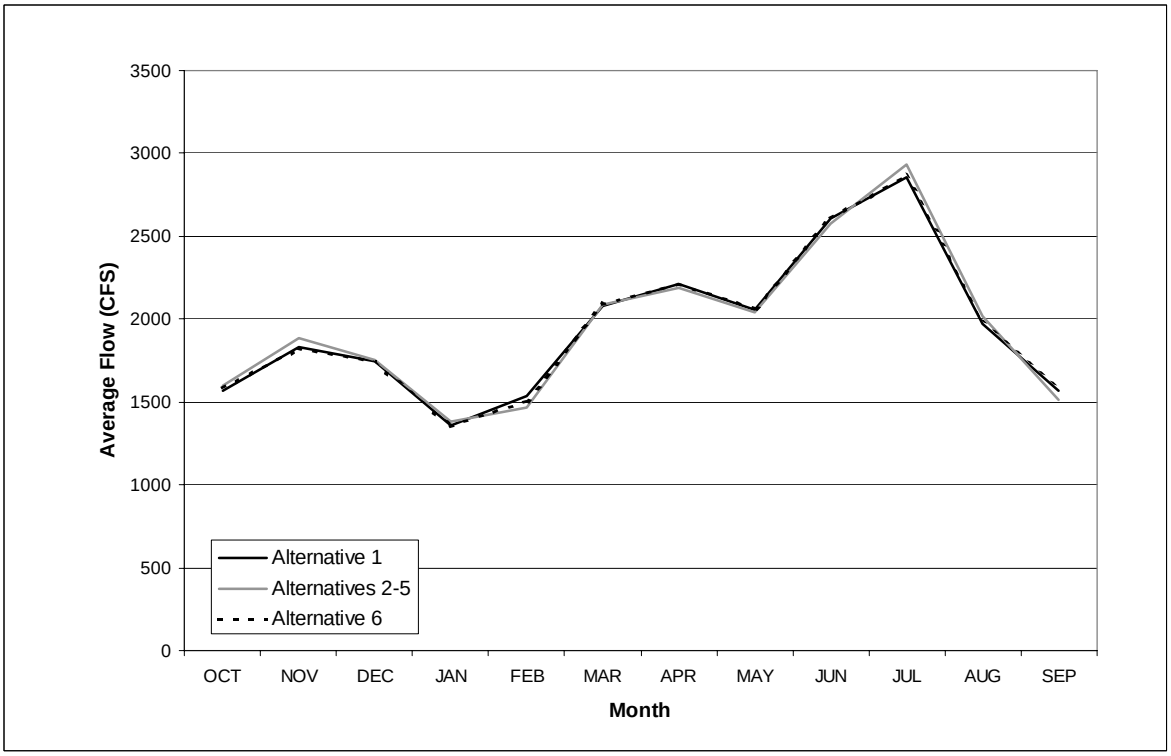


Figure 3.4.4-4. Average Simulated Monthly American River Flow Below Nimbus (Dry and Critical Years), 2001 LOD

Table 3.4.4-31. Simulated American River Flow Below Nimbus (CFS)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	2028	2074	6311	3417	4552	9586	9613	5000	2500	3661
1923	1750	2897	6919	4597	3106	3000	3454	4665	3095	5000	2738	3579
1924	1750	1847	1662	1500	1125	2599	750	1000	1500	1750	1000	1000
1925	750	800	1000	1000	5130	5000	3000	3762	5000	5000	3625	2500
1926	2273	1945	1751	1313	1337	1500	2824	2250	3883	2636	1804	1000
1927	1633	1307	2077	3650	13469	4624	7865	4876	5568	5000	2500	3643
1928	1750	3663	2700	2025	1892	12820	4848	2663	3331	4380	2733	2500
1929	1500	1200	1300	1200	1100	825	2069	1418	2361	2540	2111	1684
1930	1090	917	1300	1200	2280	2866	1750	2250	2922	3788	2139	1000
1931	2616	2093	1884	1413	1060	795	1267	1000	1720	1750	1050	1133
1932	1865	800	1000	1000	3635	3000	3000	3000	5000	5000	4138	3502
1933	2784	2558	2302	750	500	1263	2777	1195	3121	2717	2264	1069
1934	1838	1470	1323	1000	1100	1500	3460	1574	2121	1750	1018	1000
1935	1974	421	1000	1000	1486	1500	7686	4763	4149	5000	3799	2847
1936	1750	1745	1570	6479	13556	4209	5627	4138	5000	5000	3480	2893
1937	2153	1723	1550	1500	4940	4467	4415	4103	3618	5000	3701	2500
1938	1500	1345	6745	2868	9817	11086	8033	9752	9091	5000	3084	4410
1939	1750	2582	2324	1743	1307	1500	1750	1740	1841	3188	1107	1000
1940	1165	1186	1300	3382	10589	10912	6083	3309	3185	5000	2288	2500
1941	1940	1921	4840	5806	8078	4894	3802	5134	3547	5000	2500	3838
1942	1750	2747	5630	9287	10054	3000	5540	6772	7534	3504	4462	4379
1943	1750	4470	4778	10841	7258	12601	5046	3000	3000	5000	2500	3832
1944	2213	1628	1894	1500	1700	1966	3000	2250	3000	3445	2065	2666
1945	1668	1335	1300	1767	9312	2250	3000	2853	3867	5000	2167	3761
1946	1600	3625	8925	5201	3494	3000	3114	3791	3970	5000	2224	3287
1947	1500	2711	2262	1696	1272	2071	3000	2250	1910	2959	2392	2500
1948	750	800	1615	1281	1827	1500	2057	3780	5416	5000	2674	3421
1949	1750	2469	2197	1648	1350	2837	3463	3000	4316	4474	2470	2500
1950	1500	1355	1300	3209	5641	3151	4814	4189	4246	5000	2562	3627
1951	2733	16727	16253	10362	8371	3828	3254	3818	3000	5639	2500	2500
1952	1500	1827	5903	9069	9639	6228	8829	11546	10697	4745	4744	4635
1953	1750	2876	2650	7269	2385	1789	3000	3000	6286	5000	3283	4348
1954	1776	2944	2674	2005	2829	4439	4490	3000	3104	3219	2500	2500
1955	1500	1200	1300	2207	2745	2103	1750	3000	3000	2694	2471	1000
1956	1554	1246	16583	16590	6359	3000	3000	5567	6102	3347	4412	4338
1957	1750	2707	2436	1827	2936	4503	3000	2250	4095	5647	2904	2500
1958	1500	1200	2177	2936	10140	6739	10416	10164	7967	4966	2854	4410
1959	1750	2328	2095	1609	3365	2250	1750	2250	1616	5000	1000	1000
1960	750	800	1300	750	1388	4011	3325	2250	3159	2340	2249	1000
1961	1500	1200	1300	1200	1100	1500	1750	2250	1500	2788	1500	2500
1962	750	800	1000	750	1748	3000	3062	3000	3000	5000	2860	2500
1963	2803	4375	3445	3985	11887	2250	4700	8655	3431	5000	2500	3373
1964	1750	4917	2700	2069	2261	1766	1750	2250	3224	3062	2637	2500
1965	750	932	21226	13120	5555	2250	4700	4231	3463	6493	2500	3446
1966	1789	2673	2441	1831	1858	3000	1750	2250	2194	4153	1500	1000
1967	750	1150	3041	6887	4489	6142	4010	8548	10703	4224	4498	4586
1968	1750	3271	2700	2025	4700	3691	1750	2250	2418	5000	1000	1000
1969	750	1468	1300	16145	9315	3799	6570	9322	6830	5000	2500	4266
1970	1750	2917	5654	21102	6318	2417	3000	2250	4018	5000	1730	2500
1971	750	800	5532	4814	4037	3506	3334	3123	5204	5000	2500	4175
1972	1750	2788	2859	2151	3047	4166	1750	2250	5000	5000	1500	1000
1973	1500	1200	2928	9337	7204	3505	3000	4063	4976	4929	1731	2500
1974	1500	6731	7367	11740	4589	9385	6278	4944	4406	4987	3002	4485
1975	1750	2325	2092	1569	4155	4664	3000	4643	6516	3006	4400	4270
1976	1750	3899	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1300	500	500	350	368	500	1000	403	370	409
1978	1170	528	526	2533	4899	6085	4064	4411	4702	5000	2500	3700
1979	1750	2054	1849	2353	3698	3431	3000	3500	5000	4528	2364	2500
1980	1500	1200	1850	18252	13496	3607	3000	3000	3226	5000	2589	4273
1981	2041	2133	2190	1642	1350	1668	3000	2250	1500	4121	1500	1000
1982	750	3997	14422	8229	15420	7697	14459	9528	6360	5000	2876	4784
1983	2136	8058	9229	7652	12469	16481	6595	10629	14668	6194	5168	5274
1984	1751	15897	15134	6758	5884	2586	2530	2447	3000	7398	1840	2500
1985	1500	3809	2700	2025	1519	1500	3000	2250	3347	2937	2501	1758
1986	1060	982	1300	4461	32947	11117	2734	2962	3529	5000	2500	3678
1987	2407	1528	1985	1500	1125	1500	1750	1698	3103	2329	1000	1000
1988	750	800	1300	1000	1877	1500	750	2250	1500	1750	1500	448
1989	497	800	1300	1000	887	7732	3829	3695	4075	3779	3078	1096
1990	1500	2799	2360	1770	1328	1500	1889	1000	1770	1819	1547	1169
1991	984	800	1300	1000	500	750	1750	2250	1500	4556	2963	2500
1992	1029	991	1300	1000	500	1500	1897	2250	1500	1750	1823	2452
1993	483	482	500	1640	6145	7737	4106	5483	5636	5000	2653	4109
AVG:	1552	2468	3593	4175	5031	3972	3677	3834	4163	4145	2474	2684
MIN:	483	421	500	500	500	350	368	500	1000	403	370	409
MAX:	2803	16727	21226	21102	32947	16481	14459	11546	14668	7398	5168	5274

Table 3.4.4-32. Simulated American River Flow Below Nimbus (CFS)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	2028	2074	6311	3417	4552	9586	9613	5000	2500	3661
1923	1750	2897	6919	4597	3106	3000	3454	4665	3095	5000	2799	3517
1924	1750	1847	1662	1500	1125	2609	750	1000	1500	1750	1000	1434
1925	750	800	1000	1000	4662	5000	3000	3762	5000	5000	3680	2500
1926	2218	1945	1750	1313	1338	1500	2825	2299	3871	2669	2051	1000
1927	1655	1324	1762	3650	13469	4624	7865	4876	5568	5000	2500	3643
1928	1750	3663	2700	2025	1892	12820	4848	2670	3379	4455	2670	2500
1929	1500	1200	1300	1200	900	750	2192	1534	2312	2508	2162	1490
1930	1276	1021	1300	1200	2096	2867	1750	2250	3119	3785	2026	1000
1931	2885	2308	2077	1558	1168	876	750	1000	1503	1750	1974	1292
1932	2273	639	500	1000	2757	3000	3000	3000	5000	5000	4140	3504
1933	2896	2555	2300	750	500	1349	2651	1402	3118	2632	2156	1063
1934	1792	1433	1290	1000	1100	1500	3602	1730	2042	1750	1643	1000
1935	2092	423	1000	750	1476	1500	6967	4763	4149	5000	4288	2500
1936	1923	1538	1576	6350	13556	4208	5626	4136	4998	5000	3533	2833
1937	2152	1722	1550	1500	4939	4466	4415	4103	3683	5000	3639	2500
1938	1500	1345	6745	2868	9817	11086	8033	9752	9091	5000	3084	4410
1939	1750	2582	2324	1743	1307	1500	1750	1760	1874	3354	1000	1000
1940	1121	1193	1300	3315	10589	10912	6083	3309	3311	5000	2345	2500
1941	1763	1921	4840	5806	8078	4894	3802	5134	3547	5000	2500	3838
1942	1750	2747	5630	9287	10054	3000	5540	6772	7534	3504	4462	4379
1943	1750	4470	4778	10841	7258	12601	5046	3000	3000	5000	2500	3832
1944	2213	1628	1894	1500	1700	1967	3000	2250	3000	3453	2097	2692
1945	1633	1306	1300	1765	9312	2250	3000	2853	3924	5000	2225	3738
1946	1510	3625	8925	5201	3494	3000	3114	3791	4022	5000	2277	3487
1947	1500	2454	2116	1587	1190	2354	3000	2250	1911	2990	2395	2500
1948	750	800	1624	1277	1821	1500	2026	3780	5416	5000	2715	3380
1949	1750	2405	2164	1623	1350	2956	3463	3000	4358	4434	2622	2500
1950	1500	1397	1300	3018	5641	3151	4814	4189	4246	5000	2597	3590
1951	2733	16727	16253	10362	8371	3828	3254	3818	3000	5595	2500	2500
1952	1500	1871	5903	9069	9639	6228	8829	11546	10697	4784	4706	4635
1953	1750	2876	2650	7269	2385	1789	3000	3000	6286	5000	3283	4348
1954	1774	2946	2674	2005	2829	4439	4490	3000	3144	3206	2500	2500
1955	1500	1200	1300	2182	2752	2108	1750	3000	3000	2710	2466	1000
1956	1561	1250	16553	16590	6359	3000	3000	5567	6102	3405	4355	4338
1957	1750	2707	2436	1827	2936	4503	3000	2250	4167	5698	2784	2500
1958	1500	1200	2177	2936	10140	6739	10416	10164	7967	4994	2826	4410
1959	1750	2328	2095	1609	3365	2250	1750	2250	1616	5000	1000	1000
1960	750	800	1300	750	1388	4011	3422	2250	3064	2437	2263	1031
1961	1500	1200	1300	1200	1100	1500	1750	2250	1500	2822	1500	2500
1962	750	800	1000	750	1570	3000	3062	3000	3000	5000	2920	2500
1963	2744	4375	3445	3985	11887	2250	4700	8655	3431	5000	2500	3373
1964	1750	4917	2700	2069	2261	1765	1750	2250	3308	3043	2631	2500
1965	750	902	21200	13120	5555	2250	4700	4239	3456	6558	2500	3387
1966	1782	2673	2435	1826	1871	3000	1750	2250	2194	4194	1500	1000
1967	750	1150	2940	6887	4489	6142	4010	8548	10703	4224	4498	4586
1968	1750	3271	2700	2025	4700	3691	1750	2250	2418	5000	1000	1000
1969	750	1645	1386	15888	9315	3799	6570	9322	6830	5000	2500	4266
1970	1750	2917	5654	21102	6318	2417	3000	2250	4095	5000	1701	2500
1971	750	800	5489	4814	4053	3492	3346	3111	5204	5000	2500	4175
1972	1773	2767	2856	2151	3047	4166	1750	2250	5000	5000	1500	1000
1973	1500	1200	2924	9337	7204	3505	3000	4063	5000	4905	1764	2500
1974	1500	6731	7367	11740	4589	9385	6278	4944	4406	4984	3005	4485
1975	1750	2325	2092	1569	4155	4664	3000	4643	6516	3006	4400	4270
1976	1750	3899	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1300	500	500	350	368	500	1000	403	370	409
1978	1169	538	526	2524	4899	6085	4064	4411	4702	5000	2500	3700
1979	1750	2054	1849	2353	3698	3431	3000	3500	5000	4528	2464	2500
1980	1500	1200	1751	18252	13496	3607	3000	3000	3226	5000	2589	4273
1981	2087	2086	2190	1642	1350	1668	3000	2250	1500	4296	1500	1000
1982	750	3820	14422	8229	15420	7697	14459	9528	6360	5000	2876	4784
1983	2136	8058	9229	7652	12469	16481	6595	10629	14668	6194	5168	5274
1984	1751	15897	15134	6758	5884	2586	2534	2444	3000	7492	1887	2500
1985	1500	3666	2700	2025	1519	1500	3000	2250	3347	2942	2505	1758
1986	1057	1066	1300	4373	32947	11117	2734	2962	3529	5000	2500	3678
1987	2407	1528	1984	1500	1125	1500	1750	1722	3257	2524	1000	1000
1988	750	800	1300	1000	1560	1500	750	2250	1500	1750	1500	448
1989	497	800	1000	1000	1049	7835	3829	3755	3949	3841	3124	1148
1990	1500	2768	2344	1758	1318	1500	1928	1000	1777	1798	1534	1155
1991	993	800	1300	1000	500	750	1750	2250	1620	4064	3248	3001
1992	750	800	1300	975	500	1500	2010	2250	1500	1750	1825	455
1993	458	482	500	2950	6146	7737	4106	5483	5636	5000	2652	4111
AVG:	1560	2459	3574	4179	5003	3980	3665	3843	4172	4152	2513	2664
MIN:	458	423	500	500	500	350	368	500	1000	403	370	409
MAX:	2896	16727	21200	21102	32947	16481	14459	11546	14668	7492	5168	5274

Table 3.4.4-33. Simulated American River Flow Below Nimbus (CFS)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	2028	2074	6311	3417	4552	9586	9613	5000	2500	3661
1923	1750	2897	6919	4597	3106	3000	3454	4665	3095	5000	2884	3429
1924	1750	1847	1662	1500	1125	2607	750	1000	1500	1750	1000	1067
1925	750	800	1000	1000	5052	5000	3000	3762	5000	5000	3771	2500
1926	2310	1945	1751	1313	1136	1500	2825	2250	3894	2665	1953	1000
1927	1781	1425	1669	3650	13469	4624	7865	4876	5568	5000	2500	3643
1928	1750	3663	2700	2025	1892	12820	4848	2605	3494	4229	2759	2500
1929	1500	1200	1300	1200	900	750	2132	1451	2334	2526	2118	1537
1930	1219	975	1300	1200	2224	2866	1750	2250	2957	3781	2140	1000
1931	2611	2089	1880	1410	1058	793	1257	1000	1724	1750	1064	1253
1932	1868	800	1000	1000	3489	3000	3000	3000	5000	5000	4139	3505
1933	2927	2556	2300	750	500	1292	2615	1245	3118	2697	2231	1063
1934	1834	1467	1320	1000	1100	1500	3486	1615	2098	1750	1017	1000
1935	1981	422	1000	1000	1483	1500	7631	4763	4149	5000	4345	2500
1936	2265	1812	1631	5635	13556	4208	5624	4135	4996	5000	3739	2618
1937	2152	1721	1549	1500	4937	4466	4415	4103	3448	5000	4194	2500
1938	1500	1346	6745	2868	9817	11086	8033	9752	9091	5000	3084	4410
1939	1750	2582	2324	1743	1307	1500	1750	1743	1848	3220	1082	1000
1940	1160	1187	1300	3370	10589	10912	6083	3309	3245	5000	2510	2500
1941	1750	1831	4840	5806	8078	4894	3802	5134	3547	5000	2500	3838
1942	1750	2747	5630	9287	10054	3000	5540	6772	7534	3504	4462	4379
1943	1750	4470	4778	10841	7258	12601	5046	3000	3000	5000	2500	3832
1944	2213	1628	1894	1500	1700	1967	3000	2250	3000	3454	2096	2730
1945	1596	1279	1310	1783	9312	2250	3000	2853	3412	5000	2500	3971
1946	1500	3625	8925	5201	3520	3000	3090	3791	4154	5000	2402	3200
1947	1500	2608	2141	1606	1204	2178	3000	2250	1911	2978	2433	2500
1948	750	800	1300	1258	2052	1500	2131	3780	5416	5000	2715	3380
1949	1750	2522	2195	1646	1350	2790	3463	3000	4355	4436	2596	2500
1950	1500	1268	1300	3169	5641	3151	4814	4189	4246	5000	2733	3450
1951	2733	16727	16253	10362	8371	3828	3254	3818	3000	5618	2500	2500
1952	1500	1848	5903	9069	9639	6228	8829	11546	10697	4905	4599	4620
1953	1750	2876	2650	7269	2385	1789	3000	3000	6286	5000	3283	4348
1954	1762	2958	2674	2005	2829	4439	4490	3000	3144	3206	2500	2500
1955	1500	1200	1300	2182	2752	2107	1750	3000	3000	2699	2463	1000
1956	1552	1244	16581	16590	6359	3000	3000	5567	6102	5000	2767	4338
1957	1750	2707	2436	1827	2936	4503	3000	2250	4179	5821	2650	2500
1958	1500	1200	2177	2936	10140	6739	10416	10164	7967	5000	2820	4410
1959	1750	2328	2095	1609	3365	2250	1750	2250	1616	5000	1000	1000
1960	750	800	1300	750	1388	4011	3327	2250	3158	2347	2251	1000
1961	1500	1200	1300	1200	1100	1500	1750	2250	1500	2884	1500	2500
1962	750	800	1000	750	1637	3000	3062	3000	3000	5000	2890	2500
1963	2773	4375	3445	3985	11887	2250	4700	8655	3431	5000	2627	3242
1964	1750	4917	2700	2069	2261	1765	1750	2250	3268	3050	2630	2500
1965	750	907	21228	13120	5555	2250	4700	4239	3455	6562	2500	3380
1966	1785	2673	2438	1828	1865	3000	1750	2250	2194	4193	1500	1000
1967	750	1150	2943	6887	4489	6142	4010	8548	10703	4224	4498	4586
1968	1750	3271	2700	2025	4700	3691	1750	2250	2418	5000	1000	1000
1969	750	1508	1300	16106	9315	3799	6570	9322	6830	5000	2500	4266
1970	1750	2917	5654	21102	6318	2417	3000	2250	4110	5000	1695	2500
1971	750	800	5480	4814	4055	3490	3347	3111	5204	5000	2500	4175
1972	1780	2760	2856	2151	3047	4166	1750	2250	5000	4135	1884	1000
1973	1500	1200	3347	9337	7204	3505	3000	4061	4968	4937	1911	2500
1974	1500	6731	7367	11740	4589	9385	6278	4944	4406	4722	3266	4485
1975	1750	2325	2092	1569	4155	4664	3000	4643	6516	3006	4400	4270
1976	1750	3899	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1300	500	500	350	368	500	1000	403	370	409
1978	1164	527	526	2535	4899	6085	4064	4411	4702	5000	2500	3700
1979	1750	2054	1849	2353	3698	3431	3000	3500	5000	4528	2392	2500
1980	1500	1200	1822	18252	13496	3607	3000	3000	3226	5000	2589	4273
1981	2084	2089	2190	1642	1350	1668	3000	2250	1500	4172	1500	1000
1982	750	3945	14422	8229	15420	7697	14459	9528	6360	5000	2876	4784
1983	2136	8058	9229	7652	12469	16481	6595	10629	14668	6194	5168	5274
1984	1751	15897	15134	6758	5884	2586	2534	2444	3000	7493	1906	2500
1985	1500	3645	2700	2025	1519	1500	3000	2250	3347	2944	2504	1759
1986	1056	1071	1300	4367	32947	11117	2734	2962	3529	5000	2500	3678
1987	2407	1528	1984	1500	1125	1500	1750	1703	3068	2387	1000	1000
1988	750	800	1300	1000	1847	1500	750	2250	1500	1750	1500	448
1989	497	800	1300	1000	882	7732	3829	3707	4080	3785	3081	1149
1990	1500	2743	2302	1727	1295	1500	1999	1000	1775	1807	1547	1180
1991	978	800	1300	1000	500	750	1750	2250	1504	4565	2958	2500
1992	988	996	1300	1000	500	1500	1928	2250	1500	1750	1810	2432
1993	483	482	500	1640	6145	7737	4106	5483	5636	5000	2891	3865
AVG:	1560	2465	3584	4159	5022	3972	3678	3835	4164	4161	2503	2667
MIN:	483	422	500	500	500	350	368	500	1000	403	370	409
MAX:	2927	16727	21228	21102	32947	16481	14459	11546	14668	7493	5168	5274

Table 3.4.4-34. Simulated American River Flow Below Nimbus (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	60	-62
1924	0	0	0	0	0	10	0	0	0	0	0	434
1925	0	0	0	0	-468	0	0	0	0	0	55	0
1926	-55	0	0	0	1	0	0	49	-13	32	247	0
1927	22	17	-315	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	7	48	75	-63	0
1929	0	0	0	0	-200	-75	123	115	-49	-32	51	-194
1930	186	104	0	0	-184	0	0	0	197	-3	-113	0
1931	268	215	193	145	109	82	-517	0	-217	0	924	159
1932	408	-161	-500	0	-879	0	0	0	0	0	1	2
1933	112	-3	-2	0	0	86	-125	207	-3	-85	-107	-6
1934	-46	-37	-33	0	0	0	142	156	-79	0	626	0
1935	118	1	0	-250	-10	0	-720	0	0	0	489	-347
1936	173	-206	6	-129	0	-1	-1	-1	-2	0	53	-59
1937	-1	-1	-1	0	-2	-1	0	0	65	0	-62	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	20	33	165	-107	0
1940	-44	7	0	-67	0	0	0	0	127	0	57	0
1941	-177	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	8	32	27
1945	-35	-28	0	-3	0	0	0	0	58	0	58	-23
1946	-90	0	0	0	0	0	0	0	52	0	53	199
1947	0	-257	-145	-109	-82	283	0	0	1	31	3	0
1948	0	0	9	-4	-6	0	-31	0	0	0	40	-41
1949	0	-65	-33	-25	0	119	0	0	43	-41	153	0
1950	0	42	0	-191	0	0	0	0	0	0	35	-36
1951	0	0	0	0	0	0	0	0	0	-44	0	0
1952	0	45	0	0	0	0	0	0	0	38	-38	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	-2	2	0	0	0	0	0	0	40	-13	0	0
1955	0	0	0	-25	7	5	0	0	0	16	-5	0
1956	7	4	-30	0	0	0	0	0	0	57	-57	0
1957	0	0	0	0	0	0	0	0	72	51	-119	0
1958	0	0	0	0	0	0	0	0	0	28	-28	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	96	0	-95	97	14	31
1961	0	0	0	0	0	0	0	0	0	34	0	0
1962	0	0	0	0	-178	0	0	0	0	0	60	0
1963	-59	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	84	-19	-6	0
1965	0	-30	-26	0	0	0	0	8	-7	65	0	-59
1966	-7	0	-7	-5	13	0	0	0	0	41	0	0
1967	0	0	-100	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	177	86	-257	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	77	0	-29	0
1971	0	0	-43	0	16	-15	12	-12	0	0	0	0
1972	23	-21	-3	0	0	0	0	0	0	0	0	0
1973	0	0	-4	0	0	0	0	0	24	-23	34	0
1974	0	0	0	0	0	0	0	0	0	-3	3	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	-1	9	0	-9	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	100	0
1980	0	0	-99	0	0	0	0	0	0	0	0	0
1981	46	-47	0	0	0	0	0	0	0	175	0	0
1982	0	-176	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	3	-3	0	94	47	0
1985	0	-143	0	0	0	0	0	0	0	5	4	0
1986	-2	84	0	-88	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	24	154	195	0	0
1988	0	0	0	0	-317	0	0	0	0	0	0	0
1989	0	0	-300	0	163	103	0	60	-126	63	46	52
1990	0	-30	-16	-12	-9	0	39	0	7	-22	-13	-14
1991	9	0	0	0	0	0	0	0	120	-492	285	501
1992	-279	-191	0	-25	0	0	114	0	0	0	2	-1997
1993	-24	0	0	1310	1	0	0	0	0	0	-1	1
AVG:	8	-10	-19	4	-28	8	-12	9	8	7	39	-20
MIN:	-279	-257	-500	-257	-879	-75	-720	-12	-217	-492	-119	-1997
MAX:	408	215	193	1310	163	283	142	207	197	195	924	501

Table 3.4.4-35. Simulated American River Flow Below Nimbus (CFS) Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	145	-149
1924	0	0	0	0	0	8	0	0	0	0	0	67
1925	0	0	0	0	-78	0	0	0	0	0	146	0
1926	37	0	0	0	-200	0	0	0	11	29	148	0
1927	148	118	-408	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	-58	163	-152	26	0
1929	0	0	0	0	-200	-75	62	32	-27	-14	7	-147
1930	128	58	0	0	-57	0	0	0	35	-6	1	0
1931	-5	-4	-3	-3	-2	-1	-9	0	4	0	14	119
1932	3	0	0	0	-146	0	0	0	0	0	1	3
1933	143	-2	-2	0	0	29	-161	50	-3	-20	-32	-6
1934	-4	-3	-3	0	0	0	27	41	-23	0	0	0
1935	7	0	0	0	-4	0	-56	0	0	0	546	-347
1936	515	67	61	-844	0	-1	-3	-3	-3	0	259	-275
1937	-2	-1	-1	0	-3	-1	0	0	-170	0	493	0
1938	0	1	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	2	8	32	-25	0
1940	-5	1	0	-12	0	0	0	0	60	0	223	0
1941	-190	-90	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	9	31	64
1945	-72	-56	10	16	0	0	0	0	-455	0	333	210
1946	-100	0	0	0	26	0	-24	0	184	0	178	-87
1947	0	-104	-121	-91	-68	107	0	0	2	19	41	0
1948	0	0	-315	-23	225	0	74	0	0	0	40	-42
1949	0	53	-3	-2	0	-47	0	0	40	-38	126	0
1950	0	-87	0	-40	0	0	0	0	0	0	171	-176
1951	0	0	0	0	0	0	0	0	0	-21	0	0
1952	0	21	0	0	0	0	0	0	0	160	-145	-15
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	-14	15	0	0	0	0	0	0	40	-13	0	0
1955	0	0	0	-25	7	5	0	0	0	5	-7	0
1956	-2	-1	-2	0	0	0	0	0	0	1653	-1645	0
1957	0	0	0	0	0	0	0	0	84	175	-254	0
1958	0	0	0	0	0	0	0	0	0	34	-34	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	1	0	-1	7	2	0
1961	0	0	0	0	0	0	0	0	0	96	0	0
1962	0	0	0	0	-111	0	0	0	0	0	30	0
1963	-30	0	0	0	0	0	0	0	0	0	127	-131
1964	0	0	0	0	0	0	0	0	45	-12	-7	0
1965	0	-25	2	0	0	0	0	8	-8	69	0	-66
1966	-4	0	-4	-3	7	0	0	0	0	40	0	0
1967	0	0	-97	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	40	0	-39	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	92	0	-35	0
1971	0	0	-52	0	18	-17	12	-12	0	0	0	0
1972	30	-28	-3	0	0	0	0	0	0	-865	384	0
1973	0	0	419	0	0	0	0	-1	-8	8	180	0
1974	0	0	0	0	0	0	0	0	0	-266	264	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	-5	-1	0	1	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	28	0
1980	0	0	-28	0	0	0	0	0	0	0	0	0
1981	43	-44	0	0	0	0	0	0	0	51	0	0
1982	0	-52	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	3	-3	0	95	67	0
1985	0	-164	0	0	0	0	0	0	0	8	2	1
1986	-3	89	0	-94	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	4	-36	58	0	0
1988	0	0	0	0	-30	0	0	0	0	0	0	0
1989	0	0	0	0	-5	0	0	12	5	7	3	53
1990	0	-55	-58	-43	-33	0	110	0	5	-13	0	11
1991	-6	0	0	0	0	0	0	0	4	9	-5	0
1992	-41	5	0	0	0	0	31	0	0	0	-12	-20
1993	0	0	0	0	0	0	0	0	0	0	238	-245
AVG:	8	-3	-8	-17	-9	0	1	1	1	16	29	-16
MIN:	-190	-164	-408	-844	-200	-75	-161	-58	-455	-865	-1645	-347
MAX:	515	118	419	16	225	107	110	50	184	1653	546	210

Table 3.4.4-36. Simulated American River Flow at H Street (CFS)
Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1382	1106	2034	2046	6372	3390	4468	9443	9335	4698	2261	3483
1923	1633	2856	6971	4552	3072	2960	3470	4536	2876	4754	2498	3423
1924	1611	1729	1568	1477	1148	2596	645	829	1274	1525	794	839
1925	708	713	981	909	5116	4885	2832	3594	4753	4735	3383	2316
1926	2129	1843	1666	1260	1400	1446	2851	2120	3667	2376	1579	825
1927	1555	1302	1984	3613	13505	4511	7826	4714	5372	4736	2259	3465
1928	1629	3591	2627	1990	1893	12874	4690	2528	3132	4136	2502	2321
1929	1354	1133	1236	1124	1062	822	1987	1246	2165	2306	1897	1511
1930	953	792	1276	1169	2186	2821	1633	2085	2678	3543	1916	831
1931	2493	1994	1768	1359	994	755	1141	830	1530	1519	841	969
1932	1753	719	1048	920	3569	2865	2815	2805	4761	4747	3906	3313
1933	2627	2433	2223	702	409	1210	2578	1009	2892	2476	2048	897
1934	1739	1339	1310	917	1044	1380	3263	1370	1909	1523	814	842
1935	1855	375	945	985	1385	1459	7658	4496	3871	4733	3550	2652
1936	1634	1643	1485	6429	13555	4009	5437	3915	4755	4743	3245	2708
1937	2011	1589	1490	1451	4945	4443	4226	3873	3368	4752	3463	2312
1938	1363	1289	6696	2763	9843	10982	7830	9542	8791	4701	2844	4235
1939	1617	2470	2222	1674	1252	1503	1629	1591	1606	2958	887	855
1940	1061	1062	1205	3415	10599	10793	5874	3119	2942	4756	2050	2325
1941	1816	1833	4877	5763	8043	4837	3797	5043	3321	4740	2247	3653
1942	1623	2656	5641	9251	10009	2968	5609	6695	7321	3233	4224	4179
1943	1589	4394	4734	10871	7181	12619	4958	2887	2820	4755	2260	3653
1944	2056	1516	1812	1453	1773	1938	2923	2092	2772	3201	1839	2492
1945	1558	1286	1227	1671	9297	2176	2891	2695	3645	4745	1926	3585
1946	1510	3548	8893	5056	3431	2999	3008	3637	3724	4753	1989	3122
1947	1357	2643	2181	1584	1211	2072	2874	2067	1687	2723	2170	2322
1948	664	720	1525	1180	1741	1487	2044	3689	5199	4715	2420	3237
1949	1607	2368	2147	1596	1325	2904	3342	2835	4070	4224	2240	2327
1950	1351	1256	1217	3178	5569	3073	4702	3996	3984	4740	2319	3458
1951	2646	16691	16100	10201	8298	3780	3170	3693	2769	5398	2258	2323
1952	1404	1750	5884	9084	9521	6192	8733	11351	10421	4437	4509	4445
1953	1582	2792	2646	7247	2276	1779	2955	2844	6066	4728	3057	4163
1954	1624	2859	2557	1942	2809	4441	4416	2838	2881	2971	2279	2321
1955	1349	1138	1272	2160	2661	2015	1659	2831	2753	2453	2255	843
1956	1437	1156	16657	16471	6159	2911	2924	5434	5847	3078	4189	4162
1957	1630	2576	2315	1758	2935	4486	2909	2151	3880	5381	2650	2348
1958	1403	1084	2117	2931	10196	6712	10426	10011	7734	4703	2607	4228
1959	1589	2202	2016	1639	3413	2206	1662	2085	1380	4776	767	896
1960	615	682	1216	708	1345	3939	3167	2057	2921	2099	2037	826
1961	1365	1158	1205	1135	1011	1434	1604	2051	1260	2560	1283	2337
1962	603	740	937	664	1799	2920	2870	2781	2752	4758	2626	2320
1963	2830	4257	3346	3919	11794	2137	4689	8512	3156	4739	2251	3194
1964	1637	4888	2563	2055	2208	1728	1629	2068	3002	2824	2422	2324
1965	649	883	21235	12911	5337	2177	4675	4052	3214	6245	2266	3269
1966	1633	2621	2369	1746	1793	2927	1607	2060	1964	3930	1277	836
1967	616	1160	2995	6902	4321	6075	3939	8366	10435	3901	4257	4385
1968	1590	3173	2590	2011	4686	3672	1637	2102	2186	4763	770	838
1969	635	1425	1246	16219	9174	3706	6487	9122	6544	4725	2263	4089
1970	1613	2814	5619	21082	6081	2412	2912	2088	3799	4753	1496	2332
1971	635	826	5511	4682	3896	3456	3190	2953	4962	4744	2267	4001
1972	1595	2687	2815	2041	2952	4062	1609	2071	4766	4740	1263	862
1973	1420	1175	2864	9366	7129	3449	2880	3884	4717	4669	1494	2341
1974	1402	6734	7286	11640	4433	9421	6163	4778	4187	4767	2759	4300
1975	1611	2230	2039	1501	4228	4690	2909	4486	6267	2731	4183	4074
1976	1659	3785	2576	1934	1466	1091	639	815	1288	1532	808	845
1977	619	700	1205	409	405	250	188	361	790	188	188	281
1978	1053	454	500	2608	4839	6037	3923	4179	4437	4737	2258	3531
1979	1588	1998	1748	2334	3646	3345	2823	3283	4742	4266	2127	2322
1980	1414	1116	1811	18239	13355	3450	2893	2833	2978	4771	2351	4095
1981	1881	2005	2113	1610	1251	1666	2879	2066	1255	3888	1267	842
1982	677	4010	14357	8097	15326	7659	14485	9315	6132	4749	2619	4660
1983	2051	8090	9190	7672	12543	16576	6553	10553	14452	5891	4937	5084
1984	1605	15953	15078	6648	5887	2600	2479	2309	2797	7161	1591	2334
1985	1395	3806	2592	1932	1480	1515	2898	2076	3113	2692	2286	1597
1986	940	971	1240	4412	33014	10921	2627	2862	3330	4753	2263	3529
1987	2252	1402	1890	1451	1127	1538	1647	1536	2870	2089	789	839
1988	633	731	1281	956	1773	1391	650	2090	1280	1523	1292	281
1989	375	738	1247	902	786	7741	3598	3483	3825	3519	2851	982
1990	1416	2706	2233	1721	1310	1459	1775	886	1544	1589	1338	1001
1991	853	697	1218	896	432	814	1609	2052	1270	4326	2735	2318
1992	916	878	1230	917	528	1455	1730	2046	1279	1519	1612	2279
1993	375	375	515	1705	6129	7626	3867	5284	5398	4732	2414	3930
AVG:	1431	2393	3534	4122	4982	3925	3571	3666	3929	3894	2244	2513
MIN:	375	375	500	409	405	250	188	361	790	188	188	281
MAX:	2830	16691	21235	21082	33014	16576	14485	11351	14452	7161	4937	5084

Table 3.4.4-37. Simulated American River Flow at H Street (CFS)
Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1382	1106	2035	2046	6373	3391	4469	9444	9336	4697	2261	3483
1923	1633	2856	6973	4554	3074	2961	3471	4537	2878	4754	2559	3360
1924	1611	1729	1570	1479	1150	2608	647	831	1274	1525	794	1273
1925	703	713	981	909	4648	4889	2832	3594	4753	4735	3438	2315
1926	2074	1843	1665	1261	1402	1446	2851	2169	3654	2408	1826	822
1927	1577	1319	1669	3617	13505	4510	7826	4715	5372	4737	2259	3465
1928	1629	3591	2628	1991	1894	12875	4692	2536	3182	4211	2438	2322
1929	1354	1133	1236	1127	864	751	2112	1361	2115	2274	1948	1317
1930	1141	895	1274	1169	2002	2823	1633	2085	2875	3539	1803	832
1931	2762	2206	1959	1502	1104	837	624	838	1312	1521	1764	1120
1932	2159	555	551	930	2690	2873	2814	2805	4761	4747	3907	3315
1933	2739	2429	2221	702	409	1296	2452	1217	2887	2391	1941	893
1934	1693	1303	1278	917	1044	1380	3405	1525	1828	1524	1440	836
1935	1973	375	945	735	1381	1459	6938	4502	3871	4733	4039	2301
1936	1810	1435	1493	6300	13556	4008	5436	3914	4753	4743	3299	2648
1937	2011	1588	1489	1451	4944	4443	4226	3873	3433	4751	3401	2312
1938	1363	1289	6696	2763	9843	10982	7830	9543	8792	4701	2844	4235
1939	1617	2470	2222	1676	1254	1505	1630	1612	1639	3123	778	857
1940	1016	1070	1205	3348	10599	10795	5876	3120	3070	4755	2107	2324
1941	1639	1835	4877	5763	8046	4839	3799	5045	3323	4741	2247	3653
1942	1623	2656	5643	9253	10011	2969	5611	6697	7323	3234	4224	4179
1943	1589	4394	4736	10873	7183	12621	4959	2889	2822	4756	2260	3653
1944	2056	1516	1812	1456	1775	1940	2925	2094	2774	3209	1872	2518
1945	1523	1258	1227	1669	9301	2178	2893	2697	3705	4744	1983	3561
1946	1420	3549	8893	5059	3434	3001	3010	3639	3778	4752	2042	3321
1947	1355	2385	2038	1476	1134	2358	2874	2070	1688	2754	2172	2322
1948	664	720	1534	1176	1739	1489	2015	3691	5200	4715	2460	3195
1949	1607	2303	2117	1574	1327	3025	3342	2837	4115	4182	2393	2325
1950	1351	1298	1216	2987	5571	3077	4705	3998	3986	4740	2355	3421
1951	2646	16691	16100	10204	8300	3780	3171	3694	2770	5354	2258	2323
1952	1404	1794	5883	9084	9524	6194	8736	11353	10423	4477	4470	4445
1953	1582	2792	2649	7250	2278	1781	2956	2846	6068	4728	3057	4163
1954	1621	2861	2557	1945	2812	4443	4418	2840	2923	2958	2279	2321
1955	1349	1138	1272	2135	2672	2024	1662	2834	2753	2469	2249	843
1956	1444	1160	16627	16471	6161	2912	2925	5436	5849	3135	4132	4163
1957	1630	2576	2315	1761	2938	4488	2912	2153	3954	5432	2530	2349
1958	1403	1084	2117	2934	10199	6715	10429	10013	7736	4732	2579	4228
1959	1589	2202	2018	1641	3415	2208	1664	2087	1380	4776	767	896
1960	615	682	1216	708	1345	3944	3267	2059	2825	2197	2050	858
1961	1365	1158	1205	1135	1011	1434	1608	2053	1260	2594	1283	2337
1962	603	740	937	664	1621	2921	2875	2781	2752	4758	2686	2320
1963	2771	4258	3346	3919	11794	2144	4694	8516	3159	4739	2251	3194
1964	1637	4888	2567	2059	2211	1731	1631	2070	3086	2805	2417	2324
1965	649	854	21210	12911	5340	2178	4676	4061	3208	6311	2266	3209
1966	1627	2621	2363	1741	1811	2930	1610	2062	1964	3970	1277	836
1967	616	1160	2895	6903	4321	6075	3945	8371	10438	3901	4257	4385
1968	1590	3173	2595	2014	4689	3674	1640	2104	2188	4763	770	838
1969	635	1601	1331	15962	9177	3711	6491	9125	6546	4725	2263	4089
1970	1613	2814	5619	21087	6085	2415	2915	2091	3878	4752	1467	2332
1971	635	826	5468	4682	3918	3445	3205	2944	4962	4744	2267	4001
1972	1618	2666	2813	2041	2958	4066	1612	2074	4766	4740	1263	862
1973	1420	1175	2860	9366	7135	3453	2883	3887	4742	4645	1528	2340
1974	1402	6734	7286	11645	4438	9424	6166	4780	4190	4764	2762	4300
1975	1611	2230	2043	1504	4231	4693	2912	4488	6269	2731	4183	4074
1976	1659	3785	2576	1938	1470	1093	642	817	1288	1532	808	845
1977	619	700	1205	409	405	250	188	361	790	188	188	281
1978	1052	463	500	2599	4839	6037	3923	4179	4437	4737	2258	3531
1979	1588	1998	1748	2334	3646	3345	2823	3283	4742	4266	2227	2321
1980	1414	1116	1713	18240	13355	3461	2901	2839	2984	4771	2351	4095
1981	1927	1957	2113	1610	1258	1671	2883	2069	1255	4063	1266	842
1982	677	3834	14359	8097	15332	7664	14489	9318	6135	4751	2621	4660
1983	2053	8092	9192	7674	12546	16577	6555	10555	14454	5892	4939	5084
1984	1606	15955	15079	6650	5889	2602	2485	2307	2799	7255	1638	2334
1985	1395	3663	2593	1936	1484	1518	2900	2079	3113	2697	2290	1597
1986	937	1055	1239	4324	33021	10926	2631	2865	3332	4753	2263	3529
1987	2252	1402	1890	1456	1131	1541	1650	1563	3024	2283	787	839
1988	633	731	1281	956	1456	1398	652	2093	1280	1523	1292	281
1989	375	738	947	906	949	7840	3599	3546	3699	3583	2897	1034
1990	1415	2676	2217	1712	1303	1460	1816	887	1553	1567	1325	987
1991	863	697	1218	896	432	814	1610	2052	1390	3832	3024	2817
1992	632	692	1234	892	528	1455	1843	2045	1279	1519	1615	283
1993	375	375	515	3015	6117	7626	3867	5284	5398	4732	2412	3931
AVG:	1439	2384	3515	4127	4956	3936	3561	3677	3938	3901	2283	2493
MIN:	375	375	500	409	405	250	188	361	790	188	188	281
MAX:	2771	16691	21210	21087	33021	16577	14489	11353	14454	7255	4939	5084

Table 3.4.4-38. Simulated American River Flow at H Street (CFS)
Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1382	1106	2035	2046	6373	3391	4469	9444	9336	4697	2261	3483
1923	1633	2856	6973	4554	3074	2961	3471	4537	2878	4754	2644	3272
1924	1612	1729	1570	1479	1150	2605	647	831	1274	1525	794	906
1925	707	713	981	909	5038	4886	2832	3594	4753	4735	3529	2314
1926	2167	1842	1665	1261	1200	1448	2851	2120	3678	2405	1727	823
1927	1703	1419	1575	3618	13505	4510	7826	4714	5372	4737	2259	3465
1928	1629	3591	2628	1991	1894	12875	4692	2471	3297	3983	2529	2321
1929	1354	1133	1236	1127	864	751	2052	1279	2138	2292	1904	1364
1930	1083	849	1275	1169	2129	2821	1633	2085	2713	3537	1917	831
1931	2488	1990	1764	1356	992	754	1132	830	1533	1519	854	1088
1932	1755	719	1048	920	3423	2866	2815	2805	4761	4747	3907	3316
1933	2770	2430	2221	702	409	1239	2417	1060	2888	2456	2016	891
1934	1735	1336	1307	917	1044	1380	3290	1410	1885	1523	814	842
1935	1862	375	945	985	1382	1459	7603	4497	3871	4733	4096	2300
1936	2152	1706	1545	5585	13563	4007	5435	3912	4751	4743	3504	2431
1937	2012	1587	1489	1451	4943	4442	4226	3873	3199	4753	3956	2307
1938	1363	1290	6696	2763	9843	10982	7834	9545	8794	4701	2844	4235
1939	1617	2470	2222	1678	1255	1505	1631	1595	1613	2990	861	855
1940	1056	1064	1205	3402	10599	10795	5876	3120	3004	4755	2272	2323
1941	1626	1745	4877	5763	8046	4839	3799	5046	3323	4742	2247	3653
1942	1623	2656	5643	9253	10011	2969	5611	6697	7323	3234	4224	4179
1943	1589	4394	4736	10873	7183	12621	4959	2889	2822	4756	2260	3653
1944	2056	1516	1812	1456	1775	1940	2925	2094	2774	3210	1870	2555
1945	1486	1231	1237	1687	9301	2178	2893	2697	3193	4749	2258	3792
1946	1408	3549	8893	5059	3460	3001	2986	3639	3910	4751	2167	3033
1947	1358	2539	2061	1494	1148	2182	2876	2069	1689	2742	2210	2322
1948	664	720	1210	1160	1969	1486	2120	3690	5200	4715	2460	3195
1949	1607	2421	2147	1597	1327	2859	3344	2837	4112	4185	2366	2326
1950	1351	1169	1217	3138	5569	3077	4705	3998	3986	4740	2491	3280
1951	2647	16691	16100	10204	8300	3780	3171	3694	2770	5377	2258	2323
1952	1404	1771	5884	9084	9525	6194	8736	11353	10423	4599	4363	4431
1953	1582	2792	2649	7250	2278	1781	2956	2846	6068	4728	3057	4163
1954	1609	2874	2557	1945	2812	4443	4418	2840	2923	2958	2279	2321
1955	1349	1138	1272	2135	2672	2023	1662	2834	2753	2458	2247	843
1956	1434	1155	16654	16471	6162	2912	2925	5436	5849	4731	2530	4177
1957	1630	2576	2315	1761	2938	4488	2912	2153	3966	5555	2395	2350
1958	1403	1084	2117	2934	10200	6715	10429	10013	7736	4738	2573	4228
1959	1589	2202	2018	1641	3415	2208	1664	2087	1380	4776	767	896
1960	615	682	1216	708	1345	3944	3172	2060	2919	2106	2039	826
1961	1365	1158	1205	1135	1011	1434	1608	2053	1260	2656	1282	2337
1962	603	740	937	664	1688	2921	2876	2781	2752	4758	2656	2320
1963	2801	4257	3346	3919	11794	2145	4695	8516	3160	4739	2378	3063
1964	1639	4888	2568	2059	2211	1731	1631	2070	3046	2812	2415	2324
1965	649	859	21238	12911	5340	2178	4676	4062	3207	6314	2266	3203
1966	1630	2621	2365	1744	1805	2930	1610	2062	1964	3970	1277	836
1967	616	1160	2898	6903	4321	6075	3945	8371	10438	3901	4257	4385
1968	1590	3173	2595	2015	4689	3674	1640	2104	2188	4763	770	838
1969	635	1465	1246	16181	9175	3711	6491	9125	6546	4725	2263	4089
1970	1613	2814	5619	21087	6085	2415	2915	2091	3893	4752	1461	2332
1971	635	826	5460	4683	3920	3443	3206	2944	4962	4744	2267	4001
1972	1625	2659	2813	2041	2958	4066	1612	2074	4766	3876	1654	858
1973	1420	1175	3283	9363	7135	3453	2883	3886	4709	4677	1674	2339
1974	1402	6734	7286	11645	4438	9425	6167	4781	4190	4501	3025	4297
1975	1611	2230	2043	1504	4231	4693	2912	4488	6269	2731	4183	4074
1976	1659	3785	2576	1938	1470	1094	642	818	1288	1532	808	845
1977	619	700	1205	409	405	250	188	361	790	188	188	281
1978	1047	453	500	2609	4839	6037	3923	4179	4437	4737	2258	3531
1979	1588	1998	1748	2334	3646	3345	2823	3283	4742	4266	2155	2322
1980	1414	1116	1783	18239	13355	3461	2902	2840	2984	4771	2351	4095
1981	1924	1961	2113	1610	1258	1671	2883	2069	1255	3939	1267	842
1982	677	3959	14358	8097	15332	7664	14489	9318	6135	4751	2621	4660
1983	2053	8092	9192	7674	12546	16577	6556	10555	14454	5893	4939	5084
1984	1606	15955	15079	6650	5889	2602	2485	2307	2799	7256	1657	2333
1985	1395	3642	2593	1936	1484	1518	2900	2079	3113	2700	2288	1598
1986	937	1060	1239	4318	33021	10926	2631	2865	3332	4753	2263	3529
1987	2252	1402	1890	1456	1131	1541	1650	1543	2834	2147	788	839
1988	633	731	1281	956	1743	1395	653	2093	1280	1523	1292	281
1989	375	738	1247	902	781	7741	3601	3498	3830	3525	2855	1035
1990	1415	2651	2176	1681	1280	1460	1886	887	1551	1576	1338	1012
1991	848	697	1218	896	432	815	1610	2052	1275	4335	2729	2318
1992	874	883	1230	917	528	1455	1761	2045	1279	1519	1600	2260
1993	375	375	515	1705	6129	7626	3867	5284	5398	4732	2651	3683
AVG:	1439	2390	3526	4107	4975	3928	3574	3669	3930	3910	2273	2497
MIN:	375	375	500	409	405	250	188	361	790	188	188	281
MAX:	2801	16691	21238	21087	33021	16577	14489	11353	14454	7256	4939	5084

Table 3.4.4-39. Simulated American River Flow at H Street (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	1	1	1	1	1	1	1	0	0	0
1923	0	0	2	2	2	1	1	1	1	0	60	-63
1924	1	0	2	2	2	11	1	2	0	0	0	434
1925	-4	0	0	0	-468	4	0	0	0	0	55	0
1926	-55	0	0	0	1	0	0	49	-12	33	247	-2
1927	22	17	-315	4	0	-1	0	0	1	1	0	0
1928	0	0	2	2	1	1	1	8	50	74	-64	1
1929	0	0	0	3	-197	-71	126	115	-50	-32	51	-194
1930	188	103	-2	0	-184	2	0	0	197	-5	-113	1
1931	268	212	191	143	110	82	-517	7	-217	2	924	150
1932	406	-165	-497	10	-879	8	0	0	0	0	1	2
1933	112	-4	-2	0	0	86	-126	208	-4	-85	-107	-5
1934	-46	-36	-33	0	0	0	142	155	-80	1	626	-6
1935	118	0	0	-250	-4	0	-720	6	0	0	489	-351
1936	176	-208	8	-129	1	-1	-1	-1	-2	0	53	-60
1937	0	-1	-1	0	-2	-1	0	0	65	-1	-62	1
1938	0	0	0	0	0	0	0	0	1	0	0	0
1939	0	0	0	2	2	2	2	21	33	165	-108	2
1940	-44	8	0	-67	1	2	2	2	128	-1	57	-1
1941	-177	2	0	0	3	2	2	2	2	1	0	0
1942	0	0	2	2	2	2	2	2	1	1	0	0
1943	0	0	2	2	2	2	2	2	1	1	0	0
1944	0	0	0	3	2	2	2	2	2	8	32	26
1945	-36	-28	0	-3	4	2	2	2	59	-1	58	-23
1946	-90	1	0	3	3	2	2	2	54	0	53	199
1947	-2	-257	-143	-108	-77	286	-1	3	1	31	3	0
1948	0	0	9	-4	-3	2	-30	2	1	0	40	-42
1949	0	-65	-30	-22	2	121	1	2	44	-41	153	-1
1950	0	42	0	-191	2	4	3	3	3	0	35	-37
1951	0	0	0	2	1	1	1	1	1	-44	0	0
1952	0	45	0	0	4	3	3	2	2	40	-39	0
1953	0	0	3	2	2	2	2	2	2	0	0	0
1954	-2	2	0	3	3	2	2	2	42	-13	0	0
1955	0	0	0	-25	12	8	3	3	0	16	-5	0
1956	7	4	-30	0	3	1	2	2	2	57	-58	1
1957	0	0	0	3	3	2	2	2	74	50	-120	1
1958	0	0	1	3	3	2	2	2	2	30	-28	0
1959	0	1	3	2	2	2	2	2	0	0	0	0
1960	0	0	0	0	0	5	100	2	-95	98	13	31
1961	-1	0	0	0	0	0	4	2	0	34	0	0
1962	0	0	0	0	-178	2	5	0	0	0	60	-1
1963	-59	1	0	0	0	7	6	4	4	0	0	0
1964	0	0	4	4	3	2	3	2	84	-20	-6	0
1965	0	-30	-25	0	3	1	2	9	-6	65	-1	-59
1966	-7	0	-7	-5	17	3	3	3	0	41	0	0
1967	0	0	-100	1	0	0	6	4	4	0	0	0
1968	0	0	5	4	3	3	3	2	2	0	0	0
1969	0	177	85	-258	3	5	4	3	3	0	0	0
1970	0	0	0	5	4	3	3	2	79	-1	-29	0
1971	0	0	-43	0	21	-11	15	-9	0	0	0	0
1972	23	-22	-2	0	6	4	4	3	0	0	0	0
1973	0	0	-4	0	6	4	3	3	24	-24	34	0
1974	0	0	0	5	5	3	3	3	2	-3	3	0
1975	0	0	4	3	3	2	2	2	2	0	0	0
1976	0	0	0	4	4	3	3	3	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	-1	9	0	-9	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	100	-1
1980	0	0	-99	1	0	11	9	6	5	0	0	0
1981	46	-48	0	0	7	5	4	4	0	175	-2	0
1982	0	-176	2	0	7	5	4	3	3	2	1	0
1983	2	2	2	2	2	2	2	2	2	2	1	1
1984	2	2	2	2	2	2	5	-1	2	94	46	0
1985	0	-143	1	4	4	3	3	2	0	5	4	0
1986	-2	84	-2	-88	7	4	4	3	3	0	0	0
1987	0	0	0	5	4	3	3	27	153	194	-2	0
1988	0	0	0	0	-317	7	3	3	0	0	0	0
1989	0	0	-300	3	163	100	1	62	-126	64	46	52
1990	0	-30	-16	-9	-7	1	41	1	8	-22	-12	-14
1991	9	0	0	0	0	1	1	0	120	-493	289	499
1992	-284	-185	4	-25	1	0	114	-1	0	0	2	-1997
1993	0	0	0	1310	-12	0	0	0	0	0	-1	1
AVG:	8	-10	-18	5	-26	10	-10	11	9	7	39	-20
MIN:	-284	-257	-497	-258	-879	-71	-720	-9	-217	-493	-120	-1997
MAX:	406	212	191	1310	163	286	142	208	197	194	924	499

Table 3.4.4-40. Simulated American River Flow at H Street (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	1	1	1	1	1	1	1	0	0	0
1923	0	0	2	2	2	1	1	1	1	0	145	-151
1924	1	0	2	2	2	9	1	2	0	0	0	67
1925	-1	0	0	0	-78	1	0	1	0	0	146	-1
1926	38	-1	0	1	-200	2	0	0	11	29	148	-1
1927	148	117	-409	5	-1	-1	0	0	0	1	0	0
1928	0	0	2	1	1	1	1	-57	165	-153	27	0
1929	0	0	0	3	-198	-71	65	32	-28	-14	7	-147
1930	130	57	-1	0	-57	0	0	0	35	-7	1	0
1931	-5	-4	-3	-3	-1	-2	-9	0	4	0	14	119
1932	2	0	0	0	-146	1	0	0	0	0	1	3
1933	143	-4	-2	0	0	29	-161	51	-4	-20	-32	-6
1934	-4	-3	-3	0	0	0	27	40	-23	0	0	0
1935	7	0	0	0	-4	0	-56	0	0	0	546	-352
1936	518	63	60	-845	8	-1	-3	-3	-3	0	259	-277
1937	1	-1	-1	0	-3	-1	0	0	-170	1	493	-4
1938	0	1	0	0	0	0	4	3	2	0	0	0
1939	0	0	0	3	3	2	2	4	8	32	-25	0
1940	-5	1	0	-12	0	2	2	2	62	-1	223	-2
1941	-190	-88	1	0	4	3	2	2	2	1	0	0
1942	0	0	2	2	2	2	2	2	2	1	0	0
1943	0	0	2	2	2	2	2	2	2	1	0	0
1944	0	0	0	3	2	2	2	2	2	9	31	64
1945	-72	-55	10	16	4	2	2	2	-453	4	332	207
1946	-102	1	0	3	29	2	-22	2	186	-2	178	-89
1947	1	-104	-120	-90	-63	110	1	2	2	19	41	0
1948	0	0	-315	-20	227	-1	75	1	1	0	40	-42
1949	0	53	0	1	2	-45	2	2	41	-39	126	-1
1950	0	-87	1	-40	0	4	3	3	3	0	171	-178
1951	2	0	0	2	1	1	1	1	1	-21	0	0
1952	0	21	0	0	4	3	3	2	2	162	-146	-13
1953	0	0	3	2	2	2	2	2	2	0	0	0
1954	-14	15	0	4	3	2	2	2	42	-13	0	0
1955	0	0	0	-25	12	8	3	3	0	5	-7	0
1956	-2	-1	-2	0	3	1	2	2	2	1653	-1659	15
1957	0	0	0	3	3	2	2	2	86	174	-255	2
1958	0	0	1	4	3	2	2	2	2	36	-34	0
1959	0	1	3	2	2	2	2	2	0	0	0	0
1960	0	0	0	0	0	5	5	3	-1	7	2	0
1961	0	0	0	0	0	0	3	2	0	96	-1	0
1962	0	0	0	0	-111	1	6	0	0	0	30	0
1963	-30	0	0	0	0	8	6	5	4	0	127	-132
1964	1	0	5	4	3	2	3	3	45	-13	-7	0
1965	0	-25	2	0	3	2	2	10	-7	69	-1	-66
1966	-3	0	-4	-3	11	3	3	3	0	40	0	0
1967	0	0	-97	1	0	0	6	5	4	0	0	0
1968	0	0	5	4	3	3	3	2	2	0	0	0
1969	0	40	0	-39	0	5	4	3	3	0	0	0
1970	0	0	0	5	4	3	3	3	95	-1	-35	0
1971	0	0	-52	0	24	-13	16	-9	0	0	0	0
1972	30	-28	-2	0	6	4	4	3	0	-865	392	-4
1973	0	0	419	-4	7	4	4	2	-8	8	180	-2
1974	0	0	0	5	5	4	3	3	3	-266	267	-2
1975	0	0	4	3	3	3	2	2	2	0	0	0
1976	0	0	0	4	4	3	3	3	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	-5	-1	0	1	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	28	0
1980	0	0	-28	0	0	11	9	7	5	0	0	0
1981	43	-44	0	0	7	5	4	4	0	51	0	0
1982	0	-52	0	0	7	5	4	3	3	2	2	0
1983	2	2	2	2	2	2	2	2	2	2	2	1
1984	2	2	2	2	2	2	5	-1	2	95	66	-1
1985	0	-164	1	4	4	3	3	3	0	8	2	1
1986	-3	89	-2	-94	7	4	4	3	3	0	0	0
1987	0	0	0	5	5	3	3	7	-36	58	-1	0
1988	0	0	0	0	-30	4	3	3	0	0	0	0
1989	0	0	0	0	-5	0	3	15	5	6	3	53
1990	0	-55	-57	-39	-30	1	111	1	6	-13	0	11
1991	-6	0	0	0	0	1	2	0	4	9	-5	0
1992	-41	6	0	0	0	0	31	0	0	0	-12	-19
1993	0	0	0	0	0	0	0	0	0	0	238	-247
AVG:	8	-3	-8	-15	-7	2	3	3	2	16	28	-17
MIN:	-190	-164	-409	-845	-200	-71	-161	-57	-453	-865	-1659	-352
MAX:	518	117	419	16	227	110	111	51	186	1653	546	207

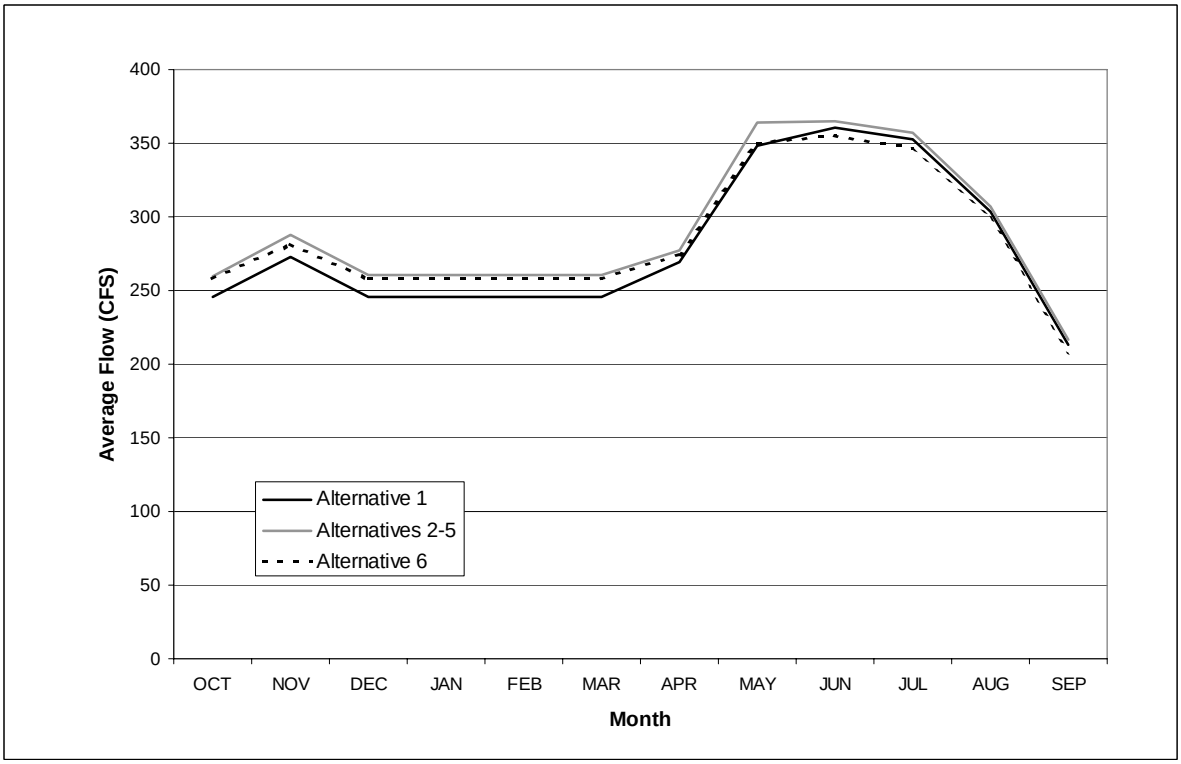


Figure 3.4.4-5. Average Simulated Monthly Mokelumne River Flow Below Camanche Reservoir (Dry and Critical Years), 2001 LOD

Table 3.4.4-41. Simulated Camanche Reservoir Release (CFS)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2547	2585	1061	962	832
1923	325	325	461	531	478	325	395	850	1005	831	749	617
1924	325	325	325	325	325	325	222	236	298	271	233	172
1925	125	130	130	130	130	130	295	652	756	633	550	419
1926	325	325	325	325	325	325	295	395	358	393	343	233
1927	220	220	220	220	220	220	325	1254	1607	1006	908	778
1928	325	443	325	325	325	910	495	509	764	493	407	276
1929	325	434	325	325	325	325	297	363	298	309	257	186
1930	220	220	220	220	220	220	295	395	358	393	343	233
1931	220	220	220	220	220	220	222	236	298	271	233	172
1932	125	130	130	130	130	130	295	445	527	393	343	233
1933	250	250	250	250	250	250	295	395	358	393	343	233
1934	220	220	220	220	220	220	297	363	298	309	257	186
1935	220	220	220	220	220	220	295	445	527	393	343	233
1936	250	250	250	250	1897	546	658	1731	1567	1006	907	777
1937	325	325	325	325	325	647	495	1018	1172	858	766	635
1938	325	325	1322	325	1226	1797	2468	3047	2322	1211	1108	971
1939	325	325	325	325	325	325	297	363	298	309	257	186
1940	220	220	220	220	220	360	525	1553	1223	818	720	590
1941	325	325	360	598	932	693	495	1278	1617	1057	965	834
1942	325	325	548	1419	1090	325	425	2153	2108	1163	1063	931
1943	325	596	485	1581	1063	1895	790	1767	1356	952	852	719
1944	325	325	325	325	325	325	295	395	358	393	343	233
1945	220	220	220	220	563	220	495	1065	1119	945	863	732
1946	325	554	1133	663	325	325	445	815	1069	755	663	531
1947	325	325	325	325	325	325	295	395	358	393	343	233
1948	220	220	220	220	220	220	295	445	527	393	343	233
1949	250	250	250	250	250	250	295	447	529	395	345	235
1950	325	325	325	325	516	351	544	1236	1293	1023	934	796
1951	325	3418	4189	1363	1148	455	525	936	990	626	538	408
1952	325	325	751	1453	1345	1158	3139	3242	1987	1459	1355	1215
1953	325	325	325	325	1253	325	295	765	869	746	663	532
1954	325	325	325	325	325	325	295	445	527	393	343	233
1955	250	250	250	250	250	250	295	395	358	393	343	233
1956	250	250	2313	3099	1058	325	528	2181	1948	1191	1090	955
1957	325	325	325	325	325	325	295	628	733	609	527	395
1958	325	325	325	325	1152	1053	1957	2702	2006	1282	1181	1046
1959	325	325	325	325	325	325	295	395	358	393	343	233
1960	220	220	220	220	220	220	295	395	358	393	343	233
1961	220	220	220	220	220	220	222	236	298	309	257	181
1962	125	130	130	130	130	130	295	445	527	393	343	233
1963	220	220	220	220	679	220	395	1581	1474	1065	973	841
1964	325	683	325	325	325	325	295	395	358	393	343	233
1965	220	220	2453	2329	917	220	475	1530	1635	1231	1131	999
1966	325	618	337	346	325	325	295	395	358	393	343	233
1967	250	250	250	486	578	952	1248	3292	1870	1466	1365	1230
1968	325	325	325	325	325	325	295	395	358	393	343	233
1969	220	220	220	1313	1695	870	2439	3544	1910	1389	1286	1147
1970	325	325	425	3489	1128	560	525	787	892	672	589	458
1971	325	660	824	743	674	579	495	935	939	816	733	602
1972	325	376	412	325	325	325	395	445	527	393	343	233
1973	250	250	250	686	1312	660	495	943	1147	833	741	610
1974	325	1378	931	1416	325	947	753	1431	1536	1131	1033	902
1975	325	325	325	325	325	325	445	1283	1337	1213	1131	999
1976	325	372	325	325	325	325	222	236	298	271	233	172
1977	125	130	130	130	130	130	222	236	298	271	233	172
1978	125	130	130	130	130	130	222	236	298	271	233	172
1979	125	130	130	130	130	130	220	268	358	393	343	228
1980	162	130	130	130	1523	579	525	1471	1625	1221	1123	992
1981	325	325	325	325	325	325	295	395	358	393	343	233
1982	220	220	333	1518	3048	1853	3737	3117	1948	1545	1440	1296
1983	325	1417	1769	1456	2384	3530	1938	4551	3673	2192	2087	1943
1984	325	2339	2755	1564	1050	427	525	1017	1121	900	818	688
1985	325	576	325	325	325	325	295	395	358	393	343	233
1986	250	250	250	250	5129	2772	549	1852	1470	1067	965	827
1987	325	325	325	325	325	325	222	236	298	309	257	181
1988	220	220	220	220	220	220	222	236	298	271	233	172
1989	125	130	130	130	130	130	295	445	527	393	343	233
1990	162	130	130	130	130	130	297	363	298	309	257	186
1991	125	130	130	130	130	130	222	236	298	309	257	181
1992	125	130	130	130	130	130	222	236	298	309	257	181
1993	125	130	130	130	130	130	325	959	1063	843	761	631
AVG:	262	392	488	546	635	503	567	1014	932	695	624	511
MIN:	125	130	130	130	130	130	220	236	298	271	233	172
MAX:	325	3418	4189	3489	5129	3530	3737	4551	3673	2192	2087	1943

Table 3.4.4-42. Simulated Camanche Reservoir Release (CFS)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2472	2569	1042	943	812
1923	325	325	441	521	469	325	396	828	983	809	727	595
1924	325	325	325	325	325	325	223	237	299	272	234	173
1925	220	220	220	220	220	220	296	690	794	670	588	456
1926	325	325	325	325	325	325	296	396	359	394	344	234
1927	250	250	250	250	793	250	557	1397	1840	987	889	758
1928	325	433	325	325	325	870	496	491	741	468	389	261
1929	325	423	325	325	325	325	298	364	299	310	258	186
1930	250	250	250	250	250	250	296	396	359	394	344	234
1931	250	250	250	250	250	250	223	237	299	272	234	173
1932	125	130	130	130	130	130	296	446	528	394	344	234
1933	250	250	250	250	250	250	296	396	359	394	344	234
1934	250	250	250	250	250	250	298	364	299	310	258	186
1935	220	220	220	220	220	220	296	576	681	557	475	343
1936	325	325	325	325	2341	536	647	1717	1551	987	888	756
1937	325	325	325	325	325	597	496	998	1152	838	746	614
1938	325	325	1302	325	1205	1787	2457	3033	2306	1191	1089	951
1939	325	325	325	325	325	325	298	364	299	310	258	186
1940	250	250	250	250	417	1578	525	1528	1204	800	701	571
1941	325	325	339	589	923	683	496	1258	1596	1038	946	814
1942	325	325	528	1409	1080	325	425	2118	2092	1144	1044	911
1943	325	585	475	1571	1054	1885	779	1753	1337	933	833	700
1944	325	325	325	325	325	325	296	396	359	394	344	234
1945	220	220	220	220	354	220	496	1043	1097	923	841	709
1946	325	544	1123	653	325	325	446	751	1055	741	649	517
1947	325	325	325	325	325	325	296	396	359	394	344	234
1948	220	220	220	220	220	220	296	446	528	394	344	234
1949	250	250	250	250	250	250	296	446	528	394	344	234
1950	250	250	250	250	332	341	541	1217	1274	1004	915	776
1951	325	3407	4179	1353	1138	444	525	916	971	607	518	388
1952	325	325	730	1443	1335	1147	3127	3228	1971	1439	1336	1195
1953	325	325	325	325	1209	325	296	743	847	723	641	509
1954	325	325	325	325	325	325	296	446	528	394	344	234
1955	250	250	250	250	250	250	296	396	359	394	344	234
1956	220	220	2059	3089	1048	314	528	2156	1932	1171	1070	935
1957	325	325	325	325	325	325	296	599	703	579	497	365
1958	325	325	325	325	1109	1043	1945	2688	1990	1262	1162	1026
1959	325	325	325	325	325	325	296	396	359	394	344	234
1960	250	250	250	250	250	250	296	396	359	394	344	234
1961	220	220	220	220	220	220	223	237	299	310	258	181
1962	125	130	130	130	130	130	296	460	542	408	358	248
1963	325	325	325	325	2422	325	350	1484	1458	1046	954	821
1964	325	672	325	325	325	325	296	396	359	394	344	234
1965	250	250	3054	2319	907	250	475	1513	1569	1205	1115	982
1966	325	607	327	336	325	325	296	396	359	394	344	234
1967	220	220	220	424	568	942	1236	3278	1851	1447	1347	1212
1968	325	325	325	325	325	325	296	396	359	394	344	234
1969	250	250	250	2548	1685	860	2428	3530	1894	1371	1267	1126
1970	325	325	404	3479	1118	550	525	767	872	652	569	437
1971	325	649	813	733	664	569	496	915	919	796	713	581
1972	325	366	402	325	325	325	396	446	528	394	344	234
1973	250	250	250	525	1302	650	496	944	1048	828	742	610
1974	325	1368	920	1406	325	928	742	1413	1518	1114	1015	884
1975	325	325	325	325	325	325	446	1213	1317	1193	1111	979
1976	325	361	325	325	325	325	223	237	299	272	234	173
1977	220	220	220	220	220	220	223	237	299	272	234	173
1978	125	130	130	130	130	130	223	237	299	272	234	173
1979	125	130	130	130	130	130	296	446	528	394	344	234
1980	162	130	130	410	2581	568	525	1451	1606	1202	1103	971
1981	325	325	325	325	325	325	296	396	359	394	344	234
1982	250	250	1325	1508	3038	1842	3725	3103	1929	1527	1421	1277
1983	325	1406	1758	1446	2374	3519	1926	4537	3657	2173	2067	1923
1984	325	2329	2745	1554	1040	417	525	997	1101	881	798	668
1985	325	566	325	325	325	325	296	396	359	394	344	234
1986	250	250	250	250	4930	2762	547	1829	1452	1048	946	808
1987	325	325	325	325	325	325	223	237	299	310	258	181
1988	220	220	220	220	220	220	223	237	299	272	234	173
1989	125	130	130	130	130	130	296	446	528	394	344	234
1990	220	220	220	220	220	220	298	364	299	310	258	186
1991	220	220	220	220	220	220	298	364	299	310	258	186
1992	125	130	130	130	130	130	298	364	299	310	258	186
1993	125	130	130	130	130	130	325	1132	1387	1023	934	804
AVG:	272	399	512	571	685	525	572	1016	935	692	621	507
MIN:	125	130	130	130	130	130	223	237	299	272	234	173
MAX:	325	3407	4179	3479	4930	3519	3725	4537	3657	2173	2067	1923

Table 3.4.4-43. Simulated Camanche Reservoir Release (CFS)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2477	3406	751	652	521
1923	325	325	453	526	467	325	396	815	1276	696	613	481
1924	325	325	325	325	325	325	223	237	299	272	234	173
1925	220	220	220	220	220	220	296	446	528	394	344	234
1926	325	325	325	325	325	325	296	396	359	394	344	234
1927	250	250	250	250	250	250	325	1050	1913	687	604	474
1928	325	434	325	325	325	883	496	1032	605	482	399	267
1929	325	325	325	325	325	325	298	364	299	310	258	186
1930	220	220	220	220	220	220	296	396	359	394	344	234
1931	220	220	220	220	220	220	223	237	299	272	234	173
1932	125	130	130	130	130	130	296	446	528	394	344	234
1933	220	220	220	220	220	220	296	396	359	394	344	234
1934	220	220	220	220	220	220	298	364	299	310	258	186
1935	220	220	220	220	220	220	296	446	528	394	344	234
1936	220	220	220	220	220	220	425	2030	1914	689	601	470
1937	325	325	325	325	325	625	496	1334	1409	613	531	399
1938	325	325	1305	325	1225	1796	2453	3023	3143	901	799	661
1939	325	325	325	325	325	325	298	364	299	310	258	186
1940	250	250	250	250	250	250	425	2056	1005	560	478	348
1941	325	325	343	592	927	687	496	1452	2224	743	657	525
1942	325	325	533	1419	1084	325	425	2113	2929	853	753	620
1943	325	590	476	1580	1058	1894	777	2288	1378	708	624	491
1944	325	325	325	325	325	325	296	396	359	394	344	234
1945	250	250	250	250	250	250	446	968	1781	687	601	469
1946	325	547	1129	652	325	325	446	1370	873	565	483	351
1947	325	325	325	325	325	325	296	396	359	394	344	234
1948	250	250	250	250	250	250	296	446	528	394	344	234
1949	325	325	325	325	325	325	296	446	528	394	344	234
1950	250	250	250	250	250	250	383	1002	1756	744	655	518
1951	325	3415	4187	1361	1142	444	525	1336	735	515	432	302
1952	325	325	740	1451	1338	1152	3124	3217	2673	1192	1089	948
1953	325	325	325	325	1216	325	296	728	833	709	627	495
1954	325	325	325	325	325	325	296	446	528	394	344	234
1955	325	325	325	325	325	325	296	396	359	394	344	234
1956	250	250	1457	3100	1050	310	528	2149	2770	881	780	645
1957	325	325	325	325	325	325	296	585	690	566	484	352
1958	325	325	325	325	1123	1054	1949	2679	2828	971	871	735
1959	325	325	325	325	325	325	296	396	359	394	344	234
1960	250	250	250	250	250	250	296	396	359	394	344	234
1961	220	220	220	220	220	220	223	237	299	310	258	181
1962	220	220	220	220	220	220	296	446	528	394	344	234
1963	220	220	220	220	220	220	296	828	1111	750	667	536
1964	325	676	325	325	325	325	296	396	359	394	344	234
1965	250	250	2158	2321	906	250	475	1500	2112	1010	920	788
1966	325	610	330	339	325	325	296	396	359	394	344	234
1967	250	250	250	273	567	948	1245	3269	2186	1564	1095	960
1968	325	325	325	325	325	325	296	396	359	394	344	234
1969	250	250	250	996	1699	860	2427	3520	2731	1080	977	838
1970	325	325	409	3490	1119	553	525	752	857	637	554	422
1971	325	656	821	733	663	573	496	900	904	780	698	566
1972	325	365	411	325	325	325	346	446	528	394	344	234
1973	325	325	325	325	1274	654	496	1294	1224	629	546	414
1974	325	1372	929	1410	325	933	742	1665	1879	885	796	666
1975	325	325	325	325	325	325	446	1202	1802	1022	939	807
1976	325	358	325	325	325	325	223	237	299	272	234	173
1977	220	220	220	220	220	220	223	237	299	272	234	173
1978	125	130	130	130	130	130	223	237	299	272	234	173
1979	125	130	130	130	130	130	296	446	528	394	344	234
1980	162	130	130	130	130	130	325	1171	1400	1014	932	802
1981	325	325	325	325	325	325	296	396	359	394	344	234
1982	250	250	250	1259	3045	1854	3728	3093	2533	1316	1210	1066
1983	325	1412	1764	1459	2382	3536	1928	4528	3645	2702	1769	1625
1984	325	2356	2756	1552	1045	417	525	982	1194	831	749	619
1985	325	571	325	325	325	325	296	396	359	394	344	234
1986	250	250	250	250	4878	2771	546	2255	1698	798	706	568
1987	325	325	325	325	325	325	223	237	299	310	258	181
1988	220	220	220	220	220	220	223	237	299	272	234	173
1989	125	130	130	130	130	130	296	446	528	394	344	234
1990	220	220	220	220	220	220	298	364	299	310	258	186
1991	125	130	130	130	130	130	298	364	299	310	258	186
1992	125	130	130	130	130	130	223	237	299	310	258	181
1993	125	130	130	130	130	130	325	546	628	397	347	239
AVG:	272	399	478	536	580	496	556	1038	1058	599	514	401
MIN:	125	130	130	130	130	130	223	237	299	272	234	173
MAX:	325	3415	4187	3490	4878	3536	3728	4528	3645	2702	1769	1625

Table 3.4.4-44. Simulated Camanche Reservoir Release (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	-75	-16	-19	-19	-20
1923	0	0	-20	-10	-9	0	1	-22	-22	-22	-22	-22
1924	0	0	0	0	0	0	1	1	1	1	1	1
1925	95	90	90	90	90	90	1	38	38	37	38	37
1926	0	0	0	0	0	0	1	1	1	1	1	1
1927	30	30	30	30	573	30	232	143	233	-19	-19	-20
1928	0	-10	0	0	0	-40	1	-18	-23	-25	-18	-15
1929	0	-11	0	0	0	0	1	1	1	1	1	0
1930	30	30	30	30	30	30	1	1	1	1	1	1
1931	30	30	30	30	30	30	1	1	1	1	1	1
1932	0	0	0	0	0	0	1	1	1	1	1	1
1933	0	0	0	0	0	0	1	1	1	1	1	1
1934	30	30	30	30	30	30	1	1	1	1	1	0
1935	0	0	0	0	0	0	1	131	154	164	132	110
1936	75	75	75	75	444	-10	-11	-14	-16	-19	-19	-21
1937	0	0	0	0	0	-50	1	-20	-20	-20	-20	-21
1938	0	0	-20	0	-21	-10	-11	-14	-16	-20	-19	-20
1939	0	0	0	0	0	0	1	1	1	1	1	0
1940	30	30	30	30	197	1218	0	-25	-19	-18	-19	-19
1941	0	0	-21	-9	-9	-10	1	-20	-21	-19	-19	-20
1942	0	0	-20	-10	-10	0	0	-35	-16	-19	-19	-20
1943	0	-11	-10	-10	-9	-10	-11	-14	-19	-19	-19	-19
1944	0	0	0	0	0	0	1	1	1	1	1	1
1945	0	0	0	0	-209	0	1	-22	-22	-22	-22	-23
1946	0	-10	-10	-10	0	0	1	-64	-14	-14	-14	-14
1947	0	0	0	0	0	0	1	1	1	1	1	1
1948	0	0	0	0	0	0	1	1	1	1	1	1
1949	0	0	0	0	0	0	1	-1	-1	-1	-1	-1
1950	-75	-75	-75	-75	-184	-10	-3	-19	-19	-19	-19	-20
1951	0	-11	-10	-10	-10	-11	0	-20	-19	-19	-20	-20
1952	0	0	-21	-10	-10	-11	-12	-14	-16	-20	-19	-20
1953	0	0	0	0	-44	0	1	-22	-22	-23	-22	-23
1954	0	0	0	0	0	0	1	1	1	1	1	1
1955	0	0	0	0	0	0	1	1	1	1	1	1
1956	-30	-30	-254	-10	-10	-11	0	-25	-16	-20	-20	-20
1957	0	0	0	0	0	0	1	-29	-30	-30	-30	-30
1958	0	0	0	0	-43	-10	-12	-14	-16	-20	-19	-20
1959	0	0	0	0	0	0	1	1	1	1	1	1
1960	30	30	30	30	30	30	1	1	1	1	1	1
1961	0	0	0	0	0	0	1	1	1	1	1	0
1962	0	0	0	0	0	0	1	15	15	15	15	15
1963	105	105	105	105	1743	105	-45	-97	-16	-19	-19	-20
1964	0	-11	0	0	0	0	1	1	1	1	1	1
1965	30	30	601	-10	-10	30	0	-17	-66	-26	-16	-17
1966	0	-11	-10	-10	0	0	1	1	1	1	1	1
1967	-30	-30	-30	-62	-10	-10	-12	-14	-19	-19	-18	-18
1968	0	0	0	0	0	0	1	1	1	1	1	1
1969	30	30	30	1235	-10	-10	-11	-14	-16	-18	-19	-21
1970	0	0	-21	-10	-10	-10	0	-20	-20	-20	-20	-21
1971	0	-11	-11	-10	-10	-10	1	-20	-20	-20	-20	-21
1972	0	-10	-10	0	0	0	1	1	1	1	1	1
1973	0	0	0	-161	-10	-10	1	1	-99	-5	1	0
1974	0	-10	-11	-10	0	-19	-11	-18	-18	-17	-18	-18
1975	0	0	0	0	0	0	1	-70	-20	-20	-20	-20
1976	0	-11	0	0	0	0	1	1	1	1	1	1
1977	95	90	90	90	90	90	1	1	1	1	1	1
1978	0	0	0	0	0	0	1	1	1	1	1	1
1979	0	0	0	0	0	0	76	178	170	1	1	6
1980	0	0	0	280	1058	-11	0	-20	-19	-19	-20	-21
1981	0	0	0	0	0	0	1	1	1	1	1	1
1982	30	30	992	-10	-10	-11	-12	-14	-19	-18	-19	-19
1983	0	-11	-11	-10	-10	-11	-12	-14	-16	-19	-20	-20
1984	0	-10	-10	-10	-10	-10	0	-20	-20	-19	-20	-20
1985	0	-10	0	0	0	0	1	1	1	1	1	1
1986	0	0	0	0	-199	-10	-2	-23	-18	-19	-19	-19
1987	0	0	0	0	0	0	1	1	1	1	1	0
1988	0	0	0	0	0	0	1	1	1	1	1	1
1989	0	0	0	0	0	0	1	1	1	1	1	1
1990	58	90	90	90	90	90	1	1	1	1	1	0
1991	95	90	90	90	90	90	76	128	1	1	1	5
1992	0	0	0	0	0	0	76	128	1	1	1	5
1993	0	0	0	0	0	0	0	173	324	180	173	173
AVG:	9	7	25	25	51	22	5	2	3	-3	-4	-4
MIN:	-75	-75	-254	-161	-209	-50	-45	-97	-99	-30	-30	-30
MAX:	105	105	992	1235	1743	1218	232	178	324	180	173	173

Table 3.4.4-45. Simulated Camanche Reservoir Release (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	-70	821	-310	-310	-311
1923	0	0	-8	-5	-11	0	1	-35	271	-135	-136	-136
1924	0	0	0	0	0	0	1	1	1	1	1	1
1925	95	90	90	90	90	90	1	-206	-228	-239	-206	-185
1926	0	0	0	0	0	0	1	1	1	1	1	1
1927	30	30	30	30	30	30	0	-204	306	-319	-304	-304
1928	0	-9	0	0	0	-27	1	523	-159	-11	-8	-9
1929	0	-109	0	0	0	0	1	1	1	1	1	0
1930	0	0	0	0	0	0	1	1	1	1	1	1
1931	0	0	0	0	0	0	1	1	1	1	1	1
1932	0	0	0	0	0	0	1	1	1	1	1	1
1933	-30	-30	-30	-30	-30	-30	1	1	1	1	1	1
1934	0	0	0	0	0	0	1	1	1	1	1	0
1935	0	0	0	0	0	0	1	1	1	1	1	1
1936	-30	-30	-30	-30	-1677	-326	-233	299	347	-317	-306	-307
1937	0	0	0	0	0	-22	1	316	237	-245	-235	-236
1938	0	0	-17	0	-1	-1	-15	-24	821	-310	-309	-310
1939	0	0	0	0	0	0	1	1	1	1	1	0
1940	30	30	30	30	30	-110	-100	503	-218	-258	-242	-242
1941	0	0	-17	-6	-5	-6	1	174	607	-314	-308	-309
1942	0	0	-15	0	-6	0	0	-40	821	-310	-310	-311
1943	0	-6	-9	-1	-5	-1	-13	521	22	-244	-228	-228
1944	0	0	0	0	0	0	1	1	1	1	1	1
1945	30	30	30	30	-313	30	-49	-97	662	-258	-262	-263
1946	0	-7	-4	-11	0	0	1	555	-196	-190	-180	-180
1947	0	0	0	0	0	0	1	1	1	1	1	1
1948	30	30	30	30	30	30	1	1	1	1	1	1
1949	75	75	75	75	75	75	1	-1	-1	-1	-1	-1
1950	-75	-75	-75	-75	-266	-101	-161	-234	463	-279	-279	-278
1951	0	-3	-2	-2	-6	-11	0	400	-255	-111	-106	-106
1952	0	0	-11	-2	-7	-6	-15	-25	686	-267	-266	-267
1953	0	0	0	0	-37	0	1	-37	-36	-37	-36	-37
1954	0	0	0	0	0	0	1	1	1	1	1	1
1955	75	75	75	75	75	75	1	1	1	1	1	1
1956	0	0	-856	1	-8	-15	0	-32	822	-310	-310	-310
1957	0	0	0	0	0	0	1	-43	-43	-43	-43	-43
1958	0	0	0	0	-29	1	-8	-23	822	-311	-310	-311
1959	0	0	0	0	0	0	1	1	1	1	1	1
1960	30	30	30	30	30	30	1	1	1	1	1	1
1961	0	0	0	0	0	0	1	1	1	1	1	0
1962	95	90	90	90	90	90	1	1	1	1	1	1
1963	0	0	0	0	-459	0	-99	-753	-363	-315	-306	-305
1964	0	-7	0	0	0	0	1	1	1	1	1	1
1965	30	30	-295	-8	-11	30	0	-30	477	-221	-211	-211
1966	0	-8	-7	-7	0	0	1	1	1	1	1	1
1967	0	0	0	-213	-11	-4	-3	-23	316	98	-270	-270
1968	0	0	0	0	0	0	1	1	1	1	1	1
1969	30	30	30	-317	4	-10	-12	-24	821	-309	-309	-309
1970	0	0	-16	1	-9	-7	0	-35	-35	-35	-35	-36
1971	0	-4	-3	-10	-11	-6	1	-35	-35	-36	-35	-36
1972	0	-11	-1	0	0	0	-49	1	1	1	1	1
1973	75	75	75	-361	-38	-6	1	351	77	-204	-195	-196
1974	0	-6	-2	-6	0	-14	-11	234	343	-246	-237	-236
1975	0	0	0	0	0	0	1	-81	465	-191	-192	-192
1976	0	-14	0	0	0	0	1	1	1	1	1	1
1977	95	90	90	90	90	90	1	1	1	1	1	1
1978	0	0	0	0	0	0	1	1	1	1	1	1
1979	0	0	0	0	0	0	76	178	170	1	1	6
1980	0	0	0	0	-1393	-449	-200	-300	-225	-207	-191	-190
1981	0	0	0	0	0	0	1	1	1	1	1	1
1982	30	30	-83	-259	-3	1	-9	-24	585	-229	-230	-230
1983	0	-5	-5	3	-2	6	-10	-23	-28	510	-318	-318
1984	0	17	1	-12	-5	-10	0	-35	73	-69	-69	-69
1985	0	-5	0	0	0	0	1	1	1	1	1	1
1986	0	0	0	0	-251	-1	-3	403	228	-269	-259	-259
1987	0	0	0	0	0	0	1	1	1	1	1	0
1988	0	0	0	0	0	0	1	1	1	1	1	1
1989	0	0	0	0	0	0	1	1	1	1	1	1
1990	58	90	90	90	90	90	1	1	1	1	1	0
1991	0	0	0	0	0	0	76	128	1	1	1	5
1992	0	0	0	0	0	0	1	1	1	1	1	0
1993	0	0	0	0	0	0	0	-413	-435	-446	-414	-392
AVG:	9	7	-10	-10	-55	-7	-11	25	126	-97	-110	-110
MIN:	-75	-109	-856	-361	-1677	-449	-233	-753	-435	-446	-414	-392
MAX:	95	90	90	90	90	90	76	555	822	510	1	6

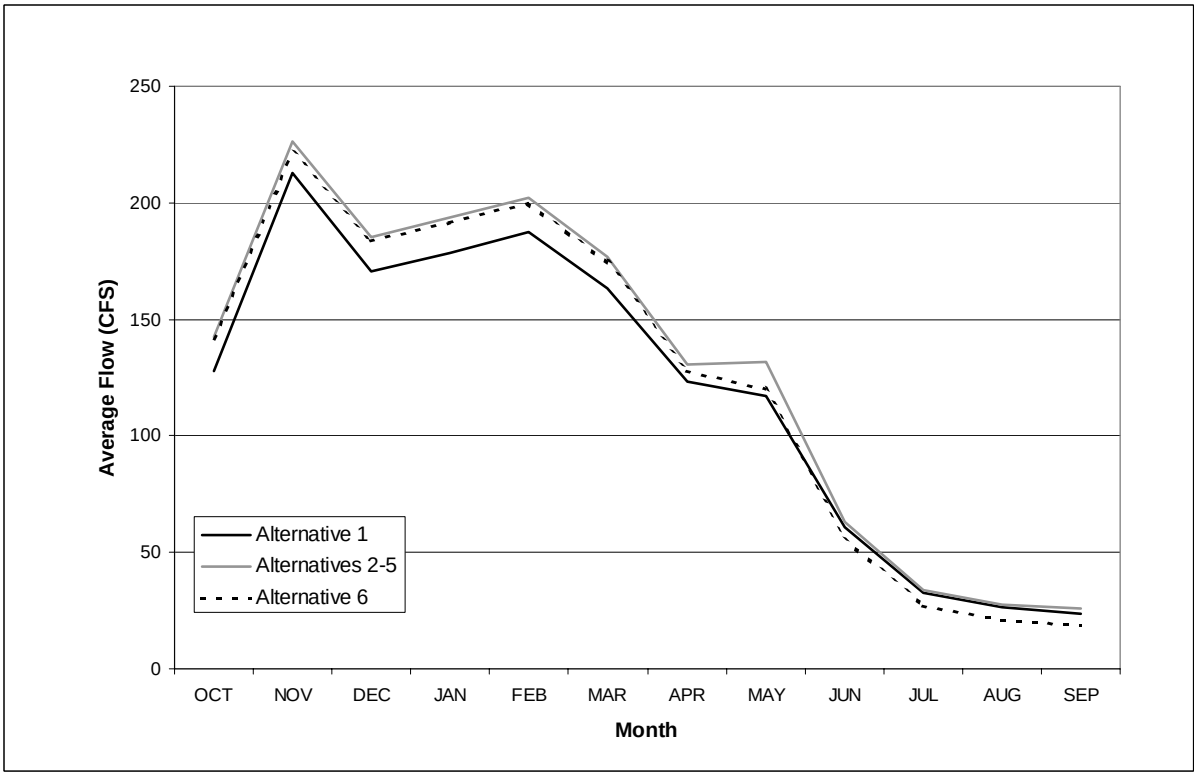


Figure 3.4.4-6. Average Simulated Monthly Mokelumne River Flow at Woodbridge (Dry and Critical Years), 2001 LOD

Table 3.4.4-46. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	181	260	244	253	261	236	324	2240	2173	603	579	579
1923	184	264	385	464	419	242	250	550	600	380	372	370
1924	188	268	254	258	268	243	75	23	31	18	15	15
1925	45	73	59	63	71	47	150	352	352	181	174	172
1926	188	268	254	258	266	242	150	150	31	29	22	20
1927	103	163	149	153	161	137	180	954	1202	555	531	531
1928	188	387	254	258	268	826	350	209	359	42	31	29
1929	188	377	254	258	266	243	150	150	31	29	22	20
1930	140	163	149	153	161	137	150	150	31	29	22	20
1931	103	163	149	153	161	138	75	23	31	18	15	15
1932	45	73	59	63	73	47	150	200	200	29	22	20
1933	133	193	179	183	191	167	150	150	31	29	22	20
1934	103	163	149	153	161	138	150	150	31	29	22	20
1935	140	163	149	153	161	137	150	200	200	29	22	20
1936	133	193	179	181	1837	460	510	1427	1159	551	527	527
1937	186	266	251	258	266	564	350	718	768	407	389	388
1938	188	268	1251	213	1126	1665	2270	2691	1859	700	676	676
1939	153	230	209	258	266	243	150	150	31	29	22	20
1940	140	163	149	153	163	276	380	1253	818	367	343	343
1941	188	268	289	532	873	610	350	977	1213	606	589	587
1942	188	268	477	1335	1015	222	260	1831	1680	689	665	665
1943	175	525	396	1498	989	1794	626	1446	930	478	455	455
1944	175	254	237	258	268	242	150	150	31	29	22	20
1945	103	163	149	153	504	137	350	765	715	494	486	485
1946	188	498	1062	596	266	242	300	515	665	304	286	285
1947	188	268	254	258	266	242	150	150	31	29	22	20
1948	103	163	149	153	163	137	150	200	200	29	22	20
1949	133	193	179	183	191	167	150	202	202	31	23	22
1950	208	268	254	217	420	223	350	885	835	517	506	505
1951	156	3326	4076	1296	1089	371	380	636	586	175	161	161
1952	188	268	680	1325	1235	1008	2923	2866	1503	927	903	903
1953	141	217	193	258	1194	242	150	465	465	294	286	285
1954	188	268	254	258	266	242	150	200	200	29	22	20
1955	133	193	179	183	191	167	150	150	31	29	22	20
1956	133	193	2242	3003	976	210	350	1846	1507	701	678	678
1957	166	244	225	258	266	242	150	328	328	158	150	148
1958	188	268	254	228	1066	937	1776	2364	1562	790	767	767
1959	165	242	223	258	266	242	150	150	31	29	22	20
1960	103	163	149	153	163	137	150	150	31	29	22	20
1961	103	163	149	153	161	138	75	23	31	29	22	15
1962	45	73	59	63	71	47	150	200	200	29	22	20
1963	103	163	149	153	620	137	250	1281	1069	614	596	595
1964	188	626	254	258	268	242	150	150	31	29	22	20
1965	103	163	2382	2248	844	120	313	1211	1211	760	736	736
1966	177	548	251	279	266	242	150	150	31	29	22	20
1967	133	193	179	389	492	837	1068	2956	1427	976	952	952
1968	166	243	224	258	268	242	150	150	31	29	22	20
1969	103	163	149	1191	1586	726	2230	3176	1434	865	842	842
1970	146	222	298	3414	1061	468	371	477	477	210	202	202
1971	182	596	744	676	614	496	350	635	535	364	357	355
1972	188	319	341	258	268	242	250	200	200	29	22	20
1973	133	193	179	619	1253	577	350	643	743	382	364	363
1974	188	1321	859	1345	262	859	603	1125	1125	674	650	650
1975	185	264	249	258	266	242	300	982	932	762	754	752
1976	188	315	254	258	268	243	75	23	31	18	15	15
1977	45	73	59	63	71	48	75	23	31	18	15	15
1978	45	73	59	63	71	48	75	23	31	18	15	15
1979	45	73	59	63	71	47	75	23	31	29	22	15
1980	45	73	59	62	1464	493	378	1169	1219	768	744	744
1981	187	267	252	258	266	242	150	150	31	29	22	20
1982	103	163	262	1369	2915	1680	3496	2716	1437	985	962	962
1983	125	1291	1615	1307	2251	3357	1697	4150	3162	1632	1609	1609
1984	125	2214	2602	1497	993	344	380	717	717	449	442	442
1985	188	519	254	258	266	242	150	150	31	29	22	20
1986	133	193	179	137	5028	2639	350	1495	1006	555	531	531
1987	153	229	207	258	266	243	75	23	31	29	22	15
1988	140	163	149	153	163	138	75	23	31	18	15	15
1989	45	73	59	63	71	47	150	200	200	29	22	20
1990	45	73	59	63	71	48	150	150	31	29	22	20
1991	45	73	59	63	71	48	75	23	31	29	22	15
1992	45	73	59	63	73	48	75	23	31	29	22	15
1993	45	73	59	63	71	47	180	659	659	392	384	384
AVG:	137	328	409	471	569	411	413	738	568	296	284	282
MIN:	45	73	59	62	71	47	75	23	31	18	15	15
MAX:	208	3326	4076	3414	5028	3357	3496	4150	3162	1632	1609	1609

Table 3.4.4-47. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	182	261	245	254	262	237	325	2166	2159	584	561	561
1923	185	265	366	454	409	241	250	527	577	357	349	347
1924	188	268	254	258	268	242	75	23	31	18	15	15
1925	140	163	149	153	161	136	150	389	389	218	210	209
1926	188	268	254	258	266	241	150	150	31	29	22	20
1927	133	193	179	183	733	166	411	1096	1434	534	511	511
1928	188	376	254	258	268	786	350	200	350	33	22	20
1929	192	366	254	258	266	242	150	150	31	29	22	20
1930	170	193	179	183	191	166	150	150	31	29	22	20
1931	133	193	179	183	191	167	75	23	31	18	15	15
1932	45	73	59	63	73	46	150	200	200	29	22	20
1933	133	193	179	183	191	166	150	150	31	29	22	20
1934	133	193	179	183	191	167	150	150	31	29	22	20
1935	140	163	149	153	161	136	150	275	275	105	97	95
1936	188	268	254	252	2279	445	494	1409	1138	526	503	503
1937	184	263	248	258	266	514	350	697	747	386	368	367
1938	188	268	1231	214	1106	1655	2259	2678	1843	681	657	657
1939	154	231	210	258	266	242	150	150	31	29	22	20
1940	170	193	179	183	360	1494	379	1227	799	347	324	324
1941	188	268	268	522	863	599	350	956	1190	586	568	567
1942	188	268	457	1326	1007	224	260	1796	1665	670	646	646
1943	176	515	387	1489	980	1784	615	1433	911	460	436	436
1944	176	255	238	258	268	241	150	150	31	29	22	20
1945	103	163	149	153	294	136	350	742	692	471	463	462
1946	188	487	1051	586	266	241	300	450	650	289	271	270
1947	188	268	254	258	266	241	150	150	31	29	22	20
1948	103	163	149	153	163	136	150	200	200	29	22	20
1949	133	193	179	183	191	166	150	200	200	29	22	20
1950	133	193	179	145	238	215	350	868	818	501	490	488
1951	158	3318	4069	1286	1079	361	379	615	565	154	140	140
1952	188	268	659	1316	1226	998	2912	2853	1488	908	884	884
1953	142	218	194	258	1150	241	150	442	442	271	263	262
1954	188	268	254	258	266	241	150	200	200	29	22	20
1955	133	193	179	183	191	166	150	150	31	29	22	20
1956	103	163	1987	2994	967	201	350	1821	1491	682	659	659
1957	167	245	226	258	266	241	150	297	297	127	119	117
1958	188	268	254	229	1023	927	1765	2350	1547	771	748	748
1959	166	244	224	258	266	241	150	150	31	29	22	20
1960	133	193	179	183	193	166	150	150	31	29	22	20
1961	103	163	149	153	161	137	75	23	31	29	22	15
1962	45	73	59	63	71	46	150	214	214	43	36	34
1963	208	268	254	255	2360	238	200	1179	1048	589	572	570
1964	186	612	250	258	268	241	150	150	31	29	22	20
1965	133	193	2983	2239	835	151	313	1195	1145	734	720	720
1966	178	539	242	270	266	241	150	150	31	29	22	20
1967	103	163	149	329	484	828	1058	2943	1410	958	935	935
1968	167	245	226	258	268	241	150	150	31	29	22	20
1969	133	193	179	2417	1568	706	2207	3150	1405	834	810	810
1970	138	214	269	3406	1053	459	371	458	458	190	183	183
1971	183	587	735	666	604	485	350	614	514	343	336	334
1972	188	309	331	258	268	241	250	200	200	29	22	20
1973	133	193	179	458	1243	566	350	643	643	375	364	363
1974	188	1311	849	1336	263	840	592	1108	1108	657	633	633
1975	186	265	250	258	266	241	300	911	911	741	733	731
1976	188	304	254	258	268	242	75	23	31	18	15	15
1977	140	163	149	153	161	137	75	23	31	18	15	15
1978	45	73	59	63	71	47	75	23	31	18	15	15
1979	45	73	59	63	71	46	150	200	200	29	22	20
1980	45	73	59	332	2514	472	366	1136	1186	735	711	711
1981	179	259	242	258	266	241	150	150	31	29	22	20
1982	133	193	1254	1359	2905	1669	3483	2701	1417	966	942	942
1983	125	1280	1605	1297	2241	3346	1685	4135	3145	1612	1588	1588
1984	125	2203	2592	1487	983	333	379	696	696	428	421	421
1985	188	509	254	258	266	241	150	150	31	29	22	20
1986	133	193	179	139	4831	2631	350	1474	989	538	514	514
1987	154	231	210	258	266	242	75	23	31	29	22	15
1988	140	163	149	153	163	137	75	23	31	18	15	15
1989	45	73	59	63	71	46	150	200	200	29	22	20
1990	103	163	149	153	161	137	150	150	31	29	22	20
1991	140	163	149	153	161	137	150	150	31	29	22	20
1992	45	73	59	63	73	47	150	150	31	29	22	20
1993	45	73	59	63	71	46	179	831	981	570	556	556
AVG:	145	335	433	496	619	432	416	738	569	290	278	277
MIN:	45	73	59	63	71	46	75	23	31	18	15	15
MAX:	208	3318	4069	3406	4831	3346	3483	4135	3145	1612	1588	1588

Table 3.4.4-48. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	188	268	254	255	263	238	325	2172	2996	294	270	270
1923	186	265	378	459	408	241	250	514	871	243	235	234
1924	188	268	254	258	268	242	75	23	31	18	15	15
1925	140	163	149	153	161	136	150	200	200	29	22	20
1926	208	268	254	258	266	241	150	150	31	29	22	20
1927	133	193	179	183	191	166	179	749	1508	234	227	227
1928	188	377	254	258	268	800	350	731	200	29	22	20
1929	188	268	254	258	266	242	150	150	31	29	22	20
1930	140	163	149	153	161	136	150	150	31	29	22	20
1931	103	163	149	153	161	137	75	23	31	18	15	15
1932	45	73	59	63	73	46	150	200	200	29	22	20
1933	103	163	149	153	161	136	150	150	31	29	22	20
1934	103	163	149	153	161	137	150	150	31	29	22	20
1935	140	163	149	153	161	136	150	200	200	29	22	20
1936	103	163	149	153	163	136	279	1729	1508	237	223	223
1937	188	268	254	258	266	541	350	1033	1003	161	153	151
1938	188	268	1234	214	1127	1664	2256	2667	2681	391	367	367
1939	154	231	210	258	266	242	150	150	31	29	22	20
1940	170	193	179	183	193	166	279	1755	599	108	101	101
1941	188	268	272	525	868	603	350	1151	1818	291	280	278
1942	188	268	462	1336	1010	224	260	1792	2503	379	356	356
1943	176	520	389	1498	985	1794	613	1968	953	235	228	228
1944	176	255	239	258	268	241	150	150	31	29	22	20
1945	133	193	179	183	191	166	300	667	1375	235	223	222
1946	188	490	1057	586	266	241	300	1069	467	113	105	103
1947	188	268	254	258	266	241	150	150	31	29	22	20
1948	133	193	179	183	193	166	150	200	200	29	22	20
1949	208	268	254	258	266	241	150	200	200	29	22	20
1950	133	193	179	152	162	132	200	662	1309	250	239	237
1951	164	3332	4084	1294	1083	360	379	1035	330	62	55	55
1952	188	268	669	1324	1230	1004	2909	2843	2191	661	637	637
1953	142	218	194	258	1157	241	150	427	427	257	249	247
1954	188	268	254	258	266	241	150	200	200	29	22	20
1955	208	268	254	258	266	241	150	150	31	29	22	20
1956	133	193	1386	3006	970	197	350	1814	2329	393	369	369
1957	167	245	227	258	266	241	150	284	284	114	106	104
1958	188	268	254	229	1038	938	1769	2342	2384	481	457	457
1959	166	244	225	258	266	241	150	150	31	29	22	20
1960	133	193	179	183	193	166	150	150	31	29	22	20
1961	103	163	149	153	161	137	75	23	31	29	22	15
1962	140	163	149	153	161	136	150	200	200	29	22	20
1963	103	163	149	153	161	136	150	526	705	298	290	288
1964	188	619	254	258	268	241	150	150	31	29	22	20
1965	133	193	2086	2241	835	152	314	1183	1689	540	526	526
1966	178	542	246	272	266	241	150	150	31	29	22	20
1967	133	193	179	180	484	836	1068	2935	1747	1077	685	685
1968	168	246	228	258	268	241	150	150	31	29	22	20
1969	133	193	179	878	1594	721	2222	3156	2260	560	536	536
1970	149	225	286	3417	1054	462	372	443	443	176	168	168
1971	183	594	743	666	604	490	350	599	499	328	320	319
1972	188	308	340	258	268	241	200	200	200	29	22	20
1973	208	268	254	258	1215	571	350	993	819	176	169	167
1974	188	1315	858	1340	263	846	592	1360	1470	429	415	415
1975	186	266	251	258	266	241	300	901	1397	569	561	560
1976	188	301	254	258	268	242	75	23	31	18	15	15
1977	140	163	149	153	161	137	75	23	31	18	15	15
1978	45	73	59	63	71	47	75	23	31	18	15	15
1979	45	73	59	63	71	46	150	200	200	29	22	20
1980	45	73	59	63	73	46	179	870	995	562	554	554
1981	188	268	254	258	266	241	150	150	31	29	22	20
1982	133	193	179	1110	2912	1680	3487	2691	2021	755	731	731
1983	125	1287	1611	1310	2249	3363	1686	4126	3133	2141	1290	1290
1984	125	2230	2603	1485	988	333	379	681	788	379	371	371
1985	188	514	254	258	266	241	150	150	31	29	22	20
1986	133	193	179	140	4780	2641	350	1901	1236	289	275	275
1987	155	232	211	258	266	242	75	23	31	29	22	15
1988	140	163	149	153	163	137	75	23	31	18	15	15
1989	45	73	59	63	71	46	150	200	200	29	22	20
1990	103	163	149	153	161	137	150	150	31	29	22	20
1991	45	73	59	63	71	47	150	150	31	29	22	20
1992	45	73	59	63	73	47	75	23	31	29	22	15
1993	45	73	59	63	71	46	179	300	300	33	25	25
AVG:	147	336	399	462	514	404	401	764	695	201	175	173
MIN:	45	73	59	63	71	46	75	23	31	18	15	15
MAX:	208	3332	4084	3417	4780	3363	3487	4126	3133	2141	1290	1290

Table 3.4.4-49. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1	1	1	1	1	1	1	-74	-14	-19	-18	-18
1923	1	1	-19	-10	-10	-1	0	-23	-23	-23	-23	-23
1924	0	0	0	0	0	-1	0	0	0	0	0	0
1925	95	90	90	90	90	89	0	37	37	37	36	37
1926	0	0	0	0	0	-1	0	0	0	0	0	0
1927	30	30	30	30	572	29	231	142	232	-21	-20	-20
1928	0	-11	0	0	0	-40	0	-9	-9	-9	-9	-9
1929	4	-11	0	0	0	-1	0	0	0	0	0	0
1930	30	30	30	30	30	29	0	0	0	0	0	0
1931	30	30	30	30	30	29	0	0	0	0	0	0
1932	0	0	0	0	0	-1	0	0	0	0	0	0
1933	0	0	0	0	0	-1	0	0	0	0	0	0
1934	30	30	30	30	30	29	0	0	0	0	0	0
1935	0	0	0	0	0	-1	0	75	75	76	75	75
1936	55	75	75	71	442	-15	-16	-18	-21	-25	-24	-24
1937	-2	-3	-3	0	0	-50	0	-21	-21	-21	-21	-21
1938	0	0	-20	1	-20	-10	-11	-13	-16	-19	-19	-19
1939	1	1	1	0	0	-1	0	0	0	0	0	0
1940	30	30	30	30	197	1218	-1	-26	-19	-20	-19	-19
1941	0	0	-21	-10	-10	-11	0	-21	-23	-20	-21	-20
1942	0	0	-20	-9	-8	2	0	-35	-15	-19	-19	-19
1943	1	-10	-9	-9	-9	-10	-11	-13	-19	-18	-19	-19
1944	1	1	1	0	0	-1	0	0	0	0	0	0
1945	0	0	0	0	-210	-1	0	-23	-23	-23	-23	-23
1946	0	-11	-11	-10	0	-1	0	-65	-15	-15	-15	-15
1947	0	0	0	0	0	-1	0	0	0	0	0	0
1948	0	0	0	0	0	-1	0	0	0	0	0	0
1949	0	0	0	0	0	-1	0	-2	-2	-2	-1	-2
1950	-75	-75	-75	-72	-182	-8	0	-17	-17	-16	-16	-17
1951	2	-8	-7	-10	-10	-10	-1	-21	-21	-21	-21	-21
1952	0	0	-21	-9	-9	-10	-11	-13	-15	-19	-19	-19
1953	1	1	1	0	-44	-1	0	-23	-23	-23	-23	-23
1954	0	0	0	0	0	-1	0	0	0	0	0	0
1955	0	0	0	0	0	-1	0	0	0	0	0	0
1956	-30	-30	-255	-9	-9	-9	0	-25	-16	-19	-19	-19
1957	1	1	1	0	0	-1	0	-31	-31	-31	-31	-31
1958	0	0	0	1	-43	-10	-11	-14	-15	-19	-19	-19
1959	1	2	1	0	0	-1	0	0	0	0	0	0
1960	30	30	30	30	30	29	0	0	0	0	0	0
1961	0	0	0	0	0	-1	0	0	0	0	0	0
1962	0	0	0	0	0	-1	0	14	14	14	14	14
1963	105	105	105	102	1740	101	-50	-102	-21	-25	-24	-25
1964	-2	-14	-4	0	0	-1	0	0	0	0	0	0
1965	30	30	601	-9	-9	31	0	-16	-66	-26	-16	-16
1966	1	-9	-9	-9	0	-1	0	0	0	0	0	0
1967	-30	-30	-30	-60	-8	-9	-10	-13	-17	-18	-17	-17
1968	1	2	2	0	0	-1	0	0	0	0	0	0
1969	30	30	30	1226	-18	-20	-23	-26	-29	-31	-32	-32
1970	-8	-8	-29	-8	-8	-9	0	-19	-19	-20	-19	-19
1971	1	-9	-9	-10	-10	-11	0	-21	-21	-21	-21	-21
1972	0	-10	-10	0	0	-1	0	0	0	0	0	0
1973	0	0	0	-161	-10	-11	0	0	-100	-7	0	0
1974	0	-10	-10	-9	1	-19	-11	-17	-17	-17	-17	-17
1975	1	1	1	0	0	-1	0	-71	-21	-21	-21	-21
1976	0	-11	0	0	0	-1	0	0	0	0	0	0
1977	95	90	90	90	90	89	0	0	0	0	0	0
1978	0	0	0	0	0	-1	0	0	0	0	0	0
1979	0	0	0	0	0	-1	75	177	169	0	0	5
1980	0	0	0	270	1050	-21	-12	-33	-33	-33	-33	-33
1981	-8	-8	-10	0	0	-1	0	0	0	0	0	0
1982	30	30	992	-10	-10	-11	-13	-15	-20	-19	-20	-20
1983	0	-11	-10	-10	-10	-11	-12	-15	-17	-20	-21	-21
1984	0	-11	-10	-10	-10	-11	-1	-21	-21	-21	-21	-21
1985	0	-10	0	0	0	-1	0	0	0	0	0	0
1986	0	0	0	2	-197	-8	0	-21	-17	-17	-17	-17
1987	1	2	3	0	0	-1	0	0	0	0	0	0
1988	0	0	0	0	0	-1	0	0	0	0	0	0
1989	0	0	0	0	0	-1	0	0	0	0	0	0
1990	58	90	90	90	90	89	0	0	0	0	0	0
1991	95	90	90	90	90	89	75	127	0	0	0	5
1992	0	0	0	0	0	-1	75	127	0	0	0	5
1993	0	0	0	0	0	-1	-1	172	322	178	172	172
AVG:	9	7	24	25	50	21	4	0	1	-5	-5	-5
MIN:	-75	-75	-255	-161	-210	-50	-50	-102	-100	-33	-33	-33
MAX:	105	105	992	1226	1740	1218	231	177	322	178	172	172

Table 3.4.4-50. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	7	8	10	2	2	2	1	-68	823	-309	-309	-309
1923	2	1	-7	-5	-11	-1	0	-36	271	-137	-137	-136
1924	0	0	0	0	0	-1	0	0	0	0	0	0
1925	95	90	90	90	90	89	0	-152	-152	-152	-152	-152
1926	20	0	0	0	0	-1	0	0	0	0	0	0
1927	30	30	30	30	30	29	-1	-205	306	-321	-304	-304
1928	0	-10	0	0	0	-26	0	522	-159	-13	-9	-9
1929	0	-109	0	0	0	-1	0	0	0	0	0	0
1930	0	0	0	0	0	-1	0	0	0	0	0	0
1931	0	0	0	0	0	-1	0	0	0	0	0	0
1932	0	0	0	0	0	-1	0	0	0	0	0	0
1933	-30	-30	-30	-30	-30	-31	0	0	0	0	0	0
1934	0	0	0	0	0	-1	0	0	0	0	0	0
1935	0	0	0	0	0	-1	0	0	0	0	0	0
1936	-30	-30	-30	-28	-1674	-324	-231	302	349	-314	-304	-304
1937	2	2	3	0	0	-23	0	315	235	-246	-236	-237
1938	0	0	-17	1	1	-1	-14	-24	822	-309	-309	-309
1939	1	1	1	0	0	-1	0	0	0	0	0	0
1940	30	30	30	30	30	-110	-101	502	-219	-259	-242	-242
1941	0	0	-17	-7	-5	-7	0	174	605	-315	-309	-309
1942	0	0	-15	1	-5	2	0	-39	823	-310	-309	-309
1943	1	-5	-7	0	-4	0	-13	522	23	-243	-227	-227
1944	1	1	2	0	0	-1	0	0	0	0	0	0
1945	30	30	30	30	-313	29	-50	-98	660	-259	-263	-263
1946	0	-8	-5	-10	0	-1	0	554	-198	-191	-181	-182
1947	0	0	0	0	0	-1	0	0	0	0	0	0
1948	30	30	30	30	30	29	0	0	0	0	0	0
1949	75	75	75	75	75	74	0	-2	-2	-2	-1	-2
1950	-75	-75	-75	-65	-258	-91	-150	-223	474	-267	-267	-268
1951	8	6	8	-2	-6	-11	-1	399	-256	-113	-106	-106
1952	0	0	-11	-1	-5	-4	-14	-23	688	-266	-266	-266
1953	1	1	1	0	-37	-1	0	-38	-38	-37	-37	-38
1954	0	0	0	0	0	-1	0	0	0	0	0	0
1955	75	75	75	75	75	74	0	0	0	0	0	0
1956	0	0	-856	3	-6	-13	0	-32	822	-308	-309	-309
1957	1	1	2	0	0	-1	0	-44	-44	-44	-44	-44
1958	0	0	0	1	-28	1	-7	-22	822	-309	-310	-310
1959	1	2	2	0	0	-1	0	0	0	0	0	0
1960	30	30	30	30	30	29	0	0	0	0	0	0
1961	0	0	0	0	0	-1	0	0	0	0	0	0
1962	95	90	90	90	90	89	0	0	0	0	0	0
1963	0	0	0	0	-459	-1	-100	-755	-364	-316	-306	-307
1964	0	-7	0	0	0	-1	0	0	0	0	0	0
1965	30	30	-296	-7	-9	32	1	-28	478	-220	-210	-210
1966	1	-6	-5	-7	0	-1	0	0	0	0	0	0
1967	0	0	0	-209	-8	-1	0	-21	320	101	-267	-267
1968	2	3	4	0	0	-1	0	0	0	0	0	0
1969	30	30	30	-313	8	-5	-8	-20	826	-305	-306	-306
1970	3	3	-12	3	-7	-6	1	-34	-34	-34	-34	-34
1971	1	-2	-1	-10	-10	-6	0	-36	-36	-36	-37	-36
1972	0	-11	-1	0	0	-1	-50	0	0	0	0	0
1973	75	75	75	-361	-38	-6	0	350	76	-206	-195	-196
1974	0	-6	-1	-5	1	-13	-11	235	345	-245	-235	-235
1975	1	2	2	0	0	-1	0	-81	465	-193	-193	-192
1976	0	-14	0	0	0	-1	0	0	0	0	0	0
1977	95	90	90	90	90	89	0	0	0	0	0	0
1978	0	0	0	0	0	-1	0	0	0	0	0	0
1979	0	0	0	0	0	-1	75	177	169	0	0	5
1980	0	0	0	1	-1391	-447	-199	-299	-224	-206	-190	-190
1981	1	1	2	0	0	-1	0	0	0	0	0	0
1982	30	30	-83	-259	-3	0	-9	-25	584	-230	-231	-231
1983	0	-4	-4	3	-2	6	-11	-24	-29	509	-319	-319
1984	0	16	1	-12	-5	-11	-1	-36	71	-70	-71	-71
1985	0	-5	0	0	0	-1	0	0	0	0	0	0
1986	0	0	0	3	-248	2	0	406	230	-266	-256	-256
1987	2	3	4	0	0	-1	0	0	0	0	0	0
1988	0	0	0	0	0	-1	0	0	0	0	0	0
1989	0	0	0	0	0	-1	0	0	0	0	0	0
1990	58	90	90	90	90	89	0	0	0	0	0	0
1991	0	0	0	0	0	-1	75	127	0	0	0	5
1992	0	0	0	0	0	-1	0	0	0	0	0	0
1993	0	0	0	0	0	-1	-1	-359	-359	-359	-359	-359
AVG:	10	8	-9	-9	-54	-7	-11	26	127	-94	-109	-109
MIN:	-75	-109	-856	-361	-1674	-447	-231	-755	-364	-359	-359	-359
MAX:	95	90	90	90	90	89	75	554	826	509	0	5

3.4.5 Delta Flows

This section presents CALSIM II Delta flow results from the FRWP alternatives. Monthly flow data are presented in tabular format for Sacramento River, Mokelumne River, and San Joaquin River flows into the Delta, as well as total Delta inflow and outflow through San Francisco Bay. Data for Georgiana Slough flow and Delta Cross-Channel net flow show how the Delta inflow and outflow relate to water movement within the Delta. Simulated results are provided for each flow, followed by a comparison of the flow in each Action alternative to Alternative 1. Figures describing average monthly values are sometimes provided for key flows.

Mokelumne River flows into the Delta are input into CALSIM II from EBMUDSIM. All other flows are calculated within CALSIM II.

Table 3.4.5-1. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	626	595	1066	994	1980	1812	1372	2925	2144	1141	939	821
1923	657	788	1945	1759	817	859	1376	1027	891	1190	954	785
1924	618	619	715	781	897	614	454	484	548	683	669	441
1925	468	474	779	755	3591	1583	1253	891	940	743	956	673
1926	562	506	591	1049	2201	828	1171	771	736	980	737	529
1927	563	1372	1154	1902	4167	2631	2707	1576	1079	1200	981	793
1928	616	1182	947	1384	1482	4567	1547	971	816	1224	1019	818
1929	655	725	736	795	880	675	424	475	629	781	768	477
1930	478	430	1094	1341	1032	1938	716	734	800	1046	909	579
1931	563	525	572	822	592	456	511	447	572	987	739	452
1932	477	422	1163	1265	1003	815	578	799	1036	694	617	663
1933	554	507	593	795	598	815	624	391	597	726	512	419
1934	478	431	879	1193	810	766	687	478	663	664	501	495
1935	477	625	606	1771	776	1577	2855	1456	1312	1141	1016	719
1936	744	597	662	2448	3508	1886	1234	921	904	1129	988	702
1937	662	558	713	783	1984	2400	1309	979	1082	1112	965	698
1938	601	1406	3953	1906	4124	4588	3586	3411	2069	1025	949	1092
1939	983	739	902	824	638	829	611	757	707	1134	989	731
1940	616	518	541	2037	3280	4539	3859	1145	1011	1358	973	737
1941	592	724	2817	4499	4098	4326	3619	2479	1154	1116	957	1054
1942	816	809	3952	4233	4131	1392	2553	2093	1623	1175	945	1065
1943	810	1029	1761	4415	2858	4125	1520	1123	991	1090	967	798
1944	699	569	665	860	1380	1286	627	667	973	1183	993	885
1945	720	853	1001	815	2574	1363	680	853	1068	1265	966	802
1946	587	1033	3995	3055	1388	1256	706	872	1010	1252	1014	829
1947	682	766	960	708	996	1249	822	650	916	1217	1070	864
1948	670	619	700	1064	940	909	1543	1737	1274	1302	1051	906
1949	705	686	827	690	636	2818	739	845	964	1121	850	733
1950	566	560	543	1294	1931	1223	1118	1027	1059	1293	1028	793
1951	802	2939	4575	3814	3564	1704	884	1162	985	1287	1031	788
1952	619	803	2887	4506	4157	3408	3577	3768	2266	1191	969	1337
1953	1012	742	2676	4493	1262	1310	944	1531	1539	1335	978	1170
1954	838	1017	876	2068	3421	3011	2345	1319	828	1348	1025	907
1955	788	969	1417	1209	788	667	763	757	933	984	805	645
1956	571	709	4563	4627	3977	2117	1102	2340	1206	1276	954	1149
1957	879	714	730	948	1958	2804	1206	993	1047	1279	969	784
1958	1190	876	1457	2374	4181	4505	4377	2742	2006	1132	934	1252
1959	1048	722	758	2248	2947	1315	594	754	1142	1307	1054	794
1960	693	737	624	739	1740	1333	660	769	782	1145	822	574
1961	561	688	974	726	1982	1134	795	699	727	1247	1148	812
1962	667	787	993	644	2630	1556	692	778	919	1337	1061	897
1963	2141	954	1666	934	3898	2016	4167	1881	975	1108	971	844
1964	1005	1648	789	1516	837	765	720	807	884	1224	1084	845
1965	607	855	4438	4566	1725	1414	2439	1379	808	1310	964	763
1966	726	1308	950	1798	1371	1718	808	891	1077	1254	972	750
1967	755	882	2484	2499	3004	3322	2214	2711	2388	1006	1010	1284
1968	1101	809	963	1754	3461	2211	717	680	1098	1254	1002	862
1969	719	770	1458	4562	4103	2857	2486	3020	1307	982	959	1281
1970	1018	838	3643	4699	3944	2029	877	696	926	1492	998	875
1971	668	995	3751	2899	1588	2747	1282	1606	1294	1477	985	1160
1972	876	753	1165	1112	1432	2166	694	687	1133	1225	977	657
1973	680	1165	1609	4508	4053	3187	971	1071	1153	1322	950	813
1974	805	3673	4120	4580	2209	4534	3906	1395	1389	1231	964	1337
1975	1054	816	1001	940	3583	4352	1227	1761	1483	1252	997	1207
1976	1089	986	981	836	713	922	564	470	632	868	761	624
1977	480	458	529	499	436	478	535	371	669	1011	704	424
1978	477	425	906	3944	2809	3755	1900	1255	1011	1034	1010	904
1979	663	610	584	1484	2302	1837	924	990	1218	1212	970	744
1980	701	790	1187	4562	4266	2726	1059	972	758	994	944	844
1981	628	572	884	1509	1466	1981	923	683	858	1222	1048	771
1982	746	2134	4536	4233	4098	4201	4429	2179	1385	998	922	1282
1983	1392	2153	3959	4380	4160	4752	3656	3468	3296	1485	1314	1595
1984	1202	3835	4612	3109	1952	2173	1021	777	874	1398	995	843
1985	724	1880	1388	864	847	808	690	815	860	1204	1026	913
1986	742	654	1067	1545	4356	4566	1080	740	818	1162	1042	847
1987	701	557	671	844	1091	1474	829	645	916	1112	894	746
1988	677	537	1133	1704	944	561	553	584	687	684	485	471
1989	479	553	624	770	488	2885	1288	933	756	1164	1056	736
1990	821	774	791	1212	802	808	650	437	513	636	713	651
1991	503	430	417	453	455	1954	735	551	495	808	624	550
1992	470	429	423	663	1897	1187	672	534	655	660	512	560
1993	476	430	768	3531	3159	2653	2302	1947	1573	1113	987	756
AVG:	737	917	1567	2044	2213	2112	1459	1216	1081	1121	925	825
MIN:	468	422	417	453	436	456	424	371	495	636	485	419
MAX:	2141	3835	4612	4699	4356	4752	4429	3768	3296	1492	1314	1595

Table 3.4.5-2. Simulated Sacramento River Inflow to Delta (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	626	593	1063	991	1974	1809	1370	2921	2139	1142	941	817
1923	654	786	1936	1757	814	858	1374	1024	893	1194	955	778
1924	617	618	727	781	894	614	445	482	556	669	653	416
1925	468	474	779	755	3562	1578	1251	887	936	739	961	672
1926	562	506	591	1049	2198	817	1159	764	732	978	743	519
1927	563	1358	1122	1898	4163	2628	2703	1574	1076	1196	982	790
1928	613	1176	943	1382	1479	4563	1544	972	817	1222	1020	818
1929	653	725	735	794	866	660	424	475	605	774	759	405
1930	478	430	1090	1341	1021	1928	719	725	786	1023	872	564
1931	563	518	582	831	598	460	510	446	568	1001	744	448
1932	477	422	1128	1263	953	814	564	796	1033	692	616	663
1933	555	507	593	793	595	810	624	392	597	720	505	419
1934	478	431	877	1191	810	756	687	477	681	748	550	480
1935	477	620	606	1753	776	1573	2809	1451	1273	1106	1010	686
1936	723	555	675	2437	3504	1827	1233	921	906	1143	991	696
1937	680	558	713	783	1980	2397	1307	979	1084	1153	940	699
1938	600	1401	3933	1904	4121	4585	3583	3407	2065	1026	950	1087
1939	972	737	899	822	638	819	605	760	707	1134	989	725
1940	622	514	531	2021	3235	4534	3855	1144	1019	1359	975	733
1941	585	723	2810	4496	4095	4322	3615	2475	1151	1116	958	1049
1942	804	807	3949	4231	4128	1389	2549	2089	1619	1174	946	1061
1943	804	1015	1758	4413	2855	4122	1516	1122	992	1090	968	795
1944	697	568	665	860	1376	1276	626	664	969	1183	993	883
1945	721	847	1000	814	2562	1354	679	851	1070	1266	969	797
1946	581	1031	3986	3053	1388	1255	705	869	1011	1253	1015	818
1947	678	758	960	701	989	1266	822	647	921	1217	1068	871
1948	670	618	690	1064	940	908	1539	1731	1269	1302	1051	894
1949	704	666	826	688	633	2837	737	842	967	1115	855	730
1950	565	567	542	1280	1928	1222	1115	966	1065	1294	1029	790
1951	839	2891	4572	3812	3561	1700	882	1159	982	1292	1032	784
1952	617	805	2867	4504	4154	3405	3543	3764	2262	1189	963	1332
1953	1006	742	2671	4491	1262	1309	940	1528	1535	1332	980	1165
1954	835	997	876	2066	3418	3008	2341	1320	828	1348	1025	907
1955	784	968	1403	1206	788	667	764	754	933	981	799	643
1956	572	710	4559	4624	3974	2114	1100	2334	1202	1277	955	1144
1957	874	712	720	949	1955	2801	1206	990	1049	1280	971	788
1958	1174	875	1453	2372	4178	4502	4373	2738	2002	1131	935	1236
1959	1043	721	758	2245	2945	1310	594	755	1142	1317	1054	803
1960	690	718	616	729	1728	1323	660	755	750	1145	820	573
1961	561	688	967	727	1956	1133	795	694	718	1245	1149	805
1962	642	792	992	644	2637	1545	681	771	919	1347	1060	890
1963	2109	940	1653	922	3849	2006	4166	1876	975	1114	972	867
1964	1000	1643	789	1457	837	754	720	822	881	1224	1085	849
1965	595	852	4377	4563	1722	1417	2428	1382	812	1314	965	757
1966	724	1283	947	1795	1369	1716	805	889	1079	1255	972	749
1967	756	881	2470	2497	2993	3319	2210	2707	2384	1002	1006	1279
1968	1096	808	959	1752	3457	2198	718	668	1105	1256	1002	862
1969	716	768	1446	4556	4100	2853	2483	3014	1303	983	961	1270
1970	1013	833	3639	4696	3941	2026	878	694	930	1488	999	876
1971	665	990	3745	2897	1590	2727	1285	1597	1291	1482	986	1155
1972	875	758	1143	1108	1429	2163	695	687	1133	1226	974	657
1973	678	1159	1605	4506	4051	3174	970	1069	1193	1223	950	768
1974	760	3787	4115	4578	2206	4530	3902	1392	1388	1229	965	1315
1975	1049	815	998	940	3580	4349	1224	1757	1479	1254	993	1202
1976	1108	981	981	836	713	895	560	470	610	878	773	612
1977	480	450	529	499	429	473	535	371	669	1007	670	424
1978	477	425	907	3940	2805	3748	1884	1251	1008	1160	1010	899
1979	662	604	584	1441	2299	1824	916	978	1211	1212	972	730
1980	695	779	1164	4559	4263	2723	1058	969	755	997	946	841
1981	629	568	884	1498	1464	1965	910	671	862	1222	1048	771
1982	735	2100	4533	4215	4095	4198	4425	2175	1381	997	923	1275
1983	1382	2148	3956	4377	4157	4749	3653	3464	3292	1481	1310	1591
1984	1196	3830	4609	3107	1949	2169	1022	774	872	1401	996	842
1985	721	1867	1385	864	844	801	689	813	863	1204	1025	913
1986	740	658	1063	1538	4352	4562	1078	738	815	1159	1038	844
1987	700	556	670	844	1088	1461	833	643	911	1114	882	743
1988	664	528	1124	1692	944	553	541	537	716	684	499	471
1989	479	554	606	770	497	2888	1284	934	744	1149	1050	730
1990	788	755	782	1209	800	796	650	422	520	636	706	653
1991	505	430	417	449	447	1940	721	537	475	756	630	592
1992	470	429	423	662	1895	1174	668	504	664	653	511	476
1993	475	430	765	3608	3155	2598	2255	1944	1568	1107	977	752
AVG:	733	913	1562	2040	2208	2105	1454	1211	1079	1122	924	819
MIN:	468	422	417	449	429	460	424	371	475	636	499	405
MAX:	2109	3830	4609	4696	4352	4749	4425	3764	3292	1488	1310	1591

Table 3.4.5-3. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	625	593	1063	991	1974	1809	1370	2921	2139	1149	958	817
1923	654	786	1914	1757	814	858	1374	1024	876	1204	962	773
1924	617	618	722	781	894	614	452	485	548	681	668	441
1925	468	474	779	755	3583	1578	1251	888	952	747	965	672
1926	562	506	591	1049	2187	827	1168	767	732	983	749	528
1927	563	1373	1125	1900	4163	2628	2703	1574	1076	1196	999	790
1928	612	1163	944	1381	1475	4563	1544	939	826	1232	1019	819
1929	653	726	736	794	866	670	424	475	615	775	761	485
1930	478	430	1090	1338	1025	1934	717	733	796	1048	906	575
1931	563	512	572	822	592	454	511	445	574	992	746	452
1932	477	422	1159	1263	995	814	565	796	1033	692	615	663
1933	554	507	593	793	595	816	624	391	597	725	510	419
1934	478	431	879	1191	810	765	687	478	663	664	504	494
1935	477	625	606	1768	776	1573	2848	1454	1270	1107	1015	696
1936	744	572	670	2393	3504	1850	1236	929	880	1171	1009	708
1937	687	558	712	783	1980	2397	1308	982	1064	1187	970	712
1938	600	1401	3922	1904	4121	4585	3583	3407	2065	1035	968	1087
1939	939	737	899	822	638	828	608	755	712	1132	987	730
1940	619	517	541	2033	3271	4535	3855	1131	1008	1374	988	733
1941	597	717	2799	4496	4095	4322	3615	2475	1151	1127	979	1050
1942	771	807	3949	4231	4128	1389	2549	2089	1619	1272	964	1061
1943	805	928	1758	4413	2855	4122	1516	1120	989	1072	969	795
1944	697	568	665	860	1391	1285	626	664	969	1183	993	881
1945	712	845	1000	816	2563	1355	679	851	1029	1281	995	811
1946	579	1021	3991	3053	1403	1255	703	869	1021	1264	1025	844
1947	668	764	961	702	990	1255	822	647	903	1217	1071	859
1948	656	616	609	1066	938	907	1546	1735	1273	1302	1051	901
1949	703	701	826	690	633	2799	737	842	973	1115	854	730
1950	566	561	542	1289	1928	1222	1116	981	1036	1310	1044	781
1951	817	2907	4572	3811	3561	1700	882	1159	982	1300	1038	784
1952	617	804	2856	4504	4154	3405	3594	3763	2263	1197	957	1331
1953	1006	742	2671	4491	1262	1309	940	1528	1535	1331	981	1165
1954	834	994	876	2066	3418	3008	2341	1320	828	1350	1025	907
1955	784	968	1403	1206	786	667	760	755	933	979	798	643
1956	571	709	4560	4624	3974	2114	1100	2334	1202	1164	973	1147
1957	935	714	750	948	1955	2801	1206	990	1034	1272	958	839
1958	1165	875	1453	2372	4177	4502	4373	2738	2002	1142	953	1240
1959	1043	721	758	2246	2945	1314	594	756	1140	1317	1054	794
1960	691	736	623	738	1737	1332	660	766	773	1145	821	574
1961	561	688	970	726	1979	1133	795	694	724	1246	1148	806
1962	666	789	992	642	2625	1555	691	776	919	1337	1061	896
1963	2126	949	1662	932	3892	2022	4163	1877	999	1178	986	884
1964	1000	1643	789	1370	834	757	728	809	891	1224	1083	859
1965	597	854	4399	4563	1722	1418	2429	1382	800	1294	976	756
1966	724	1305	947	1795	1369	1716	805	889	1079	1255	972	749
1967	755	881	2471	2497	2993	3319	2210	2707	2384	1002	1006	1279
1968	1096	808	959	1752	3457	2208	717	678	1099	1254	1002	862
1969	718	767	1452	4559	4100	2853	2483	3016	1303	1000	978	1249
1970	1013	833	3639	4696	3941	2026	878	694	932	1488	1000	877
1971	665	990	3745	2897	1590	2726	1286	1597	1291	1482	987	1155
1972	875	759	1141	1108	1429	2163	698	687	1133	1226	981	657
1973	679	1168	1631	4506	4051	3166	970	1068	1177	1234	962	761
1974	740	3778	4115	4578	2206	4530	3902	1392	1380	1237	979	1284
1975	1049	815	998	940	3580	4349	1224	1757	1479	1264	993	1202
1976	1100	981	981	836	713	904	564	469	619	889	754	627
1977	480	460	519	499	429	472	535	371	668	1002	710	424
1978	477	425	907	3941	2806	3752	1890	1251	1009	1032	1010	899
1979	662	604	584	1476	2299	1834	922	988	1209	1212	971	740
1980	701	795	1181	4559	4263	2723	1058	969	755	1009	955	841
1981	628	568	884	1483	1464	1968	920	680	859	1222	1048	771
1982	744	2133	4533	4215	4095	4198	4425	2175	1381	1005	936	1269
1983	1367	2148	3956	4377	4157	4749	3653	3464	3292	1481	1310	1591
1984	1196	3830	4609	3107	1949	2169	1022	774	871	1398	999	843
1985	721	1865	1385	864	844	802	689	812	863	1204	1025	913
1986	740	659	1063	1537	4352	4562	1078	738	813	1163	1044	844
1987	700	556	670	844	1088	1471	832	646	902	1113	865	740
1988	678	537	1134	1701	944	544	551	559	688	716	507	476
1989	479	554	624	770	488	2882	1286	933	754	1165	1056	740
1990	806	769	783	1207	800	806	650	434	514	636	709	651
1991	501	430	417	453	455	1949	734	547	475	805	617	565
1992	470	429	423	663	1894	1183	672	532	656	659	511	556
1993	476	430	764	3528	3156	2649	2290	1943	1568	1362	1006	794
AVG:	733	915	1562	2038	2210	2107	1457	1212	1077	1128	930	824
MIN:	468	422	417	453	429	454	424	371	475	636	504	419
MAX:	2126	3830	4609	4696	4352	4749	4425	3763	3292	1488	1310	1591

Table 3.4.5-4. Simulated Sacramento River Inflow to Delta (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-6	-3	-2	-4	-4	1	1	-3
1923	-3	-2	-9	-2	-3	-1	-2	-3	2	4	1	-7
1924	-1	-1	12	0	-3	0	-8	-2	8	-14	-16	-25
1925	0	0	0	0	-30	-6	-2	-4	-4	-3	5	-1
1926	0	0	0	0	-3	-11	-11	-7	-4	-2	7	-10
1927	0	-14	-32	-4	-4	-3	-4	-3	-3	-4	1	-3
1928	-3	-6	-3	-2	-3	-4	-3	1	1	-2	0	0
1929	-1	1	0	0	-14	-15	0	0	-24	-7	-10	-73
1930	0	0	-3	1	-11	-10	2	-9	-14	-23	-37	-15
1931	0	-6	11	9	6	4	-1	-2	-4	13	5	-4
1932	0	0	-35	-3	-51	-1	-14	-3	-4	-2	-1	0
1933	0	0	0	-3	-3	-5	0	0	0	-6	-7	0
1934	0	0	-2	-2	0	-11	0	0	18	84	49	-15
1935	0	-5	0	-18	0	-4	-47	-5	-39	-34	-6	-33
1936	-21	-42	13	-12	-4	-59	-1	0	2	14	2	-6
1937	19	0	0	0	-3	-3	-2	1	2	42	-24	1
1938	-1	-5	-20	-2	-3	-3	-4	-4	-4	1	1	-5
1939	-11	-2	-3	-2	0	-11	-6	4	0	1	0	-6
1940	6	-4	-9	-16	-44	-4	-3	-1	8	1	1	-3
1941	-7	-1	-7	-3	-3	-3	-4	-4	-3	0	0	-5
1942	-12	-2	-3	-2	-3	-3	-4	-4	-4	-1	1	-5
1943	-6	-14	-3	-2	-3	-3	-4	-1	1	0	1	-3
1944	-2	-1	0	0	-5	-10	-2	-3	-3	0	0	-2
1945	1	-6	-1	0	-12	-9	-1	-2	1	1	3	-4
1946	-6	-2	-9	-2	0	-1	-2	-3	1	1	1	-11
1947	-4	-8	0	-7	-7	17	0	-3	5	0	-1	7
1948	0	-1	-10	0	0	-1	-4	-6	-5	0	0	-12
1949	-1	-20	-1	-2	-3	19	-2	-3	3	-6	5	-3
1950	0	7	-1	-14	-3	-1	-3	-61	6	1	1	-3
1951	37	-47	-3	-2	-3	-3	-2	-3	-3	5	1	-3
1952	-2	2	-19	-2	-3	-3	-34	-4	-4	-1	-6	-5
1953	-6	0	-5	-2	0	-1	-3	-3	-4	-3	1	-5
1954	-3	-20	0	-2	-3	-3	-3	1	0	0	0	0
1955	-4	-1	-14	-4	0	-1	1	-3	0	-3	-6	-2
1956	1	1	-4	-2	-3	-3	-2	-6	-4	1	1	-5
1957	-6	-2	-10	0	-3	-3	0	-3	3	1	2	4
1958	-17	-2	-3	-2	-3	-3	-4	-4	-4	-1	1	-16
1959	-5	-2	0	-2	-3	-4	0	1	0	10	0	8
1960	-3	-18	-7	-10	-12	-10	0	-14	-33	-1	-2	-2
1961	0	0	-8	1	-26	-1	0	-5	-8	-2	1	-7
1962	-25	5	-1	0	7	-11	-11	-7	-1	10	-1	-6
1963	-32	-13	-13	-12	-49	-10	-1	-4	0	6	2	23
1964	-5	-5	0	-59	0	-11	0	15	-2	0	1	4
1965	-11	-3	-62	-2	-3	3	-11	3	4	4	0	-7
1966	-2	-25	-4	-3	-2	-3	-3	-2	2	0	-1	0
1967	1	-1	-15	-2	-12	-3	-3	-4	-4	-4	-4	-5
1968	-6	-1	-3	-2	-4	-13	0	-12	7	2	0	0
1969	-3	-2	-12	-6	-3	-3	-3	-6	-4	1	2	-11
1970	-6	-5	-3	-2	-3	-3	1	-3	4	-4	1	1
1971	-3	-5	-6	-2	2	-20	3	-9	-3	5	1	-5
1972	-1	6	-22	-3	-3	-3	1	0	0	1	-3	0
1973	-1	-5	-4	-3	-3	-12	-1	-3	40	-99	0	-45
1974	-45	114	-5	-2	-3	-3	-3	-3	-2	-2	1	-22
1975	-5	-1	-3	0	-4	-3	-3	-4	-4	1	-4	-5
1976	19	-5	0	0	0	-27	-4	0	-23	10	12	-12
1977	0	-8	0	0	-6	-6	0	0	0	-4	-35	0
1978	0	0	0	-4	-4	-7	-16	-4	-3	126	0	-5
1979	-1	-6	0	-43	-3	-13	-8	-12	-6	1	2	-14
1980	-6	-11	-23	-3	-3	-3	-1	-2	-3	3	2	-3
1981	1	-4	0	-11	-3	-16	-12	-12	4	0	-1	0
1982	-10	-34	-4	-18	-3	-3	-4	-4	-4	-1	1	-7
1983	-10	-5	-3	-2	-3	-3	-4	-4	-4	-4	-4	-5
1984	-5	-5	-3	-2	-3	-3	1	-3	-3	3	1	-1
1985	-3	-13	-3	0	-3	-8	-2	-3	3	0	-1	0
1986	-2	4	-4	-8	-3	-4	-2	-3	-3	-3	-4	-3
1987	-1	0	0	0	-3	-13	4	-2	-5	2	-12	-3
1988	-13	-9	-9	-12	0	-8	-12	-47	29	1	14	0
1989	0	0	-18	0	9	3	-4	1	-12	-15	-5	-7
1990	-33	-19	-9	-4	-2	-12	0	-15	8	0	-8	2
1991	2	0	0	-4	-7	-13	-14	-14	-20	-52	6	42
1992	0	0	0	-1	-3	-13	-4	-30	9	-7	-1	-83
1993	0	0	-3	78	-4	-54	-47	-3	-5	-6	-10	-4
AVG:	-4	-4	-6	-4	-5	-7	-5	-5	-2	1	-1	-6
MIN:	-45	-47	-62	-59	-51	-59	-47	-61	-39	-99	-37	-83
MAX:	37	114	13	78	9	19	4	15	40	126	49	42

Table 3.4.5-5. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-5	-3	-2	-4	-4	8	19	-4
1923	-3	-2	-31	-2	-3	-1	-2	-3	-15	13	8	-12
1924	-1	-1	7	0	-3	0	-2	1	0	-3	-1	0
1925	0	0	0	0	-8	-6	-2	-3	12	4	9	-1
1926	0	0	0	0	-14	-1	-2	-3	-4	3	13	0
1927	0	1	-29	-2	-4	-3	-4	-3	-3	-4	19	-4
1928	-4	-19	-3	-3	-6	-4	-3	-32	10	8	0	1
1929	-2	2	0	-1	-14	-6	0	0	-15	-6	-7	8
1930	0	0	-3	-3	-6	-3	0	-1	-4	2	-3	-4
1931	0	-13	0	0	0	-1	0	-2	2	5	7	0
1932	0	0	-4	-3	-8	-1	-14	-3	-3	-2	-2	0
1933	0	0	0	-3	-3	1	0	0	0	-1	-2	0
1934	0	0	0	-3	0	-1	0	0	0	0	4	-1
1935	0	0	0	-3	0	-4	-7	-3	-42	-34	-1	-23
1936	0	-26	9	-56	-3	-36	2	7	-23	42	20	6
1937	26	0	-1	0	-3	-3	-1	3	-18	75	5	14
1938	-1	-5	-32	-2	-3	-3	-3	-4	-4	11	19	-4
1939	-44	-2	-3	-2	0	-1	-3	-1	5	-1	-2	-1
1940	3	0	0	-3	-9	-4	-3	-13	-2	16	15	-4
1941	5	-7	-18	-3	-3	-3	-4	-4	-3	11	21	-4
1942	-45	-2	-3	-2	-3	-3	-4	-4	-4	97	19	-5
1943	-5	-101	-3	-2	-3	-3	-4	-3	-2	-18	3	-4
1944	-2	-1	0	0	11	-1	-2	-3	-3	0	0	-4
1945	-9	-8	-1	1	-11	-8	-1	-2	-39	16	29	9
1946	-8	-12	-3	-2	15	-2	-3	-3	11	12	11	16
1947	-14	-1	1	-6	-6	6	0	-3	-14	0	1	-5
1948	-14	-3	-91	3	-2	-1	3	-2	-1	0	0	-5
1949	-2	15	-1	0	-3	-19	-1	-3	9	-7	4	-3
1950	0	1	-1	-5	-3	-1	-2	-46	-23	16	16	-11
1951	15	-32	-3	-3	-3	-3	-2	-3	-4	13	7	-3
1952	-2	1	-31	-2	-3	-3	16	-5	-4	6	-12	-6
1953	-6	0	-5	-2	0	-1	-3	-3	-4	-3	2	-5
1954	-3	-23	0	-2	-3	-3	-3	1	0	1	0	0
1955	-4	-1	-13	-4	-2	-1	-3	-3	0	-5	-6	-2
1956	0	0	-3	-2	-3	-3	-2	-6	-4	-112	19	-2
1957	55	-1	20	0	-3	-3	0	-3	-13	-8	-11	55
1958	-26	-1	-3	-2	-4	-3	-4	-4	-4	11	19	-12
1959	-6	-2	0	-2	-3	-1	0	2	-2	10	0	0
1960	-1	-1	-1	0	-3	-1	0	-3	-9	-1	-1	0
1961	0	0	-4	0	-3	-1	0	-5	-3	-1	0	-6
1962	-1	1	-1	-2	-5	-1	-1	-2	0	0	0	0
1963	-14	-5	-3	-3	-6	6	-5	-4	24	70	15	39
1964	-5	-5	0	-145	-3	-8	8	2	7	0	-1	14
1965	-10	-1	-39	-2	-3	4	-10	3	-9	-16	12	-7
1966	-2	-3	-4	-3	-2	-2	-3	-2	1	0	-1	-1
1967	0	-1	-14	-2	-11	-3	-3	-4	-4	-4	-4	-5
1968	-6	-1	-3	-2	-4	-3	0	-3	2	1	0	0
1969	-1	-3	-6	-3	-3	-3	-3	-4	-4	17	19	-31
1970	-6	-5	-3	-2	-3	-3	0	-3	5	-5	2	2
1971	-3	-5	-6	-2	3	-21	3	-9	-3	5	2	-5
1972	-1	6	-24	-3	-3	-3	4	0	0	2	4	0
1973	-1	4	22	-3	-3	-21	-1	-3	24	-88	12	-51
1974	-64	106	-6	-2	-3	-3	-3	-3	-9	6	14	-53
1975	-5	-1	-3	0	-4	-3	-3	-4	-4	12	-4	-5
1976	11	-5	0	0	0	-18	-1	0	-13	20	-7	3
1977	0	2	-10	1	-6	-7	0	0	0	-8	6	0
1978	0	0	0	-3	-4	-3	-10	-4	-2	-3	0	-5
1979	-1	-6	0	-8	-3	-3	-3	-2	-9	0	1	-3
1980	0	5	-5	-3	-3	-3	-1	-2	-3	15	12	-3
1981	0	-4	0	-26	-3	-13	-3	-3	1	0	0	0
1982	-1	-1	-3	-18	-3	-3	-4	-4	-4	6	14	-12
1983	-25	-5	-3	-2	-3	-3	-4	-4	-4	-4	-4	-5
1984	-5	-5	-3	-2	-3	-3	1	-3	-4	0	4	0
1985	-3	-15	-3	0	-3	-7	-2	-3	3	0	-1	0
1986	-3	4	-4	-8	-3	-4	-2	-3	-5	1	2	-3
1987	-1	0	0	0	-3	-3	3	0	-14	0	-28	-6
1988	1	0	1	-3	0	-18	-2	-25	1	32	22	5
1989	0	0	0	0	0	-4	-2	0	-3	0	0	4
1990	-14	-5	-7	-5	-2	-2	0	-3	1	0	-4	0
1991	-3	0	0	0	0	-4	-1	-5	-20	-3	-6	16
1992	0	0	0	0	-3	-4	0	-3	1	-1	-1	-3
1993	0	0	-4	-3	-3	-4	-12	-4	-4	248	19	38
AVG:	-4	-3	-5	-5	-3	-4	-2	-4	-4	7	5	-1
MIN:	-64	-101	-91	-145	-14	-36	-14	-46	-42	-112	-28	-53
MAX:	55	106	22	3	15	6	16	7	24	248	29	55

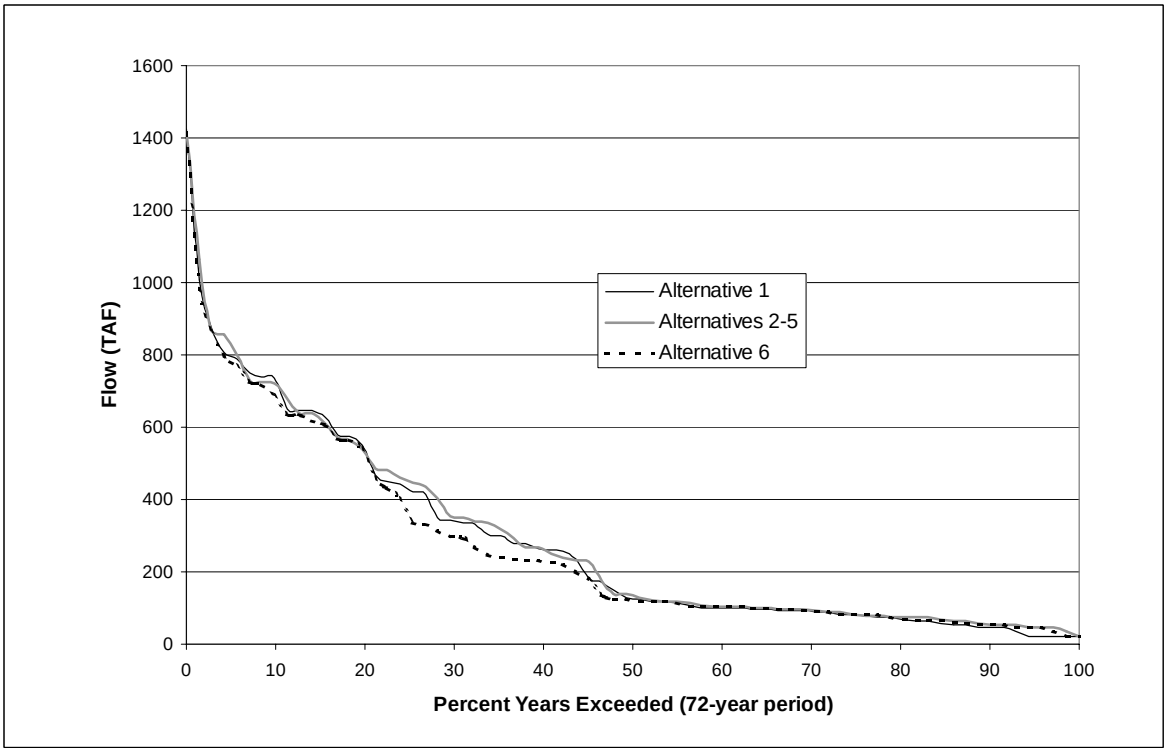


Figure 3.4.5-1. Exceedence for Simulated Annual Mokelumne River Delta Inflow, 2001 LOD

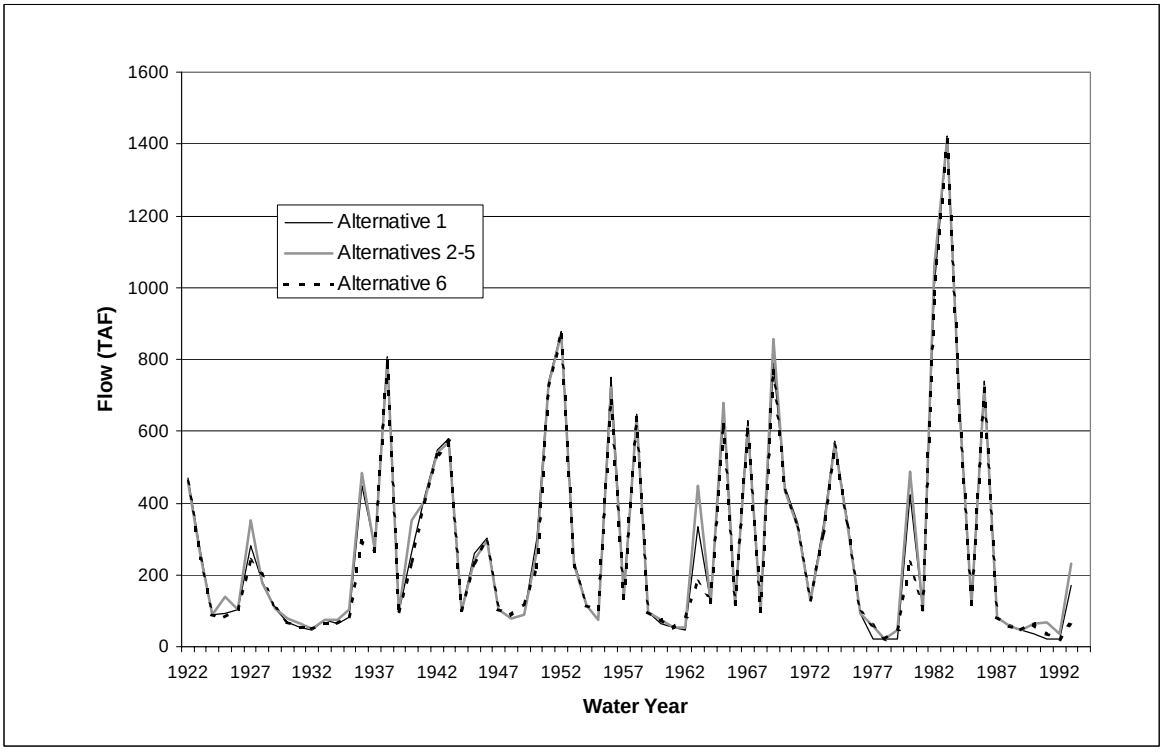


Figure 3.4.5-2. Simulated Annual Mokelumne River Delta Inflow, 2001 LOD

Table 3.4.5-6. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	10	15	14	15	14	14	18	136	128	35	34	34
1923	11	15	23	28	23	14	14	32	34	22	22	21
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	2	4	3	3	4	2	8	20	19	9	9	9
1926	11	15	15	15	14	14	8	8	0	0	0	0
1927	6	9	9	9	9	8	10	57	70	32	31	31
1928	11	23	15	15	15	50	20	11	20	1	1	1
1929	11	22	15	15	14	14	8	8	0	0	0	0
1930	8	9	9	9	9	8	8	8	0	0	0	0
1931	6	9	9	9	9	8	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	8	11	10	11	10	10	8	8	0	0	0	0
1934	6	9	9	9	9	8	8	8	0	0	0	0
1935	8	9	9	9	9	8	8	11	10	0	0	0
1936	8	11	10	11	105	28	30	86	67	32	31	31
1937	11	15	15	15	14	34	20	43	44	23	23	22
1938	11	15	76	13	62	102	134	164	109	41	40	39
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	8	9	9	9	9	16	22	76	47	21	20	20
1941	11	15	17	32	48	37	20	59	70	35	35	34
1942	11	15	29	82	56	13	15	111	98	41	40	39
1943	10	31	24	92	55	110	36	88	53	28	27	26
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	6	9	9	9	28	8	20	46	41	29	29	28
1946	11	29	65	36	14	14	17	30	38	17	16	16
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	6	9	9	9	9	8	8	11	10	0	0	0
1949	8	11	10	11	10	10	8	11	10	0	0	0
1950	12	15	15	13	23	13	20	53	48	30	30	29
1951	9	197	250	79	60	22	22	38	33	9	9	9
1952	11	15	41	81	71	61	173	175	88	55	54	53
1953	8	12	11	15	66	14	8	27	26	16	16	16
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	8	11	10	11	10	10	8	8	0	0	0	0
1956	8	11	137	184	56	12	20	112	88	41	40	39
1957	10	14	13	15	14	14	8	19	18	8	8	8
1958	11	15	15	14	59	57	105	144	91	47	46	45
1959	9	14	13	15	14	14	8	8	0	0	0	0
1960	6	9	9	9	9	8	8	8	0	0	0	0
1961	6	9	9	9	9	8	4	0	0	0	0	0
1962	2	4	3	3	4	2	8	11	10	0	0	0
1963	6	9	9	9	34	8	14	77	62	36	35	35
1964	11	37	15	15	15	14	8	8	0	0	0	0
1965	6	9	146	138	46	7	18	73	70	45	44	43
1966	10	32	15	17	14	14	8	8	0	0	0	0
1967	8	11	10	23	27	51	63	180	83	58	57	56
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	6	9	9	73	88	44	132	194	84	51	50	49
1970	8	13	18	209	59	28	21	28	27	11	11	11
1971	11	35	45	41	34	30	20	38	30	21	21	20
1972	11	19	20	15	15	14	14	11	10	0	0	0
1973	8	11	10	38	69	35	20	38	42	22	21	21
1974	11	78	52	82	14	52	35	68	65	40	39	38
1975	11	15	15	15	14	14	17	59	54	45	45	44
1976	11	18	15	15	15	14	4	0	0	0	0	0
1977	2	4	3	3	4	2	4	0	0	0	0	0
1978	2	4	3	3	4	2	4	0	0	0	0	0
1979	2	4	3	3	4	2	4	0	0	0	0	0
1980	2	4	3	3	84	30	22	70	71	45	44	43
1981	11	15	15	15	14	14	8	8	0	0	0	0
1982	6	9	16	84	161	103	207	166	84	59	58	56
1983	7	76	99	80	125	206	100	254	186	99	98	95
1984	7	131	159	92	57	21	22	43	41	26	26	25
1985	11	30	15	15	14	14	8	8	0	0	0	0
1986	8	11	10	8	279	162	20	91	58	32	31	31
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	4	2	8	11	10	0	0	0
1990	2	4	3	3	4	2	8	8	0	0	0	0
1991	2	4	3	3	4	2	4	0	0	0	0	0
1992	2	4	3	3	4	2	4	0	0	0	0	0
1993	2	4	3	3	4	2	10	39	37	22	22	22
AVG:	8	19	25	28	31	25	24	44	32	16	16	16
MIN:	2	4	3	3	4	2	4	0	0	0	0	0
MAX:	12	197	250	209	279	206	207	254	186	99	98	95

Table 3.4.5-7. Simulated Mokelumne River Delta Inflow (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	11	15	15	15	14	14	19	132	127	34	33	32
1923	11	15	22	27	22	14	14	31	33	20	20	20
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	8	9	9	9	8	8	8	23	21	12	12	12
1926	11	15	15	15	14	14	8	8	0	0	0	0
1927	8	11	10	11	40	10	24	66	84	31	30	30
1928	11	22	15	15	15	48	20	11	19	0	0	0
1929	11	21	15	15	14	14	8	8	0	0	0	0
1930	10	11	10	11	10	10	8	8	0	0	0	0
1931	8	11	10	11	10	10	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	8	11	10	11	10	10	8	8	0	0	0	0
1934	8	11	10	11	10	10	8	8	0	0	0	0
1935	8	9	9	9	8	8	8	15	15	5	5	5
1936	11	15	15	15	131	27	29	85	66	31	30	29
1937	11	15	15	15	14	31	20	41	43	22	21	21
1938	11	15	75	13	61	101	134	163	108	40	39	38
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	10	11	10	11	20	91	22	74	46	20	19	18
1941	11	15	16	32	48	36	20	57	69	34	34	33
1942	11	15	27	81	55	13	15	109	97	39	38	38
1943	10	30	23	91	54	109	36	87	52	27	26	25
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	6	9	9	9	16	8	20	44	39	27	27	27
1946	11	29	64	36	14	14	17	26	37	16	15	15
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	6	9	9	9	9	8	8	11	10	0	0	0
1949	8	11	10	11	10	10	8	11	10	0	0	0
1950	8	11	10	8	13	13	20	52	47	29	29	28
1951	9	197	250	79	59	22	22	36	32	8	7	7
1952	11	15	40	80	70	61	172	174	87	54	53	52
1953	8	12	11	15	63	14	8	26	24	15	15	15
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	8	11	10	11	10	10	8	8	0	0	0	0
1956	6	9	122	184	55	12	20	111	87	40	39	38
1957	10	14	13	15	14	14	8	17	16	6	6	6
1958	11	15	15	14	56	57	104	143	90	46	45	44
1959	10	14	13	15	14	14	8	8	0	0	0	0
1960	8	11	10	11	11	10	8	8	0	0	0	0
1961	6	9	9	9	8	8	4	0	0	0	0	0
1962	2	4	3	3	3	2	8	12	11	1	1	1
1963	12	15	15	15	131	14	11	71	61	34	34	33
1964	11	36	15	15	15	14	8	8	0	0	0	0
1965	8	11	183	137	46	9	18	72	66	43	43	42
1966	10	32	14	16	14	14	8	8	0	0	0	0
1967	6	9	9	20	26	50	62	180	82	57	56	55
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	8	11	10	148	87	43	130	192	82	49	49	47
1970	8	12	16	209	58	28	21	27	25	10	10	10
1971	11	34	45	40	33	29	20	36	29	19	19	19
1972	11	18	20	15	15	14	14	11	10	0	0	0
1973	8	11	10	28	69	34	20	38	36	21	21	21
1974	11	77	52	82	14	51	34	67	64	39	38	37
1975	11	15	15	15	14	14	17	55	52	44	44	43
1976	11	18	15	15	15	14	4	0	0	0	0	0
1977	8	9	9	9	8	8	4	0	0	0	0	0
1978	2	4	3	3	3	2	4	0	0	0	0	0
1979	2	4	3	3	3	2	8	11	10	0	0	0
1980	2	4	3	20	144	28	21	68	69	43	42	41
1981	10	15	14	15	14	14	8	8	0	0	0	0
1982	8	11	77	83	161	102	206	165	83	58	57	55
1983	7	76	98	79	124	205	99	253	185	97	96	94
1984	7	131	159	91	56	20	22	41	40	25	25	24
1985	11	30	15	15	14	14	8	8	0	0	0	0
1986	8	11	10	8	268	161	20	89	57	31	30	30
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	3	2	8	11	10	0	0	0
1990	6	9	9	9	8	8	8	8	0	0	0	0
1991	8	9	9	9	8	8	8	8	0	0	0	0
1992	2	4	3	3	4	2	8	8	0	0	0	0
1993	2	4	3	3	3	2	10	50	57	33	33	32
AVG:	8	19	26	30	34	26	24	44	32	16	16	16
MIN:	2	4	3	3	3	2	4	0	0	0	0	0
MAX:	12	197	250	209	268	205	206	253	185	97	96	94

Table 3.4.5-8. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	11	15	15	15	14	14	19	132	176	16	15	15
1923	11	15	23	28	22	14	14	30	50	13	13	13
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	8	9	9	9	9	8	8	11	10	0	0	0
1926	12	15	15	15	14	14	8	8	0	0	0	0
1927	8	11	10	11	10	10	10	45	88	13	13	13
1928	11	22	15	15	15	49	20	44	10	0	0	0
1929	11	15	15	15	14	14	8	8	0	0	0	0
1930	8	9	9	9	9	8	8	8	0	0	0	0
1931	6	9	9	9	9	8	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	6	9	9	9	9	8	8	8	0	0	0	0
1934	6	9	9	9	9	8	8	8	0	0	0	0
1935	8	9	9	9	9	8	8	11	10	0	0	0
1936	6	9	9	9	9	8	16	105	88	13	12	12
1937	11	15	15	15	14	33	20	62	58	8	8	8
1938	11	15	75	13	62	102	133	163	158	22	21	21
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	10	11	10	11	11	10	16	107	34	5	5	5
1941	11	15	16	32	48	37	20	69	106	16	16	16
1942	11	15	28	82	56	13	15	109	147	22	21	20
1943	10	30	23	92	54	110	36	120	55	13	13	13
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	8	11	10	11	10	10	17	40	80	13	12	12
1946	11	29	64	36	14	14	17	64	26	5	5	5
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	8	11	10	11	11	10	8	11	10	0	0	0
1949	12	15	15	15	14	14	8	11	10	0	0	0
1950	8	11	10	9	9	8	11	39	76	14	13	13
1951	9	198	251	79	60	22	22	62	18	2	2	2
1952	11	15	41	81	70	61	172	173	129	39	38	37
1953	8	13	11	15	64	14	8	25	24	14	14	14
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	12	15	15	15	14	14	8	8	0	0	0	0
1956	8	11	85	184	55	12	20	110	137	22	21	21
1957	10	14	13	15	14	14	8	16	15	5	5	5
1958	11	15	15	14	57	57	104	143	140	28	27	26
1959	10	14	13	15	14	14	8	8	0	0	0	0
1960	8	11	10	11	11	10	8	8	0	0	0	0
1961	6	9	9	9	9	8	4	0	0	0	0	0
1962	8	9	9	9	9	8	8	11	10	0	0	0
1963	6	9	9	9	9	8	8	31	40	16	16	16
1964	11	36	15	15	15	14	8	8	0	0	0	0
1965	8	11	128	137	46	9	18	71	99	31	31	30
1966	10	32	15	16	14	14	8	8	0	0	0	0
1967	8	11	10	11	26	51	63	179	102	64	41	40
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	8	11	10	54	88	44	131	193	133	33	32	31
1970	8	13	17	210	58	28	21	26	25	9	9	9
1971	11	35	45	41	33	30	20	35	28	18	18	18
1972	11	18	20	15	15	14	11	11	10	0	0	0
1973	12	15	15	15	67	35	20	60	47	9	9	9
1974	11	78	52	82	14	51	34	82	86	25	24	24
1975	11	15	15	15	14	14	17	54	81	33	33	32
1976	11	17	15	15	15	14	4	0	0	0	0	0
1977	8	9	9	9	9	8	4	0	0	0	0	0
1978	2	4	3	3	4	2	4	0	0	0	0	0
1979	2	4	3	3	4	2	8	11	10	0	0	0
1980	2	4	3	3	4	2	10	52	57	33	33	32
1981	11	15	15	15	14	14	8	8	0	0	0	0
1982	8	11	10	68	161	103	207	164	118	45	44	43
1983	7	76	98	80	125	206	100	252	185	130	78	76
1984	7	132	159	91	56	20	22	40	45	22	22	21
1985	11	30	15	15	14	14	8	8	0	0	0	0
1986	8	11	10	8	265	162	20	115	72	16	16	16
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	4	2	8	11	10	0	0	0
1990	6	9	9	9	9	8	8	8	0	0	0	0
1991	2	4	3	3	4	2	8	8	0	0	0	0
1992	2	4	3	3	4	2	4	0	0	0	0	0
1993	2	4	3	3	4	2	10	17	16	0	0	1
AVG:	8	19	24	28	28	24	23	46	40	11	9	9
MIN:	2	4	3	3	4	2	4	0	0	0	0	0
MAX:	12	198	251	210	265	206	207	252	185	130	78	76

Table 3.4.5-9. Simulated Mokelumne River Delta Inflow (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	-5	-1	-1	-1	-1
1923	0	0	-1	-1	-1	0	0	-1	-1	-1	-1	-1
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	6	5	6	6	5	6	0	2	2	2	2	2
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	2	2	2	2	32	2	14	9	14	-1	-1	-1
1928	0	-1	0	0	0	-2	0	-1	-1	-1	-1	-1
1929	0	-1	0	0	0	0	0	0	0	0	0	0
1930	2	2	2	2	2	2	0	0	0	0	0	0
1931	2	2	2	2	2	2	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	2	2	2	2	2	2	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	5	4	5	5	4
1936	3	4	5	4	25	-1	-1	-1	-1	-1	-2	-1
1937	0	0	0	0	0	-3	0	-1	-1	-1	-1	-1
1938	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	2	2	2	2	11	75	0	-2	-1	-1	-1	-1
1941	0	0	-1	-1	-1	-1	0	-1	-1	-1	-1	-1
1942	0	0	-1	-1	0	0	0	-2	-1	-1	-1	-1
1943	0	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	-12	0	0	-1	-1	-1	-1	-1
1946	0	-1	-1	-1	0	0	0	-4	-1	-1	-1	-1
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	-5	-4	-5	-4	-10	0	0	-1	-1	-1	-1	-1
1951	0	0	0	-1	-1	-1	0	-1	-1	-1	-1	-1
1952	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
1953	0	0	0	0	-2	0	0	-1	-1	-1	-1	-1
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	-2	-2	-16	-1	-1	-1	0	-2	-1	-1	-1	-1
1957	0	0	0	0	0	0	0	-2	-2	-2	-2	-2
1958	0	0	0	0	-2	-1	-1	-1	-1	-1	-1	-1
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	2	2	2	2	2	2	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	1	1	1	1	1
1963	6	6	6	6	97	6	-3	-6	-1	-1	-2	-1
1964	0	-1	0	0	0	0	0	0	0	0	0	0
1965	2	2	37	-1	0	2	0	-1	-4	-2	-1	-1
1966	0	-1	-1	-1	0	0	0	0	0	0	0	0
1967	-2	-2	-2	-4	0	-1	-1	-1	-1	-1	-1	-1
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	2	2	2	75	-1	-1	-1	-2	-2	-2	-2	-2
1970	0	0	-2	-1	0	-1	0	-1	-1	-1	-1	-1
1971	0	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1
1972	0	-1	-1	0	0	0	0	0	0	0	0	0
1973	0	0	0	-10	-1	-1	0	0	-6	0	0	0
1974	0	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1
1975	0	0	0	0	0	0	0	-4	-1	-1	-1	-1
1976	0	-1	0	0	0	0	0	0	0	0	0	0
1977	6	5	6	6	5	6	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	4	11	10	0	0	0
1980	0	0	0	17	60	-1	-1	-2	-2	-2	-2	-2
1981	0	0	-1	0	0	0	0	0	0	0	0	0
1982	2	2	61	-1	-1	-1	-1	-1	-1	-1	-1	-1
1983	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
1984	0	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1
1985	0	-1	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	-11	0	0	-1	-1	-1	-1	-1
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	4	5	6	6	5	6	0	0	0	0	0	0
1991	6	5	6	6	5	6	4	8	0	0	0	0
1992	0	0	0	0	0	0	4	8	0	0	0	0
1993	0	0	0	0	0	0	0	11	19	11	11	10
AVG:	1	0	1	2	3	1	0	0	0	0	0	0
MIN:	-5	-4	-16	-10	-12	-3	-3	-6	-6	-2	-2	-2
MAX:	6	6	61	75	97	75	14	11	19	11	11	10

Table 3.4.5-10. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	1	1	0	0	0	0	-4	49	-19	-19	-18
1923	0	0	0	0	-1	0	0	-2	16	-8	-8	-8
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	6	5	6	6	5	6	0	-9	-9	-9	-9	-9
1926	1	0	0	0	0	0	0	0	0	0	0	0
1927	2	2	2	2	2	2	0	-13	18	-20	-19	-18
1928	0	-1	0	0	0	-2	0	32	-9	-1	-1	-1
1929	0	-6	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	-2	-2	-2	-2	-2	-2	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	-2	-2	-2	-2	-96	-20	-14	19	21	-19	-19	-18
1937	0	0	0	0	0	-1	0	19	14	-15	-15	-14
1938	0	0	-1	0	0	0	-1	-1	49	-19	-19	-18
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	2	2	2	2	2	-7	-6	31	-13	-16	-15	-14
1941	0	0	-1	0	0	0	0	11	36	-19	-19	-18
1942	0	0	-1	0	0	0	0	-2	49	-19	-19	-18
1943	0	0	0	0	0	0	-1	32	1	-15	-14	-14
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	2	2	2	2	-17	2	-3	-6	39	-16	-16	-16
1946	0	0	0	-1	0	0	0	34	-12	-12	-11	-11
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	2	2	2	2	2	2	0	0	0	0	0	0
1949	5	4	5	5	4	5	0	0	0	0	0	0
1950	-5	-4	-5	-4	-14	-6	-9	-14	28	-16	-16	-16
1951	1	0	0	0	0	-1	0	25	-15	-7	-7	-6
1952	0	0	-1	0	0	0	-1	-1	41	-16	-16	-16
1953	0	0	0	0	-2	0	0	-2	-2	-2	-2	-2
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	5	4	5	5	4	5	0	0	0	0	0	0
1956	0	0	-53	0	0	-1	0	-2	49	-19	-19	-18
1957	0	0	0	0	0	0	0	-3	-3	-3	-3	-3
1958	0	0	0	0	-2	0	0	-1	49	-19	-19	-18
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	2	2	2	2	2	2	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	6	5	6	6	5	6	0	0	0	0	0	0
1963	0	0	0	0	-26	0	-6	-46	-22	-19	-19	-18
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	2	2	-18	0	-1	2	0	-2	28	-13	-13	-12
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	-13	0	0	0	-1	19	6	-16	-16
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	2	2	2	-19	0	0	0	-1	49	-19	-19	-18
1970	0	0	-1	0	0	0	0	-2	-2	-2	-2	-2
1971	0	0	0	-1	-1	0	0	-2	-2	-2	-2	-2
1972	0	-1	0	0	0	0	-3	0	0	0	0	0
1973	5	4	5	-22	-2	0	0	22	5	-13	-12	-12
1974	0	0	0	0	0	-1	-1	14	20	-15	-15	-14
1975	0	0	0	0	0	0	0	-5	28	-12	-12	-11
1976	0	-1	0	0	0	0	0	0	0	0	0	0
1977	6	5	6	6	5	6	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	4	11	10	0	0	0
1980	0	0	0	0	-80	-27	-12	-18	-13	-13	-12	-11
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	2	2	-5	-16	0	0	-1	-2	35	-14	-14	-14
1983	0	0	0	0	0	0	-1	-1	-2	31	-20	-19
1984	0	1	0	-1	0	-1	0	-2	4	-4	-4	-4
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	-14	0	0	25	14	-16	-16	-15
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	4	5	6	6	5	6	0	0	0	0	0	0
1991	0	0	0	0	0	0	4	8	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	-22	-21	-22	-22	-21
AVG:	1	0	-1	-1	-3	0	-1	2	8	-6	-7	-6
MIN:	-5	-6	-53	-22	-96	-27	-14	-46	-22	-22	-22	-21
MAX:	6	5	6	6	5	6	4	34	49	31	0	0

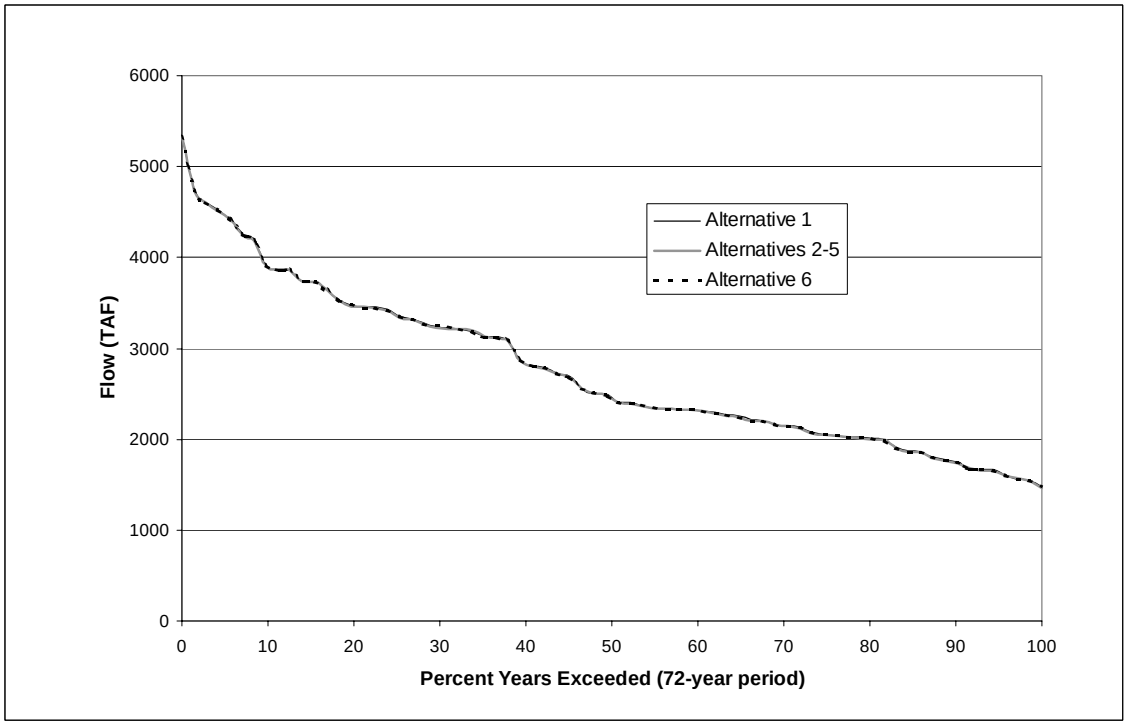


Figure 3.4.5-3. Exceedence for Simulated Annual Georgiana Slough Flow, 2001 LOD

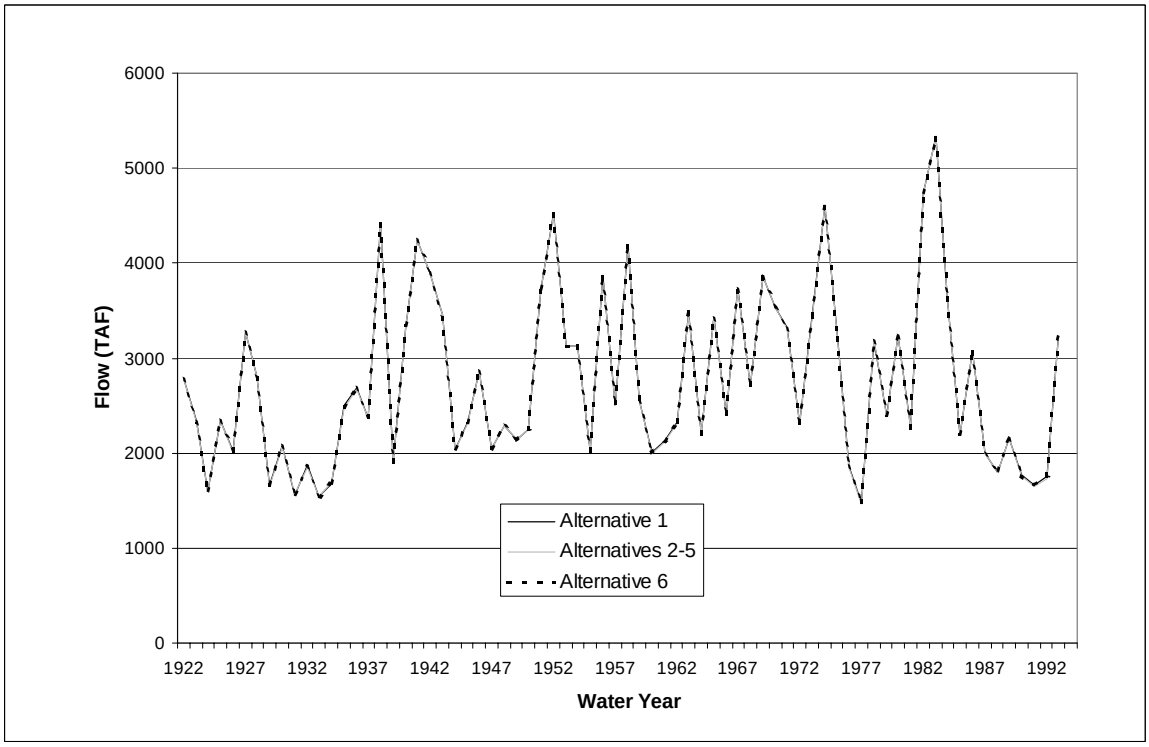


Figure 3.4.5-4. Simulated Annual Georgiana Slough Flow, 2001 LOD

Table 3.4.5-11. Simulated Georgiana Slough Flow (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	134	128	193	183	309	292	232	440	334	203	176	159
1923	138	154	310	285	155	165	232	188	168	209	178	154
1924	133	132	146	155	167	133	110	115	122	142	140	108
1925	113	112	155	151	524	262	216	170	174	150	178	139
1926	126	117	130	190	339	161	205	153	147	181	149	120
1927	126	232	204	304	600	401	409	261	193	211	181	155
1928	133	207	177	235	245	658	255	180	158	214	187	158
1929	138	146	149	157	163	141	106	114	133	155	153	113
1930	115	107	196	229	183	309	145	149	156	190	172	126
1931	126	119	127	160	125	112	117	110	125	182	149	109
1932	114	105	206	219	181	159	126	157	187	143	133	138
1933	125	117	130	157	126	159	132	103	129	148	119	105
1934	115	107	168	210	154	153	141	114	137	139	118	115
1935	114	132	132	287	149	261	429	245	224	203	186	145
1936	150	129	139	377	514	302	213	174	169	201	182	143
1937	139	124	146	155	310	370	223	181	193	199	179	142
1938	131	236	577	304	595	661	526	505	325	187	177	195
1939	182	148	171	161	131	161	131	152	143	202	182	147
1940	133	118	123	322	484	655	563	203	184	232	180	147
1941	130	146	426	649	591	626	531	381	203	199	178	189
1942	160	157	577	614	595	236	389	329	265	207	177	191
1943	159	186	285	638	426	600	251	200	181	196	180	155
1944	144	125	139	165	231	222	133	140	179	208	183	167
1945	147	163	184	159	388	232	140	164	191	219	179	156
1946	129	187	582	457	231	218	143	167	184	218	186	160
1947	142	151	179	145	178	217	159	137	171	213	193	164
1948	140	132	144	192	173	172	255	282	219	224	191	170
1949	145	141	161	143	131	426	148	163	178	200	164	147
1950	126	124	123	223	303	214	198	188	190	223	188	155
1951	158	440	659	558	520	278	167	206	180	222	188	154
1952	133	156	435	650	601	504	525	552	351	209	180	227
1953	186	148	407	649	214	225	175	255	254	228	181	205
1954	162	185	167	326	501	452	361	226	159	230	187	170
1955	156	178	239	212	151	140	151	152	173	182	158	135
1956	127	144	658	666	577	333	196	362	210	221	178	202
1957	168	144	148	177	306	424	210	183	189	221	180	154
1958	209	166	245	367	602	650	631	416	316	201	175	216
1959	190	145	152	350	438	226	128	151	201	225	191	155
1960	143	147	134	149	279	228	137	153	153	203	160	126
1961	126	141	181	148	310	202	155	144	146	217	204	157
1962	140	154	183	137	396	258	141	154	172	229	192	169
1963	336	176	273	175	564	319	604	301	179	198	180	162
1964	185	269	156	253	159	153	145	158	167	214	195	162
1965	132	163	641	658	275	239	374	234	157	225	179	151
1966	148	223	177	290	228	279	157	169	193	218	180	149
1967	151	167	381	383	446	493	344	411	367	185	185	220
1968	197	157	179	284	508	345	145	141	195	218	184	164
1969	147	152	245	658	592	431	380	453	223	182	179	220
1970	186	161	535	676	571	321	166	144	173	249	184	166
1971	140	182	550	437	257	416	220	265	221	247	182	204
1972	168	149	206	199	238	339	142	142	200	214	181	137
1973	141	204	265	651	585	475	178	193	203	227	177	157
1974	158	538	599	660	340	654	569	237	234	215	179	227
1975	191	158	184	176	523	630	213	285	247	218	184	210
1976	196	180	182	162	142	174	124	113	133	166	152	132
1977	115	110	121	117	104	115	121	100	138	185	145	106
1978	114	106	172	576	420	550	302	218	184	189	185	170
1979	139	130	129	248	352	295	172	183	211	212	180	148
1980	144	154	209	658	615	414	190	180	150	183	176	162
1981	135	125	169	252	241	314	172	142	163	214	190	152
1982	150	333	654	614	591	610	638	341	234	184	174	220
1983	236	336	578	633	599	683	536	512	488	248	226	262
1984	211	559	664	464	307	340	185	154	166	237	183	162
1985	147	299	236	166	159	158	141	159	164	211	187	171
1986	150	136	193	257	625	658	193	149	158	205	190	162
1987	144	123	140	163	191	247	160	137	171	199	170	149
1988	141	121	202	278	173	126	123	129	141	142	115	112
1989	115	123	134	153	111	435	221	175	150	206	191	147
1990	160	152	156	212	153	158	136	109	118	136	146	136
1991	118	106	106	111	107	311	147	124	115	158	134	122
1992	113	106	107	139	300	209	139	122	136	139	119	124
1993	114	107	153	521	466	404	356	310	258	199	182	150
AVG:	149	171	259	323	341	332	243	213	193	200	174	159
MIN:	113	105	106	111	104	112	106	100	115	136	115	105
MAX:	336	559	664	676	625	683	638	552	488	249	226	262

Table 3.4.5-12. Simulated Georgiana Slough Flow (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	134	128	192	183	309	292	232	439	334	203	176	158
1923	138	154	308	285	154	165	232	187	168	210	178	153
1924	133	131	148	155	167	133	109	115	123	140	138	105
1925	113	112	155	151	520	261	216	169	174	149	179	139
1926	126	117	130	190	338	160	204	153	147	181	150	118
1927	126	230	200	303	600	401	409	260	192	210	182	154
1928	132	206	176	235	244	658	255	180	158	213	187	158
1929	138	146	149	157	161	139	106	114	130	154	152	103
1930	115	107	196	229	182	307	145	147	154	187	167	124
1931	126	118	128	161	126	112	117	110	125	184	150	109
1932	114	105	201	219	174	159	124	157	187	143	133	138
1933	125	117	130	156	125	159	132	103	129	147	118	105
1934	115	107	168	209	154	151	141	114	140	150	124	113
1935	114	132	132	284	149	260	423	244	219	198	185	141
1936	147	123	141	375	514	294	213	173	170	203	183	142
1937	141	124	146	155	309	370	223	181	193	204	176	142
1938	131	236	574	304	594	661	526	504	324	187	177	194
1939	180	147	171	160	131	160	130	152	143	202	183	146
1940	134	118	122	320	478	654	562	203	185	232	181	147
1941	129	145	425	649	591	626	530	380	202	199	178	189
1942	158	157	576	614	595	236	388	329	265	207	177	190
1943	158	184	285	638	426	599	251	200	181	196	180	155
1944	144	125	139	165	231	221	133	139	178	208	183	167
1945	147	162	184	159	387	231	140	164	192	219	180	155
1946	128	186	581	457	231	218	143	167	184	218	186	158
1947	141	150	179	144	178	219	159	137	172	213	193	165
1948	140	132	143	193	173	172	254	281	218	224	191	168
1949	145	138	161	143	130	428	147	163	178	199	165	146
1950	126	125	123	221	302	214	198	179	191	223	188	154
1951	163	434	659	558	520	277	167	205	180	223	188	154
1952	133	156	432	650	600	504	521	552	350	209	179	226
1953	185	148	406	648	214	225	174	254	253	228	181	204
1954	162	182	167	326	501	451	361	227	159	230	187	170
1955	155	178	238	211	151	140	151	151	173	181	157	135
1956	127	144	657	666	576	332	196	361	209	221	178	201
1957	167	144	147	177	306	423	210	183	189	221	180	154
1958	207	166	244	366	602	650	631	415	316	201	175	214
1959	190	145	152	350	438	225	128	151	201	226	191	156
1960	143	145	133	148	278	227	137	151	149	203	160	125
1961	126	141	180	148	306	202	155	143	145	217	204	156
1962	136	155	183	137	397	256	140	153	172	230	192	168
1963	331	174	271	174	558	318	603	301	179	199	180	165
1964	184	268	156	245	159	151	145	160	167	214	195	162
1965	130	163	633	658	275	239	372	235	157	226	179	150
1966	147	220	177	290	228	279	156	169	193	218	180	149
1967	151	166	379	383	444	492	343	411	366	184	185	219
1968	197	157	179	284	507	343	145	140	196	218	184	164
1969	146	151	243	657	591	430	380	452	223	182	179	218
1970	186	160	535	676	570	320	166	143	173	249	184	166
1971	139	181	549	436	258	414	220	263	221	248	182	203
1972	167	150	203	198	238	339	142	142	200	214	180	137
1973	141	203	264	650	585	473	178	193	208	214	177	151
1974	152	553	598	660	339	653	568	236	234	214	179	224
1975	190	158	184	176	522	629	212	285	246	218	183	209
1976	198	180	181	162	142	170	124	113	130	168	154	131
1977	115	109	121	117	103	114	121	100	138	185	140	106
1978	114	106	172	575	419	549	300	217	183	205	185	169
1979	139	130	129	243	352	294	171	181	210	212	180	146
1980	143	153	206	657	615	413	190	180	150	184	177	161
1981	135	125	169	250	241	312	170	140	164	214	190	152
1982	149	329	654	612	591	609	638	340	233	184	174	219
1983	235	335	577	633	599	683	535	512	487	248	225	261
1984	210	559	664	464	307	339	185	154	165	237	183	161
1985	147	298	235	166	158	157	141	159	164	211	187	171
1986	149	137	192	255	625	658	193	149	158	205	189	162
1987	144	123	140	163	191	245	160	136	170	199	168	148
1988	139	119	200	276	173	124	121	122	145	142	117	112
1989	115	123	132	153	112	435	220	175	148	204	191	146
1990	156	150	155	212	152	157	136	107	119	135	145	136
1991	118	106	106	111	106	309	145	122	112	152	135	128
1992	113	106	107	139	300	207	138	118	138	138	119	113
1993	114	107	153	531	466	397	349	310	258	198	181	149
AVG:	148	171	259	322	340	331	243	212	193	200	174	158
MIN:	113	105	106	111	103	112	106	100	112	135	117	103
MAX:	331	559	664	676	625	683	638	552	487	249	225	261

Table 3.4.5-13. Simulated Georgiana Slough Flow (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	134	128	192	183	309	292	232	439	334	204	178	158
1923	138	154	305	285	154	165	232	187	166	211	179	152
1924	133	131	147	155	167	133	109	116	122	141	140	108
1925	113	112	155	151	523	261	216	169	176	150	179	139
1926	126	117	130	190	337	161	205	153	147	182	151	120
1927	126	232	201	304	600	400	409	260	192	210	184	154
1928	132	204	177	235	244	658	255	176	159	215	186	158
1929	138	146	149	157	161	140	106	114	131	154	152	114
1930	115	107	196	229	182	308	145	148	155	190	171	126
1931	126	117	127	160	125	111	117	110	126	183	150	109
1932	114	105	205	219	180	159	124	157	187	143	133	138
1933	125	117	130	156	125	159	132	103	129	147	119	105
1934	115	107	168	209	154	153	141	114	137	139	118	115
1935	114	132	132	286	149	260	428	244	218	198	186	142
1936	150	125	140	369	514	297	214	175	166	207	185	143
1937	142	124	146	155	309	370	223	182	191	209	180	144
1938	131	236	573	304	594	661	526	504	324	189	180	194
1939	176	147	171	160	131	161	130	151	144	202	182	146
1940	133	118	123	321	483	654	562	201	183	234	182	147
1941	130	145	423	649	591	626	530	380	202	201	181	189
1942	154	157	576	614	595	236	388	329	265	220	179	190
1943	158	173	285	638	426	599	251	200	181	193	180	155
1944	144	125	139	165	233	222	133	139	178	208	183	167
1945	146	162	184	159	387	231	140	164	186	221	183	157
1946	128	185	582	457	233	218	143	167	185	219	187	162
1947	140	151	179	144	178	218	159	137	169	213	193	164
1948	138	131	132	193	172	172	255	282	219	224	191	169
1949	145	143	161	143	130	423	147	163	179	199	165	146
1950	126	124	123	222	302	214	198	181	187	225	190	153
1951	160	436	659	558	520	277	167	205	180	224	189	154
1952	133	156	431	650	600	504	527	551	350	210	178	226
1953	185	148	406	648	214	225	174	254	253	228	181	204
1954	162	182	167	326	501	451	361	227	159	230	187	170
1955	155	178	238	211	151	140	150	151	173	181	157	135
1956	127	144	657	666	576	332	196	361	209	206	180	202
1957	175	144	151	177	306	424	210	183	187	220	178	161
1958	206	166	244	366	602	650	631	415	316	203	178	214
1959	190	145	152	350	438	226	128	152	201	226	191	155
1960	143	147	134	149	279	228	137	153	152	203	160	126
1961	126	141	180	148	309	202	155	143	146	217	204	157
1962	140	154	183	136	395	258	141	154	172	229	192	169
1963	334	176	272	175	564	320	603	301	182	208	182	167
1964	184	268	156	233	159	152	146	159	168	214	195	164
1965	130	163	636	658	275	240	372	235	156	223	181	150
1966	147	223	177	290	228	279	156	169	193	218	180	149
1967	151	166	380	383	444	492	343	411	366	184	185	219
1968	197	157	179	284	507	345	145	141	196	218	184	164
1969	146	151	244	657	591	430	380	452	223	184	181	215
1970	186	160	535	676	570	320	166	143	173	249	184	166
1971	139	181	549	436	258	413	220	263	221	248	182	203
1972	167	150	203	198	238	339	142	142	200	214	181	137
1973	141	205	268	650	585	472	178	193	206	215	179	151
1974	149	552	598	660	339	653	568	236	233	216	181	220
1975	190	158	184	176	522	629	212	285	246	219	183	209
1976	197	180	181	162	142	171	124	113	132	169	151	133
1977	115	111	120	117	103	114	121	100	138	184	145	106
1978	114	106	172	575	419	550	301	217	183	188	185	169
1979	139	130	129	247	352	295	172	182	210	212	180	148
1980	144	155	208	657	615	413	190	180	150	185	178	161
1981	135	125	169	248	241	313	172	141	164	214	190	152
1982	150	333	654	612	591	609	638	340	233	185	175	218
1983	233	335	577	633	599	683	535	512	487	248	225	261
1984	210	559	664	464	307	339	185	154	165	237	184	161
1985	147	297	235	166	158	158	141	159	164	211	187	171
1986	149	137	192	255	625	658	193	149	157	206	190	162
1987	144	123	140	163	191	247	160	137	169	199	166	148
1988	141	121	202	277	173	123	123	125	141	146	118	113
1989	115	123	134	153	111	434	220	175	150	206	191	148
1990	158	152	155	212	152	158	136	109	118	136	145	136
1991	118	106	106	111	106	310	147	124	112	158	133	125
1992	113	106	107	139	300	208	139	122	137	139	119	123
1993	114	107	153	520	466	403	354	309	258	232	185	155
AVG:	148	171	259	322	340	331	243	212	193	201	175	159
MIN:	113	105	106	111	103	111	106	100	112	136	118	105
MAX:	334	559	664	676	625	683	638	551	487	249	225	261

Table 3.4.5-14. Simulated Georgiana Slough Flow (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	-1	0	0	-1	-1	0	0	0
1923	0	0	-1	0	0	0	0	0	0	1	0	-1
1924	0	0	2	0	0	0	-1	0	1	-2	-2	-3
1925	0	0	0	0	-4	-1	0	-1	-1	0	1	0
1926	0	0	0	0	0	-1	-2	-1	0	0	1	-1
1927	0	-2	-4	-1	-1	0	0	0	0	-1	0	0
1928	0	-1	0	0	0	-1	0	0	0	0	0	0
1929	0	0	0	0	-2	-2	0	0	-3	-1	-1	-10
1930	0	0	0	0	-1	-1	0	-1	-2	-3	-5	-2
1931	0	-1	1	1	1	0	0	0	-1	2	1	-1
1932	0	0	-5	0	-7	0	-2	0	-1	0	0	0
1933	0	0	0	0	0	-1	0	0	0	-1	-1	0
1934	0	0	0	0	0	-1	0	0	2	11	7	-2
1935	0	-1	0	-2	0	0	-6	-1	-5	-5	-1	-4
1936	-3	-6	2	-2	0	-8	0	0	0	2	0	-1
1937	2	0	0	0	0	0	0	0	0	6	-3	0
1938	0	-1	-3	0	0	0	0	-1	-1	0	0	-1
1939	-2	0	0	0	0	-1	-1	0	0	0	0	-1
1940	1	0	-1	-2	-6	-1	0	0	1	0	0	0
1941	-1	0	-1	0	0	0	0	-1	0	0	0	-1
1942	-2	0	0	0	0	0	0	-1	-1	0	0	-1
1943	-1	-2	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	-1	-1	0	0	0	0	0	0
1945	0	-1	0	0	-2	-1	0	0	0	0	0	-1
1946	-1	0	-1	0	0	0	0	0	0	0	0	-1
1947	0	-1	0	-1	-1	2	0	0	1	0	0	1
1948	0	0	-1	0	0	0	-1	-1	-1	0	0	-2
1949	0	-3	0	0	0	3	0	0	0	-1	1	0
1950	0	1	0	-2	0	0	0	-8	1	0	0	0
1951	5	-6	0	0	0	0	0	0	0	1	0	0
1952	0	0	-3	0	0	0	-5	0	-1	0	-1	-1
1953	-1	0	-1	0	0	0	0	0	-1	0	0	-1
1954	0	-3	0	0	0	0	0	0	0	0	0	0
1955	0	0	-2	0	0	0	0	0	0	0	-1	0
1956	0	0	-1	0	0	0	0	-1	-1	0	0	-1
1957	-1	0	-1	0	0	0	0	0	0	0	0	1
1958	-2	0	0	0	0	0	0	-1	-1	0	0	-2
1959	-1	0	0	0	0	-1	0	0	0	1	0	1
1960	0	-2	-1	-1	-2	-1	0	-2	-4	0	0	0
1961	0	0	-1	0	-3	0	0	-1	-1	0	0	-1
1962	-3	1	0	0	1	-1	-1	-1	0	1	0	-1
1963	-4	-2	-2	-2	-6	-1	0	-1	0	1	0	3
1964	-1	-1	0	-8	0	-1	0	2	0	0	0	1
1965	-2	0	-8	0	0	0	-1	0	0	1	0	-1
1966	0	-3	0	0	0	0	0	0	0	0	0	0
1967	0	0	-2	0	-2	0	0	-1	-1	-1	-1	-1
1968	-1	0	0	0	0	-2	0	-2	1	0	0	0
1969	0	0	-2	-1	0	0	0	-1	-1	0	0	-1
1970	-1	-1	0	0	0	0	0	0	1	-1	0	0
1971	0	-1	-1	0	0	-3	0	-1	0	1	0	-1
1972	0	1	-3	0	0	0	0	0	0	0	0	0
1973	0	-1	-1	0	0	-2	0	0	5	-13	0	-6
1974	-6	15	-1	0	0	0	0	0	0	0	0	-3
1975	-1	0	0	0	0	0	0	-1	-1	0	-1	-1
1976	3	-1	0	0	0	-4	-1	0	-3	1	2	-2
1977	0	-1	0	0	-1	-1	0	0	0	-1	-5	0
1978	0	0	0	0	-1	-1	-2	-1	0	17	0	-1
1979	0	-1	0	-6	0	-2	-1	-2	-1	0	0	-2
1980	-1	-1	-3	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	0	-2	-2	-2	1	0	0	0
1982	-1	-5	-1	-2	0	0	0	-1	-1	0	0	-1
1983	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-1
1984	-1	-1	0	0	0	0	0	0	0	0	0	0
1985	0	-2	0	0	0	-1	0	0	0	0	0	0
1986	0	1	0	-1	0	-1	0	0	0	0	-1	0
1987	0	0	0	0	0	-2	1	0	-1	0	-2	0
1988	-2	-1	-1	-2	0	-1	-2	-6	4	0	2	0
1989	0	0	-2	0	1	0	-1	0	-2	-2	-1	-1
1990	-4	-2	-1	0	0	-2	0	-2	1	0	-1	0
1991	0	0	0	0	-1	-2	-2	-2	-3	-7	1	6
1992	0	0	0	0	0	-2	-1	-4	1	-1	0	-11
1993	0	0	0	10	-1	-7	-6	0	-1	-1	-1	0
AVG:	0	-1	-1	0	-1	-1	-1	-1	0	0	0	-1
MIN:	-6	-6	-8	-8	-7	-8	-6	-8	-5	-13	-5	-11
MAX:	5	15	2	10	1	3	1	2	5	17	7	6

Table 3.4.5-15. Simulated Georgiana Slough Flow (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	-1	0	0	-1	-1	1	3	0
1923	0	0	-4	0	0	0	0	0	-2	2	1	-2
1924	0	0	1	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	-1	-1	0	0	2	1	1	0
1926	0	0	0	0	-2	0	0	0	-1	0	2	0
1927	0	0	-4	0	-1	0	0	0	0	-1	2	0
1928	-1	-3	0	0	-1	-1	0	-4	1	1	0	0
1929	0	0	0	0	-2	-1	0	0	-2	-1	-1	1
1930	0	0	0	0	-1	0	0	0	-1	0	0	-1
1931	0	-2	0	0	0	0	0	0	0	1	1	0
1932	0	0	-1	0	-1	0	-2	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	-1	0	-6	-4	0	-3
1936	0	-3	1	-7	0	-5	0	1	-3	6	3	1
1937	3	0	0	0	0	0	0	0	-2	10	1	2
1938	0	-1	-4	0	0	0	0	-1	-1	1	3	-1
1939	-6	0	0	0	0	0	0	0	1	0	0	0
1940	0	0	0	0	-1	0	0	-2	0	2	2	0
1941	1	-1	-2	0	0	0	0	-1	0	1	3	-1
1942	-6	0	0	0	0	0	0	-1	-1	13	3	-1
1943	-1	-13	0	0	0	0	0	0	0	-2	0	0
1944	0	0	0	0	1	0	0	0	0	0	0	-1
1945	-1	-1	0	0	-1	-1	0	0	-5	2	4	1
1946	-1	-2	0	0	2	0	0	0	1	2	1	2
1947	-2	0	0	-1	-1	1	0	0	-2	0	0	-1
1948	-2	0	-12	0	0	0	0	0	0	0	0	-1
1949	0	2	0	0	0	-3	0	0	1	-1	1	0
1950	0	0	0	-1	0	0	0	-6	-3	2	2	-1
1951	2	-4	0	0	0	0	0	0	0	2	1	0
1952	0	0	-4	0	0	0	2	-1	-1	1	-2	-1
1953	-1	0	-1	0	0	0	0	0	-1	0	0	-1
1954	0	-3	0	0	0	0	0	0	0	0	0	0
1955	0	0	-2	0	0	0	0	0	0	-1	-1	0
1956	0	0	0	0	0	0	0	-1	-1	-15	3	0
1957	7	0	3	0	0	0	0	0	-2	-1	-2	7
1958	-3	0	0	0	-1	0	0	-1	-1	1	3	-2
1959	-1	0	0	0	0	0	0	0	0	1	0	0
1960	0	0	0	0	0	0	0	0	-1	0	0	0
1961	0	0	-1	0	0	0	0	-1	0	0	0	-1
1962	0	0	0	0	-1	0	0	0	0	0	0	0
1963	-2	-1	0	0	-1	1	-1	-1	3	9	2	5
1964	-1	-1	0	-19	0	-1	1	0	1	0	0	2
1965	-1	0	-5	0	0	1	-1	0	-1	-2	2	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	-2	0	-1	0	0	-1	-1	-1	-1	-1
1968	-1	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	-1	0	0	0	0	-1	-1	2	2	-4
1970	-1	-1	0	0	0	0	0	0	1	-1	0	0
1971	0	-1	-1	0	0	-3	0	-1	0	1	0	-1
1972	0	1	-3	0	0	0	1	0	0	0	1	0
1973	0	1	3	0	0	-3	0	0	3	-12	2	-7
1974	-9	14	-1	0	0	0	0	0	-1	1	2	-7
1975	-1	0	0	0	0	0	0	-1	-1	2	-1	-1
1976	1	-1	0	0	0	-2	0	0	-2	3	-1	0
1977	0	0	-1	0	-1	-1	0	0	0	-1	1	0
1978	0	0	0	0	0	0	-1	-1	0	0	0	-1
1979	0	-1	0	-1	0	0	0	0	-1	0	0	0
1980	0	1	-1	0	0	0	0	0	0	2	2	0
1981	0	0	0	-3	0	-2	0	0	0	0	0	0
1982	0	0	0	-2	0	0	0	-1	-1	1	2	-2
1983	-3	-1	0	0	0	0	0	-1	-1	-1	-1	-1
1984	-1	-1	0	0	0	0	0	0	0	0	1	0
1985	0	-2	0	0	0	-1	0	0	0	0	0	0
1986	0	1	0	-1	0	-1	0	0	-1	0	0	0
1987	0	0	0	0	0	0	0	0	-2	0	-4	-1
1988	0	0	0	0	0	-2	0	-3	0	4	3	1
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	-2	-1	-1	-1	0	0	0	0	0	0	-1	0
1991	0	0	0	0	0	-1	0	-1	-3	0	-1	2
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	-1	-2	-1	-1	33	3	5
AVG:	0	0	-1	-1	0	-1	0	0	-1	1	1	0
MIN:	-9	-13	-12	-19	-2	-5	-2	-6	-6	-15	-4	-7
MAX:	7	14	3	0	2	1	2	1	3	33	4	7

Table 3.4.5-16. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	137	104	163	172	369	481	411	444	707	132	125	117
1923	256	103	284	446	347	184	366	324	156	132	125	114
1924	137	92	101	100	107	102	103	97	73	72	58	63
1925	99	83	86	79	155	154	266	249	125	108	100	98
1926	113	83	91	80	106	108	209	188	92	85	59	72
1927	101	107	122	109	256	231	337	302	137	114	104	96
1928	110	113	129	133	142	363	343	251	108	100	95	91
1929	113	84	90	88	100	103	142	135	78	77	52	64
1930	85	71	72	78	88	111	132	123	75	73	50	63
1931	90	71	72	71	75	77	83	73	68	53	44	56
1932	75	73	193	211	426	282	283	242	117	107	100	98
1933	118	85	87	99	106	125	148	140	75	67	63	66
1934	82	72	81	81	103	101	100	91	63	59	48	55
1935	69	82	90	223	190	220	378	344	176	128	109	108
1936	121	87	98	115	549	352	414	328	138	119	108	107
1937	149	92	110	156	796	658	540	547	154	128	114	113
1938	201	97	338	405	1112	1676	1040	1309	1153	219	137	172
1939	543	108	130	140	170	238	273	244	112	111	107	91
1940	122	90	94	249	331	577	397	330	153	126	121	115
1941	155	107	173	325	780	683	597	541	379	146	134	118
1942	287	110	303	470	483	361	414	396	316	171	141	129
1943	340	124	221	761	596	1064	464	434	184	156	137	130
1944	209	112	121	123	186	210	312	292	136	136	131	112
1945	134	116	120	115	368	489	410	336	156	144	138	119
1946	216	121	340	290	288	278	353	320	152	134	130	116
1947	141	116	135	120	152	118	150	145	100	99	61	74
1948	104	81	79	73	79	113	227	218	134	112	106	101
1949	116	85	87	80	94	163	214	203	105	106	102	97
1950	102	84	86	123	152	145	210	196	103	98	95	94
1951	102	218	497	582	542	334	330	319	147	113	105	109
1952	147	106	173	341	352	698	582	811	803	201	133	153
1953	500	109	162	400	273	195	282	269	140	117	111	101
1954	133	94	100	104	127	162	289	265	116	116	111	100
1955	131	90	99	114	109	108	149	147	101	100	68	74
1956	94	83	641	1026	690	392	358	323	325	145	123	141
1957	295	96	109	108	145	261	268	272	139	113	106	100
1958	140	98	107	122	190	554	857	756	591	164	140	147
1959	391	97	106	126	270	197	249	197	99	99	95	92
1960	112	80	82	85	124	114	149	141	89	84	50	68
1961	95	77	83	75	77	79	92	83	84	64	49	67
1962	86	74	77	74	305	279	282	240	101	98	93	93
1963	100	83	84	114	190	170	348	326	176	136	114	110
1964	123	102	106	102	96	104	144	138	84	82	57	70
1965	101	97	250	607	383	297	407	339	174	125	110	108
1966	145	181	323	295	267	212	242	203	108	109	104	95
1967	128	97	176	198	176	421	744	811	963	554	128	191
1968	343	95	118	127	234	202	259	201	102	103	98	93
1969	123	94	119	804	1345	1089	1099	1439	1463	251	131	169
1970	546	105	204	1052	522	456	343	327	151	124	119	114
1971	146	111	149	145	149	209	267	264	132	121	115	101
1972	129	92	110	105	110	104	145	148	92	92	89	86
1973	114	86	92	148	409	508	393	338	131	121	116	112
1974	146	95	125	334	263	391	461	380	204	134	122	121
1975	224	105	118	120	316	529	417	362	290	144	126	124
1976	262	101	111	105	112	110	146	140	88	86	85	75
1977	195	124	103	80	77	78	101	97	74	54	42	58
1978	90	80	93	229	436	559	767	674	672	155	114	155
1979	283	92	106	305	519	536	376	343	129	115	109	110
1980	151	102	113	768	1140	807	458	376	343	241	122	170
1981	321	98	110	130	143	226	264	222	102	103	99	93
1982	128	101	108	456	722	919	1457	990	586	232	133	251
1983	775	455	1125	1442	1730	2306	1204	1216	2072	1099	122	393
1984	759	758	1275	892	556	380	329	316	157	136	130	116
1985	142	114	121	110	122	136	194	214	105	102	97	94
1986	129	100	109	134	916	1400	714	476	401	147	132	128
1987	225	99	105	103	113	122	148	142	93	95	81	71
1988	102	79	79	79	77	77	102	98	74	71	42	61
1989	95	71	80	72	75	99	103	89	77	81	56	69
1990	81	73	71	73	77	82	94	82	70	63	55	64
1991	83	70	69	61	63	147	134	106	68	66	56	61
1992	76	72	70	74	127	117	115	83	64	72	50	63
1993	82	80	91	456	293	281	286	285	200	129	117	107
AVG:	182	111	170	255	329	364	354	332	246	137	99	107
MIN:	69	70	69	61	63	77	83	73	63	53	42	55
MAX:	775	758	1275	1442	1730	2306	1457	1439	2072	1099	141	393

Table 3.4.5-17. Simulated San Joaquin River Inflow to Delta (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	137	104	163	172	369	481	411	444	707	132	125	117
1923	256	103	284	446	347	184	366	324	156	132	125	114
1924	137	92	101	100	107	102	103	97	73	72	58	63
1925	99	83	86	79	155	154	266	249	125	108	100	98
1926	113	83	91	80	106	108	209	188	92	85	59	72
1927	101	107	122	109	256	231	337	302	137	114	104	96
1928	110	113	129	133	142	363	343	251	108	100	95	91
1929	113	84	90	88	100	103	142	135	78	77	52	64
1930	85	71	72	78	88	111	132	123	75	73	50	63
1931	90	71	72	71	75	77	83	73	68	53	44	56
1932	75	73	193	211	426	282	283	242	117	107	100	98
1933	118	85	87	99	106	125	148	140	75	67	63	66
1934	82	72	81	81	103	101	100	91	63	59	48	55
1935	69	82	90	223	190	220	378	344	176	128	109	108
1936	121	87	98	115	549	352	414	328	138	119	108	107
1937	149	92	110	156	796	658	540	547	154	128	114	113
1938	201	97	338	405	1112	1676	1040	1309	1153	219	137	172
1939	543	108	130	140	170	238	273	244	112	111	107	91
1940	122	90	94	249	331	577	397	330	153	126	121	115
1941	155	107	173	325	780	683	597	541	379	146	134	118
1942	287	110	303	470	483	361	414	396	316	171	141	129
1943	340	124	221	761	596	1064	464	434	184	156	137	130
1944	209	112	121	123	186	210	312	292	136	136	131	112
1945	134	116	120	115	368	489	410	336	156	144	138	119
1946	216	121	340	290	288	278	353	320	152	134	130	116
1947	141	116	135	120	152	118	150	145	100	99	61	74
1948	104	81	79	73	79	113	227	218	134	112	106	101
1949	116	85	87	80	94	163	214	203	105	106	102	97
1950	102	84	86	123	152	145	210	196	103	98	95	94
1951	102	218	497	582	542	334	330	319	147	113	105	109
1952	147	106	173	341	352	698	582	811	803	201	133	153
1953	500	109	162	400	273	195	282	269	140	117	111	101
1954	133	94	100	104	127	162	289	265	116	116	111	100
1955	131	90	99	114	109	108	149	147	101	100	68	74
1956	94	83	641	1026	690	392	358	323	325	145	123	141
1957	295	96	109	108	145	261	268	272	139	113	106	100
1958	140	98	107	122	190	554	857	756	591	164	140	147
1959	391	97	106	126	270	197	249	197	99	99	95	92
1960	112	80	82	85	124	114	149	141	89	84	50	68
1961	95	77	83	75	77	79	92	83	84	64	49	67
1962	86	74	77	74	305	279	282	240	101	98	93	93
1963	100	83	84	114	190	170	348	326	176	136	114	110
1964	123	102	106	102	96	104	144	138	84	82	57	70
1965	101	97	250	607	383	297	407	339	174	125	110	108
1966	145	181	323	295	267	212	242	203	108	109	104	95
1967	128	97	176	198	176	421	744	811	963	554	128	191
1968	343	95	118	127	234	202	259	201	102	103	98	93
1969	123	94	119	804	1345	1089	1099	1439	1463	251	131	169
1970	546	105	204	1052	522	456	343	327	151	124	119	114
1971	146	111	149	145	149	209	267	264	132	121	115	101
1972	129	92	110	105	110	104	145	148	92	92	89	86
1973	114	86	92	148	409	508	393	338	131	121	116	112
1974	146	95	125	334	263	391	461	380	204	134	122	121
1975	224	105	118	120	316	529	417	362	290	144	126	124
1976	262	101	111	105	112	110	146	140	88	86	85	75
1977	195	124	103	80	77	78	101	97	74	54	42	58
1978	90	80	93	229	436	559	767	674	672	155	114	155
1979	283	92	106	305	519	536	376	343	129	115	109	110
1980	151	102	113	768	1140	807	458	376	343	241	122	170
1981	321	98	110	130	143	226	264	222	102	103	99	93
1982	128	101	108	456	722	919	1457	990	586	232	133	251
1983	775	455	1125	1442	1730	2306	1204	1216	2072	1099	122	393
1984	759	758	1275	892	556	380	329	316	157	136	130	116
1985	142	114	121	110	122	136	194	214	105	102	97	94
1986	129	100	109	134	916	1400	714	476	401	147	132	128
1987	225	99	105	103	113	122	148	142	93	95	81	71
1988	102	79	79	79	77	77	102	98	74	71	42	61
1989	95	71	80	72	75	99	103	89	77	81	56	69
1990	81	73	71	73	77	82	94	82	70	63	55	64
1991	83	70	69	61	63	147	134	106	68	66	56	61
1992	76	72	70	74	127	117	115	83	64	72	50	63
1993	82	80	91	456	293	281	286	285	200	129	117	107
AVG:	182	111	170	255	329	364	354	332	246	137	99	107
MIN:	69	70	69	61	63	77	83	73	63	53	42	55
MAX:	775	758	1275	1442	1730	2306	1457	1439	2072	1099	141	393

Table 3.4.5-18. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	137	104	163	172	369	481	411	444	707	132	125	117
1923	256	103	284	446	347	184	366	324	156	132	125	114
1924	137	92	101	100	107	102	103	97	73	72	58	63
1925	99	83	86	79	155	154	266	249	125	108	100	98
1926	113	83	91	80	106	108	209	188	92	85	59	72
1927	101	107	122	109	256	231	337	302	137	114	104	96
1928	110	113	129	133	142	363	343	251	108	100	95	91
1929	112	84	90	88	100	103	142	135	78	77	52	64
1930	85	71	72	77	88	111	132	123	75	73	50	63
1931	90	71	72	71	75	77	83	73	68	53	44	56
1932	75	73	193	211	426	282	283	242	117	107	100	98
1933	118	85	87	99	106	125	148	140	75	67	63	66
1934	82	72	81	81	103	101	100	91	62	59	48	55
1935	69	82	90	223	190	220	378	344	176	128	109	108
1936	122	87	98	115	549	352	414	328	138	119	108	107
1937	149	92	110	156	796	658	540	546	154	128	114	113
1938	201	97	338	405	1112	1676	1040	1309	1153	219	137	172
1939	543	108	130	140	170	238	273	244	112	111	107	91
1940	122	90	94	249	331	577	397	330	153	126	121	115
1941	155	107	173	325	780	683	597	541	379	146	134	118
1942	287	110	303	470	483	361	414	396	316	171	141	129
1943	340	124	221	761	596	1064	464	434	184	156	137	130
1944	209	112	121	123	186	210	312	292	136	136	131	112
1945	134	116	120	114	368	489	410	336	156	144	138	119
1946	216	121	340	290	288	278	353	320	152	134	130	116
1947	141	116	135	120	152	118	150	145	100	99	61	74
1948	104	81	79	73	79	113	227	218	134	112	106	101
1949	116	85	87	80	94	163	214	203	105	106	102	97
1950	102	84	86	123	152	145	210	196	103	98	95	94
1951	102	218	497	582	542	334	330	319	147	113	105	109
1952	147	106	173	341	352	698	582	811	803	201	133	153
1953	500	109	162	400	273	195	282	269	140	117	111	101
1954	133	94	100	104	127	162	289	265	116	116	111	100
1955	131	90	99	114	109	108	149	147	101	100	68	74
1956	94	83	641	1026	690	392	358	323	325	145	123	141
1957	295	96	109	108	145	261	268	272	139	113	106	100
1958	140	98	107	122	190	554	857	756	591	164	140	147
1959	391	97	106	126	270	197	249	197	99	99	95	92
1960	112	80	82	85	124	114	149	141	89	84	50	68
1961	95	77	83	75	77	79	92	83	84	64	49	67
1962	80	74	77	74	305	279	282	240	101	98	93	93
1963	100	83	84	114	190	170	348	326	176	136	114	110
1964	123	102	106	102	96	104	144	138	84	82	57	70
1965	99	97	250	607	383	297	407	339	174	125	110	108
1966	147	181	323	295	267	212	242	204	108	109	104	95
1967	128	97	176	198	176	421	744	811	963	554	128	191
1968	345	95	118	127	234	202	259	201	102	103	98	93
1969	123	94	119	804	1345	1089	1099	1439	1463	251	131	169
1970	546	105	204	1052	522	456	343	327	151	124	119	114
1971	146	111	149	145	149	209	267	264	132	121	115	101
1972	129	92	110	105	110	104	145	148	92	92	89	86
1973	114	86	92	148	409	508	393	338	131	121	116	112
1974	146	95	125	334	263	391	461	380	204	134	122	121
1975	224	105	118	120	316	529	417	362	290	144	126	124
1976	262	101	111	105	112	110	146	140	88	86	85	75
1977	195	124	103	80	77	78	101	97	74	54	42	58
1978	90	80	93	229	436	559	767	674	672	155	114	155
1979	283	92	106	305	519	536	376	343	129	115	109	110
1980	151	102	113	768	1140	807	458	376	343	241	122	170
1981	321	98	110	130	143	226	264	222	102	103	99	93
1982	128	101	108	456	722	919	1457	990	586	232	133	251
1983	775	455	1125	1442	1730	2306	1204	1216	2072	1099	122	393
1984	759	758	1275	892	556	380	329	316	157	136	130	116
1985	142	114	121	110	122	136	194	214	105	102	97	94
1986	130	100	109	134	916	1400	714	476	401	147	132	128
1987	225	99	105	103	113	122	148	142	94	95	80	71
1988	102	79	79	79	77	77	102	98	74	71	42	61
1989	95	71	80	72	75	99	103	89	77	81	56	69
1990	81	73	71	73	76	82	94	82	70	63	55	64
1991	83	70	69	61	63	147	134	106	68	66	56	61
1992	76	72	70	74	127	117	115	83	64	72	50	63
1993	82	80	91	456	293	281	286	285	200	129	117	107
AVG:	182	111	170	255	329	364	354	332	246	137	99	107
MIN:	69	70	69	61	63	77	83	73	62	53	42	55
MAX:	775	758	1275	1442	1730	2306	1457	1439	2072	1099	141	393

Table 3.4.5-19. Simulated San Joaquin River Inflow to Delta (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	0	0	0	0	0	0	0	0	0	0	0	0

Table 3.4.5-20. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	1	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	-5	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	-2	0	0	0	0	0	0	0	0	0	0	0
1966	2	0	0	0	0	0	0	1	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	1	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	-5	0	0	0	0	0	0	0	0	0	0	0
MAX:	2	0	0	0	0	0	0	1	0	0	0	0

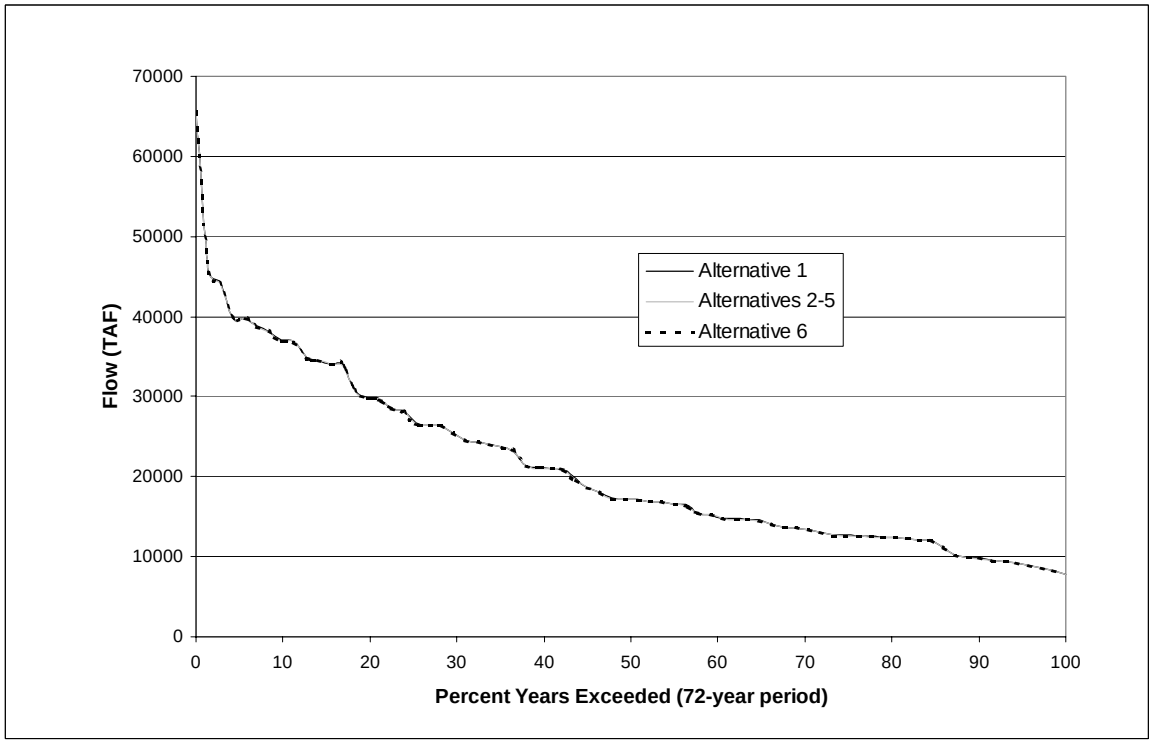


Figure 3.4.5-5. Exceedence for Simulated Annual Total Delta Inflow, 2001 LOD

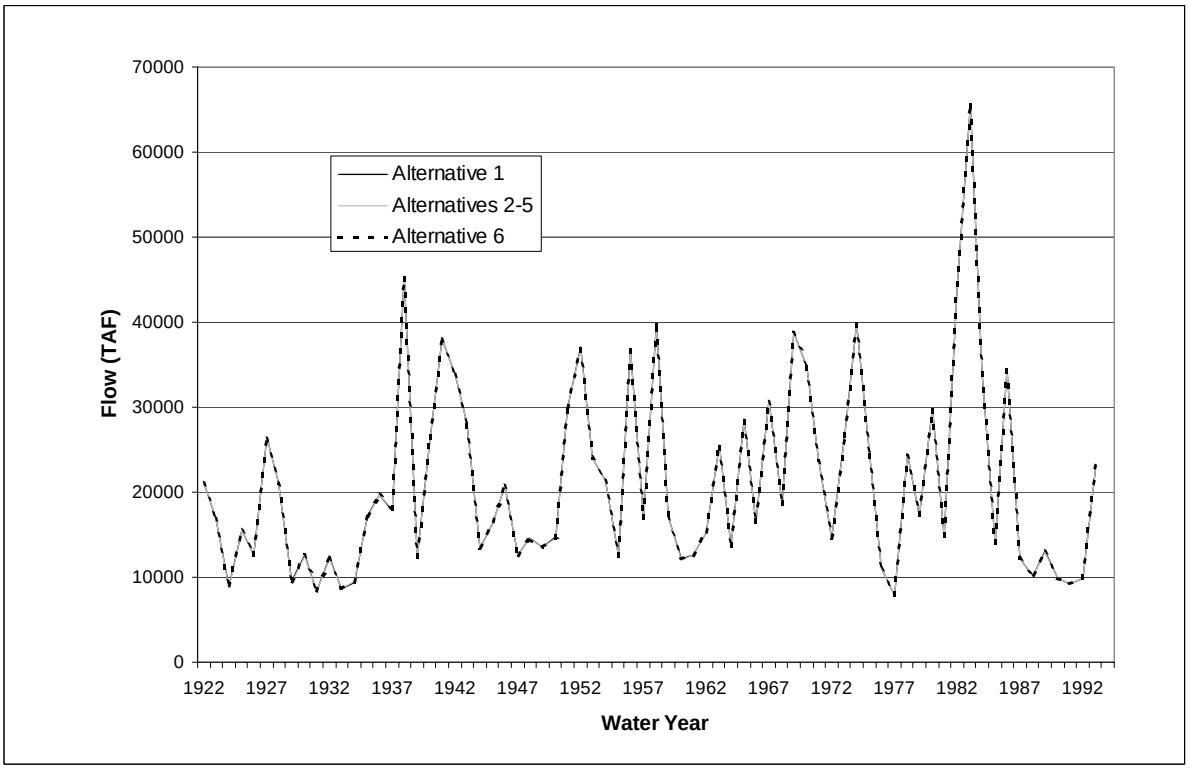


Figure 3.4.5-6 Simulated Annual Total Delta Inflow, 2001 LOD

Table 3.4.5-21. Simulated Total Delta Inflow (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	783	721	1302	1229	2652	2453	1906	3618	3020	1321	1110	985
1923	931	933	2515	2363	1254	1110	1877	1436	1105	1357	1113	932
1924	777	731	840	906	1045	744	580	593	630	763	736	553
1925	573	572	911	856	4055	1787	1654	1226	1107	871	1077	794
1926	697	614	706	1170	2535	978	1632	985	838	1074	804	612
1927	675	1571	1312	2087	7858	3020	3232	1988	1310	1358	1127	933
1928	745	1336	1142	1577	1708	6954	2003	1265	958	1335	1126	923
1929	789	846	869	909	1030	815	611	645	723	866	829	560
1930	581	515	1232	1469	1175	2186	896	889	888	1127	967	653
1931	666	613	657	932	692	559	616	530	648	1048	791	557
1932	564	510	1493	1518	1539	1148	919	1112	1186	810	725	772
1933	699	609	703	943	725	972	811	577	697	801	582	533
1934	573	518	1031	1342	982	906	815	590	735	731	557	561
1935	562	734	729	2143	1010	1932	3516	1881	1522	1277	1133	838
1936	880	702	780	2703	4691	2360	1802	1383	1136	1291	1138	852
1937	829	671	859	979	3057	3353	1981	1648	1303	1275	1113	847
1938	822	1551	4556	2353	8285	10671	4938	5005	3399	1300	1139	1317
1939	1544	872	1058	999	841	1120	927	1026	829	1254	1106	834
1940	755	621	651	2482	3965	7065	4507	1588	1227	1517	1127	885
1941	765	853	3209	6540	7261	6170	4806	3167	1628	1311	1139	1220
1942	1121	945	4452	5262	8146	1986	3347	2717	2084	1403	1139	1248
1943	1169	1216	2104	5711	3703	5815	2140	1690	1252	1288	1144	968
1944	928	703	813	1017	1659	1613	991	1015	1129	1331	1136	1010
1945	867	1012	1166	959	3178	1957	1198	1286	1294	1450	1145	962
1946	822	1203	4733	3503	1722	1622	1157	1271	1220	1416	1173	974
1947	844	916	1132	856	1191	1433	1019	821	1027	1325	1140	950
1948	787	717	796	1164	1042	1073	1881	2052	1455	1426	1167	1019
1949	836	788	940	821	768	3154	1035	1111	1097	1237	962	842
1950	691	668	653	1492	2229	1443	1458	1334	1232	1433	1164	928
1951	921	3564	6383	4774	4379	2237	1297	1578	1186	1422	1158	919
1952	787	942	3228	5795	4915	4579	4492	4887	3210	1467	1171	1559
1953	1533	876	2986	6634	1647	1563	1293	1883	1743	1483	1119	1301
1954	995	1136	1001	2238	3625	3360	2780	1630	969	1477	1148	1021
1955	937	1079	1584	1395	942	823	957	959	1050	1093	881	734
1956	682	811	6409	10812	5369	2810	1541	2865	1648	1476	1131	1342
1957	1194	833	860	1088	2164	3206	1529	1344	1227	1413	1095	905
1958	1348	997	1596	2547	10349	6365	6171	3747	2732	1358	1133	1459
1959	1460	866	923	2417	3286	1574	881	976	1251	1416	1158	896
1960	826	831	721	849	1955	1523	852	944	882	1238	881	653
1961	676	790	1079	819	2092	1254	911	801	821	1319	1205	890
1962	765	875	1085	729	3067	1972	1049	1067	1047	1443	1162	1000
1963	2354	1052	1793	1120	4429	2290	5416	2380	1241	1292	1131	1001
1964	1148	1814	925	1719	968	907	908	988	983	1314	1150	932
1965	719	977	5311	7920	2294	1779	3061	1851	1082	1495	1131	931
1966	894	1547	1351	2206	1725	2020	1108	1125	1198	1375	1108	871
1967	901	1022	2789	3170	3392	4162	3537	3851	3501	1640	1210	1546
1968	1466	944	1149	1989	3854	2564	1023	912	1213	1366	1110	976
1969	857	895	1654	7728	7812	4363	3866	4750	2889	1299	1153	1529
1970	1585	968	3915	13137	5136	2769	1284	1089	1122	1640	1170	1022
1971	834	1180	4226	3320	1825	3127	1651	1962	1484	1632	1133	1299
1972	1029	873	1331	1258	1612	2353	906	878	1249	1326	1099	761
1973	812	1312	1738	5400	5478	4092	1468	1507	1347	1477	1125	968
1974	972	3890	4448	8382	2662	7196	4598	1906	1682	1421	1139	1512
1975	1297	944	1157	1095	4055	5911	1825	2281	1867	1457	1181	1389
1976	1371	1116	1117	965	860	1074	736	625	730	963	855	718
1977	687	591	641	590	526	575	657	479	751	1072	754	535
1978	579	516	1030	4347	3399	4559	2840	1998	1713	1202	1135	1073
1979	958	716	704	1904	2983	2520	1388	1417	1364	1338	1091	867
1980	860	905	1341	7084	7911	3982	1605	1471	1195	1294	1122	1071
1981	970	691	1020	1712	1653	2285	1229	934	970	1334	1160	876
1982	886	2316	5707	5139	6268	5546	8922	3437	2088	1305	1127	1603
1983	2192	2818	5638	6625	9991	15622	5515	5150	5647	2713	1551	2099
1984	1980	5035	9748	4562	2659	2663	1427	1174	1091	1572	1163	998
1985	959	2093	1545	1003	1017	1007	939	1059	977	1316	1132	1020
1986	888	783	1223	1743	12053	9701	1905	1343	1294	1353	1218	1018
1987	946	674	795	974	1246	1660	997	800	1020	1217	984	828
1988	793	631	1232	1831	1042	666	677	695	773	763	535	547
1989	586	638	719	859	585	3101	1442	1054	855	1253	1120	815
1990	912	860	872	1306	903	932	780	543	597	707	776	726
1991	599	508	497	523	542	2215	909	684	578	882	688	621
1992	556	510	505	753	2110	1358	814	629	727	739	570	633
1993	565	518	888	4234	3578	3131	2726	2328	1838	1272	1134	895
AVG:	938	1072	1920	2791	3172	2969	2002	1645	1382	1286	1053	964
MIN:	556	508	497	523	526	559	580	479	578	707	535	533
MAX:	2354	5035	9748	13137	12053	15622	8922	5150	5647	2713	1551	2099

Table 3.4.5-22. Simulated Total Delta Inflow (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	783	719	1298	1226	2647	2449	1904	3609	3015	1321	1110	980
1923	927	932	2505	2361	1250	1109	1875	1432	1106	1359	1113	924
1924	776	730	852	906	1042	744	571	591	638	749	720	528
1925	579	577	916	862	4030	1787	1652	1224	1105	870	1084	795
1926	697	614	706	1170	2532	967	1620	978	834	1072	811	602
1927	677	1559	1281	2085	7851	3019	3242	1994	1321	1352	1127	928
1928	742	1329	1138	1574	1705	6948	2000	1265	958	1333	1126	922
1929	788	846	869	909	1016	800	611	645	699	859	819	553
1930	583	517	1230	1472	1165	2178	898	880	873	1104	930	638
1931	667	608	670	943	700	565	616	529	644	1061	796	553
1932	564	510	1458	1515	1489	1147	905	1109	1183	808	724	772
1933	699	609	703	940	722	967	811	577	697	795	576	533
1934	575	519	1031	1342	984	897	815	589	753	814	606	546
1935	563	730	729	2125	1010	1929	3469	1880	1487	1247	1132	809
1936	863	664	797	2695	4713	2300	1800	1382	1137	1304	1139	845
1937	848	670	859	980	3053	3346	1979	1647	1304	1315	1088	847
1938	821	1546	4535	2350	8281	10666	4934	5000	3394	1301	1139	1311
1939	1533	870	1055	997	841	1110	921	1030	829	1254	1106	829
1940	764	619	643	2468	3932	7113	4503	1586	1234	1517	1127	880
1941	758	852	3201	6522	7257	6166	4803	3161	1624	1309	1138	1214
1942	1109	943	4448	5259	8142	1983	3344	2710	2079	1400	1139	1242
1943	1163	1201	2100	5708	3699	5811	2136	1688	1252	1287	1143	964
1944	927	701	813	1017	1654	1603	989	1012	1126	1331	1136	1009
1945	867	1006	1165	958	3154	1948	1197	1283	1294	1450	1147	957
1946	816	1201	4724	3500	1722	1621	1156	1264	1220	1416	1173	962
1947	840	908	1132	849	1184	1449	1019	818	1032	1325	1138	958
1948	787	717	786	1165	1042	1072	1877	2046	1450	1426	1167	1007
1949	835	767	939	819	764	3173	1033	1108	1100	1231	967	839
1950	686	671	648	1474	2216	1442	1455	1272	1237	1432	1164	924
1951	958	3516	6381	4771	4376	2233	1295	1574	1181	1426	1158	915
1952	785	944	3207	5792	4911	4575	4457	4882	3204	1465	1164	1553
1953	1527	876	2981	6632	1645	1563	1290	1879	1738	1479	1119	1295
1954	992	1116	1001	2236	3622	3357	2777	1631	969	1476	1148	1021
1955	934	1078	1570	1392	942	823	958	956	1050	1090	875	731
1956	681	810	6382	10809	5366	2806	1539	2858	1643	1476	1131	1336
1957	1188	831	850	1088	2161	3202	1529	1340	1227	1412	1095	907
1958	1331	995	1592	2545	10331	6361	6166	3742	2728	1357	1133	1442
1959	1455	865	923	2414	3283	1570	881	977	1252	1426	1158	905
1960	825	815	716	841	1944	1514	852	929	850	1237	878	652
1961	676	790	1072	820	2066	1253	911	796	812	1317	1206	883
1962	737	880	1083	729	3075	1961	1038	1060	1047	1454	1162	995
1963	2329	1045	1786	1114	4477	2287	5419	2369	1240	1297	1131	1022
1964	1142	1808	925	1660	968	896	908	1003	981	1314	1151	936
1965	708	976	5286	7917	2291	1784	3050	1853	1082	1497	1131	923
1966	893	1522	1347	2202	1723	2017	1105	1124	1200	1375	1108	871
1967	899	1019	2772	3165	3380	4158	3533	3846	3496	1634	1205	1540
1968	1462	943	1146	1986	3851	2551	1023	900	1220	1369	1110	976
1969	856	895	1644	7720	7809	4359	3862	4743	2883	1298	1153	1516
1970	1579	962	3910	13134	5133	2765	1285	1085	1125	1635	1170	1022
1971	832	1174	4220	3317	1827	3107	1654	1952	1480	1636	1133	1294
1972	1028	878	1309	1254	1610	2349	907	878	1249	1328	1096	761
1973	811	1307	1734	5380	5475	4079	1466	1504	1381	1378	1125	923
1974	928	4004	4442	8379	2659	7192	4594	1902	1679	1418	1139	1489
1975	1291	943	1154	1096	4051	5908	1822	2272	1861	1457	1176	1383
1976	1390	1111	1116	965	861	1047	732	625	707	973	867	706
1977	693	588	647	596	525	575	657	479	751	1068	719	535
1978	579	517	1030	4344	3396	4552	2824	1994	1710	1328	1135	1068
1979	957	710	704	1861	2980	2507	1384	1416	1368	1339	1092	853
1980	854	895	1317	7065	7968	3978	1603	1466	1190	1295	1122	1066
1981	970	687	1019	1701	1651	2269	1216	922	974	1334	1160	876
1982	877	2284	5749	5120	6265	5542	8918	3432	2082	1303	1127	1595
1983	2182	2813	5634	6622	9988	15618	5510	5145	5642	2707	1545	2093
1984	1975	5029	9744	4559	2656	2659	1427	1170	1088	1574	1163	995
1985	956	2079	1542	1003	1014	999	938	1057	979	1315	1131	1020
1986	886	787	1219	1735	12021	9692	1903	1339	1291	1350	1213	1014
1987	945	674	795	974	1243	1647	1001	798	1014	1218	971	826
1988	780	622	1222	1818	1042	658	665	647	802	763	550	546
1989	586	638	701	859	594	3104	1439	1055	843	1238	1115	808
1990	883	847	869	1308	906	926	780	528	604	707	769	728
1991	601	514	503	525	540	2207	900	678	558	830	694	663
1992	556	510	506	752	2107	1345	814	607	735	732	568	550
1993	565	518	885	4312	3574	3077	2679	2335	1852	1278	1135	901
AVG:	935	1069	1915	2788	3168	2964	1998	1640	1380	1287	1052	958
MIN:	556	510	503	525	525	565	571	479	558	707	550	528
MAX:	2329	5029	9744	13134	12021	15618	8918	5145	5642	2707	1545	2093

Table 3.4.5-23. Simulated Total Delta Inflow (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	783	720	1299	1226	2647	2449	1904	3609	3065	1310	1110	963
1923	927	932	2484	2361	1250	1109	1875	1431	1106	1361	1113	912
1924	776	730	847	906	1042	744	578	594	630	760	735	553
1925	579	577	916	862	4052	1787	1653	1214	1109	866	1076	784
1926	698	614	706	1171	2520	977	1630	981	834	1076	816	612
1927	677	1574	1285	2087	7823	3019	3228	1972	1325	1334	1127	911
1928	742	1316	1139	1574	1701	6949	2000	1265	958	1343	1125	924
1929	787	841	869	908	1016	809	611	645	708	860	821	566
1930	581	515	1228	1467	1168	2183	896	888	884	1129	964	649
1931	666	600	657	932	692	558	616	528	650	1053	798	557
1932	564	510	1489	1515	1531	1147	905	1109	1183	808	724	772
1933	697	607	702	938	721	971	811	577	697	799	580	533
1934	573	518	1031	1340	982	905	815	589	735	731	560	560
1935	562	735	729	2140	1010	1929	3509	1878	1480	1243	1133	815
1936	879	674	787	2645	4591	2304	1790	1410	1134	1315	1140	840
1937	855	671	858	980	3053	3348	1979	1670	1299	1335	1104	846
1938	821	1546	4524	2351	8282	10667	4934	4999	3444	1292	1139	1294
1939	1500	870	1055	997	841	1119	924	1025	834	1252	1104	833
1940	760	623	653	2481	3958	7048	4498	1606	1212	1517	1127	867
1941	770	846	3190	6522	7258	6166	4803	3173	1661	1302	1141	1197
1942	1076	943	4448	5259	8143	1983	3344	2710	2129	1480	1139	1224
1943	1164	1115	2101	5708	3699	5812	2135	1719	1252	1255	1132	951
1944	927	701	813	1017	1670	1612	989	1012	1125	1331	1135	1007
1945	860	1005	1167	961	3150	1950	1194	1278	1294	1450	1158	956
1946	814	1191	4729	3500	1737	1620	1154	1302	1219	1416	1173	979
1947	830	914	1132	851	1184	1438	1019	818	1014	1325	1141	945
1948	775	716	706	1169	1042	1074	1883	2050	1454	1426	1167	1014
1949	839	807	944	826	769	3140	1033	1108	1106	1230	965	839
1950	686	665	648	1483	2212	1437	1447	1274	1237	1433	1164	901
1951	936	3532	6382	4771	4376	2233	1295	1600	1167	1429	1158	909
1952	785	943	3196	5792	4912	4575	4507	4881	3247	1457	1142	1538
1953	1527	876	2981	6632	1645	1563	1290	1878	1737	1478	1119	1294
1954	991	1113	1001	2236	3622	3357	2777	1631	969	1478	1148	1021
1955	938	1083	1575	1396	944	827	954	956	1050	1088	875	732
1956	682	811	6352	10809	5366	2806	1539	2858	1693	1345	1131	1323
1957	1249	832	880	1088	2161	3202	1529	1339	1211	1402	1081	957
1958	1323	996	1592	2545	10313	6362	6167	3741	2777	1350	1133	1428
1959	1455	865	923	2414	3283	1574	881	978	1249	1425	1158	896
1960	827	832	722	851	1953	1524	852	941	873	1237	879	653
1961	676	790	1075	820	2089	1253	911	796	818	1318	1205	884
1962	765	882	1090	733	3067	1977	1047	1065	1047	1442	1162	1000
1963	2339	1048	1789	1118	4397	2296	5400	2329	1243	1342	1127	1022
1964	1143	1809	925	1574	965	899	917	990	990	1314	1149	947
1965	710	978	5254	7917	2291	1785	3052	1853	1102	1465	1131	911
1966	893	1544	1347	2202	1723	2018	1105	1124	1200	1375	1108	871
1967	900	1021	2775	3155	3381	4159	3534	3845	3516	1642	1189	1526
1968	1462	943	1146	1986	3851	2561	1023	909	1214	1367	1110	976
1969	859	894	1650	7693	7810	4360	3863	4744	2934	1298	1153	1479
1970	1579	963	3911	13135	5133	2765	1284	1084	1126	1634	1170	1022
1971	831	1175	4220	3317	1827	3105	1655	1951	1479	1636	1133	1293
1972	1028	878	1308	1255	1610	2349	907	878	1249	1328	1103	761
1973	816	1320	1764	5368	5474	4071	1466	1525	1376	1377	1125	905
1974	908	3996	4442	8379	2659	7192	4594	1918	1693	1412	1139	1445
1975	1292	943	1154	1096	4051	5908	1822	2271	1890	1457	1165	1373
1976	1382	1111	1116	965	861	1057	736	625	717	983	848	721
1977	693	598	637	596	525	574	657	479	751	1063	760	535
1978	580	517	1030	4344	3396	4556	2830	1993	1711	1200	1135	1068
1979	957	710	704	1896	2980	2517	1390	1426	1365	1338	1091	864
1980	860	910	1335	7078	7827	3952	1592	1450	1179	1296	1122	1057
1981	970	688	1019	1686	1651	2272	1226	932	972	1334	1160	876
1982	887	2317	5695	5105	6266	5543	8918	3431	2118	1297	1127	1577
1983	2167	2813	5635	6622	9988	15619	5510	5144	5641	2740	1527	2076
1984	1975	5031	9745	4559	2656	2659	1427	1169	1092	1567	1163	994
1985	956	2078	1542	1003	1014	1001	938	1056	980	1315	1131	1020
1986	886	788	1219	1735	12018	9693	1903	1365	1303	1338	1204	1000
1987	945	674	795	974	1243	1657	1000	801	1006	1217	955	822
1988	795	631	1232	1828	1042	648	675	670	774	795	557	548
1989	586	638	719	859	585	3097	1441	1054	852	1254	1120	819
1990	901	861	871	1307	906	935	780	541	598	707	772	726
1991	596	508	497	523	542	2211	912	687	558	879	682	637
1992	556	510	506	753	2107	1355	814	626	728	738	569	630
1993	565	518	885	4232	3575	3127	2714	2302	1812	1499	1131	912
AVG:	935	1070	1913	2785	3164	2965	2000	1643	1386	1287	1051	956
MIN:	556	508	497	523	525	558	578	479	558	707	557	533
MAX:	2339	5031	9745	13135	12018	15619	8918	5144	5641	2740	1527	2076

Table 3.4.5-24. Simulated Total Delta Inflow (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-6	-3	-2	-9	-5	0	0	-5
1923	-3	-2	-10	-3	-4	-1	-2	-4	1	2	0	-8
1924	-1	-1	12	0	-3	0	-8	-2	8	-14	-16	-25
1925	6	5	6	6	-25	0	-2	-2	-2	-1	7	1
1926	0	0	0	0	-3	-11	-11	-7	-4	-2	7	-10
1927	2	-12	-30	-2	-8	-1	10	6	11	-5	0	-5
1928	-3	-7	-3	-2	-3	-6	-3	0	0	-2	0	-1
1929	-1	0	0	0	-14	-15	0	0	-24	-7	-10	-7
1930	2	2	-2	2	-9	-8	2	-9	-15	-23	-37	-15
1931	2	-4	12	11	8	6	-1	-2	-4	13	5	-4
1932	0	0	-35	-3	-51	-1	-14	-3	-4	-2	-1	0
1933	0	0	0	-3	-3	-5	0	0	0	-6	-7	0
1934	2	2	0	0	2	-9	0	0	18	84	49	-15
1935	0	-4	0	-18	0	-4	-47	-1	-35	-30	-1	-28
1936	-17	-38	18	-8	22	-60	-2	-2	1	13	1	-7
1937	18	0	0	0	-3	-6	-2	-1	1	41	-26	0
1938	-1	-5	-22	-2	-4	-4	-4	-5	-5	0	0	-6
1939	-11	-2	-3	-2	0	-11	-6	4	0	0	0	-6
1940	8	-2	-8	-14	-33	47	-3	-3	7	0	0	-5
1941	-7	-1	-8	-18	-3	-4	-4	-6	-5	-2	-1	-6
1942	-12	-2	-4	-3	-3	-3	-4	-7	-5	-2	0	-6
1943	-6	-14	-4	-3	-3	-4	-4	-1	0	-1	0	-5
1944	-1	-1	0	0	-5	-10	-2	-3	-3	0	0	-2
1945	1	-6	-2	0	-23	-9	-1	-4	0	0	2	-6
1946	-6	-3	-9	-3	0	-1	-2	-7	0	0	0	-12
1947	-4	-8	0	-7	-7	17	0	-3	5	0	-1	7
1948	0	-1	-10	1	0	-1	-4	-6	-5	0	0	-12
1949	-1	-20	-1	-2	-3	19	-2	-3	3	-6	5	-3
1950	-5	2	-5	-19	-13	-1	-3	-62	5	0	0	-4
1951	37	-48	-2	-3	-3	-4	-2	-4	-4	4	0	-5
1952	-2	2	-21	-3	-3	-4	-35	-5	-5	-2	-7	-6
1953	-6	0	-5	-2	-2	-1	-3	-4	-5	-4	0	-6
1954	-3	-20	0	-2	-3	-3	-3	1	0	0	0	0
1955	-4	-1	-14	-4	0	-1	1	-3	0	-3	-6	-2
1956	-1	-1	-27	-3	-3	-4	-2	-7	-5	0	0	-6
1957	-6	-2	-10	0	-3	-3	0	-5	1	-1	0	2
1958	-17	-1	-3	-2	-19	-4	-4	-5	-5	-2	0	-17
1959	-5	-2	0	-2	-3	-4	0	1	0	10	0	8
1960	-1	-17	-5	-8	-10	-8	0	-14	-33	-1	-2	-2
1961	0	0	-8	1	-26	-1	0	-5	-9	-2	1	-7
1962	-28	5	-1	0	7	-11	-11	-6	0	11	0	-5
1963	-25	-7	-6	-6	48	-4	3	-11	-1	5	0	21
1964	-5	-6	0	-59	0	-11	0	15	-2	0	1	4
1965	-11	-1	-25	-3	-3	5	-11	2	0	3	0	-8
1966	0	-25	-4	-3	-2	-2	-3	-1	2	0	-1	0
1967	-1	-3	-17	-6	-12	-4	-4	-5	-5	-5	-5	-6
1968	-5	-1	-3	-2	-4	-13	0	-12	7	2	0	0
1969	-1	0	-10	-8	-3	-5	-5	-8	-6	-1	0	-13
1970	-6	-5	-5	-3	-3	-4	1	-4	3	-5	0	0
1971	-3	-6	-6	-3	2	-20	3	-10	-4	3	0	-6
1972	-2	5	-22	-3	-3	-3	1	0	0	1	-3	0
1973	-1	-5	-4	-20	-3	-13	-1	-3	34	-100	0	-45
1974	-45	113	-6	-3	-3	-5	-4	-4	-3	-3	0	-23
1975	-5	-1	-3	0	-4	-3	-3	-9	-5	0	-5	-6
1976	19	-6	0	0	0	-27	-4	0	-23	10	12	-12
1977	6	-3	6	6	-1	0	0	0	0	-4	-35	0
1978	0	0	0	-4	-4	-7	-16	-4	-3	126	0	-5
1979	-1	-6	0	-43	-3	-13	-3	-1	4	1	2	-14
1980	-6	-11	-23	-18	57	-4	-2	-4	-5	1	0	-5
1981	0	-4	-1	-11	-3	-16	-12	-12	4	0	-1	0
1982	-9	-32	43	-18	-3	-4	-4	-5	-5	-2	0	-8
1983	-10	-5	-4	-3	-3	-4	-4	-5	-5	-5	-5	-6
1984	-6	-5	-4	-3	-4	-4	1	-4	-4	2	0	-3
1985	-3	-14	-3	0	-3	-8	-2	-3	3	0	-1	0
1986	-2	4	-4	-8	-32	-9	-2	-4	-4	-4	-5	-4
1987	-1	0	0	0	-3	-13	4	-2	-5	2	-12	-2
1988	-13	-9	-9	-12	0	-8	-12	-47	29	0	14	0
1989	0	0	-18	0	9	3	-4	1	-13	-16	-5	-7
1990	-29	-13	-3	2	3	-6	0	-15	8	0	-8	2
1991	2	5	6	2	-2	-8	-9	-7	-20	-52	6	43
1992	0	0	0	-1	-3	-13	0	-22	8	-7	-1	-83
1993	0	0	-3	78	-5	-54	-47	7	14	5	0	7
AVG:	-3	-3	-5	-4	-4	-6	-4	-5	-2	0	-1	-6
MIN:	-45	-48	-35	-59	-51	-60	-47	-62	-35	-100	-37	-83
MAX:	37	113	43	78	57	47	10	15	34	126	49	43

Table 3.4.5-25. Simulated Total Delta Inflow (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-5	-3	-2	-9	45	-11	0	-22
1923	-3	-2	-32	-3	-4	-1	-2	-5	1	5	0	-20
1924	-1	-1	7	0	-3	0	-2	1	0	-3	-1	0
1925	6	5	6	6	-3	0	-2	-12	2	-5	0	-10
1926	1	0	0	0	-14	-1	-2	-3	-4	3	13	0
1927	2	3	-27	0	-35	-1	-4	-15	15	-24	0	-22
1928	-4	-20	-3	-3	-6	-5	-3	0	0	7	-1	1
1929	-2	-5	0	-1	-14	-6	0	0	-15	-6	-7	6
1930	0	0	-4	-3	-6	-3	0	-1	-4	3	-3	-4
1931	0	-13	0	0	0	-1	0	-2	2	5	7	0
1932	0	0	-4	-3	-8	-1	-14	-3	-3	-2	-2	0
1933	-2	-2	-2	-4	-5	-1	0	0	0	-2	-2	0
1934	0	0	0	-2	0	-1	0	0	0	0	4	-1
1935	0	0	0	-3	0	-4	-7	-3	-42	-34	-1	-23
1936	-1	-28	7	-58	-100	-56	-12	26	-2	23	2	-12
1937	26	0	-1	0	-3	-5	-1	22	-4	60	-9	0
1938	-1	-5	-33	-2	-3	-4	-4	-6	45	-8	0	-23
1939	-44	-2	-3	-2	0	-1	-3	-1	5	-1	-2	-1
1940	5	1	2	-1	-7	-18	-9	18	-15	0	0	-18
1941	5	-7	-19	-18	-3	-4	-4	6	33	-9	2	-23
1942	-45	-2	-4	-2	-3	-3	-4	-7	45	78	0	-23
1943	-5	-101	-3	-2	-3	-3	-4	29	0	-33	-11	-17
1944	-2	-1	0	0	11	-1	-2	-3	-3	0	0	-4
1945	-7	-6	0	3	-28	-6	-4	-8	0	0	13	-6
1946	-8	-13	-4	-3	15	-1	-3	31	-1	0	0	5
1947	-14	-1	1	-6	-6	6	0	-3	-14	0	1	-5
1948	-12	-1	-89	5	0	1	3	-2	-1	0	0	-5
1949	3	19	4	5	1	-14	-1	-3	9	-7	4	-3
1950	-5	-4	-5	-9	-17	-6	-11	-60	5	0	0	-27
1951	15	-32	-2	-3	-3	-4	-2	22	-19	6	0	-10
1952	-2	1	-32	-2	-3	-4	16	-6	37	-10	-29	-21
1953	-5	0	-5	-2	-2	-1	-3	-5	-6	-6	0	-7
1954	-3	-23	0	-2	-3	-3	-3	1	0	1	0	0
1955	1	3	-9	1	3	4	-3	-3	0	-5	-6	-2
1956	0	0	-56	-2	-3	-4	-2	-8	45	-131	0	-20
1957	55	-1	20	0	-3	-3	0	-6	-16	-10	-14	52
1958	-26	-1	-3	-2	-36	-3	-4	-6	45	-8	0	-31
1959	-5	-2	0	-2	-3	-1	0	2	-2	10	0	0
1960	0	1	1	2	-1	1	0	-3	-9	-1	-1	0
1961	0	0	-4	0	-3	-1	0	-5	-3	-1	0	-6
1962	0	7	5	3	0	4	-1	-2	0	0	0	0
1963	-14	-5	-3	-2	-32	6	-16	-50	2	50	-4	21
1964	-5	-5	0	-145	-3	-8	8	2	7	0	-1	14
1965	-10	1	-57	-3	-3	6	-9	2	20	-30	-1	-20
1966	0	-4	-4	-3	-2	-2	-3	-1	1	0	-1	-1
1967	0	-1	-14	-15	-11	-3	-3	-5	15	2	-20	-21
1968	-4	-1	-3	-2	-4	-3	0	-3	2	1	0	0
1969	1	-1	-4	-35	-3	-4	-4	-6	45	-1	0	-49
1970	-5	-5	-4	-2	-3	-4	1	-5	3	-7	0	0
1971	-3	-5	-6	-3	2	-22	3	-11	-5	3	0	-7
1972	-1	5	-24	-3	-3	-3	1	0	0	2	4	0
1973	4	8	26	-32	-5	-21	-1	18	29	-100	0	-63
1974	-64	106	-6	-3	-3	-4	-4	12	11	-9	0	-67
1975	-5	-1	-3	0	-4	-3	-3	-9	24	0	-16	-16
1976	11	-6	0	0	0	-18	0	0	-13	21	-7	3
1977	6	7	-4	6	-1	-1	0	0	0	-8	6	0
1978	0	0	0	-3	-4	-3	-10	-5	-2	-3	0	-5
1979	-1	-6	0	-8	-3	-3	2	9	1	0	1	-3
1980	0	5	-5	-6	-83	-30	-13	-21	-16	2	0	-14
1981	0	-3	0	-26	-3	-13	-3	-3	1	0	0	0
1982	0	1	-12	-34	-3	-3	-4	-6	31	-8	0	-26
1983	-25	-5	-4	-2	-3	-3	-4	-6	-6	27	-24	-24
1984	-5	-4	-3	-3	-3	-4	1	-5	1	-4	0	-4
1985	-3	-15	-3	0	-3	-7	-2	-3	3	0	-1	0
1986	-3	4	-4	-8	-35	-8	-2	22	9	-15	-14	-18
1987	-1	0	0	0	-3	-3	3	0	-14	0	-28	-6
1988	1	0	1	-2	0	-17	-2	-25	1	32	22	1
1989	0	0	0	0	0	-4	-2	0	-3	0	0	4
1990	-11	1	-2	1	3	3	0	-3	1	0	-4	0
1991	-3	0	0	0	0	-4	3	3	-20	-3	-6	16
1992	0	0	0	0	-3	-4	0	-3	1	-1	-1	-3
1993	0	0	-4	-3	-3	-4	-12	-26	-26	226	-3	17
AVG:	-3	-2	-6	-6	-7	-5	-2	-2	4	1	-2	-8
MIN:	-64	-101	-89	-145	-100	-56	-16	-60	-42	-131	-29	-67
MAX:	55	106	26	6	15	6	16	31	45	226	22	52

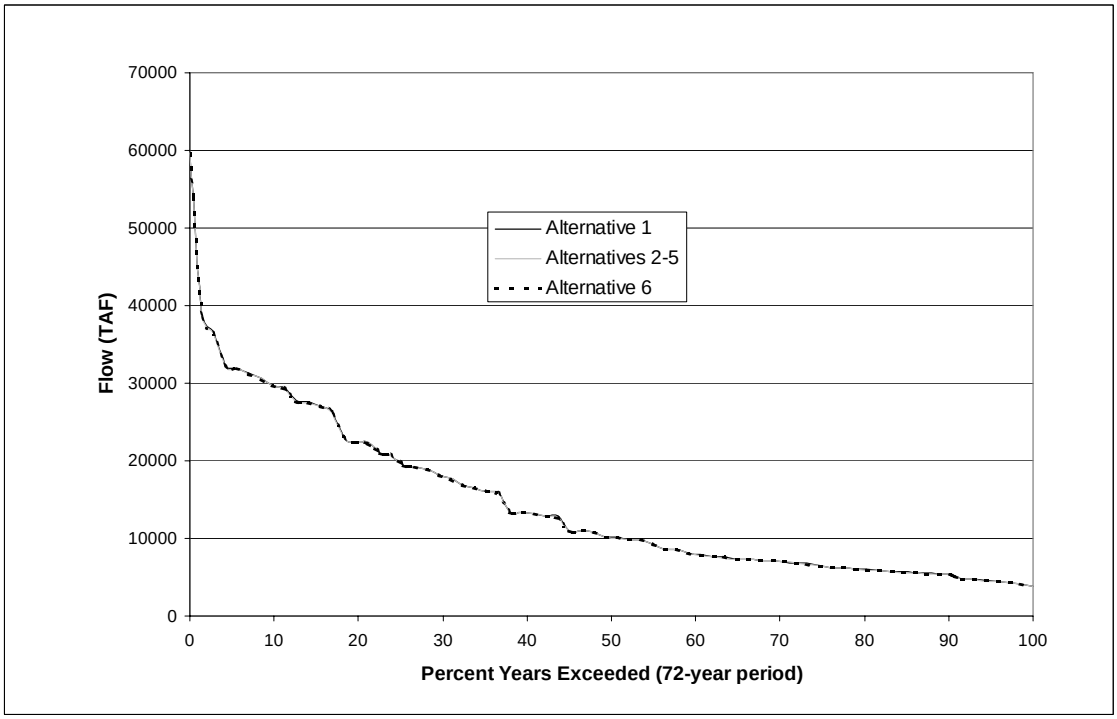


Figure 3.4.5-7. Exceedence for Simulated Annual Delta Outflow, 2001 LOD

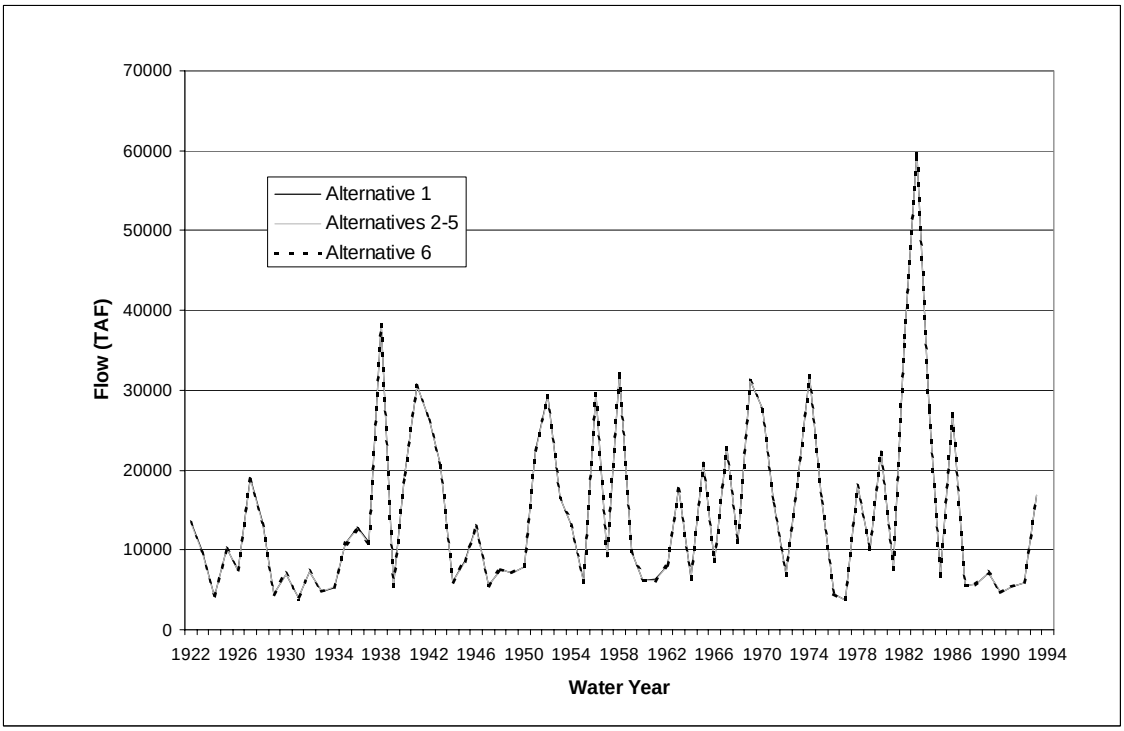


Figure 3.4.5-8 Simulated Annual Delta Outflow, 2001 LOD

Table 3.4.5-26. Simulated Delta Outflow (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	694	581	2102	1711	1455	3162	2180	492	246	231
1923	259	316	2043	1787	891	642	1508	1021	486	400	246	237
1924	246	343	299	396	618	621	385	252	306	418	184	179
1925	245	288	463	437	3644	1672	1286	877	507	307	251	192
1926	280	276	339	746	2133	575	1279	668	303	307	290	179
1927	254	890	666	1536	7367	2364	2792	1480	591	568	246	211
1928	246	624	419	893	1048	6252	1569	1008	343	521	246	210
1929	264	373	383	334	612	586	413	404	359	246	280	179
1930	227	338	604	1085	818	1597	606	609	349	307	294	179
1931	260	337	387	447	471	388	404	280	297	418	184	179
1932	269	296	1153	1099	1050	683	666	759	606	307	273	179
1933	246	308	447	555	541	599	597	351	360	246	315	179
1934	198	363	454	913	695	701	595	345	410	246	223	179
1935	265	327	337	1648	633	1314	3186	1630	685	400	246	179
1936	296	347	277	2068	4371	1695	1386	1043	481	400	246	183
1937	256	385	277	420	2516	2933	1588	1150	574	400	246	179
1938	246	850	4219	1825	8050	10232	4557	4598	2539	492	246	499
1939	786	268	464	563	445	694	596	602	307	307	277	181
1940	307	288	287	2012	3490	6369	4033	1096	502	492	246	203
1941	246	389	2576	5964	6709	5513	4462	2724	880	492	267	402
1942	361	269	3959	4991	7485	1598	2975	2286	1228	492	246	431
1943	397	515	1353	5159	3225	5400	1733	1347	546	564	246	208
1944	246	325	287	443	1240	979	683	640	472	307	215	230
1945	338	323	572	440	2527	1281	826	884	542	400	246	218
1946	246	493	4145	2730	1352	1003	747	820	520	400	246	224
1947	271	370	498	369	727	903	666	559	406	307	272	208
1948	323	278	348	572	645	662	1500	1624	701	400	246	250
1949	265	345	412	423	438	2599	692	709	449	307	289	189
1950	281	315	366	1104	1572	882	1055	968	526	400	246	227
1951	261	2888	5865	4242	3833	1646	943	1228	499	506	246	206
1952	246	407	2650	5364	4180	3895	4253	4413	2414	492	246	738
1953	751	268	2616	5923	1289	955	1082	1421	927	599	246	484
1954	251	425	283	1537	2967	2650	2336	1327	365	529	246	246
1955	264	429	862	787	633	483	725	610	420	307	253	179
1956	321	297	6121	10588	4629	2009	1166	2417	878	492	246	542
1957	435	268	277	468	1581	2578	1119	976	532	497	246	213
1958	610	270	1091	2054	9949	5752	5822	3308	1916	492	246	641
1959	680	268	277	1765	2991	1261	528	554	520	422	246	259
1960	246	422	277	378	1500	934	678	641	334	307	267	179
1961	303	338	506	439	1537	787	605	541	368	307	326	209
1962	269	390	468	369	2588	1231	669	732	389	452	246	242
1963	1646	325	1176	515	3815	1612	5132	1947	637	512	246	237
1964	393	1120	277	1077	644	536	690	593	411	307	283	223
1965	270	379	4767	7237	1555	1148	2630	1422	446	661	246	212
1966	246	849	620	1491	1221	1244	837	680	504	400	246	198
1967	346	347	2215	2820	2699	3469	3240	3457	2689	620	282	731
1968	689	268	394	1432	3520	1933	820	514	498	400	246	228
1969	302	339	1040	7228	7304	3625	3589	4263	2083	492	246	707
1970	831	366	3397	12971	4699	2206	909	661	456	735	246	228
1971	246	526	3622	2622	1423	2376	1219	1706	700	679	246	480
1972	264	268	608	551	1086	1563	592	479	666	400	246	179
1973	305	694	1291	5073	4926	3369	1017	1045	596	492	246	227
1974	279	3210	3909	7761	1939	6752	4205	1501	837	531	246	685
1975	533	268	409	454	3414	5238	1571	1800	1016	492	279	565
1976	628	398	355	320	459	673	531	246	238	246	241	194
1977	249	267	423	293	383	376	422	268	304	414	184	179
1978	261	305	481	4181	2785	3906	2701	1579	863	492	246	273
1979	246	268	350	1303	2713	1865	970	941	628	400	246	184
1980	297	352	746	6445	7376	3268	1232	1126	519	492	246	268
1981	246	272	441	1177	1250	1676	977	528	326	307	284	205
1982	321	1649	5134	4680	5578	4982	8520	2913	1265	492	246	830
1983	1446	2215	5020	6699	9934	15636	5286	4921	4951	1715	638	1301
1984	1312	4752	9595	4201	2225	2087	988	746	505	674	246	214
1985	275	1438	838	369	604	679	729	634	341	307	269	266
1986	281	315	631	1107	11659	9025	1480	918	560	492	319	259
1987	246	280	344	381	862	1296	644	491	381	307	230	179
1988	404	268	829	1202	643	484	419	403	410	246	247	179
1989	258	301	333	444	437	2507	1022	634	334	307	300	224
1990	274	432	277	626	633	568	586	331	244	340	223	179
1991	292	227	415	277	405	1642	707	451	238	248	293	179
1992	227	326	215	426	1664	927	616	376	391	246	292	179
1993	204	347	394	4128	3181	2413	2276	1928	1024	492	246	187
AVG:	373	571	1397	2291	2724	2440	1677	1272	737	440	259	292
MIN:	198	227	215	277	383	376	385	246	238	246	184	179
MAX:	1646	4752	9595	12971	11659	15636	8520	4921	4951	1715	638	1301

Table 3.4.5-27. Simulated Delta Outflow (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	690	578	2097	1707	1453	3153	2175	492	246	229
1923	258	318	2033	1780	888	641	1506	1018	487	400	246	235
1924	246	346	300	397	615	621	376	250	314	405	184	179
1925	250	288	467	438	3619	1672	1284	875	507	307	257	192
1926	274	283	335	748	2132	575	1269	662	304	307	293	179
1927	252	878	636	1534	7353	2363	2802	1486	598	565	246	210
1928	246	617	416	890	1046	6245	1566	1008	343	521	246	209
1929	264	372	383	334	602	587	413	404	359	246	275	179
1930	230	335	602	1088	810	1590	608	600	353	307	272	179
1931	273	321	399	453	484	392	403	280	297	421	184	179
1932	268	299	1118	1096	1018	682	666	756	606	307	271	179
1933	246	309	447	535	536	595	597	351	360	246	314	179
1934	200	360	457	922	696	701	595	345	410	246	224	179
1935	268	330	334	1630	633	1301	3151	1637	663	400	246	179
1936	287	360	277	2060	4309	1633	1381	1042	481	400	246	180
1937	261	386	277	418	2493	2922	1584	1146	575	400	246	179
1938	246	845	4228	1821	8045	10228	4553	4593	2534	492	246	493
1939	774	268	461	561	445	687	597	605	306	307	277	179
1940	311	284	288	1999	3457	6416	4029	1093	508	492	246	201
1941	246	394	2568	5946	6705	5495	4458	2718	881	492	266	396
1942	348	269	3944	4988	7481	1595	2972	2280	1223	492	246	425
1943	392	501	1349	5156	3221	5396	1729	1346	546	563	246	207
1944	246	326	286	444	1236	973	682	637	470	307	215	230
1945	338	317	571	440	2503	1276	825	881	542	400	246	216
1946	246	491	4136	2728	1353	1002	746	814	520	400	246	220
1947	276	364	499	369	721	914	666	558	408	307	271	211
1948	322	277	346	572	645	661	1496	1618	698	400	246	245
1949	268	341	412	424	434	2618	690	709	449	307	287	187
1950	278	316	364	1085	1559	882	1053	912	529	400	246	225
1951	275	2841	5863	4259	3830	1624	941	1225	497	505	246	204
1952	246	409	2629	5361	4177	3891	4218	4408	2409	492	246	732
1953	745	268	2610	5923	1288	954	1079	1417	921	599	246	477
1954	250	405	283	1535	2964	2647	2332	1328	365	529	246	246
1955	263	429	849	783	633	482	726	608	420	307	252	179
1956	319	297	6094	10585	4626	2005	1165	2409	874	492	246	536
1957	430	268	277	466	1581	2563	1119	972	532	496	246	214
1958	593	269	1088	2052	9931	5748	5818	3303	1911	492	246	624
1959	675	268	277	1763	2988	1261	528	554	520	425	246	262
1960	246	414	277	374	1490	929	678	628	336	307	270	179
1961	298	344	498	439	1511	787	605	540	368	307	328	206
1962	262	401	461	369	2595	1223	660	732	389	457	246	240
1963	1620	318	1170	510	3863	1608	5135	1936	638	512	246	245
1964	388	1114	277	1019	644	528	690	607	404	307	285	224
1965	267	382	4743	7234	1551	1149	2619	1424	446	660	246	209
1966	246	824	615	1487	1219	1242	834	679	505	400	246	198
1967	346	345	2198	2814	2688	3465	3236	3452	2684	615	277	725
1968	684	268	391	1434	3516	1921	820	504	504	400	246	228
1969	303	339	1030	7220	7301	3620	3585	4256	2077	492	246	694
1970	824	361	3388	12968	4695	2202	909	658	458	733	246	228
1971	246	520	3616	2619	1424	2355	1222	1696	697	680	246	474
1972	263	268	586	548	1083	1559	593	479	666	400	246	179
1973	305	688	1287	5053	4923	3356	1015	1042	596	492	246	212
1974	263	3323	3903	7757	1935	6733	4201	1498	835	528	246	662
1975	527	268	406	454	3411	5272	1568	1791	1012	492	274	559
1976	647	393	355	320	464	654	527	246	239	246	247	185
1977	261	263	429	295	382	376	422	268	304	414	184	179
1978	260	304	481	4177	2781	3899	2685	1575	860	492	246	268
1979	246	280	335	1252	2710	1852	967	940	628	400	246	180
1980	300	348	723	6426	7433	3257	1230	1122	516	492	246	264
1981	246	274	436	1166	1247	1660	965	518	328	307	284	205
1982	320	1617	5177	4662	5575	4978	8516	2908	1260	492	246	822
1983	1436	2209	5018	6696	9931	15632	5282	4915	4946	1710	633	1295
1984	1305	4746	9590	4197	2221	2083	989	742	502	675	246	213
1985	274	1424	834	369	601	674	728	631	343	307	269	266
1986	280	315	628	1099	11628	9016	1479	914	558	492	314	258
1987	246	282	341	383	845	1282	647	490	378	307	228	179
1988	404	268	821	1190	643	484	409	406	410	246	239	179
1989	264	295	328	443	437	2510	1019	635	332	307	299	222
1990	270	425	277	628	633	563	586	317	251	339	222	179
1991	294	232	410	277	403	1635	698	444	238	250	278	179
1992	241	301	223	429	1661	917	616	354	399	246	291	179
1993	190	372	390	4206	3176	2359	2229	1936	1038	492	246	189
AVG:	371	570	1392	2287	2719	2435	1673	1268	737	440	258	290
MIN:	190	232	223	277	382	376	376	246	238	246	184	179
MAX:	1620	4746	9590	12968	11628	15632	8516	4915	4946	1710	633	1295

Table 3.4.5-28. Simulated Delta Outflow (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	691	578	2097	1707	1453	3153	2225	492	246	223
1923	257	321	2011	1767	887	641	1506	1017	487	400	246	230
1924	246	350	293	402	615	621	383	253	306	416	184	179
1925	251	285	469	438	3641	1672	1285	866	509	307	251	188
1926	284	273	340	745	2115	577	1277	665	304	307	300	179
1927	249	893	639	1535	7354	2363	2788	1465	601	546	246	204
1928	246	604	417	890	1044	6246	1566	1009	343	522	246	210
1929	263	368	388	334	601	587	413	404	359	246	276	179
1930	229	334	600	1083	812	1594	607	608	348	307	294	179
1931	259	335	386	447	474	387	404	280	297	417	184	179
1932	270	295	1149	1096	1044	682	666	756	606	307	271	179
1933	246	306	446	546	536	598	597	351	360	246	315	179
1934	198	363	454	913	695	701	595	345	410	246	221	179
1935	267	325	338	1645	633	1314	3182	1630	658	400	246	179
1936	288	361	277	2010	4193	1635	1370	1067	479	400	246	179
1937	263	387	277	417	2493	2906	1584	1166	572	400	246	179
1938	246	880	4221	1820	8045	10229	4553	4593	2584	492	246	477
1939	742	268	461	549	445	693	596	600	308	307	276	181
1940	311	283	291	2011	3483	6351	4024	1111	491	492	246	197
1941	246	402	2557	5946	6706	5487	4458	2730	880	492	270	380
1942	315	269	3969	4989	7481	1595	2972	2279	1273	492	246	408
1943	392	414	1350	5182	3221	5397	1729	1359	546	539	246	202
1944	246	331	279	450	1252	979	682	637	470	307	215	229
1945	338	316	573	440	2499	1277	822	877	543	400	246	215
1946	246	480	4141	2727	1353	1002	745	848	519	400	246	226
1947	269	368	499	369	722	907	666	559	408	307	273	207
1948	321	281	339	576	645	662	1502	1622	701	400	246	248
1949	271	346	415	423	438	2584	690	709	449	307	274	187
1950	288	304	364	1095	1555	878	1046	914	529	400	246	217
1951	277	2857	5864	4229	3829	1644	941	1248	487	505	246	203
1952	246	411	2618	5361	4177	3892	4268	4407	2451	492	246	716
1953	745	268	2614	5921	1288	954	1079	1416	920	598	246	477
1954	250	402	283	1535	2964	2647	2332	1328	365	529	246	246
1955	268	427	853	788	633	486	722	608	421	307	252	179
1956	321	296	6064	10585	4626	2005	1165	2409	906	492	246	522
1957	491	268	277	461	1590	2543	1119	971	532	492	246	231
1958	585	269	1088	2052	9913	5749	5818	3302	1961	492	246	610
1959	675	268	277	1775	2989	1260	528	555	518	425	246	259
1960	246	423	277	379	1499	935	678	638	335	307	267	179
1961	302	339	503	439	1534	786	605	540	369	307	327	207
1962	271	396	467	369	2588	1233	667	732	389	452	246	242
1963	1631	320	1172	513	3783	1617	5116	1897	639	512	246	245
1964	388	1115	277	932	644	530	699	595	410	307	282	228
1965	266	382	4710	7234	1551	1149	2620	1423	459	638	246	205
1966	246	846	616	1488	1218	1243	834	679	505	400	246	198
1967	346	347	2201	2805	2688	3465	3237	3452	2704	622	262	710
1968	685	268	391	1433	3516	1930	820	512	500	400	246	228
1969	304	339	1037	7193	7301	3621	3586	4257	2128	492	246	658
1970	825	368	3390	12969	4696	2202	909	657	459	732	246	228
1971	246	521	3616	2619	1424	2354	1223	1695	697	680	246	473
1972	263	268	584	548	1083	1559	593	479	666	400	246	179
1973	309	702	1317	5040	4922	3347	1016	1061	593	492	246	205
1974	256	3315	3903	7757	1935	6725	4201	1512	848	510	246	617
1975	527	268	406	454	3411	5333	1568	1790	1031	492	263	548
1976	639	393	355	320	475	656	531	246	238	246	237	198
1977	252	270	419	295	382	376	422	268	304	413	184	179
1978	261	304	482	4178	2782	3903	2691	1575	861	492	246	268
1979	246	269	348	1289	2710	1861	972	949	626	400	246	183
1980	299	352	741	6439	7293	3245	1220	1107	509	492	246	260
1981	246	277	433	1151	1247	1664	974	526	326	307	284	205
1982	322	1650	5123	4647	5575	4979	8516	2907	1296	492	246	804
1983	1421	2210	5026	6697	9931	15633	5282	4915	4945	1742	615	1277
1984	1306	4748	9591	4197	2222	2083	989	741	505	670	246	212
1985	274	1423	835	369	601	675	728	631	343	307	268	266
1986	280	315	628	1099	11625	9017	1479	938	566	492	305	253
1987	246	287	335	389	834	1291	647	491	372	307	226	179
1988	407	268	824	1200	643	484	418	403	410	246	244	179
1989	261	301	333	444	437	2504	1021	635	334	307	300	226
1990	272	428	277	626	633	569	586	328	245	340	225	179
1991	289	229	413	277	405	1638	710	454	238	248	294	179
1992	228	324	215	427	1661	924	616	374	392	246	292	179
1993	203	348	390	4125	3177	2409	2264	1902	1009	492	246	193
AVG:	371	571	1392	2284	2716	2436	1675	1270	741	439	258	286
MIN:	198	229	215	277	382	376	383	246	238	246	184	179
MAX:	1631	4748	9591	12969	11625	15633	8516	4915	4945	1742	615	1277

Table 3.4.5-29. Simulated Delta Outflow (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	-3	-2	-6	-4	-1	-9	-5	0	0	-2
1923	-1	2	-10	-6	-3	-1	-2	-4	0	0	0	-3
1924	0	3	1	1	-3	0	-8	-2	8	-13	0	0
1925	4	0	3	1	-25	0	-2	-2	0	0	6	1
1926	-7	7	-4	2	-1	0	-11	-6	1	0	3	0
1927	-2	-12	-30	-2	-13	-1	10	6	7	-4	0	-2
1928	0	-7	-3	-2	-2	-6	-3	0	0	-1	0	0
1929	0	-1	1	0	-10	0	0	0	0	0	-6	0
1930	3	-3	-2	2	-7	-8	2	-9	4	0	-23	0
1931	13	-16	12	6	13	5	-1	0	0	3	0	0
1932	-1	3	-35	-3	-31	-1	0	-3	0	0	-1	0
1933	0	0	0	-20	-5	-4	0	0	0	0	-1	0
1934	3	-3	3	9	1	0	0	0	0	0	0	0
1935	4	3	-3	-18	0	-12	-35	8	-22	0	0	0
1936	-9	12	0	-8	-62	-62	-5	-1	1	0	0	-3
1937	5	1	0	-3	-23	-11	-4	-3	1	0	0	0
1938	0	-5	9	-4	-6	-4	-4	-5	-5	0	0	-6
1939	-11	0	-3	-2	0	-7	0	3	-1	0	0	-2
1940	5	-4	1	-14	-33	47	-3	-2	6	0	0	-2
1941	0	4	-8	-18	-3	-19	-4	-6	1	0	-1	-6
1942	-12	-1	-15	-3	-3	-3	-4	-7	-5	0	0	-6
1943	-6	-14	-4	-3	-3	-4	-4	-1	0	-1	0	-2
1944	0	1	-1	1	-5	-7	-1	-2	-2	0	0	-1
1945	1	-6	-2	0	-23	-6	-1	-3	0	0	0	-2
1946	0	-2	-9	-3	1	-1	-1	-6	0	0	0	-4
1947	5	-6	0	0	-6	11	0	-1	2	0	-1	3
1948	-1	-1	-2	1	0	-1	-4	-6	-3	0	0	-4
1949	3	-4	0	1	-4	19	-1	0	0	0	-2	-1
1950	-3	1	-2	-19	-13	-1	-3	-56	3	0	0	-1
1951	13	-48	-2	17	-3	-22	-1	-4	-3	-1	0	-2
1952	0	2	-21	-3	-3	-4	-35	-5	-5	0	0	-6
1953	-6	0	-5	0	-1	-1	-3	-4	-5	0	0	-6
1954	-1	-20	0	-2	-3	-3	-3	1	0	0	0	0
1955	-1	0	-14	-4	0	0	1	-3	0	0	-1	0
1956	-2	0	-27	-3	-3	-4	-1	-7	-4	0	0	-6
1957	-6	0	0	-1	0	-16	0	-4	1	-1	0	1
1958	-17	-1	-3	-2	-19	-4	-4	-5	-5	0	0	-17
1959	-5	0	0	-2	-3	0	0	1	0	3	0	3
1960	0	-7	0	-4	-10	-5	0	-13	2	0	3	0
1961	-5	5	-8	0	-26	0	0	-1	-1	0	1	-2
1962	-7	11	-6	0	7	-7	-9	0	0	5	0	-2
1963	-25	-7	-6	-6	48	-4	3	-11	0	0	0	7
1964	-5	-6	0	-59	0	-8	0	14	-7	0	1	1
1965	-3	2	-25	-3	-3	1	-11	2	0	-1	0	-3
1966	0	-25	-4	-3	-2	-2	-3	-1	1	0	0	0
1967	0	-2	-17	-6	-12	-4	-4	-5	-5	-5	-5	-6
1968	-5	0	-3	2	-4	-13	0	-10	6	0	0	0
1969	1	0	-10	-8	-3	-5	-5	-8	-6	0	0	-13
1970	-6	-5	-8	-3	-3	-4	0	-3	2	-2	0	0
1971	0	-6	-6	-3	1	-20	3	-10	-3	1	0	-6
1972	-1	0	-22	-3	-3	-3	1	0	0	0	0	0
1973	0	-5	-4	-20	-3	-13	-1	-2	1	0	0	-16
1974	-16	113	-6	-3	-3	-18	-4	-3	-2	-3	0	-23
1975	-5	0	-3	0	-4	33	-3	-9	-4	0	-5	-6
1976	19	-6	0	0	5	-19	-4	0	1	0	6	-9
1977	12	-5	6	1	0	0	0	0	0	-1	0	0
1978	-1	-1	1	-3	-4	-7	-16	-4	-3	0	0	-5
1979	0	12	-15	-51	-3	-13	-3	-1	1	0	0	-5
1980	3	-4	-23	-18	57	-11	-2	-4	-3	0	0	-5
1981	0	2	-4	-11	-3	-16	-12	-10	3	0	-1	0
1982	-1	-32	43	-18	-3	-4	-4	-5	-5	0	0	-8
1983	-10	-5	-2	-3	-3	-4	-4	-5	-5	-5	-5	-6
1984	-7	-6	-4	-3	-4	-4	1	-4	-3	1	0	-1
1985	-1	-14	-3	0	-3	-6	-1	-2	2	0	-1	0
1986	-1	0	-4	-8	-32	-9	-2	-4	-2	0	-5	-1
1987	0	2	-2	2	-17	-14	3	-1	-3	0	-2	0
1988	0	0	-9	-12	0	0	-10	3	0	0	-8	0
1989	6	-5	-6	-1	0	3	-3	1	-3	0	-1	-2
1990	-4	-7	0	2	0	-5	0	-13	8	0	-1	0
1991	2	5	-5	0	-2	-8	-9	-7	0	1	-14	0
1992	13	-25	7	4	-3	-10	0	-22	8	0	-2	0
1993	-14	25	-4	78	-4	-54	-47	7	14	0	0	2
AVG:	-1	-2	-5	-4	-5	-5	-4	-4	-1	0	-1	-3
MIN:	-25	-48	-35	-59	-62	-62	-47	-56	-22	-13	-23	-23
MAX:	19	113	43	78	57	47	10	14	14	5	6	7

Table 3.4.5-30. Simulated Delta Outflow (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	-3	-2	-5	-4	-1	-9	45	0	0	-8
1923	-1	5	-32	-19	-4	-1	-2	-4	1	0	0	-7
1924	0	7	-6	6	-3	0	-2	1	0	-1	0	0
1925	6	-2	5	1	-3	0	-2	-11	2	0	0	-3
1926	4	-3	1	0	-18	2	-2	-3	1	0	11	0
1927	-6	3	-27	0	-13	-1	-4	-15	10	-23	0	-8
1928	0	-20	-3	-3	-4	-5	-3	0	0	0	0	0
1929	-1	-5	5	0	-10	0	0	0	0	0	-4	0
1930	2	-3	-4	-3	-5	-3	0	-1	0	0	0	0
1931	-1	-2	0	0	3	-1	0	1	0	-1	0	0
1932	1	0	-4	-3	-5	-1	0	-3	0	0	-1	0
1933	0	-2	-1	-9	-5	-1	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	-3	0
1935	2	-2	2	-3	0	0	-5	1	-27	0	0	0
1936	-8	14	0	-58	-178	-59	-16	24	-1	0	0	-4
1937	7	2	0	-4	-23	-27	-4	16	-2	0	0	0
1938	0	30	2	-4	-5	-4	-4	-6	45	0	0	-23
1939	-44	0	-3	-14	0	-1	0	-1	1	0	-1	0
1940	4	-5	4	-1	-7	-18	-9	16	-11	0	0	-6
1941	0	12	-19	-18	-3	-26	-4	6	0	0	2	-23
1942	-45	-1	10	-2	-3	-3	-4	-7	45	0	0	-23
1943	-5	-101	-3	23	-3	-3	-4	12	0	-25	0	-6
1944	0	5	-7	7	11	-1	-1	-2	-2	0	0	-1
1945	0	-6	1	1	-28	-4	-3	-7	0	0	0	-2
1946	0	-13	-4	-3	2	-1	-2	29	0	0	0	2
1947	-2	-2	1	0	-5	4	0	0	1	0	1	-2
1948	-2	3	-9	5	0	0	3	-2	-1	0	0	-2
1949	6	1	3	0	0	-14	-1	0	0	0	-14	-1
1950	8	-11	-2	-9	-17	-4	-9	-54	3	0	0	-9
1951	15	-32	-2	-13	-4	-2	-1	20	-12	-1	0	-3
1952	0	4	-32	-2	-3	-4	16	-6	37	0	0	-21
1953	-5	0	-2	-2	-1	-1	-3	-5	-6	-1	0	-7
1954	-1	-23	0	-2	-3	-3	-3	1	0	0	0	0
1955	4	-2	-9	1	0	3	-4	-2	0	0	-1	0
1956	0	0	-56	-2	-3	-4	-1	-8	28	0	0	-20
1957	55	0	0	-7	10	-36	0	-5	1	-5	0	18
1958	-26	0	-3	-2	-36	-3	-4	-6	45	0	0	-31
1959	-5	0	0	10	-2	0	0	1	-1	3	0	0
1960	0	1	0	1	-1	1	0	-3	0	0	0	0
1961	-1	1	-3	0	-3	-1	0	-1	0	0	0	-2
1962	1	6	-1	0	0	3	-1	0	0	0	0	0
1963	-14	-5	-3	-2	-32	6	-16	-50	2	0	0	7
1964	-5	-5	0	-145	0	-6	8	2	-1	0	-1	5
1965	-4	2	-57	-3	-3	1	-9	2	13	-23	0	-7
1966	0	-4	-4	-3	-3	-1	-3	-1	1	0	0	0
1967	0	0	-14	-15	-11	-3	-3	-5	15	2	-20	-21
1968	-4	0	-3	1	-4	-3	0	-2	1	0	0	0
1969	2	-1	-4	-35	-3	-4	-4	-6	45	0	0	-49
1970	-5	2	-6	-2	-3	-4	0	-4	2	-3	0	0
1971	0	-5	-6	-3	1	-22	3	-11	-3	1	0	-7
1972	0	0	-24	-3	-3	-3	1	0	0	0	0	0
1973	4	8	26	-32	-5	-21	-1	16	-3	0	0	-22
1974	-22	106	-6	-3	-3	-27	-4	11	10	-21	0	-67
1975	-5	0	-3	0	-4	95	-3	-9	15	0	-16	-16
1976	11	-6	0	0	16	-17	0	0	0	0	-4	4
1977	3	2	-4	2	0	0	0	0	0	-1	0	0
1978	0	-1	1	-3	-4	-3	-10	-5	-2	0	0	-5
1979	0	1	-2	-15	-3	-3	2	8	-2	0	0	-1
1980	1	0	-5	-6	-83	-23	-12	-19	-11	0	0	-8
1981	0	5	-8	-26	-3	-13	-3	-2	1	0	0	0
1982	0	1	-12	-34	-3	-3	-4	-6	31	0	0	-26
1983	-25	-5	6	-2	-3	-3	-4	-6	-6	27	-24	-24
1984	-7	-4	-3	-4	-4	-4	1	-5	1	-4	0	-1
1985	-1	-15	-3	0	-3	-5	-2	-3	2	0	-1	0
1986	-1	0	-4	-8	-35	-8	-2	20	6	0	-14	-6
1987	0	7	-9	8	-28	-5	3	0	-9	0	-4	0
1988	3	0	-5	-2	0	0	-2	1	0	0	-3	0
1989	3	0	0	0	0	-4	-2	0	0	0	0	1
1990	-2	-4	0	1	0	2	0	-2	1	0	2	0
1991	-3	2	-2	0	0	-4	3	3	0	0	1	0
1992	1	-2	0	2	-3	-4	0	-3	1	0	0	0
1993	-1	1	-4	-3	-3	-4	-12	-26	-15	0	0	6
AVG:	-2	-1	-5	-7	-8	-4	-2	-2	4	-1	-1	-6
MIN:	-45	-101	-57	-145	-178	-59	-16	-54	-27	-25	-24	-67
MAX:	55	106	26	23	16	95	16	29	45	27	11	18

Table 3.4.5-31. Simulated Delta Cross-Channel Position (Days Open)
Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	0	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	31	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	0	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	31	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.4.5-32. Simulated Delta Cross-Channel Position (Days Open)
Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	0	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	31	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	11	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	31	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.4.5-33. Simulated Delta Cross-Channel Position (Days Open)
Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	0	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	31	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	11	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	31	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.4.5-34. Simulated Delta Cross-Channel Net Flow (CFS)
Alternative 1, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5073	4065	5219	4344	5570	4749	3895	7157	5620	7528	6566	6132
1923	5220	4845	5036	4635	2786	2687	3904	3050	5991	7763	6635	5956
1924	5034	4161	3987	3686	2903	2158	1843	1877	4422	5346	5278	4262
1925	4320	3578	4210	3607	9429	4254	3629	2757	6214	5628	6647	5405
1926	4767	3709	3551	4513	6100	2619	3446	2496	5282	6760	5601	4694
1927	4774	7194	5526	4944	10807	6520	6879	4239	6849	7807	6763	5995
1928	5024	6432	4799	5548	4255	10708	4287	2930	5648	7921	6947	6117
1929	5210	4588	4060	3729	2937	2290	1777	1857	4795	5810	5750	4441
1930	4367	3403	5315	5415	3300	5020	2430	2417	5576	7074	6420	4942
1931	4772	3783	3484	3813	2247	1815	1971	1797	4532	6795	5612	4316
1932	4363	3370	5558	5182	3148	2591	2122	2558	6654	5397	5029	5355
1933	4732	3710	3558	3731	2261	2592	2223	1676	4648	5551	4528	4151
1934	4367	3404	4560	4960	2769	2487	2365	1862	4948	5255	4476	4527
1935	4365	4185	3603	4660	2688	4239	7211	3979	7912	7526	6931	5631
1936	5636	4076	3799	6125	8939	4908	3588	2822	6047	7470	6800	5548
1937	5243	3917	3980	3692	5579	6020	3755	2946	6860	7387	6688	5528
1938	4954	7332	9380	4952	10706	10754	8845	8208	5454	6972	6613	7466
1939	6774	4647	4643	3821	2358	2623	2194	2466	5149	7493	6802	5689
1940	5025	3754	3375	5234	8412	10646	9454	3305	6536	8561	6729	5719
1941	4912	4586	6922	10561	10642	10185	8917	6191	7192	7409	6653	7279
1942	5981	4929	9377	9985	10722	3841	6536	5357	4457	7691	6594	7336
1943	5950	5813	4638	10379	7673	9752	4226	3257	6447	7284	6697	6020
1944	5420	3963	3813	3931	4020	3610	2231	2271	6362	7726	6820	6448
1945	5522	5105	4991	3791	6993	3777	2348	2674	6800	8117	6695	6037
1946	4887	5830	9470	7437	4153	3547	2408	2714	6534	8057	6923	6170
1947	5338	4754	4845	3462	3214	3531	2667	2235	6104	7888	7187	6345
1948	5284	4162	3933	4560	3002	2794	4278	4587	7738	8295	7098	6553
1949	5448	4432	4381	3407	2353	6924	2480	2657	6324	7433	6140	5700
1950	4785	3925	3383	5270	5452	3475	3328	3050	6756	8253	6989	5993
1951	5911	7398	10725	9078	9365	4514	2805	3343	6420	8222	7004	5969
1952	5039	4904	7073	10576	10442	8201	8825	8979	5895	7763	6708	8673
1953	6912	4660	6617	10549	3850	3662	2939	4141	4269	8449	6751	7852
1954	6081	5767	4551	5303	9021	7343	6069	3683	5700	8516	6975	6558
1955	5845	5573	6447	5009	2715	2273	2535	2467	6179	6779	5924	5268
1956	4809	4525	10699	10836	10025	5409	3291	5891	7427	8169	6637	7747
1957	6280	4547	4039	4203	5517	6895	3524	2977	6701	8185	6709	5950
1958	7763	5199	6587	5964	10842	10573	10612	6761	5312	7482	6541	8255
1959	7085	4579	4138	5691	7888	3673	2156	2461	7134	8317	7111	6001
1960	5391	4638	3666	3556	4853	3712	2304	2493	5493	7548	6006	4917
1961	4762	4440	4896	3517	5576	3282	2606	2341	5239	8034	7560	6090
1962	5268	4841	4961	3263	7126	4195	2376	2512	6119	8461	7145	6505
1963	5459	5511	4432	4160	10164	5191	10144	4897	6372	7369	6717	6248
1964	6878	4513	4246	5954	2765	2483	2438	2574	5957	7923	7254	6250
1965	4981	5115	10430	10705	4959	3887	6280	3812	5613	8333	6684	5848
1966	5551	6938	4812	4718	4112	4546	2636	2756	6840	8067	6723	5781
1967	5688	5221	6203	6235	8023	8015	5777	6692	6167	6885	6902	8413
1968	7337	4928	4855	4623	8831	5612	2432	2301	6933	8064	6863	6333
1969	5514	4770	6591	10698	10656	7008	6386	7362	7890	6771	6661	8396
1970	6942	5045	8708	10992	10273	5218	2790	2335	6151	9202	6844	6398
1971	5274	5679	8943	7100	4631	6771	3695	4303	7829	9128	6783	7801
1972	6267	4702	5563	4707	4139	5515	2380	2315	7095	7926	6746	5325
1973	5329	6360	4309	10581	10535	7722	2999	3146	7185	8389	6617	6092
1974	5924	9038	9742	10737	6120	10635	9559	3846	8265	7956	6685	8672
1975	7113	4958	4990	4178	9411	10242	3572	4638	8693	8057	6840	8031
1976	7281	5641	4921	3856	2477	2823	2090	1845	4809	6227	5716	5165
1977	4376	3514	3333	2815	1873	1864	2025	1632	4974	6906	5447	4176
1978	4365	3382	4657	9360	7557	8952	5076	3545	6536	7020	6903	6541
1979	5250	4127	3526	5857	6342	4803	2895	2971	7482	7865	6712	5752
1980	5432	4850	5641	10697	10693	6725	3197	2931	5384	6828	6586	6248
1981	5085	3972	4580	5933	4340	5114	2892	2306	5841	7913	7084	5886
1982	5643	5599	10641	9985	10642	9917	10728	5542	8245	6847	6482	8400
1983	8724	5641	9393	10303	10790	11108	9001	8331	8197	9167	8351	4395
1984	7817	9400	10806	7554	5342	5528	3111	2510	5913	8750	6829	6243
1985	5540	5031	6347	3942	2857	2578	2372	2593	5848	7829	6978	6588
1986	5628	4305	5220	4172	11260	10705	3243	2430	5655	7626	7055	6260
1987	5431	3912	3831	3880	3441	4018	2682	2225	6104	7391	6348	5763
1988	5316	3832	5452	4515	3012	2043	2065	2092	5058	5348	4399	4410
1989	4372	3899	3667	3653	1997	7070	3709	2847	5375	7638	7120	5716
1990	6001	4785	4252	5018	2749	2577	2282	1773	4263	5120	5489	5294
1991	4488	3401	2942	2674	1918	5055	2472	2022	4181	5941	5061	4796
1992	4327	3397	2962	3323	5216	3397	2331	1984	4911	5235	4530	4845
1993	4356	3402	4172	8466	8395	6567	5975	5040	4344	7395	6793	5811
AVG:	5505	4828	5527	5949	6086	5396	4090	3459	6109	7434	6498	6075
MIN:	4320	3370	2942	2674	1873	1815	1777	1632	4181	5120	4399	4151
MAX:	8724	9400	10806	10992	11260	11108	10728	8979	8693	9202	8351	8673

Table 3.4.5-35. Simulated Delta Cross-Channel Net Flow (CFS)
Alternatives 2-5, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5073	4057	5207	4336	5555	4742	3891	7147	5611	7534	6572	6115
1923	5205	4837	5016	4630	2779	2685	3900	3044	6000	7781	6642	5923
1924	5029	4157	4028	3686	2897	2158	1824	1872	4459	5278	5204	4137
1925	4319	3577	4211	3607	9358	4242	3624	2748	6194	5613	6671	5401
1926	4767	3709	3552	4514	6093	2596	3420	2481	5266	6752	5633	4646
1927	4774	7140	5413	4935	10798	6514	6871	4233	6834	7788	6769	5978
1928	5010	6406	4788	5540	4249	10700	4281	2931	5651	7913	6949	6116
1929	5204	4591	4058	3729	2903	2257	1777	1858	4686	5778	5704	4083
1930	4367	3403	5302	5416	3274	5000	2435	2396	5510	6967	6245	4869
1931	4771	3758	3521	3841	2262	1823	1969	1793	4514	6859	5634	4296
1932	4363	3370	5436	5174	3032	2590	2091	2551	6636	5386	5024	5355
1933	4733	3710	3558	3723	2254	2580	2223	1676	4648	5523	4497	4152
1934	4368	3404	4555	4953	2770	2463	2365	1862	5029	5653	4711	4455
1935	4365	4167	3604	4621	2688	4231	7107	3968	7734	7361	6904	5470
1936	5537	3907	3845	6099	8931	4780	3585	2821	6058	7538	6811	5519
1937	5332	3917	3979	3692	5572	6013	3750	2948	6871	7586	6572	5533
1938	4949	7311	9336	4947	10698	10746	8837	8199	5445	6979	6619	7442
1939	6720	4640	4632	3814	2358	2600	2181	2474	5149	7495	6804	5661
1940	5055	3740	3342	5200	8309	10637	9446	3303	6574	8567	6735	5701
1941	4879	4581	6908	10555	10635	10178	8909	6182	7178	7406	6653	7257
1942	5923	4921	9370	9980	10715	3834	6527	5347	4448	7685	6599	7313
1943	5923	5756	4632	10374	7666	9745	4218	3256	6453	7284	6701	6002
1944	5413	3957	3812	3931	4010	3588	2228	2265	6347	7726	6820	6440
1945	5525	5081	4985	3790	6965	3758	2346	2669	6807	8124	6709	6017
1946	4857	5823	9451	7432	4153	3545	2404	2708	6539	8061	6927	6116
1947	5321	4723	4846	3441	3197	3567	2667	2229	6128	7888	7181	6381
1948	5284	4160	3900	4561	3002	2793	4269	4574	7717	8296	7098	6493
1949	5443	4350	4376	3401	2345	6965	2477	2651	6338	7404	6165	5685
1950	4785	3953	3381	5226	5446	3473	3322	2918	6784	8258	6994	5978
1951	6088	7292	10718	9074	9358	4507	2801	3337	6406	8246	7010	5952
1952	5029	4911	7031	10571	10435	8194	8749	8971	5885	7758	6680	8649
1953	6886	4660	6605	10543	3850	3660	2931	4135	4259	8436	6758	7828
1954	6069	5686	4550	5298	9014	7336	6062	3685	5700	8515	6975	6558
1955	5827	5568	6399	4998	2715	2271	2536	2460	6180	6763	5897	5257
1956	4814	4528	10691	10831	10019	5402	3287	5878	7409	8175	6643	7723
1957	6254	4539	4004	4204	5510	6888	3524	2971	6713	8190	6716	5969
1958	7682	5193	6575	5959	10834	10566	10604	6751	5303	7479	6547	8178
1959	7059	4572	4137	5686	7881	3663	2156	2463	7136	8366	7111	6043
1960	5376	4563	3641	3526	4825	3690	2304	2462	5345	7544	5996	4909
1961	4761	4440	4869	3519	5514	3281	2606	2330	5201	8023	7565	6056
1962	5147	4861	4956	3263	7144	4171	2352	2496	6116	8510	7141	6475
1963	5391	5456	4404	4123	10047	5169	10141	4887	6374	7399	6724	6359
1964	6854	4501	4245	5773	2765	2460	2438	2606	5946	7923	7259	6269
1965	4927	5102	10296	10700	4952	3895	6255	3818	5630	8353	6686	5815
1966	5542	6838	4800	4712	4107	4540	2628	2753	6848	8069	6720	5779
1967	5691	5216	6171	6230	7996	8008	5770	6684	6158	6865	6883	8390
1968	7311	4924	4844	4618	8823	5584	2433	2274	6965	8076	6863	6333
1969	5500	4762	6550	10684	10648	7001	6378	7349	7872	6774	6670	8342
1970	6916	5025	8701	10987	10266	5211	2791	2330	6169	9183	6850	6404
1971	5261	5659	8931	7095	4637	6728	3702	4283	7815	9150	6789	7778
1972	6259	4724	5487	4697	4133	5507	2382	2315	7095	7932	6730	5325
1973	5323	6338	4300	10575	10529	7695	2996	3141	7367	7916	6616	5872
1974	5712	9293	9730	10731	6112	10628	9552	3841	8257	7948	6690	8565
1975	7087	4953	4979	4179	9402	10235	3564	4629	8674	8063	6820	8007
1976	7372	5621	4919	3856	2477	2764	2081	1845	4705	6275	5774	5106
1977	4376	3481	3335	2816	1857	1852	2025	1632	4974	6886	5282	4176
1978	4365	3382	4659	9352	7548	8936	5040	3535	6523	7619	6903	6517
1979	5244	4102	3526	5725	6336	4775	2877	2945	7452	7868	6720	5682
1980	5402	4808	5559	10690	10686	6719	3194	2925	5370	6841	6596	6233
1981	5087	3957	4580	5899	4334	5079	2864	2280	5859	7913	7082	5886
1982	5594	5522	10633	9947	10635	9910	10720	5534	8227	6842	6488	8366
1983	8676	5631	9386	10297	10783	11101	8993	8322	8188	9147	8332	4385
1984	7791	9390	10798	7549	5335	5521	3112	2504	5901	8765	6835	6236
1985	5526	5001	6335	3942	2850	2561	2369	2587	5860	7829	6975	6587
1986	5616	4322	5208	6022	11252	10697	3240	2425	5643	7613	7037	6245
1987	5426	3910	3830	3881	3434	3990	2692	2220	6080	7399	6291	5751
1988	5254	3794	5420	4488	3012	2025	2039	1990	5192	5350	4467	4410
1989	4372	3901	3603	3654	2020	7076	3700	2849	5319	7564	7094	5683
1990	5845	4710	4221	5007	2745	2551	2282	1741	4297	5118	5453	5304
1991	4497	3401	2943	2663	1900	5025	2441	1991	4090	5694	5092	5005
1992	4327	3397	2963	3321	5210	3368	2322	1920	4953	5203	4524	4435
1993	4356	3402	4162	8634	8385	6450	5869	5034	4333	7367	6744	5793
AVG:	5489	4812	5510	5965	6073	5382	4080	3448	6103	7437	6494	6044
MIN:	4319	3370	2943	2663	1857	1823	1777	1632	4090	5118	4467	4083
MAX:	8676	9390	10798	10987	11252	11101	10720	8971	8674	9183	8332	8649

Table 3.4.5-36. Simulated Delta Cross-Channel Net Flow (CFS)
Alternative 6, 2001 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5070	4057	5207	4336	5556	4742	3891	7147	5611	7567	6657	6115
1923	5204	4837	4968	4630	2779	2685	3900	3044	5921	7825	6675	5897
1924	5029	4157	4011	3686	2897	2158	1839	1879	4424	5333	5272	4261
1925	4319	3577	4211	3607	9410	4242	3625	2750	6266	5650	6690	5401
1926	4767	3709	3552	4514	6066	2617	3441	2488	5263	6774	5660	4691
1927	4774	7200	5426	4939	10798	6513	6871	4233	6834	7787	6852	5978
1928	5006	6355	4789	5540	4240	10700	4281	2861	5691	7960	6945	6124
1929	5199	4596	4059	3727	2903	2277	1777	1858	4728	5783	5715	4480
1930	4367	3403	5302	5406	3284	5013	2431	2414	5558	7086	6408	4920
1931	4772	3731	3484	3813	2247	1812	1971	1792	4541	6819	5644	4316
1932	4363	3370	5544	5173	3129	2589	2091	2551	6639	5386	5021	5355
1933	4732	3710	3558	3723	2254	2593	2223	1676	4648	5544	4519	4151
1934	4367	3404	4561	4952	2769	2484	2365	1862	4948	5255	4493	4522
1935	4365	4186	3604	4654	2688	4231	7195	3973	7721	7365	6928	5518
1936	5637	3972	3830	6004	8931	4831	3592	2838	5941	7672	6896	5576
1937	5365	3917	3976	3692	5572	6013	3752	2953	6779	7745	6711	5595
1938	4950	7312	9312	4947	10698	10746	8837	8199	5445	7022	6703	7444
1939	6567	4640	4632	3814	2358	2621	2188	2463	5172	7486	6794	5683
1940	5039	3753	3375	5227	8392	10638	9446	3276	6525	8637	6800	5701
1941	4935	4559	6883	10555	10635	10178	8909	6182	7178	7460	6755	7258
1942	5766	4922	9370	9980	10715	3834	6527	5347	4448	8153	6685	7313
1943	5924	5407	4633	10374	7666	9745	4218	3251	6439	7196	6709	6002
1944	5412	3957	3812	3931	4046	3608	2228	2265	6347	7726	6820	6429
1945	5481	5073	4986	3794	6968	3759	2346	2669	6621	8193	6833	6084
1946	4850	5780	9462	7432	4189	3544	2401	2708	6584	8113	6976	6248
1947	5271	4748	4848	3444	3199	3543	2667	2229	6042	7887	7192	6320
1948	5218	4150	3613	4568	2998	2792	4284	4583	7734	8296	7098	6527
1949	5441	4492	4377	3407	2346	6883	2477	2651	6365	7401	6158	5685
1950	4785	3929	3381	5255	5445	3473	3324	2950	6651	8331	7066	5938
1951	5981	7326	10718	9073	9358	4506	2801	3337	6403	8285	7035	5952
1952	5029	4910	7006	10571	10435	8194	8862	8969	5886	7794	6649	8645
1953	6886	4659	6606	10543	3850	3660	2931	4135	4259	8433	6763	7828
1954	6066	5672	4550	5298	9014	7336	6062	3685	5700	8521	6975	6558
1955	5827	5568	6400	4998	2712	2271	2527	2461	6180	6755	5894	5258
1956	4810	4524	10692	10831	10019	5402	3287	5878	7409	7637	6728	7739
1957	6543	4543	4109	4203	5510	6888	3525	2971	6642	8149	6655	6220
1958	7640	5195	6575	5959	10833	10566	10604	6751	5303	7533	6632	8195
1959	7059	4572	4137	5686	7881	3672	2156	2464	7125	8363	7111	5999
1960	5384	4634	3663	3555	4845	3711	2304	2487	5451	7544	6000	4916
1961	4762	4441	4880	3519	5569	3280	2606	2330	5226	8029	7560	6061
1962	5265	4846	4959	3257	7114	4192	2373	2508	6120	8459	7145	6503
1963	5428	5492	4425	4153	10149	5203	10133	4888	6482	7702	6787	6442
1964	6855	4502	4245	5506	2758	2466	2456	2578	5988	7923	7250	6319
1965	4934	5111	10345	10700	4952	3896	6259	3819	5572	8256	6742	5813
1966	5542	6924	4800	4712	4107	4541	2628	2752	6847	8069	6720	5778
1967	5686	5217	6173	6230	7997	8008	5770	6684	6158	6865	6883	8390
1968	7311	4924	4844	4618	8823	5605	2432	2295	6940	8068	6863	6333
1969	5511	4760	6572	10691	10648	7001	6379	7353	7872	6854	6750	8242
1970	6915	5025	8701	10987	10266	5211	2791	2330	6175	9179	6854	6408
1971	5260	5658	8930	7095	4637	6725	3702	4283	7815	9153	6793	7778
1972	6261	4726	5480	4697	4133	5507	2389	2315	7095	7934	6766	5325
1973	5326	6375	4356	10575	10529	7677	2997	3139	7295	7971	6674	5838
1974	5618	9274	9729	10731	6112	10628	9552	3841	8223	7985	6754	8411
1975	7088	4953	4979	4179	9402	10235	3564	4629	8674	8114	6820	8007
1976	7333	5622	4919	3856	2477	2785	2089	1845	4749	6324	5683	5180
1977	4376	3522	3298	2817	1857	1849	2025	1632	4973	6866	5474	4176
1978	4365	3382	4658	9353	7548	8945	5054	3535	6527	7007	6903	6517
1979	5244	4102	3526	5832	6335	4796	2889	2966	7440	7866	6717	5736
1980	5433	4871	5622	10691	10686	6719	3194	2926	5370	6898	6642	6232
1981	5085	3958	4580	5853	4334	5087	2885	2301	5845	7913	7083	5886
1982	5637	5596	10634	9947	10635	9910	10720	5534	8227	6878	6550	8340
1983	8604	5631	9386	10297	10783	11101	8993	8322	8188	9147	8332	4385
1984	7791	9390	10798	7549	5335	5521	3112	2504	5896	8750	6850	6243
1985	5526	4998	6335	3942	2850	2563	2369	2585	5863	7829	6974	6587
1986	5614	4323	5208	6021	11252	10697	3240	2425	5633	7631	7065	6245
1987	5426	3910	3830	3881	3434	4011	2689	2225	6040	7392	6213	5733
1988	5322	3831	5455	4509	3012	2005	2061	2038	5064	5500	4504	4432
1989	4372	3899	3668	3654	1997	7062	3704	2848	5362	7639	7121	5734
1990	5932	4766	4226	5003	2744	2572	2282	1768	4269	5122	5470	5294
1991	4475	3401	2944	2675	1918	5045	2469	2011	4090	5927	5032	4874
1992	4327	3397	2963	3324	5209	3389	2331	1979	4916	5230	4525	4829
1993	4356	3402	4159	8460	8387	6558	5947	5032	4334	8578	6884	5999
AVG:	5489	4816	5512	5961	6078	5387	4087	3451	6093	7466	6521	6068
MIN:	4319	3370	2944	2675	1857	1812	1777	1632	4090	5122	4493	4151
MAX:	8604	9390	10798	10987	11252	11101	10720	8969	8674	9179	8332	8645

Table 3.4.5-37. Simulated Delta Cross-Channel Net Flow (CFS)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-8	-12	-8	-14	-7	-4	-9	-9	6	5	-17
1923	-15	-8	-20	-5	-7	-2	-4	-6	10	18	7	-32
1924	-5	-4	41	0	-7	0	-19	-5	36	-68	-74	-125
1925	0	-1	1	0	-71	-12	-5	-9	-20	-15	24	-4
1926	0	0	1	1	-7	-23	-26	-14	-17	-8	32	-48
1927	0	-55	-113	-9	-10	-7	-8	-6	-15	-19	6	-17
1928	-14	-26	-11	-8	-6	-8	-7	1	3	-9	2	-1
1929	-6	3	-1	-1	-33	-33	0	0	-109	-32	-46	-358
1930	0	0	-12	2	-26	-21	5	-20	-66	-107	-175	-73
1931	0	-25	37	28	15	8	-2	-4	-18	64	22	-20
1932	0	0	-122	-8	-117	-2	-31	-7	-18	-11	-5	0
1933	1	0	0	-8	-7	-12	0	1	1	-28	-31	1
1934	1	0	-5	-7	1	-23	0	0	81	398	235	-72
1935	0	-18	1	-39	0	-8	-104	-11	-178	-164	-27	-162
1936	-99	-169	46	-26	-9	-128	-3	-1	11	67	11	-29
1937	89	0	-1	1	-7	-7	-5	1	11	199	-116	5
1938	-4	-21	-44	-5	-7	-8	-8	-9	-9	7	6	-24
1939	-54	-8	-12	-7	0	-23	-13	8	0	3	2	-28
1940	31	-15	-33	-34	-103	-9	-8	-2	38	6	6	-17
1941	-33	-5	-14	-6	-7	-7	-8	-9	-15	-2	0	-22
1942	-58	-8	-7	-5	-7	-7	-8	-9	-9	-6	5	-23
1943	-26	-56	-7	-5	-7	-7	-8	-1	6	0	4	-17
1944	-7	-5	-1	0	-11	-22	-4	-6	-15	0	0	-8
1945	3	-24	-5	-1	-28	-19	-2	-5	7	7	14	-21
1946	-31	-8	-19	-5	0	-2	-4	-6	5	4	4	-54
1947	-17	-31	1	-21	-17	36	0	-6	24	0	-6	35
1948	0	-2	-33	2	0	-2	-9	-13	-21	0	0	-59
1949	-5	-82	-4	-6	-8	41	-4	-6	14	-29	25	-15
1950	0	28	-2	-43	-7	-2	-7	-132	28	5	5	-14
1951	177	-106	-7	-5	-7	-7	-4	-6	-15	24	6	-17
1952	-10	7	-42	-5	-7	-7	-76	-8	-10	-6	-28	-24
1953	-27	0	-11	-5	0	-2	-8	-6	-9	-14	7	-24
1954	-12	-81	-1	-5	-7	-7	-8	2	0	-1	0	0
1955	-17	-5	-47	-11	0	-1	1	-7	1	-16	-28	-11
1956	5	3	-8	-5	-7	-7	-4	-13	-18	6	6	-24
1957	-27	-8	-34	0	-7	-7	0	-6	11	5	7	19
1958	-81	-6	-12	-5	-8	-7	-8	-9	-9	-3	6	-77
1959	-26	-8	-1	-5	-7	-10	0	2	2	49	0	41
1960	-15	-74	-25	-30	-27	-22	0	-31	-148	-4	-10	-8
1961	-1	0	-27	2	-62	-2	0	-11	-39	-11	5	-35
1962	-121	20	-5	0	18	-24	-24	-16	-3	49	-4	-30
1963	-69	-54	-28	-37	-116	-21	-3	-10	2	30	7	112
1964	-24	-11	-1	-182	0	-23	0	33	-11	0	5	19
1965	-54	-13	-133	-5	-7	7	-25	6	17	19	2	-33
1966	-9	-100	-12	-6	-5	-6	-7	-4	7	2	-3	-2
1967	2	-4	-32	-5	-28	-7	-8	-9	-9	-20	-20	-24
1968	-26	-4	-11	-5	-8	-28	1	-26	31	12	0	0
1969	-14	-8	-41	-13	-7	-7	-8	-13	-18	3	9	-54
1970	-27	-19	-7	-5	-7	-7	1	-6	17	-19	6	6
1971	-13	-20	-13	-5	6	-43	7	-19	-14	22	6	-23
1972	-7	23	-76	-10	-6	-7	3	0	1	6	-16	0
1973	-6	-22	-8	-6	-6	-27	-3	-6	182	-472	0	-219
1974	-212	255	-12	-5	-8	-7	-8	-6	-7	-8	5	-108
1975	-26	-4	-11	0	-9	-7	-8	-9	-19	6	-20	-24
1976	92	-20	-1	0	0	-59	-10	0	-104	48	57	-59
1977	0	-34	2	0	-16	-12	0	0	0	-19	-165	0
1978	0	0	2	-8	-9	-16	-36	-9	-13	599	0	-23
1979	-6	-25	0	-132	-7	-28	-18	-26	-30	3	8	-69
1980	-30	-42	-81	-7	-7	-6	-3	-5	-14	13	10	-15
1981	2	-15	-1	-34	-6	-35	-28	-26	18	0	-2	0
1982	-49	-76	-8	-38	-7	-7	-8	-9	-18	-5	6	-34
1983	-48	-10	-7	-5	-7	-7	-8	-9	-9	-19	-19	-11
1984	-26	-10	-7	-5	-7	-7	2	-6	-12	16	6	-7
1985	-14	-30	-11	0	-7	-17	-3	-6	12	0	-3	0
1986	-11	16	-12	1850	-8	-8	-4	-6	-11	-12	-18	-15
1987	-5	-2	-1	1	-7	-28	9	-5	-24	8	-58	-12
1988	-63	-37	-32	-27	0	-18	-26	-103	134	2	68	1
1989	0	2	-64	1	22	6	-9	2	-56	-73	-25	-33
1990	-156	-75	-31	-11	-4	-26	0	-32	34	-2	-36	10
1991	10	0	1	-11	-18	-29	-31	-31	-92	-247	31	209
1992	0	0	1	-2	-6	-28	-10	-65	42	-32	-5	-410
1993	0	0	-10	168	-10	-117	-106	-7	-11	-28	-49	-17
AVG:	-17	-16	-17	16	-13	-15	-11	-11	-6	3	-4	-31
MIN:	-212	-169	-133	-182	-117	-128	-106	-132	-178	-472	-175	-410
MAX:	177	255	46	1850	22	41	9	33	182	599	235	209

Table 3.4.5-38. Simulated Delta Cross-Channel Net Flow (CFS)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2	-8	-12	-8	-13	-7	-4	-9	-9	39	90	-18
1923	-16	-8	-68	-5	-7	-2	-4	-6	-69	62	40	-58
1924	-5	-4	25	0	-7	0	-4	2	2	-14	-6	-1
1925	0	-1	0	0	-19	-12	-4	-7	53	21	43	-4
1926	0	0	1	1	-34	-2	-5	-8	-20	14	60	-2
1927	0	6	-100	-5	-9	-7	-8	-6	-15	-20	89	-18
1928	-18	-77	-9	-8	-15	-8	-7	-69	44	39	-1	7
1929	-11	7	-1	-2	-33	-12	0	0	-67	-27	-35	39
1930	0	0	-12	-8	-15	-7	1	-2	-18	12	-12	-22
1931	0	-52	0	0	0	-3	0	-5	9	24	32	0
1932	0	0	-14	-9	-19	-3	-30	-7	-15	-11	-8	0
1933	0	0	0	-8	-7	1	0	0	0	-7	-9	0
1934	0	0	0	-8	0	-3	0	0	0	0	17	-5
1935	0	1	1	-6	0	-8	-15	-6	-191	-161	-3	-113
1936	1	-105	31	-121	-8	-78	4	16	-106	202	96	28
1937	122	-1	-4	1	-7	-7	-3	7	-81	359	24	67
1938	-3	-20	-68	-5	-7	-8	-7	-9	-9	50	90	-21
1939	-208	-7	-12	-7	0	-2	-6	-3	23	-7	-8	-6
1940	14	-2	0	-7	-20	-8	-8	-29	-11	76	71	-18
1941	22	-27	-39	-6	-7	-7	-8	-9	-15	52	102	-21
1942	-215	-7	-7	-5	-7	-7	-8	-9	-9	462	91	-23
1943	-26	-405	-6	-5	-7	-7	-8	-7	-8	-88	13	-17
1944	-8	-6	-1	0	26	-2	-4	-6	-15	0	0	-19
1945	-41	-32	-5	3	-26	-18	-2	-5	-179	76	138	47
1946	-38	-50	-8	-5	36	-3	-7	-6	50	56	53	79
1947	-66	-6	3	-17	-15	13	0	-5	-62	0	5	-25
1948	-66	-12	-320	8	-4	-2	6	-4	-4	0	0	-26
1949	-7	60	-4	1	-7	-41	-3	-6	41	-32	18	-15
1950	0	3	-2	-15	-7	-2	-4	-99	-106	78	77	-55
1951	70	-71	-7	-5	-7	-7	-4	-6	-17	63	31	-17
1952	-10	6	-67	-5	-7	-7	37	-10	-9	31	-59	-28
1953	-26	0	-11	-5	0	-2	-8	-6	-9	-16	11	-24
1954	-16	-94	-1	-5	-7	-7	-8	2	0	5	0	0
1955	-18	-5	-47	-11	-4	-1	-7	-6	1	-24	-30	-11
1956	1	-1	-8	-5	-7	-7	-4	-13	-18	-532	90	-8
1957	263	-4	70	0	-7	-7	1	-6	-59	-36	-54	270
1958	-123	-5	-12	-5	-9	-7	-8	-9	-9	51	90	-61
1959	-26	-8	-1	-5	-7	-1	0	4	-8	46	0	-2
1960	-7	-3	-3	0	-7	-2	0	-6	-42	-4	-6	-2
1961	0	1	-16	1	-7	-2	0	-10	-13	-4	1	-29
1962	-3	5	-2	-7	-12	-3	-3	-3	0	-2	0	-1
1963	-31	-18	-7	-8	-15	12	-10	-9	110	333	71	194
1964	-23	-11	-1	-448	-7	-17	18	5	31	0	-5	69
1965	-47	-4	-85	-5	-7	9	-21	7	-41	-78	58	-36
1966	-9	-13	-12	-6	-6	-5	-7	-4	7	2	-3	-3
1967	-2	-4	-30	-5	-26	-7	-8	-9	-9	-20	-20	-24
1968	-26	-4	-11	-5	-8	-7	0	-6	7	3	0	0
1969	-3	-11	-19	-7	-7	-7	-7	-10	-18	83	89	-154
1970	-27	-20	-7	-5	-7	-7	1	-6	24	-22	10	10
1971	-14	-20	-14	-5	6	-46	7	-20	-14	26	11	-23
1972	-5	24	-83	-10	-6	-7	9	0	1	7	19	0
1973	-3	15	47	-6	-6	-45	-3	-7	110	-418	58	-253
1974	-306	237	-13	-5	-8	-7	-8	-6	-42	29	69	-261
1975	-25	-4	-11	0	-9	-7	-8	-9	-19	56	-20	-24
1976	53	-20	-1	0	0	-38	-1	0	-60	97	-33	15
1977	0	8	-35	2	-15	-15	0	1	-1	-40	27	0
1978	0	0	1	-6	-9	-7	-22	-9	-9	-13	0	-24
1979	-7	-25	0	-25	-7	-8	-6	-5	-42	0	4	-15
1980	0	21	-19	-6	-7	-6	-3	-5	-13	70	55	-15
1981	0	-14	-1	-79	-6	-27	-7	-6	5	0	-1	0
1982	-6	-3	-8	-38	-7	-7	-8	-9	-18	31	67	-60
1983	-120	-10	-7	-5	-7	-7	-8	-9	-9	-19	-19	-11
1984	-26	-10	-7	-5	-7	-7	2	-6	-17	0	21	0
1985	-14	-32	-11	0	-7	-14	-3	-7	15	0	-3	0
1986	-13	18	-13	1849	-8	-8	-4	-6	-21	6	10	-15
1987	-4	-2	-1	1	-7	-7	7	1	-65	2	-135	-30
1988	6	0	2	-5	0	-38	-4	-54	6	152	105	22
1989	0	1	1	1	0	-8	-4	1	-13	2	1	18
1990	-69	-19	-25	-15	-5	-5	0	-6	6	2	-20	0
1991	-12	0	2	1	0	-9	-3	-11	-92	-14	-29	78
1992	0	0	1	1	-7	-8	0	-5	5	-5	-4	-16
1993	0	0	-13	-6	-8	-8	-28	-9	-10	1183	91	189
AVG:	-17	-12	-15	12	-7	-9	-4	-8	-16	32	22	-7
MIN:	-306	-405	-320	-448	-34	-78	-30	-99	-191	-532	-135	-261
MAX:	263	237	70	1849	36	13	37	16	110	1183	138	270

3.4.6 Delta Exports

This section presents CALSIM II Delta export results. The Banks Pumping Plant is the SWP facility for pumping export water from the Delta, while Tracy Pumping Plant supplies water for CVP contractors south of the Delta.

An exceedence plot and a time series plot for each pumping plant convey overall exports over the 72 year hydrologic period, and tables list monthly results and comparisons.

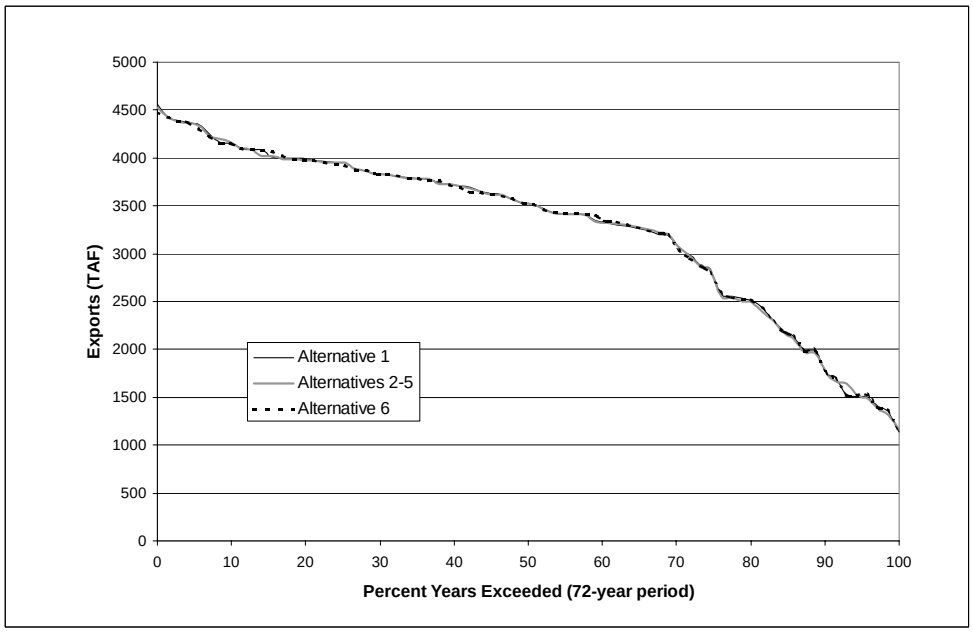


Figure 3.4.6-1. Exceedence for Simulated Annual Delta Exports at Banks Pumping Plant, 2001 LOD

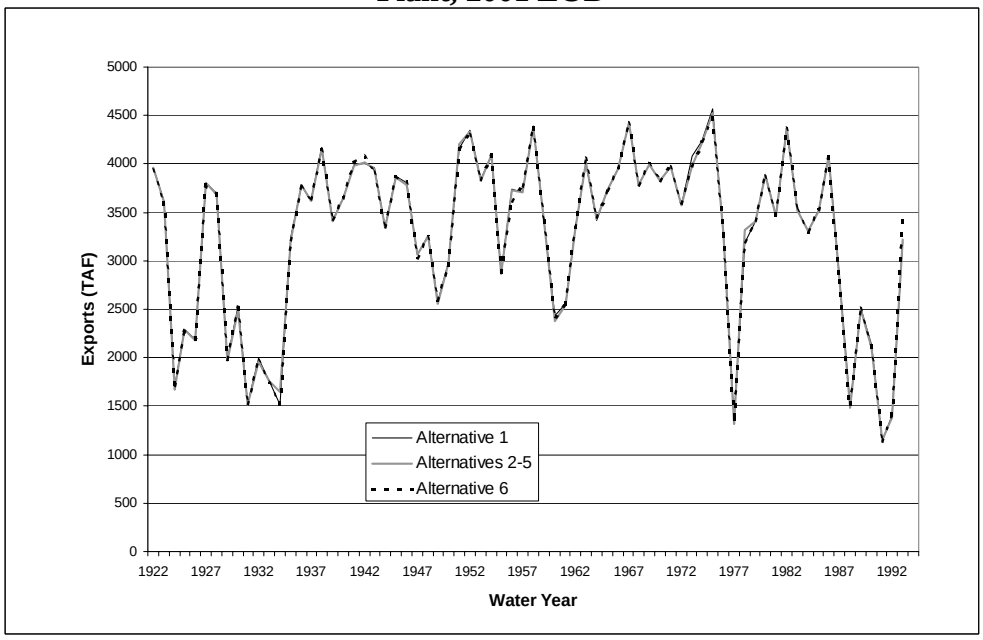


Figure 3.4.6-2 Simulated Annual Delta Exports at Banks Pumping Plant, 2001 LOD

Table 3.4.6-1 Simulated Delta Exports at Banks Pumping Plant (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	190.2	168.8	326.9	468.1	472.1	464.9	203.2	223.6	397.5	261.0	410.7	373.6	3960.6
1923	336.8	311.4	343.5	522.6	192.4	226.5	177.1	152.0	208.2	398.5	410.7	339.3	3619.2
1924	196.1	150.7	296.1	248.0	205.0	18.4	17.9	75.9	17.9	49.3	294.7	132.1	1702.1
1925	115.8	142.2	225.1	225.1	313.9	18.4	170.8	144.2	194.1	104.7	386.2	253.9	2294.5
1926	112.7	89.7	152.9	261.2	263.1	96.8	157.1	111.2	146.6	378.6	279.2	137.8	2187.0
1927	185.5	397.5	321.5	331.9	456.3	448.0	204.2	223.6	280.1	201.4	410.7	339.8	3800.6
1928	175.5	397.5	434.4	455.2	404.6	464.9	180.4	43.0	156.6	243.3	403.2	334.0	3692.7
1929	200.0	207.3	229.3	331.0	201.7	97.1	41.7	18.4	61.9	245.3	245.3	102.6	1981.6
1930	78.9	17.9	314.7	263.5	190.7	317.8	96.9	102.6	170.3	415.8	384.8	179.3	2533.3
1931	109.7	75.1	130.5	257.9	96.7	52.7	17.9	36.4	47.9	259.0	304.4	140.2	1528.3
1932	92.0	74.5	266.9	280.2	342.3	218.5	32.8	133.9	208.3	103.4	18.4	222.7	1994.0
1933	154.7	181.6	172.2	426.9	124.0	303.4	41.7	43.0	17.9	190.4	27.2	73.6	1756.6
1934	100.0	17.9	281.1	263.8	316.0	59.1	17.9	18.4	17.9	154.4	97.2	170.4	1514.0
1935	113.7	190.1	180.2	360.6	236.5	446.2	204.2	19.9	361.7	441.5	405.3	284.1	3244.1
1936	312.9	143.1	244.9	449.0	485.3	464.9	171.0	147.3	219.0	441.5	403.2	290.6	3772.6
1937	235.5	100.2	275.3	358.7	472.1	464.9	204.2	193.5	277.4	374.4	379.1	289.3	3624.5
1938	229.9	397.5	237.5	522.6	472.1	464.9	180.4	201.3	397.5	230.4	410.7	427.2	4172.1
1939	410.7	349.7	434.5	322.2	239.2	249.1	77.8	126.1	94.7	385.0	410.7	316.8	3416.6
1940	225.6	139.0	182.8	366.9	485.3	464.9	204.2	188.1	240.1	441.5	401.7	311.1	3651.2
1941	172.1	180.1	442.3	519.0	472.1	448.5	180.4	201.3	304.4	235.4	410.7	427.2	3993.6
1942	410.7	360.8	303.0	296.6	457.7	189.1	204.2	223.6	397.5	328.2	410.7	427.2	4009.3
1943	410.7	397.5	451.2	451.3	342.9	350.5	180.4	132.6	304.9	149.1	422.1	363.3	3956.5
1944	330.6	90.5	212.8	323.7	280.3	318.4	128.5	136.3	251.6	441.5	441.5	391.1	3346.8
1945	240.8	397.5	321.1	261.4	472.1	421.7	121.6	138.5	274.3	441.5	417.6	359.3	3867.5
1946	251.5	397.5	350.6	507.3	112.9	382.5	142.1	159.4	248.5	441.5	441.5	367.0	3802.3
1947	249.8	248.9	323.1	213.4	228.6	239.9	107.0	21.4	231.7	441.5	410.7	352.4	3068.4
1948	226.6	223.1	193.8	322.8	121.0	187.8	177.4	201.3	330.8	441.5	441.5	396.6	3264.0
1949	229.5	122.2	240.6	203.1	162.8	324.1	108.3	121.5	183.2	349.7	246.8	281.8	2573.5
1950	100.5	72.2	101.0	269.5	421.6	252.6	142.9	142.8	252.6	441.5	441.5	343.3	2981.9
1951	335.5	397.5	350.8	522.6	472.1	383.5	129.7	164.9	287.5	341.4	441.5	331.6	4158.6
1952	204.5	275.0	442.4	522.6	485.3	464.9	89.3	223.6	373.5	400.4	438.6	427.2	4347.5
1953	410.7	298.8	204.0	522.6	161.8	442.2	66.9	203.6	397.5	286.9	410.7	427.2	3833.1
1954	378.3	397.5	391.2	445.4	412.8	436.8	192.3	69.2	169.6	363.6	441.5	397.5	4095.7
1955	315.5	350.4	428.8	448.6	105.1	137.7	66.4	108.9	189.0	300.9	210.2	213.1	2874.7
1956	93.0	212.1	276.9	296.0	485.3	464.9	149.6	201.3	306.6	410.7	410.7	427.2	3734.4
1957	410.7	240.4	258.0	364.8	419.4	419.6	160.6	154.9	244.2	336.1	377.1	321.3	3707.0
1958	410.7	394.5	261.4	451.4	434.3	464.9	204.2	223.6	397.5	305.8	410.7	427.2	4386.3
1959	410.7	276.5	323.9	452.8	204.9	76.9	107.7	121.7	259.4	403.4	441.5	330.1	3409.3
1960	295.8	93.8	221.9	309.2	272.9	290.1	17.9	107.6	140.7	346.0	171.6	166.8	2434.2
1961	76.4	188.1	256.3	228.6	294.3	210.3	98.2	23.5	38.6	416.3	410.7	312.6	2553.9
1962	209.8	184.2	297.3	157.3	472.1	427.4	121.4	31.7	188.0	402.2	441.5	393.9	3326.7
1963	410.7	397.5	316.1	448.6	431.4	438.1	180.4	201.3	163.5	218.8	410.7	383.7	4000.9
1964	410.7	397.5	324.2	444.9	121.5	149.1	41.7	111.6	198.8	441.5	410.7	365.9	3418.1
1965	221.3	305.9	339.0	522.6	472.1	307.0	204.2	133.5	200.2	258.6	428.8	338.3	3731.6
1966	285.1	397.5	469.7	509.1	272.4	443.6	66.9	135.1	240.8	426.7	385.4	316.6	3948.9
1967	245.9	393.5	328.7	476.7	429.6	464.9	180.4	201.3	397.5	441.5	441.5	427.2	4428.7
1968	410.7	360.3	432.3	365.5	204.6	443.3	17.9	115.8	243.5	383.1	441.5	368.1	3786.7
1969	252.8	252.4	320.9	522.6	472.1	423.2	89.3	223.6	373.4	224.2	410.7	427.2	3992.5
1970	410.7	397.5	401.4	324.1	324.8	350.3	128.7	120.6	214.3	317.9	441.5	397.5	3829.3
1971	300.7	397.5	437.9	459.2	137.0	444.4	170.6	69.2	341.0	378.3	410.7	427.2	3973.8
1972	401.1	287.9	430.8	445.9	260.6	427.5	97.8	101.6	118.7	357.0	384.8	257.1	3570.8
1973	212.2	397.5	260.3	460.0	472.1	464.9	167.5	180.7	287.5	414.0	403.9	362.7	4083.2
1974	364.4	397.5	321.8	522.1	458.7	225.5	180.4	194.5	397.5	340.1	410.7	427.2	4240.5
1975	410.7	358.4	432.3	450.9	472.1	464.9	89.3	223.6	384.2	410.7	441.5	427.2	4565.8
1976	410.7	397.5	431.1	367.0	183.8	171.3	41.7	78.8	138.0	379.9	413.6	271.1	3284.4
1977	194.4	174.5	110.2	147.9	58.3	70.3	41.7	43.0	86.5	135.6	202.3	90.9	1355.7
1978	35.0	67.7	268.7	282.4	472.1	464.9	41.7	201.3	390.3	127.9	410.7	427.2	3189.8
1979	348.1	141.9	55.6	512.5	257.0	464.9	160.9	172.6	261.5	360.7	378.0	296.6	3410.3
1980	231.8	264.7	320.1	522.6	485.3	418.3	154.9	155.2	239.8	258.9	410.7	427.2	3889.6
1981	363.1	113.1	325.8	454.1	237.0	447.2	66.9	117.9	169.8	441.5	410.7	319.9	3467.2
1982	288.6	397.5	319.4	522.6	472.1	464.9	204.2	223.6	397.5	243.6	410.7	427.2	4372.0
1983	410.7	397.5	472.1	160.8	149.6	158.1	169.4	43.0	245.5	441.5	441.5	427.2	3517.0
1984	310.8	193.2	200.0	280.8	317.2	355.1	164.1	150.6	168.4	323.2	441.5	397.5	3302.5
1985	355.6	397.5	432.8	391.9	199.4	168.0	41.7	118.0	170.9	441.5	410.7	397.5	3525.5
1986	279.6	270.8	319.5	455.4	472.1	464.9	179.4	143.6	282.9	410.7	410.7	396.2	4085.9
1987	342.0	79.1	135.9	335.4	237.1	236.7	105.2	20.6	190.7	441.5	401.5	314.1	2839.8
1988	151.6	111.0	187.5	437.1	120.9	54.2	79.1	58.6	52.4	153.4	18.4	76.0	1500.3
1989	51.7	145.5	167.7	204.8	58.5	316.7	141.6	117.5	131.7	441.5	411.1	317.6	2505.9
1990	342.0	128.2	266.3	435.2	116.2	152.5	17.9	71.4	17.9	18.4	285.3	281.4	2132.6
1991	78.4	78.8	18.4	114.5	57.6	322.4	41.7	43.0	36.2	245.3	37.0	68.5	1141.8
1992	73.4	62.1	111.3	163.0	315.5	209.0	41.7	18.4	17.9	162.6	38.3	191.4	1404.6
1993	87.7	17.9	247.3	295.9	348.4	456.0	192.3	212.5	397.5	215.4	410.7	315.5	3196.9
AVG:	256.2	243.5	290.4	372.8	310.4	321.1	122.2	129.4	225.6	322.2	363.1	319.1	3275.9
MIN:	35.0	17.9	18.4	114.5	57.6	18.4	17.9	18.4	17.9	18.4	18.4	68.5	1141.8
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4565.8

Table 3.4.6-2 Simulated Delta Exports at Banks Pumping Plant (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	190.2	167.9	326.9	468.1	472.1	464.9	203.1	223.6	397.5	261.1	410.7	370.6	3956.7
1923	334.8	308.0	343.5	522.6	192.3	226.1	176.9	151.7	208.5	400.9	410.7	334.2	3610.4
1924	195.6	148.2	307.8	246.5	205.0	18.4	17.9	75.7	17.9	47.9	287.3	97.0	1665.3
1925	114.1	139.8	226.3	227.2	313.9	18.4	170.6	144.0	193.8	104.7	387.6	254.9	2295.3
1926	119.3	83.1	155.1	259.2	261.5	92.0	156.1	110.6	146.0	376.4	282.9	133.5	2175.7
1927	192.4	397.5	321.5	331.9	456.3	448.0	204.2	223.6	283.8	199.8	410.7	336.7	3806.5
1928	174.2	397.5	434.4	455.2	403.6	464.9	180.4	43.0	156.7	241.5	403.1	333.6	3688.0
1929	199.9	207.2	228.7	330.9	199.9	95.2	41.7	18.4	56.5	245.3	245.3	104.5	1973.6
1930	77.5	17.9	314.7	263.5	189.9	317.8	97.1	101.8	152.8	411.1	369.7	170.1	2483.9
1931	97.6	72.1	130.3	261.8	97.8	53.4	17.9	34.7	43.8	269.8	304.5	135.9	1519.7
1932	78.1	83.5	266.9	280.2	323.1	217.7	19.9	133.6	207.0	103.4	19.1	222.7	1955.1
1933	147.8	181.5	172.2	443.9	125.9	301.5	41.7	43.0	17.9	184.4	21.8	73.6	1755.1
1934	98.7	17.9	278.3	260.8	316.9	55.1	17.9	18.4	35.6	237.9	146.6	163.8	1647.9
1935	110.9	183.6	181.8	360.6	236.8	446.2	204.2	19.9	356.7	441.5	404.4	256.2	3202.8
1936	318.8	139.6	259.2	449.0	485.3	464.9	170.8	147.1	219.5	441.5	403.8	285.4	3784.9
1937	252.3	99.8	274.7	361.4	472.1	464.9	204.2	193.4	277.9	369.8	353.4	288.9	3612.9
1938	228.9	397.5	229.2	522.6	472.1	464.9	180.4	201.3	397.5	230.7	410.7	427.2	4163.1
1939	410.7	343.8	434.5	322.2	239.1	249.3	72.4	126.5	95.3	385.1	410.7	317.3	3407.0
1940	225.6	139.4	180.2	366.9	485.3	464.9	204.2	187.9	241.6	441.5	401.7	308.0	3647.3
1941	165.2	177.7	442.3	519.0	472.1	449.9	180.4	201.3	299.3	233.7	410.7	427.2	3978.9
1942	410.7	359.5	313.1	296.6	457.7	189.1	204.2	223.6	397.5	325.8	410.7	427.2	4015.8
1943	410.7	397.5	451.2	451.3	342.9	350.5	180.4	132.6	304.9	149.0	421.8	360.4	3953.3
1944	329.2	88.7	213.7	322.5	280.3	314.9	128.4	136.1	250.7	441.5	441.5	390.1	3337.6
1945	241.5	397.5	321.1	261.6	472.1	418.6	121.5	138.2	274.3	441.5	419.2	355.7	3862.8
1946	245.1	397.5	350.6	507.3	111.8	382.7	142.0	158.8	248.5	441.5	441.5	359.3	3786.7
1947	244.7	247.4	323.1	206.6	228.0	245.7	107.0	20.0	234.3	441.5	410.7	357.1	3066.1
1948	227.3	223.7	190.1	322.8	121.0	187.6	177.1	201.3	329.1	441.5	441.5	388.8	3251.8
1949	225.6	118.5	240.1	201.6	163.0	324.1	108.2	118.8	186.3	343.5	245.9	279.7	2555.3
1950	99.9	71.8	98.6	269.5	421.6	252.4	142.6	137.2	254.4	441.5	441.5	340.9	2971.8
1951	359.5	397.5	350.8	522.6	472.1	401.2	129.6	164.5	286.3	346.5	441.5	328.6	4200.6
1952	202.4	274.4	442.4	522.6	485.3	464.9	89.3	223.6	373.5	398.0	431.5	427.2	4335.2
1953	410.7	298.8	204.2	520.6	161.1	442.2	66.9	203.2	397.5	282.8	410.7	427.2	3826.0
1954	376.6	397.5	391.0	445.4	412.8	436.8	192.3	69.2	169.6	363.3	441.5	397.5	4093.5
1955	312.8	349.0	428.8	448.6	105.1	137.6	65.9	108.7	189.1	300.5	207.2	212.0	2865.4
1956	93.6	210.5	276.9	296.0	485.3	464.9	149.5	201.3	305.6	410.7	410.7	427.2	3732.3
1957	410.7	238.5	248.3	366.4	419.4	432.1	160.6	154.5	244.1	336.1	376.7	322.6	3710.1
1958	410.7	393.5	261.4	451.4	434.3	464.9	204.2	223.6	397.5	304.1	410.7	427.2	4383.6
1959	410.7	274.6	323.7	452.8	204.8	71.9	107.7	121.7	259.5	410.7	441.5	330.5	3410.3
1960	294.5	93.6	220.4	305.6	272.9	287.2	17.9	106.3	109.1	343.7	165.8	166.1	2383.0
1961	77.8	185.0	256.4	228.8	294.3	216.7	98.2	19.7	31.5	414.2	410.7	308.1	2541.3
1962	209.3	178.4	302.3	157.1	472.1	423.6	120.5	25.4	188.1	408.5	441.5	394.8	3321.5
1963	410.7	397.5	316.1	448.6	431.4	438.1	180.4	201.3	162.3	223.8	410.7	397.5	4018.5
1964	410.7	397.5	323.7	444.9	121.7	147.7	41.7	111.3	202.8	441.5	410.7	371.0	3425.2
1965	217.5	304.6	339.0	522.6	472.1	311.6	204.2	133.5	200.2	262.4	428.3	333.4	3729.4
1966	285.0	397.5	469.7	509.1	272.6	442.7	66.9	135.0	241.4	427.1	384.7	316.5	3948.2
1967	244.6	392.9	328.7	476.7	429.7	464.9	180.4	201.3	397.5	441.5	441.5	427.2	4426.8
1968	410.7	359.4	432.3	363.6	204.6	443.3	17.9	114.7	244.3	385.6	441.5	368.1	3786.0
1969	250.7	252.2	320.9	522.6	472.1	423.3	89.3	223.6	373.7	222.9	410.7	427.2	3989.3
1970	410.7	397.5	404.4	324.1	324.8	350.3	128.7	120.3	215.2	314.8	441.5	397.5	3829.8
1971	299.4	397.5	437.9	459.2	137.7	444.4	170.8	69.2	339.5	380.6	410.7	427.2	3974.1
1972	400.1	292.8	430.8	445.9	260.7	427.5	97.9	101.6	118.7	358.3	381.3	258.9	3574.6
1973	211.9	397.5	260.3	460.0	472.1	464.9	167.3	180.5	317.8	314.4	403.9	333.7	3984.3
1974	335.5	397.5	321.8	522.1	458.7	232.4	180.4	194.1	397.5	340.1	410.7	427.2	4218.1
1975	410.7	357.5	432.3	450.9	472.1	428.0	89.3	223.6	382.7	410.7	441.5	427.2	4526.5
1976	410.7	397.5	431.1	367.1	181.1	168.4	41.7	78.8	132.5	387.2	416.0	270.7	3282.6
1977	195.3	174.4	110.2	150.1	57.1	70.3	41.7	43.0	86.5	133.8	168.1	90.9	1321.3
1978	35.5	67.7	268.4	282.4	472.1	464.9	41.7	201.3	391.0	253.6	410.7	427.2	3316.4
1979	346.7	123.8	70.8	512.5	257.0	464.9	160.7	172.5	264.4	361.2	379.7	287.7	3402.0
1980	222.5	263.0	320.1	522.6	485.3	421.5	154.7	154.8	238.1	259.7	410.7	426.8	3879.9
1981	363.1	112.5	319.8	454.1	237.0	447.2	66.9	116.8	170.5	441.5	410.7	319.9	3460.2
1982	284.7	397.5	319.4	522.6	472.1	464.9	204.2	223.6	397.5	241.3	410.7	427.2	4365.8
1983	410.7	397.5	472.1	160.8	149.6	158.1	169.4	43.0	245.5	441.5	441.5	427.2	3517.0
1984	312.1	193.2	200.0	280.8	317.2	355.1	164.2	150.3	167.9	323.9	441.5	397.5	3303.7
1985	353.6	397.5	432.8	391.9	199.5	167.0	41.7	117.8	171.4	441.5	410.7	397.5	3522.7
1986	279.7	275.6	319.5	455.4	472.1	464.9	179.2	143.2	282.0	410.7	410.7	393.6	4086.7
1987	341.1	77.1	138.0	333.6	238.1	236.9	105.6	19.1	187.1	441.5	391.8	311.2	2821.1
1988	146.0	109.7	187.1	437.1	120.9	45.7	78.1	18.4	81.6	153.9	31.1	76.0	1485.8
1989	50.5	147.1	161.6	205.7	58.5	316.7	141.3	117.6	130.6	441.5	412.4	314.6	2498.0
1990	314.9	126.8	263.2	435.2	118.4	151.8	17.9	70.0	17.9	18.4	286.7	279.5	2100.6
1991	91.6	79.4	18.4	115.1	57.6	322.4	41.7	43.0	17.9	212.1	38.5	117.5	1155.1
1992	60.9	73.8	107.3	160.9	315.5	207.7	41.7	18.4	17.9	155.5	38.4	185.3	1383.4
1993	102.0	17.9	247.5	295.8	348.3	456.1	192.3	212.5	397.5	220.3	410.7	319.8	3220.7
AVG:	255.0	242.6	290.6	372.9	310.1	320.7	121.9	128.4	225.4	323.3	362.5	317.4	3270.7
MIN:	35.5	17.9	18.4	115.1	57.1	18.4	17.9	18.4	17.9	18.4	19.1	73.6	1155.1
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4526.5

Table 3.4.6-3 Simulated Delta Exports at Banks Pumping Plant (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	190.2	168.1	326.9	468.1	472.1	464.9	203.1	223.6	397.5	250.2	410.7	359.4	3934.8
1923	334.7	304.6	343.5	522.6	192.3	226.1	176.9	151.6	208.6	403.2	410.7	326.4	3601.2
1924	195.7	145.9	303.2	241.7	205.0	18.4	17.9	76.0	17.9	47.8	294.4	137.0	1700.9
1925	112.2	141.3	225.3	227.2	313.9	18.4	170.7	143.1	194.6	104.7	386.1	247.6	2285.0
1926	109.4	92.4	152.3	261.9	267.0	95.7	156.9	110.9	145.9	376.3	281.2	137.5	2187.4
1927	175.4	397.5	321.5	331.9	456.3	448.0	204.2	222.8	285.3	200.0	410.7	325.6	3779.4
1928	174.2	397.5	434.4	455.2	402.2	464.9	180.4	43.0	156.7	250.5	402.4	334.6	3695.9
1929	199.3	207.3	226.6	330.6	199.9	96.8	41.7	18.4	59.8	245.3	245.3	108.3	1979.4
1930	77.1	17.9	314.7	263.5	190.3	317.8	97.0	102.5	166.8	416.4	384.3	175.9	2524.2
1931	110.3	62.5	130.5	257.9	96.9	52.2	17.9	33.4	49.6	264.9	304.5	140.2	1520.6
1932	90.9	74.7	266.9	280.2	339.2	219.5	20.3	133.6	207.7	103.4	18.4	222.8	1977.6
1933	145.0	182.0	171.5	431.5	124.2	303.0	41.7	43.0	17.9	188.9	25.7	73.6	1747.9
1934	99.9	17.9	280.8	263.2	316.2	58.5	17.9	18.4	17.9	154.4	103.4	169.5	1517.9
1935	113.3	190.8	179.6	360.6	236.6	446.2	204.2	19.9	352.3	441.5	404.7	261.2	3211.0
1936	315.8	136.0	248.8	449.0	485.3	464.9	170.0	149.6	218.2	441.5	404.4	281.7	3765.3
1937	258.5	99.8	274.4	362.6	472.1	464.9	204.2	195.5	276.2	367.6	369.5	288.6	3633.8
1938	229.2	397.5	228.0	522.6	472.1	464.9	180.4	201.3	397.5	222.0	410.7	427.2	4153.5
1939	410.7	349.0	434.5	334.3	239.2	249.3	75.4	126.0	98.3	384.5	410.7	317.0	3428.9
1940	225.6	142.4	180.1	366.9	485.3	464.9	204.2	189.7	236.0	441.5	401.7	299.3	3637.7
1941	176.8	174.1	442.3	519.0	472.1	451.0	180.4	201.3	337.5	226.9	410.7	427.2	4019.4
1942	410.7	359.6	288.7	296.6	457.7	189.1	204.2	223.6	397.5	406.1	410.7	427.2	4071.8
1943	410.7	397.5	451.2	425.9	342.9	350.5	180.4	150.1	304.8	140.5	410.7	352.3	3917.4
1944	329.1	85.9	219.8	316.4	280.3	318.1	128.4	136.1	250.7	441.5	441.5	388.6	3336.3
1945	236.6	397.5	321.1	263.6	472.1	419.5	121.3	137.8	274.4	441.5	430.6	355.3	3871.0
1946	243.6	397.5	350.6	507.3	126.0	382.8	141.9	162.2	248.2	441.5	441.5	370.4	3813.6
1947	237.7	249.0	323.1	207.8	228.0	242.0	107.0	19.0	217.9	441.5	410.7	349.1	3032.9
1948	216.6	221.3	188.7	322.8	121.0	187.9	177.6	201.3	330.5	441.5	441.5	393.2	3243.9
1949	227.0	140.4	240.6	205.6	163.2	324.1	108.2	118.7	192.2	343.0	249.2	279.7	2592.0
1950	89.8	76.7	98.6	269.5	421.6	251.5	142.0	137.4	254.4	441.5	441.1	325.6	2949.8
1951	335.2	397.5	350.8	522.6	472.1	381.2	129.6	166.8	282.5	349.1	441.5	325.3	4154.2
1952	202.4	271.5	442.4	522.6	485.3	464.9	89.3	223.6	373.5	390.6	409.9	427.2	4303.1
1953	410.7	298.8	202.3	522.6	161.3	442.2	66.9	203.1	397.5	282.1	410.7	427.2	3825.6
1954	376.1	397.5	391.0	445.4	412.8	436.8	192.3	69.2	169.6	364.5	441.5	397.5	4094.2
1955	312.8	355.5	428.8	448.6	107.0	138.3	66.9	108.7	189.1	300.5	208.0	212.0	2876.3
1956	92.7	212.2	276.9	296.0	485.3	464.9	149.5	201.3	323.0	280.1	410.7	427.2	3619.8
1957	410.7	239.6	278.1	371.9	419.4	452.9	160.6	154.4	227.6	330.9	363.0	355.2	3764.3
1958	410.7	393.8	261.4	451.4	434.3	464.9	204.2	223.6	397.5	297.4	410.7	427.2	4377.2
1959	410.7	274.6	323.7	452.8	204.7	76.5	107.7	121.8	258.7	409.7	441.5	330.2	3412.7
1960	296.2	93.8	222.1	309.9	272.9	290.5	17.9	107.3	132.1	346.1	170.5	166.6	2425.7
1961	76.5	187.0	255.6	228.8	294.3	211.0	98.2	20.1	35.8	415.4	410.7	308.7	2542.2
1962	208.5	184.8	303.5	159.7	472.1	429.0	121.2	30.2	188.0	401.8	441.5	395.2	3335.5
1963	410.7	397.5	316.1	448.6	431.4	438.1	180.4	201.3	163.9	269.5	406.7	397.5	4061.8
1964	410.7	397.5	324.0	444.9	118.4	148.1	41.7	111.3	205.7	441.5	410.7	381.3	3435.9
1965	219.2	305.1	339.0	522.6	472.1	312.3	204.2	133.5	207.2	251.9	428.0	325.5	3720.5
1966	285.0	397.5	469.7	509.1	272.5	442.9	66.9	135.0	241.4	427.2	384.7	316.4	3948.4
1967	245.4	392.8	328.7	476.7	429.7	464.9	180.4	201.3	397.5	441.5	441.5	427.2	4427.7
1968	410.7	359.5	432.3	364.0	204.6	443.3	17.9	115.6	243.7	383.8	441.5	368.1	3784.9
1969	252.3	252.5	320.9	522.6	472.1	423.3	89.3	223.6	373.4	222.9	410.7	427.2	3990.8
1970	410.7	397.5	403.7	324.1	324.8	350.3	128.7	120.2	215.5	314.3	441.5	397.5	3828.7
1971	299.3	397.5	437.9	459.2	137.7	444.4	170.8	69.2	339.2	380.9	410.7	427.2	3974.0
1972	400.4	293.2	430.8	445.9	260.7	427.5	97.9	101.6	118.7	358.6	388.8	259.3	3583.4
1973	209.4	397.5	260.3	460.0	472.1	464.9	167.4	182.4	316.4	313.7	404.0	321.7	3969.6
1974	322.7	397.5	321.8	522.1	458.7	236.8	180.4	195.5	397.5	352.2	410.7	427.2	4223.2
1975	410.7	357.5	432.3	450.9	472.1	376.5	89.3	223.6	392.6	410.7	441.5	427.2	4484.9
1976	410.7	397.5	431.1	367.1	175.9	169.9	41.7	78.8	128.4	395.0	408.5	271.3	3275.9
1977	194.6	178.2	110.2	150.2	57.0	69.1	41.7	43.0	86.5	129.2	208.3	90.9	1358.9
1978	35.1	67.9	268.1	282.4	472.1	464.9	41.7	201.3	390.4	125.2	410.7	427.2	3187.1
1979	346.7	134.6	57.5	512.5	257.0	464.9	161.1	173.4	263.9	360.8	378.9	294.8	3406.1
1980	230.5	263.2	320.1	522.6	485.3	419.5	153.8	153.3	234.1	261.0	410.7	420.7	3874.9
1981	363.1	112.8	318.5	454.1	237.0	447.2	66.9	117.6	170.0	441.5	410.7	319.9	3459.6
1982	288.3	397.5	319.4	522.6	472.1	464.9	204.2	223.6	397.5	235.9	410.7	427.2	4364.0
1983	410.7	397.5	472.1	160.8	149.6	158.1	169.4	43.0	245.5	441.5	441.5	427.2	3517.0
1984	312.0	193.2	200.0	280.8	317.2	355.1	164.2	150.2	168.2	323.2	441.5	397.5	3303.1
1985	353.6	397.5	432.8	391.9	199.5	167.1	41.7	117.7	171.5	441.5	410.7	397.5	3522.9
1986	279.7	276.0	319.5	455.4	472.1	464.9	179.2	145.6	285.3	410.7	410.7	384.3	4083.5
1987	341.2	72.2	144.3	327.8	238.1	237.1	105.5	21.2	183.9	441.5	378.5	307.6	2799.0
1988	148.2	110.6	190.3	437.1	120.9	36.7	78.9	35.4	53.7	185.4	39.4	78.7	1515.3
1989	51.9	145.9	167.9	205.0	58.6	316.7	141.5	117.6	131.5	441.5	411.4	320.3	2509.6
1990	330.9	132.1	264.8	435.2	118.6	153.1	17.9	71.1	17.9	18.4	282.3	281.5	2123.7
1991	74.2	79.0	18.4	114.7	57.6	322.4	41.7	43.0	17.9	245.3	30.4	85.9	1130.4
1992	72.6	63.1	111.5	162.3	315.5	209.0	41.7	18.4	17.9	161.5	37.5	190.5	1401.6
1993	88.2	17.9	247.4	295.9	348.4	456.0	192.3	212.5	387.2	441.5	407.6	326.6	3421.3
AVG:	254.3	243.2	290.5	372.6	310.4	320.3	122.0	129.2	225.7	323.7	362.2	317.4	3271.5
MIN:	35.1	17.9	18.4	114.7	57.0	18.4	17.9	18.4	17.9	18.4	18.4	73.6	1130.4
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4484.9

Table 3.4.6-4 Simulated Delta Exports at Banks Pumping Plant (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.9	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	-3.0	-4.0
1923	-2.0	-3.4	0.0	0.0	-0.1	-0.3	-0.2	-0.4	0.3	2.4	0.0	-5.2	-8.8
1924	-0.5	-2.5	11.8	-1.5	0.0	0.0	0.0	-0.2	0.0	-1.4	-7.4	-35.1	-36.8
1925	-1.7	-2.5	1.2	2.1	0.0	0.0	-0.2	-0.2	-0.4	0.0	1.4	0.9	0.8
1926	6.6	-6.6	2.2	-2.0	-1.6	-4.8	-0.9	-0.6	-0.6	-2.3	3.7	-4.3	-11.3
1927	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	-1.6	0.0	-3.1	6.0
1928	-1.3	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	-1.8	-0.1	-0.5	-4.6
1929	-0.1	-0.1	-0.6	-0.1	-1.8	-1.9	0.0	0.0	-5.4	0.0	0.0	1.9	-8.0
1930	-1.5	0.0	0.0	0.0	-0.8	0.0	0.2	-0.9	-17.5	-4.7	-15.1	-9.3	-49.4
1931	-12.1	-3.0	-0.2	3.9	1.0	0.8	0.0	-1.6	-4.2	10.8	0.2	-4.3	-8.6
1932	-13.9	9.0	0.0	0.0	-19.2	-0.8	-12.9	-0.3	-1.4	0.0	0.7	-0.1	-38.8
1933	-6.9	-0.1	0.0	17.0	1.8	-1.9	0.0	0.0	0.0	-6.1	-5.4	0.0	-1.5
1934	-1.3	0.0	-2.8	-3.1	0.9	-4.0	0.0	0.0	17.7	83.6	49.4	-6.5	133.9
1935	-2.7	-6.6	1.6	0.0	0.3	0.0	0.0	0.0	-5.0	0.0	-0.9	-27.9	-41.3
1936	5.9	-3.5	14.3	0.0	0.0	0.0	-0.2	-0.1	0.4	0.0	0.7	-5.1	12.3
1937	16.8	-0.3	-0.5	2.7	0.0	0.0	0.0	-0.1	0.4	-4.5	-25.6	-0.4	-11.6
1938	-0.9	0.0	-8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	-9.0
1939	0.0	-6.0	0.0	0.0	0.0	0.2	-5.4	0.3	0.6	0.1	0.0	0.5	-9.6
1940	0.0	0.5	-2.6	0.0	0.0	0.0	0.0	-0.2	1.6	0.0	0.0	-3.0	-3.9
1941	-6.9	-2.4	0.0	0.0	0.0	1.5	0.0	0.0	-5.1	-1.8	0.0	0.0	-14.7
1942	0.0	-1.3	10.1	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	0.0	0.0	6.5
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.2	-3.0	-3.2
1944	-1.5	-1.8	1.0	-1.1	0.0	-3.5	-0.1	-0.2	-0.9	0.0	0.0	-1.0	-9.2
1945	0.7	0.0	0.0	0.1	0.0	-3.1	-0.1	-0.3	0.0	0.0	1.5	-3.6	-4.7
1946	-6.4	0.0	0.0	0.0	-1.1	0.2	-0.1	-0.6	0.1	0.0	0.0	-7.7	-15.6
1947	-5.1	-1.4	0.0	-6.8	-0.6	5.8	0.0	-1.5	2.6	0.0	0.0	4.7	-2.3
1948	0.8	0.6	-3.7	0.0	0.0	-0.1	-0.3	0.0	-1.6	0.0	0.0	-7.8	-12.2
1949	-3.8	-3.6	-0.5	-1.5	0.2	0.0	-0.1	-2.7	3.1	-6.2	-0.9	-2.1	-18.1
1950	-0.6	-0.4	-2.3	0.0	0.0	-0.2	-0.2	-5.6	1.8	0.0	0.0	-2.4	-10.0
1951	24.0	0.0	0.0	0.0	0.0	17.7	-0.1	-0.4	-1.2	5.1	0.0	-3.0	42.1
1952	-2.1	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4	-7.2	0.0	-12.3
1953	0.0	0.0	0.1	-2.1	-0.6	0.0	0.0	-0.4	0.0	-4.1	0.0	0.0	-7.1
1954	-1.7	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	-2.2
1955	-2.7	-1.4	0.0	0.0	0.0	-0.1	-0.5	-0.3	0.1	-0.4	-3.0	-1.0	-9.3
1956	0.6	-1.5	0.0	0.0	0.0	0.0	-0.1	0.0	-1.1	0.0	0.0	0.0	-2.2
1957	0.0	-1.9	-9.8	1.6	0.0	12.6	0.0	-0.4	0.0	0.0	-0.4	1.3	3.1
1958	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	0.0	0.0	-2.7
1959	0.0	-1.8	-0.2	0.0	-0.1	-4.9	0.0	0.1	0.2	7.3	0.0	0.5	1.0
1960	-1.3	-0.2	-1.5	-3.5	0.0	-2.9	0.0	-1.3	-31.6	-2.3	-5.9	-0.7	-51.2
1961	1.4	-3.1	0.1	0.2	0.0	6.3	0.0	-3.8	-7.1	-2.1	0.0	-4.5	-12.6
1962	-0.5	-5.9	5.0	-0.1	0.0	-3.8	-0.9	-6.3	0.1	6.3	0.0	0.9	-5.2
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	5.0	0.0	13.8	17.6
1964	0.0	0.0	-0.5	0.0	0.2	-1.4	0.0	-0.3	4.0	0.0	0.0	5.1	7.1
1965	-3.8	-1.3	0.0	0.0	0.0	4.6	0.0	0.0	0.0	3.8	-0.5	-5.0	-2.2
1966	-0.1	0.0	0.0	0.0	0.2	-0.9	0.0	-0.1	0.6	0.4	-0.7	-0.1	-0.7
1967	-1.3	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9
1968	0.0	-1.0	0.0	-1.9	0.0	0.0	0.0	-1.1	0.9	2.5	0.0	0.0	-0.6
1969	-2.1	-0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.3	-1.3	0.0	0.0	-3.3
1970	0.0	0.0	3.0	0.0	0.0	0.0	0.0	-0.3	0.9	-3.1	0.0	0.0	0.5
1971	-1.3	0.0	0.0	0.0	0.6	0.0	0.3	0.0	-1.5	2.3	0.0	0.0	0.3
1972	-1.0	4.9	0.0	0.0	0.0	0.0	0.1	0.0	0.1	1.3	-3.4	1.8	3.8
1973	-0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	30.3	-99.5	0.0	-29.0	-98.9
1974	-29.0	0.0	0.0	0.0	0.0	6.9	0.0	-0.3	0.0	0.0	0.0	0.0	-22.4
1975	0.0	-1.0	0.0	0.0	0.0	-36.9	0.0	0.0	-1.5	0.0	0.0	0.0	-39.4
1976	0.0	0.0	0.0	0.1	-2.7	-2.9	0.0	0.0	-5.5	7.2	2.4	-0.4	-1.8
1977	0.9	-0.1	0.0	2.1	-1.2	0.0	0.0	0.0	0.0	-1.9	-34.2	0.0	-34.4
1978	0.4	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.7	125.7	0.0	0.0	126.6
1979	-1.3	-18.1	15.3	0.0	0.0	0.0	-0.3	-0.1	2.9	0.5	1.7	-8.9	-8.3
1980	-9.3	-1.7	0.0	0.0	0.0	3.2	-0.2	-0.4	-1.7	0.7	0.0	-0.4	-9.7
1981	0.0	-0.6	-6.0	0.0	0.0	0.0	0.0	-1.1	0.7	0.0	0.0	0.0	-7.0
1982	-3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.3	0.0	0.0	-6.2
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	1.2	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	-0.5	0.7	0.0	0.0	1.1
1985	-2.0	0.0	0.0	0.0	0.0	-1.1	0.0	-0.2	0.4	0.0	0.0	0.0	-2.8
1986	0.1	4.8	0.0	0.0	0.0	0.0	-0.1	-0.4	-0.9	0.0	0.0	-2.6	0.9
1987	-0.9	-2.1	2.0	-1.8	1.0	0.2	0.3	-1.4	-3.6	0.0	-9.7	-2.9	-18.8
1988	-5.6	-1.3	-0.3	0.0	0.0	-8.5	-1.0	-40.1	29.2	0.5	12.6	0.0	-14.4
1989	-1.2	1.6	-6.1	0.9	0.0	0.0	-0.3	0.1	-1.1	0.0	1.2	-3.0	-7.9
1990	-27.1	-1.4	-3.2	0.0	2.2	-0.6	0.0	-1.3	0.0	0.0	1.3	-1.9	-32.0
1991	13.2	0.7	0.0	0.6	0.0	0.0	0.0	0.0	-18.3	-33.2	1.4	49.0	13.3
1992	-12.5	11.8	-4.0	-2.1	0.0	-1.3	0.0	0.0	0.0	-7.1	0.2	-6.1	-21.2
1993	14.4	0.0	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	4.8	0.1	4.3	23.8
AVG:	-1.2	-0.8	0.2	0.1	-0.3	-0.4	-0.3	-1.1	-0.2	1.1	-0.6	-1.7	-5.2
MIN:	-29.0	-18.1	-9.8	-6.8	-19.2	-36.9	-12.9	-40.1	-31.6	-99.5	-34.2	-35.1	-98.9
MAX:	24.0	11.8	15.3	17.0	2.2	17.7	0.3	0.3	30.3	125.7	49.4	49.0	133.9

Table 3.4.6-5 Simulated Delta Exports at Banks Pumping Plant (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.7	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-10.8	0.0	-14.3	-25.8
1923	-2.1	-6.8	0.0	0.0	-0.1	-0.3	-0.2	-0.4	0.3	4.7	0.0	-13.0	-18.0
1924	-0.4	-4.8	7.2	-6.3	0.0	0.0	0.0	0.1	0.0	-1.5	-0.3	4.9	-1.2
1925	-3.6	-0.9	0.1	2.1	0.0	0.0	-0.1	-1.1	0.4	0.0	-0.1	-6.4	-9.5
1926	-3.3	2.7	-0.6	0.7	3.9	-1.1	-0.2	-0.3	-0.8	-2.3	2.0	-0.3	0.5
1927	-10.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	5.2	-1.3	0.0	-14.1	-21.1
1928	-1.3	0.0	0.0	0.0	-2.4	0.0	0.0	0.0	0.0	7.2	-0.9	0.6	3.2
1929	-0.8	0.0	-2.6	-0.3	-1.8	-0.3	0.0	0.0	-2.1	0.0	0.0	5.7	-2.2
1930	-1.8	0.0	0.0	0.0	-0.4	0.0	0.0	-0.1	-3.5	0.6	-0.4	-3.4	-9.1
1931	0.6	-12.6	0.0	0.0	0.1	-0.5	0.0	-3.0	1.7	5.9	0.1	-0.1	-7.7
1932	-1.1	0.2	0.0	0.0	-3.1	1.0	-12.4	-0.3	-0.6	0.0	0.0	0.0	-16.4
1933	-9.7	0.4	-0.7	4.6	0.2	-0.4	0.0	0.0	0.0	-1.5	-1.5	0.0	-8.7
1934	-0.2	0.0	-0.2	-0.6	0.2	-0.6	0.0	0.0	0.0	0.0	6.2	-0.8	3.9
1935	-0.4	0.7	-0.6	0.0	0.1	0.0	0.0	0.0	-9.4	0.0	-0.6	-22.9	-33.2
1936	2.9	-7.1	4.0	0.0	0.0	0.0	-1.0	2.4	-0.8	0.0	1.2	-8.8	-7.3
1937	23.0	-0.4	-0.9	3.9	0.0	0.0	0.0	2.0	-1.3	-6.8	-9.6	-0.8	9.2
1938	-0.7	0.0	-9.5	0.0	0.0	0.0	0.0	0.0	0.0	-8.5	0.0	0.0	-18.6
1939	0.0	-0.8	0.0	12.1	0.0	0.2	-2.4	-0.1	3.6	-0.5	0.0	0.2	12.3
1940	0.0	3.5	-2.7	0.0	0.0	0.0	0.0	1.6	-4.1	0.0	0.0	-11.7	-13.5
1941	4.7	-6.0	0.0	0.0	0.0	2.5	0.0	0.0	33.2	-8.6	0.0	0.0	25.7
1942	0.0	-1.2	-14.3	0.0	0.0	0.0	0.0	0.0	0.0	77.9	0.0	0.0	62.5
1943	0.0	0.0	0.0	-25.4	0.0	0.0	0.0	17.5	-0.1	-8.6	-11.3	-11.1	-39.0
1944	-1.5	-4.7	7.1	-7.2	0.0	-0.3	-0.1	-0.2	-0.9	0.0	0.0	-2.5	-10.5
1945	-4.2	0.0	0.0	2.1	0.0	-2.2	-0.3	-0.7	0.1	0.0	12.9	-4.0	3.6
1946	-7.9	0.0	0.0	0.0	13.1	0.3	-0.2	2.8	-0.3	0.0	0.0	3.4	11.2
1947	-12.1	0.2	0.0	-5.6	-0.5	2.1	0.0	-2.4	-13.8	0.0	0.0	-3.3	-35.4
1948	-9.9	-1.8	-5.1	0.0	0.0	0.1	0.2	0.0	-0.3	0.0	0.0	-3.4	-20.2
1949	-2.4	18.3	0.0	2.5	0.4	0.0	-0.1	-2.8	9.0	-6.7	2.4	-2.1	18.5
1950	-10.7	4.5	-2.3	0.0	0.0	-1.1	-0.9	-5.4	1.8	0.0	-0.3	-17.7	-32.1
1951	-0.3	0.0	0.0	0.0	0.0	-2.3	-0.1	2.0	-5.0	7.7	0.0	-6.4	-4.4
1952	-2.1	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.8	-28.8	0.0	-44.3
1953	0.0	0.0	-1.8	0.0	-0.4	0.0	0.0	-0.5	0.0	-4.8	0.0	0.0	-7.5
1954	-2.2	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	-1.5
1955	-2.7	5.1	0.0	0.0	1.9	0.5	0.5	-0.2	0.1	-0.4	-2.1	-1.0	1.5
1956	-0.3	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	16.4	-130.6	0.0	0.0	-114.6
1957	0.0	-0.8	20.0	7.1	0.0	33.3	0.0	-0.5	-16.6	-5.2	-14.1	33.9	57.2
1958	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.4	0.0	0.0	-9.1
1959	0.0	-1.8	-0.2	0.0	-0.2	-0.3	0.0	0.1	-0.6	6.3	0.0	0.1	3.4
1960	0.4	0.0	0.2	0.8	0.0	0.4	0.0	-0.3	-8.6	0.1	-1.2	-0.2	-8.5
1961	0.1	-1.0	-0.7	0.2	0.0	0.7	0.0	-3.4	-2.7	-0.9	0.0	-3.8	-11.6
1962	-1.2	0.6	6.3	2.5	0.0	1.5	-0.1	-1.5	0.0	-0.4	0.0	1.3	8.9
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	50.7	-4.0	13.8	60.9
1964	0.0	0.0	-0.2	0.0	-3.1	-1.0	0.0	-0.3	6.9	0.0	0.0	15.5	17.9
1965	-2.1	-0.8	0.0	0.0	0.0	5.3	0.0	0.0	6.9	-6.8	-0.7	-12.8	-11.1
1966	-0.1	0.0	0.0	0.0	0.1	-0.7	0.0	-0.1	0.5	0.4	-0.6	-0.2	-0.6
1967	-0.4	-0.7	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0
1968	0.0	-0.9	0.0	-1.5	0.0	0.0	0.0	-0.2	0.2	0.7	0.0	0.0	-1.8
1969	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.0	0.0	-1.7
1970	0.0	0.0	2.3	0.0	0.0	0.0	0.0	-0.4	1.1	-3.6	0.0	0.0	-0.5
1971	-1.5	0.0	0.0	0.0	0.7	0.0	0.3	0.0	-1.8	2.6	0.0	0.0	0.2
1972	-0.7	5.3	0.0	0.0	0.0	0.0	0.1	0.0	0.1	1.6	4.0	2.2	12.6
1973	-2.8	0.0	0.0	0.0	0.0	0.0	-0.1	1.6	28.9	-100.3	0.1	-41.0	-113.6
1974	-41.8	0.0	0.0	0.0	0.0	11.3	0.0	1.1	0.0	12.1	0.0	0.0	-17.3
1975	0.0	-1.0	0.0	0.0	0.0	-88.3	0.0	0.0	8.4	0.0	0.0	0.0	-81.0
1976	0.0	0.0	0.0	0.1	-7.9	-1.4	0.0	0.0	-9.6	15.1	-5.1	0.2	-8.5
1977	0.2	3.8	0.0	2.3	-1.3	-1.2	0.0	0.0	0.0	-6.5	5.9	0.0	3.2
1978	0.1	0.3	-0.6	0.0	0.0	0.0	0.0	0.0	0.1	-2.6	0.0	0.0	-2.8
1979	-1.4	-7.3	2.0	0.0	0.0	0.0	0.2	0.8	2.4	0.1	0.9	-1.8	-4.2
1980	-1.3	-1.4	0.0	0.0	0.0	1.2	-1.1	-1.9	-5.7	2.0	0.0	-6.5	-14.7
1981	0.0	-0.3	-7.3	0.0	0.0	0.0	0.0	-0.2	0.2	0.0	0.0	0.0	-7.7
1982	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.7	0.0	0.0	-8.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	1.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.5	-0.2	0.0	0.0	0.0	0.6
1985	-2.0	0.0	0.0	0.0	0.0	-0.9	0.0	-0.3	0.5	0.0	0.0	0.0	-2.6
1986	0.1	5.2	0.0	0.0	0.0	0.0	-0.1	2.0	2.4	0.0	0.0	-11.9	-2.3
1987	-0.8	-7.0	8.4	-7.6	1.0	0.4	0.3	0.7	-6.8	0.0	-23.0	-6.5	-40.9
1988	-3.4	-0.4	2.8	0.0	0.0	-17.5	-0.2	-23.2	1.3	31.9	21.0	2.7	15.0
1989	0.2	0.4	0.2	0.2	0.1	0.0	-0.2	0.0	-0.2	0.0	0.3	2.7	3.7
1990	-11.0	3.9	-1.5	0.0	2.4	0.6	0.0	-0.2	0.0	0.0	-3.1	0.1	-8.9
1991	-4.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	-18.3	0.0	-6.7	17.4	-11.4
1992	-0.7	1.0	0.2	-0.8	0.0	-0.1	0.0	0.0	0.0	-1.1	-0.8	-0.9	-3.0
1993	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-10.3	226.1	-3.0	11.0	224.4
AVG:	-1.9	-0.3	0.1	-0.2	0.0	-0.8	-0.3	-0.2	0.1	1.5	-0.8	-1.6	-4.4
MIN:	-41.8	-12.6	-14.3	-25.4	-7.9	-88.3	-12.4	-23.2	-18.3	-130.6	-28.8	-41.0	-114.6
MAX:	23.0	18.3	20.0	12.1	13.1	33.3	0.5	17.5	33.2	226.1	21.0	33.9	224.4

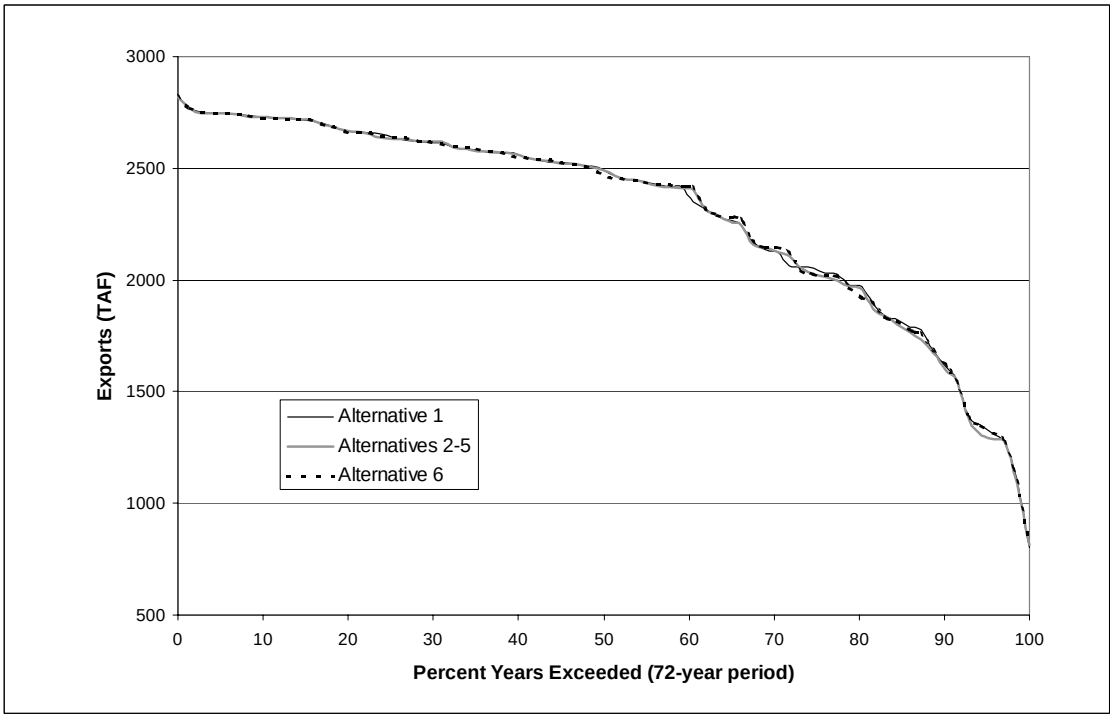


Figure 3.4.6-3 Exceedence for Simulated Annual Delta Exports at Tracy Pumping Plant, 2001 LOD

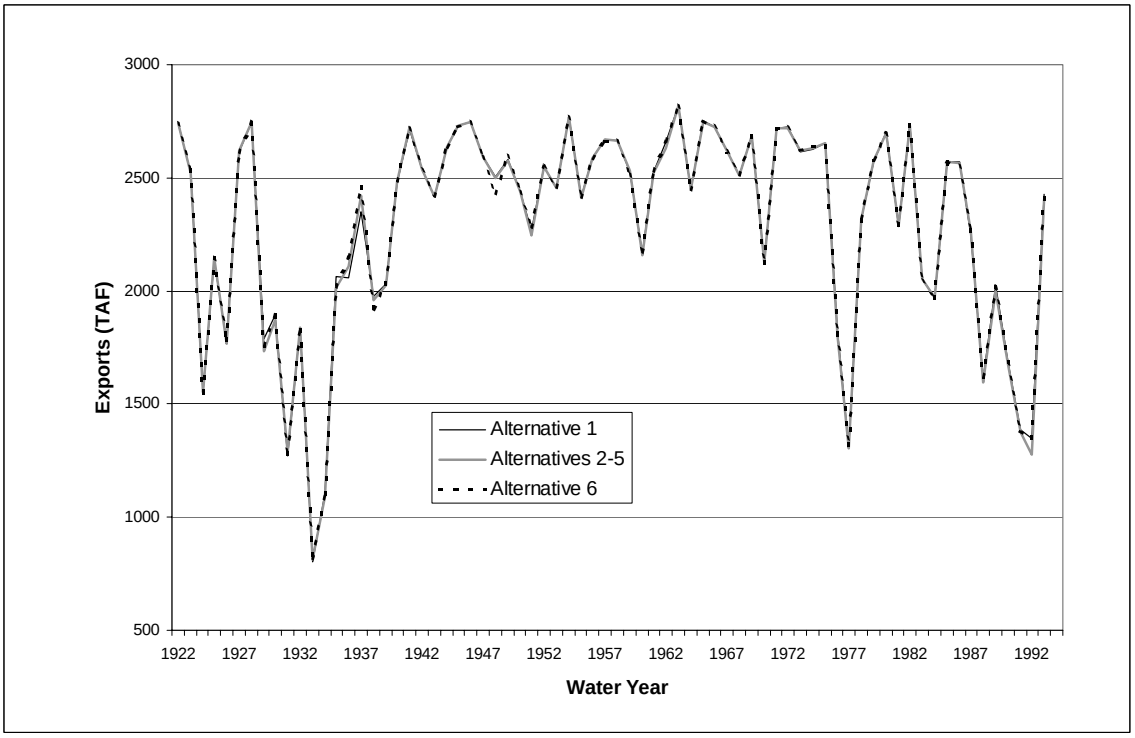


Figure 3.4.6-4 Simulated Annual Delta Exports at Tracy Pumping Plant, 2001 LOD

Table 3.4.6-6 Simulated Delta Exports at Tracy Pumping Plant (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	230.0	259.9	260.2	236.3	238.4	147.0	92.2	178.5	282.4	279.6	266.4	2740.9
1923	268.0	253.2	259.7	154.4	144.7	162.0	151.5	117.5	178.5	282.8	279.9	266.6	2518.7
1924	257.7	176.1	179.1	260.0	205.0	49.2	47.6	75.9	47.6	36.9	80.6	134.4	1550.2
1925	148.6	87.1	225.1	225.1	234.3	49.2	163.4	128.7	158.8	178.5	275.6	261.9	2136.2
1926	226.5	194.2	152.9	184.5	235.2	217.2	151.5	49.2	69.6	58.5	49.2	191.2	1779.6
1927	161.1	251.1	259.0	259.2	199.0	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2615.7
1928	262.5	253.4	259.8	260.1	244.4	262.8	151.5	49.2	178.5	281.0	278.5	265.9	2747.6
1929	239.1	225.3	229.3	259.9	201.7	78.9	47.6	49.2	74.7	95.9	111.1	176.6	1789.2
1930	188.7	93.1	258.9	184.1	190.7	260.7	96.9	49.2	101.5	125.8	128.4	213.0	1890.8
1931	216.3	138.7	69.3	257.9	117.3	49.2	47.6	49.2	47.6	49.2	97.2	132.7	1272.2
1932	111.2	86.0	183.8	183.9	242.6	183.2	110.7	69.2	86.0	97.1	235.7	251.0	1840.5
1933	209.4	60.4	34.2	24.8	35.4	36.9	47.6	49.2	47.6	49.2	36.9	173.3	804.9
1934	186.2	69.1	258.8	172.7	37.5	56.5	47.6	49.2	47.6	36.9	36.9	105.4	1104.5
1935	94.3	169.5	180.2	259.1	117.0	198.1	130.9	78.2	171.0	130.5	274.9	260.4	2064.2
1936	198.8	145.8	198.7	259.4	70.3	146.9	146.4	49.2	178.5	126.9	276.3	263.4	2060.8
1937	254.9	119.5	259.4	259.6	215.5	117.0	88.6	134.1	178.5	187.2	275.2	261.1	2350.6
1938	263.7	251.9	79.2	58.5	60.5	85.4	121.8	49.2	178.5	281.8	279.1	266.2	1975.7
1939	267.5	188.1	94.4	114.1	139.3	142.9	111.4	126.1	133.6	261.0	224.4	225.4	2028.3
1940	143.9	134.4	122.7	259.7	243.9	261.3	175.3	139.8	178.5	278.5	276.6	264.0	2478.7
1941	265.1	217.7	259.4	259.6	235.4	200.3	151.5	117.5	178.5	282.8	279.9	266.6	2714.4
1942	268.3	253.3	184.7	156.4	236.0	162.7	175.3	92.2	178.5	282.1	279.3	266.3	2535.2
1943	267.8	253.1	259.7	248.9	142.1	85.8	151.5	49.2	133.4	281.7	279.0	266.1	2418.3
1944	267.5	228.4	259.7	259.9	226.6	246.1	89.3	92.2	143.4	280.7	278.2	265.7	2637.6
1945	213.3	252.8	259.6	259.8	235.7	263.1	121.6	117.5	178.5	282.0	279.2	266.3	2729.4
1946	267.7	253.1	259.7	259.9	235.8	185.2	142.1	139.8	178.5	281.4	278.8	266.0	2748.2
1947	239.7	253.0	259.6	259.9	228.6	261.5	107.0	49.2	113.7	279.6	277.4	265.3	2594.4
1948	182.4	161.9	193.8	259.7	243.8	187.8	151.5	117.5	178.5	281.0	278.4	265.8	2502.1
1949	266.9	252.8	240.6	203.1	162.8	260.9	108.3	117.5	178.5	280.2	243.9	265.6	2581.1
1950	224.5	227.5	132.9	184.8	235.6	252.6	142.9	49.2	178.5	276.1	274.8	260.0	2439.4
1951	263.2	251.7	259.2	109.1	90.3	162.6	129.7	49.2	127.6	280.9	278.4	265.8	2267.8
1952	266.9	216.0	184.6	184.8	244.0	262.5	89.3	92.2	178.5	282.4	279.6	266.4	2547.3
1953	268.0	253.2	204.0	260.0	161.8	105.0	66.9	128.7	178.5	282.8	279.9	266.6	2455.5
1954	268.3	253.3	259.7	260.0	236.0	262.7	163.4	69.2	169.6	282.3	279.4	266.4	2770.4
1955	267.9	253.2	259.7	260.0	187.0	137.7	102.0	108.9	178.5	208.4	216.8	237.2	2417.4
1956	185.0	252.2	184.4	184.6	243.6	263.0	149.6	117.5	178.5	282.8	280.2	266.7	2588.3
1957	268.6	253.4	259.8	260.0	167.4	163.9	160.6	128.7	178.5	282.8	280.1	266.7	2670.6
1958	268.6	253.4	184.8	185.0	236.0	262.6	175.3	92.2	178.5	282.4	279.6	266.4	2664.8
1959	268.0	253.2	259.7	220.3	144.7	161.0	107.7	121.7	178.5	282.4	279.5	252.4	2529.1
1960	195.3	247.3	158.5	185.0	226.7	242.9	47.6	49.2	101.0	271.6	250.8	195.3	2171.1
1961	211.0	231.5	256.3	228.6	234.8	228.6	98.2	94.7	117.6	281.3	278.7	266.0	2527.0
1962	198.8	252.9	259.6	203.4	235.7	262.9	121.4	128.7	178.5	281.4	278.7	256.1	2658.2
1963	267.2	252.9	259.6	259.9	235.8	263.2	151.5	117.5	178.5	282.8	280.2	266.8	2816.0
1964	268.7	253.4	259.8	260.1	166.1	149.1	47.6	111.6	140.0	277.6	275.9	240.2	2450.1
1965	163.7	249.3	259.3	259.6	235.2	262.9	175.3	139.8	178.5	282.8	280.5	266.9	2754.1
1966	269.0	253.5	259.8	260.1	236.1	263.4	66.9	128.7	178.5	281.9	279.1	249.6	2726.6
1967	219.9	253.1	259.7	184.9	235.8	262.6	151.5	49.2	178.5	281.8	279.1	266.2	2622.3
1968	267.5	253.0	259.7	238.9	139.5	162.0	66.9	115.8	178.5	282.8	279.8	266.5	2511.0
1969	223.3	253.3	259.7	260.0	235.9	263.0	89.3	92.2	178.5	282.4	279.6	266.4	2683.7
1970	268.0	140.8	97.0	100.4	105.5	161.1	128.7	117.5	178.5	282.6	279.7	266.5	2126.3
1971	208.9	253.2	259.7	260.0	235.9	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2720.6
1972	268.1	253.2	259.7	260.0	244.2	262.8	97.8	101.6	178.5	280.4	278.0	237.7	2722.1
1973	246.1	252.7	184.5	184.8	235.6	262.9	167.5	92.2	162.5	281.9	279.2	266.2	2616.2
1974	267.6	253.1	259.7	184.9	235.8	225.5	151.5	49.2	171.0	281.4	278.8	266.0	2624.6
1975	267.2	253.0	259.6	184.9	235.8	263.7	89.3	92.2	178.5	282.1	279.3	266.3	2651.9
1976	267.8	253.1	259.7	260.0	183.8	123.2	47.6	78.8	67.5	49.2	68.8	162.9	1822.3
1977	159.8	92.9	49.2	147.9	44.4	49.2	47.6	49.2	89.5	231.7	182.1	167.3	1310.7
1978	188.3	89.6	258.9	184.0	234.4	263.3	47.6	49.2	173.7	281.8	279.1	266.2	2316.0
1979	267.5	253.0	228.6	209.1	139.3	162.1	160.9	139.8	178.5	282.8	280.3	266.8	2569.0
1980	268.7	231.1	259.8	260.1	244.4	259.8	122.0	49.2	178.5	281.8	279.1	266.2	2700.6
1981	267.5	243.9	193.4	114.2	139.4	161.4	66.9	117.9	169.8	282.5	279.6	249.2	2285.8
1982	215.8	253.2	259.7	185.0	235.9	262.4	175.3	139.8	178.5	282.8	280.4	266.9	2735.9
1983	268.9	253.5	184.8	49.2	96.5	102.7	47.6	49.2	178.5	279.4	277.2	265.2	2052.7
1984	265.7	72.1	64.8	77.9	117.1	161.5	164.1	92.2	140.1	282.0	279.2	251.2	1968.0
1985	267.7	253.1	259.7	259.9	199.4	168.0	47.6	117.5	170.9	280.8	278.3	265.8	2568.8
1986	249.1	163.8	259.6	259.8	235.7	262.5	151.5	117.5	170.1	155.9	278.1	265.7	2569.4
1987	266.5	252.7	258.3	259.8	149.5	118.8	105.2	94.6	166.2	185.6	168.0	221.1	2246.5
1988	157.4	204.9	187.5	259.6	243.7	49.2	79.1	85.1	47.6	49.2	72.4	177.6	1613.1
1989	186.4	137.6	167.7	204.8	72.1	259.3	141.6	117.5	115.2	186.7	224.8	212.3	2026.2
1990	215.9	241.7	259.3	259.5	152.0	140.0	47.6	49.2	47.6	49.2	72.5	150.4	1684.9
1991	135.6	136.7	2.5	117.8	44.4	260.1	47.6	49.2	74.4	92.8	171.1	253.8	1385.8
1992	180.7	57.3	116.7	163.0	242.9	209.0	47.6	49.2	47.6	49.2	36.9	148.0	1348.1
1993	183.7	77.1	247.3	184.3	234.9	263.0	163.4	69.2	178.5	281.3	278.7	266.0	2427.5
AVG:	230.3	206.9	211.9	210.3	188.2	190.6	113.5	89.7	147.6	228.9	238.9	242.9	2299.6
MIN:	94.3	57.3	2.5	24.8	35.4	36.9	47.6	49.2	47.6	36.9	36.9	105.4	804.9
MAX:	270.0	253.5	259.9	260.2	244.4	263.7	175.3	139.8	178.5	282.8	280.5	266.9	2816.0

Table 3.4.6-7 Simulated Delta Exports at Tracy Pumping Plant (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	228.9	259.9	260.2	236.3	239.4	146.9	92.2	178.5	282.4	279.6	266.4	2740.7
1923	268.0	253.2	259.7	157.8	144.7	162.0	151.5	117.5	178.5	282.8	279.9	266.6	2522.2
1924	257.1	175.1	178.4	260.0	205.0	49.2	47.6	75.7	47.6	36.9	72.5	144.1	1549.3
1925	151.7	94.3	226.3	227.2	234.3	49.2	163.4	128.7	156.7	177.6	275.6	261.9	2146.8
1926	226.5	194.2	155.1	184.5	235.2	211.3	151.5	49.2	65.3	59.0	49.2	185.8	1766.8
1927	158.3	251.1	259.0	259.2	204.7	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2618.6
1928	260.8	253.4	259.8	260.1	244.4	262.8	151.5	49.2	178.5	281.0	278.5	265.9	2745.9
1929	238.0	226.3	228.7	259.9	199.9	65.4	47.6	49.2	56.0	89.1	107.0	167.7	1734.8
1930	189.3	97.6	258.9	184.0	189.9	260.6	97.1	49.2	100.2	107.8	129.4	207.5	1871.5
1931	216.9	153.5	70.0	259.3	110.9	49.2	47.6	49.2	47.6	49.2	101.7	133.0	1288.0
1932	126.0	74.3	183.8	183.9	242.6	183.8	109.6	69.2	83.4	94.7	235.1	251.0	1837.4
1933	216.3	60.4	34.2	24.8	35.4	36.9	47.6	49.2	47.6	49.2	36.9	173.3	811.9
1934	186.9	74.1	258.8	165.9	37.4	51.6	47.6	49.2	47.6	36.9	36.9	97.4	1090.3
1935	93.9	168.5	181.8	259.1	116.7	207.0	119.0	69.9	164.0	100.5	274.7	259.9	2014.8
1936	185.4	99.2	202.0	259.4	154.3	149.0	149.1	49.2	178.5	139.7	276.5	263.8	2106.0
1937	252.0	118.4	259.4	259.6	235.4	121.5	90.3	136.6	178.5	232.4	275.4	261.4	2420.9
1938	263.8	251.9	57.0	59.9	62.0	85.4	121.8	49.2	178.5	281.8	279.1	266.2	1956.6
1939	267.5	192.2	94.4	114.1	139.3	139.0	110.9	126.5	133.8	261.4	224.7	221.3	2025.1
1940	147.5	138.9	116.5	259.7	243.9	261.3	175.3	139.8	178.5	278.5	276.6	264.0	2480.6
1941	265.0	214.8	259.4	259.6	235.4	213.7	151.5	117.5	178.5	282.8	279.9	266.6	2724.8
1942	268.3	253.3	184.7	156.4	236.0	162.7	175.3	92.2	178.5	282.1	279.3	266.3	2535.2
1943	267.8	253.1	259.7	248.9	142.1	85.8	151.5	49.2	133.4	281.7	279.0	266.1	2418.3
1944	267.5	228.0	259.7	259.9	226.6	246.1	89.3	92.2	143.1	280.6	278.2	265.7	2636.8
1945	212.6	252.8	259.6	259.8	235.7	263.1	121.5	117.5	178.5	282.0	279.2	266.2	2728.5
1946	267.7	253.1	259.7	259.9	235.8	184.6	142.0	139.8	178.5	281.4	278.8	266.0	2747.5
1947	236.4	253.0	259.6	259.9	228.0	261.5	107.0	49.2	114.1	279.6	277.4	265.3	2590.9
1948	182.4	161.4	190.1	259.7	243.8	187.6	151.5	117.5	178.5	280.8	278.4	265.8	2497.5
1949	266.8	240.2	240.1	201.6	163.0	260.9	108.2	117.5	178.5	280.2	252.0	265.6	2574.6
1950	222.9	229.5	132.1	184.8	235.6	252.4	142.6	49.2	178.5	276.0	274.7	259.9	2438.3
1951	263.1	251.7	259.2	89.3	89.7	162.6	129.6	49.2	127.2	280.9	278.4	265.8	2246.8
1952	266.9	216.2	184.6	184.8	244.0	262.5	89.3	92.2	178.5	282.4	279.6	266.4	2547.4
1953	268.0	253.2	204.2	260.0	161.1	104.7	66.9	128.7	178.5	282.8	279.9	266.6	2454.7
1954	268.3	253.3	259.7	260.0	236.0	262.7	163.4	69.2	169.6	282.3	279.4	266.4	2770.4
1955	267.9	253.2	259.7	260.0	187.0	137.6	102.0	108.7	178.5	205.5	214.5	236.1	2410.6
1956	185.4	252.2	184.4	184.6	243.6	263.0	149.5	117.5	178.5	282.8	280.2	266.7	2588.4
1957	268.6	253.4	259.8	260.0	164.4	163.7	160.6	128.7	178.5	282.8	280.1	266.7	2667.3
1958	268.6	253.4	184.8	185.0	236.0	262.6	175.3	92.2	178.5	282.4	279.5	266.4	2664.7
1959	268.0	253.2	259.7	219.7	144.5	161.0	107.7	121.7	178.5	282.4	279.5	257.4	2533.3
1960	195.3	238.3	154.7	185.0	226.7	242.8	47.6	49.2	98.2	273.2	251.8	194.4	2157.2
1961	214.8	229.3	256.4	228.8	234.8	222.0	98.2	94.2	116.7	281.1	278.6	265.9	2520.6
1962	178.0	252.9	259.6	203.4	235.7	262.9	120.5	128.7	178.5	281.4	278.8	251.9	2632.2
1963	267.2	252.9	259.6	259.9	235.8	263.1	151.5	117.5	178.5	282.8	280.2	266.8	2816.0
1964	268.7	253.4	259.8	260.1	166.1	147.7	47.6	112.9	140.5	277.6	275.9	237.6	2447.9
1965	159.2	246.9	259.3	259.6	235.2	262.9	175.3	139.8	178.5	282.8	280.5	266.9	2747.0
1966	269.0	253.5	259.8	260.1	236.1	263.4	66.9	128.7	178.5	281.9	279.1	249.5	2726.5
1967	219.9	253.1	259.7	184.9	235.8	262.6	151.5	49.2	178.5	281.8	279.1	266.2	2622.3
1968	267.5	253.0	259.7	236.9	139.5	162.0	66.9	114.7	178.5	282.8	279.8	266.5	2507.9
1969	223.3	253.3	259.7	260.0	235.9	263.0	89.3	92.2	178.5	282.4	279.6	266.4	2683.7
1970	268.0	140.5	97.0	100.4	105.5	161.1	128.7	117.5	178.5	282.6	279.7	266.5	2126.0
1971	207.5	253.2	259.7	260.0	235.9	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2719.2
1972	268.1	253.2	259.7	260.0	244.2	262.9	97.9	101.6	178.5	280.4	278.0	235.9	2720.5
1973	245.4	252.7	184.6	184.8	235.6	262.9	167.3	92.2	165.4	281.9	279.2	266.2	2618.3
1974	267.6	253.1	259.7	184.9	235.8	232.4	151.5	49.2	170.7	281.4	278.8	266.0	2631.2
1975	267.2	253.0	259.6	184.9	235.8	263.9	89.3	92.2	178.5	282.1	279.3	266.3	2652.2
1976	267.8	253.1	259.7	260.0	181.1	118.1	47.6	78.8	49.4	52.0	72.6	160.6	1800.8
1977	152.9	94.7	49.2	150.1	44.4	49.2	47.6	49.2	89.5	230.1	181.7	167.2	1305.9
1978	188.2	90.6	258.9	184.0	234.4	263.3	47.6	49.2	173.4	281.8	279.1	266.2	2316.7
1979	267.5	253.0	228.7	217.4	139.3	162.1	160.7	139.8	178.5	282.8	280.3	266.8	2577.0
1980	268.7	226.1	259.8	260.1	244.4	263.0	122.0	49.2	178.5	281.8	279.1	266.2	2698.8
1981	267.5	238.0	203.0	114.2	139.4	161.4	66.9	116.8	170.5	282.5	279.6	249.2	2289.1
1982	212.7	253.2	259.7	185.0	235.9	262.4	175.3	139.8	178.5	282.8	280.4	266.8	2732.6
1983	268.8	253.4	182.7	49.2	96.0	102.7	47.6	49.2	178.5	279.4	277.3	265.3	2050.2
1984	265.7	72.4	65.1	78.4	117.7	161.5	164.2	92.2	139.8	282.0	279.2	249.5	1967.8
1985	267.7	253.1	259.7	259.9	199.5	167.0	47.6	117.5	171.4	280.7	278.2	265.7	2567.9
1986	247.8	163.2	259.6	259.8	235.7	262.5	151.5	117.5	169.8	152.4	278.2	265.7	2563.7
1987	266.6	252.8	258.3	259.8	162.7	119.4	105.6	94.4	168.0	187.4	167.3	221.6	2263.8
1988	149.8	199.6	187.1	259.6	243.7	49.2	78.1	74.6	47.6	49.2	82.2	177.6	1598.3
1989	181.4	141.8	161.6	205.7	81.1	259.3	141.3	117.5	106.5	171.1	219.3	210.9	1997.6
1990	217.9	233.4	259.3	259.5	153.0	139.1	47.6	49.2	47.6	49.2	64.9	154.3	1674.8
1991	122.3	136.3	13.3	119.2	44.4	260.1	47.6	49.2	72.6	72.8	190.5	247.5	1375.9
1992	180.0	70.3	113.6	160.9	242.9	207.7	47.6	49.2	47.6	49.2	36.9	70.8	1276.6
1993	183.7	52.1	247.5	184.2	234.7	263.1	163.4	69.2	178.5	281.6	279.0	266.1	2403.2
AVG:	229.5	205.7	211.7	210.2	189.8	190.5	113.3	89.4	146.7	228.4	239.2	241.3	2295.7
MIN:	93.9	52.1	13.3	24.8	35.4	36.9	47.6	49.2	47.6	36.9	36.9	70.8	811.9
MAX:	270.0	253.5	259.9	260.2	244.4	263.9	175.3	139.8	178.5	282.8	280.5	266.9	2816.0

Table 3.4.6-8 Simulated Delta Exports at Tracy Pumping Plant (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	229.1	259.9	260.2	236.3	239.1	146.9	92.2	178.5	282.4	279.6	266.4	2740.7
1923	268.0	253.2	259.7	171.0	144.7	162.0	151.5	117.5	178.5	282.8	279.9	266.6	2535.4
1924	257.1	173.0	185.0	260.0	205.0	49.2	47.6	76.0	47.6	36.9	79.7	129.3	1546.3
1925	151.9	95.2	225.3	227.2	234.3	49.2	163.4	128.7	159.2	173.6	275.6	261.9	2145.5
1926	226.9	194.2	152.3	184.5	235.2	215.7	151.5	49.2	65.4	63.6	49.2	191.0	1778.8
1927	178.7	251.1	259.0	259.2	176.4	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2610.7
1928	260.0	253.4	259.8	260.1	244.4	262.8	151.5	49.2	178.5	281.0	278.5	265.9	2745.0
1929	238.4	225.7	226.6	259.9	199.9	73.3	47.6	49.2	61.9	90.2	107.4	176.8	1756.9
1930	188.7	96.4	258.9	184.0	190.3	260.7	97.0	49.2	101.1	127.8	126.4	212.0	1892.5
1931	216.3	140.1	69.5	257.9	114.5	49.2	47.6	49.2	47.6	49.2	103.8	132.7	1277.6
1932	111.2	86.2	183.8	183.9	242.6	181.9	109.6	69.2	83.3	94.9	235.2	251.0	1832.8
1933	217.2	60.4	34.2	24.8	35.4	36.9	47.6	49.2	47.6	49.2	36.9	173.3	812.8
1934	186.2	69.5	258.8	171.1	37.4	55.8	47.6	49.2	47.6	36.9	36.9	105.2	1102.3
1935	92.8	171.1	179.6	259.1	116.9	194.2	128.6	74.9	165.7	96.7	274.9	260.3	2014.7
1936	202.8	111.1	201.7	259.4	149.1	150.7	151.3	49.2	178.5	150.2	276.7	264.2	2144.9
1937	250.5	118.2	259.4	259.6	235.4	139.7	91.2	137.9	178.5	254.4	275.5	261.6	2461.9
1938	263.9	217.3	54.0	60.6	62.8	85.4	121.8	49.2	178.5	281.8	279.1	266.2	1920.6
1939	267.5	187.1	94.4	114.1	139.3	142.4	111.2	126.0	134.0	260.1	224.0	224.4	2024.5
1940	144.7	137.9	122.9	259.7	243.9	261.3	175.3	139.8	178.5	278.5	276.6	264.0	2483.3
1941	265.0	204.9	259.4	259.6	235.4	220.6	151.5	117.5	178.5	282.8	279.9	266.6	2721.7
1942	268.3	253.3	184.7	156.4	236.0	162.7	175.3	92.2	178.5	282.1	279.3	266.3	2535.2
1943	267.8	253.1	259.7	248.9	142.1	85.8	151.5	49.2	133.3	281.7	279.0	266.1	2418.2
1944	267.5	226.5	259.7	259.9	226.6	246.1	89.3	92.2	143.1	280.6	278.2	265.7	2635.2
1945	210.3	252.8	259.6	259.8	235.6	263.1	121.3	117.5	178.5	282.0	279.2	266.3	2726.0
1946	267.7	253.1	259.7	259.9	235.8	184.4	141.9	139.8	178.5	281.4	278.8	266.0	2747.1
1947	240.3	253.0	259.6	259.9	228.0	261.5	107.0	49.2	112.5	279.5	277.4	265.3	2593.1
1948	182.3	159.5	118.9	259.7	243.8	187.9	151.5	117.5	178.5	280.8	278.3	265.8	2424.6
1949	266.8	252.8	240.6	205.6	163.2	260.9	108.2	117.5	178.5	280.3	259.5	265.6	2599.4
1950	222.9	230.6	132.2	184.8	235.6	251.5	142.0	49.2	178.5	276.2	274.8	260.1	2438.4
1951	263.2	251.7	259.2	119.9	90.8	162.6	129.6	49.2	125.9	280.9	278.4	265.8	2277.3
1952	266.9	216.7	184.6	184.8	244.0	262.5	89.3	92.2	178.5	282.4	279.6	266.4	2547.9
1953	268.0	253.2	202.3	260.0	161.3	104.7	66.9	128.7	178.5	282.8	279.9	266.6	2453.0
1954	268.3	253.3	259.7	260.0	236.0	262.7	163.4	69.2	169.6	282.3	279.4	266.4	2770.4
1955	267.9	253.2	259.7	260.0	187.7	138.3	101.7	108.7	178.5	203.7	213.4	236.0	2408.9
1956	185.4	252.2	184.4	184.6	243.6	263.0	149.5	117.5	178.5	282.8	280.2	266.7	2588.5
1957	268.6	253.4	259.8	260.0	155.2	163.0	160.6	128.7	178.5	282.8	280.1	266.7	2657.5
1958	268.6	253.4	184.8	185.0	236.0	262.5	175.3	92.2	178.5	282.4	279.5	266.4	2664.6
1959	268.0	253.2	259.7	208.4	144.1	161.0	107.7	121.8	178.5	282.4	279.5	252.0	2516.2
1960	195.3	247.3	159.3	185.0	226.7	242.9	47.6	49.2	100.2	270.6	250.5	195.2	2169.9
1961	211.9	231.8	255.6	228.8	234.8	227.5	98.2	94.2	117.2	281.2	278.7	266.0	2525.7
1962	198.4	252.9	259.6	204.4	235.7	262.9	121.2	128.7	178.5	281.4	278.8	254.7	2657.2
1963	267.2	252.9	259.6	259.9	235.8	263.1	151.5	117.5	178.5	282.8	280.2	266.8	2816.0
1964	268.7	253.4	259.8	260.1	166.1	148.1	47.6	111.8	140.7	277.7	276.0	233.9	2443.8
1965	160.3	248.6	259.3	259.6	235.2	262.9	175.3	139.8	178.5	282.8	280.5	266.9	2749.8
1966	269.0	253.5	259.8	260.1	236.1	263.4	66.9	128.7	178.5	281.9	279.1	249.4	2726.4
1967	219.9	253.1	259.7	184.9	235.8	262.6	151.5	49.2	178.5	281.8	279.1	266.2	2622.3
1968	267.5	253.0	259.7	237.3	139.5	162.0	66.9	115.6	178.5	282.8	279.8	266.5	2509.2
1969	223.3	253.3	259.7	260.0	235.9	263.0	89.3	92.2	178.5	282.4	279.6	266.4	2683.7
1970	268.0	134.2	97.0	100.4	105.5	161.1	128.7	117.5	178.5	282.6	279.7	266.5	2119.8
1971	207.5	253.2	259.7	260.0	235.9	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2719.2
1972	268.1	253.2	259.7	260.0	244.2	262.9	97.9	101.6	178.5	280.4	278.0	235.5	2720.1
1973	248.5	252.7	184.6	184.8	235.6	262.9	167.4	92.2	165.0	281.9	279.2	266.2	2620.9
1974	267.6	253.1	259.7	184.9	235.8	236.8	151.5	49.2	171.9	281.4	278.8	266.0	2636.8
1975	267.2	253.0	259.6	184.9	235.8	254.0	89.3	92.2	178.5	282.1	279.3	266.3	2642.3
1976	267.8	253.1	259.7	260.0	175.9	124.1	47.6	78.8	64.1	54.6	71.4	161.6	1818.7
1977	162.4	94.2	49.2	150.2	44.4	49.2	47.6	49.2	89.5	230.9	181.8	167.2	1315.9
1978	188.4	90.2	258.9	184.0	234.4	263.3	47.6	49.2	173.5	281.8	279.1	266.2	2316.4
1979	267.5	253.0	228.7	215.5	139.3	162.1	161.1	139.8	178.5	282.8	280.3	266.8	2575.6
1980	268.7	237.5	259.8	260.1	244.4	251.1	122.0	49.2	178.5	281.8	279.1	266.2	2698.2
1981	267.5	235.5	208.4	114.2	139.4	161.4	66.9	117.6	170.0	282.5	279.6	249.2	2292.2
1982	216.5	253.2	259.7	185.0	235.9	262.4	175.3	139.8	178.5	282.8	280.4	266.9	2736.5
1983	268.9	253.5	175.6	49.2	96.6	102.7	47.6	49.2	178.5	279.4	277.3	265.3	2043.6
1984	265.7	72.4	65.1	78.3	117.6	161.5	164.2	92.2	140.2	282.0	279.2	248.5	1967.0
1985	267.7	253.1	259.7	259.9	199.5	167.1	47.6	117.5	171.5	280.6	278.2	265.7	2568.1
1986	247.4	163.2	259.6	259.8	235.7	262.6	151.5	117.5	170.9	140.9	278.2	265.7	2552.9
1987	266.6	252.8	258.3	259.8	173.9	119.9	105.5	94.6	168.0	186.0	166.5	221.6	2273.7
1988	158.6	204.9	190.3	259.6	243.7	49.2	78.9	82.8	47.6	49.2	76.3	176.2	1617.3
1989	183.6	137.0	167.9	205.0	72.0	259.3	141.5	117.5	112.8	187.1	224.5	211.9	2020.0
1990	217.7	239.5	259.3	259.5	152.5	140.8	47.6	49.2	47.6	49.2	69.6	150.3	1682.7
1991	139.8	134.0	5.1	117.9	44.4	260.1	47.6	49.2	72.6	90.1	170.2	252.6	1383.7
1992	180.7	58.5	116.8	162.3	242.9	209.0	47.6	49.2	47.6	49.2	36.9	145.4	1346.1
1993	183.7	76.3	247.4	184.3	234.9	263.1	163.4	69.2	178.5	281.4	278.8	266.0	2426.9
AVG:	230.6	205.7	210.8	210.7	189.3	190.9	113.5	89.7	147.2	229.3	239.1	242.5	2299.3
MIN:	92.8	58.5	5.1	24.8	35.4	36.9	47.6	49.2	47.6	36.9	36.9	105.2	812.8
MAX:	270.0	253.5	259.9	260.2	244.4	263.4	175.3	139.8	178.5	282.8	280.5	266.9	2816.0

Table 3.4.6-9 Simulated Delta Exports at Tracy Pumping Plant (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-1.1	0.0	0.0	0.0	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2
1923	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
1924	-0.6	-1.0	-0.6	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-8.1	9.7	-0.8
1925	3.1	7.2	1.2	2.1	0.0	0.0	0.0	0.0	-2.1	-0.8	0.0	0.0	10.6
1926	0.0	0.0	2.2	0.0	0.0	-5.9	0.0	0.0	-4.2	0.5	0.0	-5.4	-12.8
1927	-2.8	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
1928	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8
1929	-1.2	0.9	-0.6	0.0	-1.8	-13.4	0.0	0.0	-18.7	-6.8	-4.0	-8.9	-54.4
1930	0.6	4.5	0.0	0.0	-0.8	-0.1	0.2	0.0	-1.3	-18.0	1.1	-5.5	-19.3
1931	0.6	14.8	0.7	1.4	-6.4	0.0	0.0	0.0	0.0	0.0	4.5	0.2	15.8
1932	14.8	-11.7	0.0	0.0	0.0	0.5	-1.1	0.0	-2.6	-2.4	-0.6	0.0	-3.1
1933	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.9
1934	0.6	5.0	0.0	-6.8	-0.2	-4.9	0.0	0.0	0.0	0.0	0.0	-8.0	-14.2
1935	-0.5	-1.1	1.6	0.0	-0.3	8.9	-11.9	-8.4	-7.1	-30.0	-0.2	-0.5	-49.4
1936	-13.5	-46.6	3.3	0.0	84.0	2.0	2.6	0.0	0.0	12.7	0.2	0.4	45.2
1937	-2.9	-1.1	0.0	0.0	19.8	4.5	1.6	2.4	0.0	45.2	0.1	0.3	70.2
1938	0.2	0.0	-22.2	1.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19.2
1939	0.0	4.1	0.0	0.0	0.0	-3.9	-0.5	0.3	0.2	0.4	0.2	-4.1	-3.3
1940	3.6	4.6	-6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
1941	0.0	-2.9	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	10.4
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	-0.8
1945	-0.7	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.9
1946	0.0	0.0	0.0	0.0	0.0	-0.5	-0.1	0.0	0.0	0.0	0.0	0.0	-0.7
1947	-3.3	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	-3.5
1948	0.0	-0.5	-3.7	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	-4.6
1949	-0.1	-12.6	-0.5	-1.5	0.2	0.0	-0.1	0.0	0.0	0.0	8.1	0.0	-6.5
1950	-1.5	1.9	-0.8	0.0	0.0	-0.2	-0.2	0.0	0.0	-0.1	-0.1	-0.1	-1.1
1951	-0.1	0.0	0.0	-19.8	-0.6	0.0	-0.1	0.0	-0.4	0.0	0.0	0.0	-21.0
1952	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1953	0.0	0.0	0.1	0.0	-0.6	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.8
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	0.0	-3.0	-2.4	-1.2	-6.8
1956	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2
1957	0.0	0.0	0.0	0.0	-3.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-3.3
1958	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1959	0.0	0.0	0.0	-0.6	-0.2	0.0	0.0	0.1	0.0	0.0	0.0	5.0	4.2
1960	0.0	-9.0	-3.8	0.0	0.0	-0.1	0.0	0.0	-2.9	1.6	1.0	-0.9	-14.0
1961	3.9	-2.2	0.1	0.2	0.0	-6.5	0.0	-0.5	-1.0	-0.2	-0.1	-0.1	-6.4
1962	-20.8	0.0	0.0	0.0	0.0	0.0	-0.9	0.0	0.0	0.0	0.0	-4.3	-26.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	-1.4	0.0	1.4	0.4	0.0	0.0	-2.6	-2.2
1965	-4.6	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.1
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	-2.0	0.0	0.0	0.0	-1.1	0.0	0.0	0.0	0.0	-3.1
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
1971	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-1.8	-1.6
1973	-0.7	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	3.0	0.0	0.0	0.0	2.1
1974	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0	-0.2	0.0	0.0	0.0	6.7
1975	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
1976	0.0	0.0	0.0	0.0	-2.7	-5.1	0.0	0.0	-18.0	2.8	3.8	-2.3	-21.5
1977	-6.9	1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	-1.5	-0.4	0.0	-4.9
1978	-0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.6
1979	0.0	0.0	0.0	8.2	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	8.0
1980	0.0	-5.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	-1.8
1981	0.0	-5.9	9.6	0.0	0.0	0.0	0.0	-1.1	0.7	0.0	0.0	0.0	3.3
1982	-3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-3.3
1983	-0.1	0.0	-2.1	0.0	-0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	-2.5
1984	0.1	0.3	0.3	0.5	0.6	0.0	0.1	0.0	-0.3	0.0	0.0	-1.7	-0.2
1985	0.0	0.0	0.0	0.0	0.0	-1.1	0.0	0.0	0.4	-0.1	-0.1	0.0	-0.8
1986	-1.3	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-3.6	0.1	0.0	-5.8
1987	0.1	0.0	-0.1	0.0	13.2	0.7	0.3	-0.2	1.8	1.8	-0.7	0.4	17.3
1988	-7.6	-5.3	-0.3	0.0	0.0	0.0	-1.0	-10.5	0.0	0.0	9.8	0.0	-14.9
1989	-5.0	4.1	-6.1	0.9	9.0	0.0	-0.3	0.0	-8.7	-15.6	-5.6	-1.4	-28.6
1990	2.0	-8.3	0.0	0.0	0.9	-0.9	0.0	0.0	0.0	0.0	-7.7	3.9	-10.1
1991	-13.3	-0.4	10.8	1.5	0.0	0.0	0.0	0.0	-1.8	-20.0	19.5	-6.3	-9.9
1992	-0.7	13.0	-3.1	-2.1	0.0	-1.3	0.0	0.0	0.0	0.0	0.0	-77.2	-71.4
1993	0.0	-25.1	0.2	-0.1	-0.2	0.1	0.0	0.0	0.0	0.3	0.2	0.1	-24.3
AVG:	-0.8	-1.1	-0.3	-0.2	1.6	-0.1	-0.2	-0.2	-0.9	-0.5	0.3	-1.6	-3.9
MIN:	-20.8	-46.6	-22.2	-19.8	-6.4	-13.4	-11.9	-10.5	-18.7	-30.0	-8.1	-77.2	-71.4
MAX:	14.8	14.8	10.8	8.2	84.0	13.4	2.6	2.4	3.0	45.2	19.5	9.7	70.2

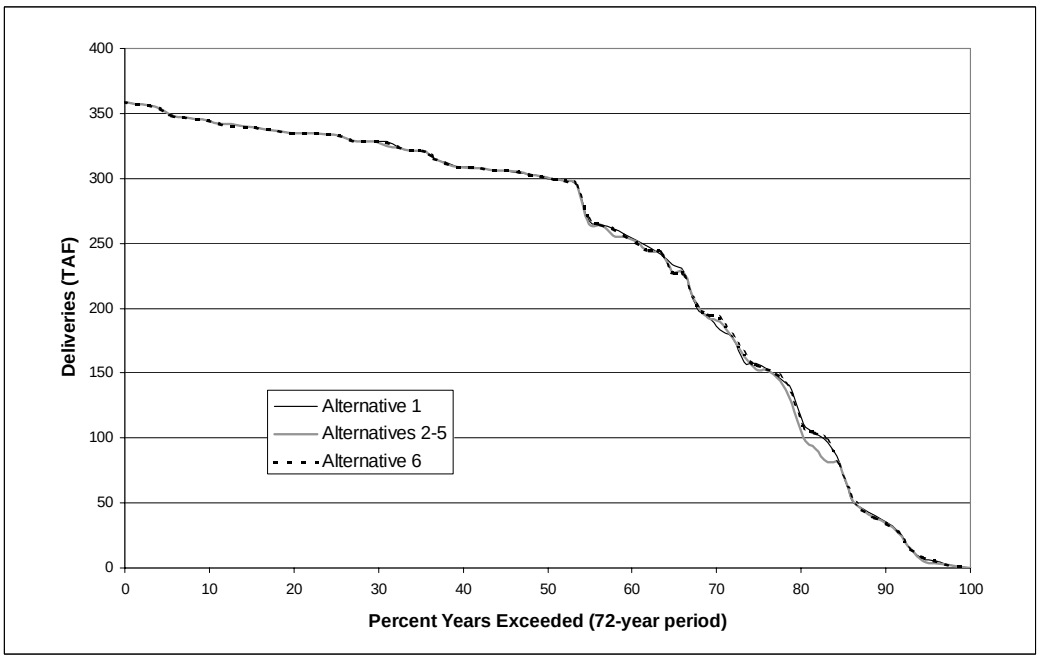
Table 3.4.6-10 Simulated Delta Exports at Tracy Pumping Plant (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.8	0.0	0.0	0.0	0.8	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2
1923	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
1924	-0.6	-3.1	5.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-1.0	-5.1	-3.8
1925	3.4	8.1	0.1	2.1	0.0	0.0	0.0	0.0	0.4	-4.8	0.0	0.0	9.3
1926	0.4	0.0	-0.6	0.0	0.0	-1.4	0.0	0.0	-4.1	5.1	0.0	-0.2	-0.8
1927	17.6	0.0	0.0	0.0	-22.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.0
1928	-2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6
1929	-0.8	0.3	-2.6	0.0	-1.8	-5.5	0.0	0.0	-12.7	-5.8	-3.6	0.3	-32.3
1930	0.0	3.3	0.0	0.0	-0.4	0.0	0.0	0.0	-0.3	2.0	-1.9	-1.0	1.7
1931	0.0	1.4	0.2	0.0	-2.8	0.0	0.0	0.0	0.0	0.0	6.6	0.0	5.5
1932	0.0	0.2	0.0	0.0	0.0	-1.4	-1.1	0.0	-2.7	-2.2	-0.6	0.0	-7.8
1933	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9
1934	0.0	0.4	0.0	-1.6	-0.1	-0.7	0.0	0.0	0.0	0.0	0.0	-0.2	-2.2
1935	-1.5	1.6	-0.6	0.0	-0.1	-3.9	-2.3	-3.3	-5.3	-33.8	-0.1	-0.1	-49.5
1936	3.9	-34.7	3.0	0.0	78.8	3.7	4.8	0.0	0.0	23.3	0.4	0.8	84.1
1937	-4.3	-1.3	0.0	0.0	19.9	22.7	2.5	3.8	0.0	67.2	0.2	0.5	111.2
1938	0.2	-34.5	-25.3	2.1	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-55.1
1939	0.0	-1.0	0.0	0.0	0.0	-0.6	-0.2	-0.1	0.4	-0.9	-0.5	-1.0	-3.8
1940	0.9	3.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1941	0.0	-12.8	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	7.4
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.1	0.0	-2.4
1945	-3.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	-3.4
1946	0.0	0.0	0.0	0.0	0.0	-0.8	-0.2	0.0	0.0	0.0	0.0	0.0	-1.1
1947	0.6	0.0	0.0	0.0	-0.5	-0.1	0.0	0.0	-1.2	0.0	0.0	0.0	-1.2
1948	-0.1	-2.4	-74.9	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-77.5
1949	-0.1	0.0	0.0	2.5	0.4	0.0	-0.1	0.0	0.0	0.1	15.5	0.0	18.3
1950	-1.5	3.1	-0.7	0.0	0.0	-1.1	-0.9	0.0	0.0	0.1	0.0	0.1	-1.0
1951	0.0	0.0	0.0	10.8	0.5	0.0	-0.1	0.0	-1.7	0.0	0.0	0.0	9.5
1952	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1953	0.0	0.0	-1.8	0.0	-0.4	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-2.5
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.7	0.5	-0.3	-0.2	0.0	-4.7	-3.4	-1.2	-8.5
1956	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2
1957	0.0	0.0	0.0	0.0	-12.3	-0.9	0.0	0.0	0.0	0.0	0.0	0.0	-13.1
1958	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.2
1959	-0.1	0.0	0.0	-11.9	-0.6	0.0	0.0	0.1	0.0	0.0	0.0	-0.4	-12.8
1960	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	-0.8	-1.0	-0.3	-0.1	-1.2
1961	1.0	0.3	-0.7	0.2	0.0	-1.1	0.0	-0.4	-0.5	0.0	0.0	0.0	-1.3
1962	-0.4	0.0	0.0	1.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-1.5	-1.1
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	-1.0	0.0	0.2	0.7	0.0	0.0	-6.3	-6.4
1965	-3.5	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	-1.6	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-1.8
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	-6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.5
1971	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-2.2	-2.1
1973	2.3	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	2.5	0.0	0.0	0.0	4.7
1974	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	1.0	0.0	0.0	0.0	12.3
1975	0.0	0.0	0.0	0.0	0.0	-9.7	0.0	0.0	0.0	0.0	0.0	0.0	-9.7
1976	0.0	0.0	0.0	0.0	-7.9	0.9	0.0	0.0	-3.3	5.4	2.6	-1.4	-3.7
1977	2.6	1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	-0.8	-0.2	0.0	5.1
1978	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.4
1979	0.0	0.0	0.0	6.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	6.5
1980	0.0	6.3	0.0	0.0	0.0	-8.7	0.0	0.0	0.0	0.0	0.0	0.0	-2.4
1981	0.0	-8.5	15.0	0.0	0.0	0.0	0.0	-0.2	0.2	0.0	0.0	0.0	6.5
1982	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1983	0.0	0.0	-9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-9.1
1984	0.0	0.2	0.3	0.5	0.5	0.0	0.1	0.0	0.1	0.0	0.0	-2.7	-1.0
1985	0.0	0.0	0.0	0.0	0.0	-0.9	0.0	0.0	0.5	-0.1	-0.1	-0.1	-0.6
1986	-1.7	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8	-15.1	0.1	0.0	-16.5
1987	0.1	0.0	-0.1	0.0	24.4	1.2	0.3	0.0	1.9	0.4	-1.6	0.5	27.1
1988	1.3	0.0	2.8	0.0	0.0	0.0	-0.2	-2.2	0.0	0.0	3.9	-1.4	4.2
1989	-2.8	-0.6	0.2	0.2	-0.2	0.0	-0.2	0.0	-2.4	0.3	-0.4	-0.4	-6.1
1990	1.8	-2.2	0.0	0.0	0.5	0.8	0.0	0.0	0.0	0.0	-2.9	-0.1	-2.2
1991	4.2	-2.6	2.6	0.2	0.0	0.0	0.0	0.0	-1.8	-2.7	-0.8	-1.2	-2.1
1992	0.0	1.2	0.1	-0.8	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-2.5	-2.0
1993	0.0	-0.9	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	-0.6
AVG:	0.3	-1.2	-1.2	0.4	1.1	0.3	0.0	0.0	-0.4	0.4	0.2	-0.4	-0.3
MIN:	-4.3	-34.7	-74.9	-11.9	-22.6	-9.7	-2.3	-3.3	-12.7	-33.8	-3.6	-6.3	-77.5
MAX:	17.6	8.1	15.0	16.7	78.8	22.7	4.8	3.8	2.5	67.2	15.5	0.8	111.2

3.4.7 CVP Deliveries

This section presents Central Valley Project deliveries to both agricultural and municipal and industrial (M&I) contractors. Delivery results are separated into North-of-Delta and South-of-Delta categories. Figures illustrate overall trends and compare each action alternative to Alternative 1. Monthly results and action alternative comparisons to Alternative 1 are provided in tables.

Figure 3.4.7-1. Exceedence for Simulated Annual CVP North-of-Delta Agricultural Water Service Deliveries, 2001 LOD



The bar charts depicting deliveries (see the two graphs below) shown in this appendix show Alternative 1 deliveries and changes from these deliveries in the action alternatives. Decreases in deliveries are shown as negative values below the x-axis, while increases in deliveries are stacked above the Alternative 1 delivery bars.

Figure 3.4.7-2. Simulated Annual CVP North-of-Delta Agricultural Water Service Deliveries, 2001 LOD (Alternative 2-5 comparison to Alternative 1)

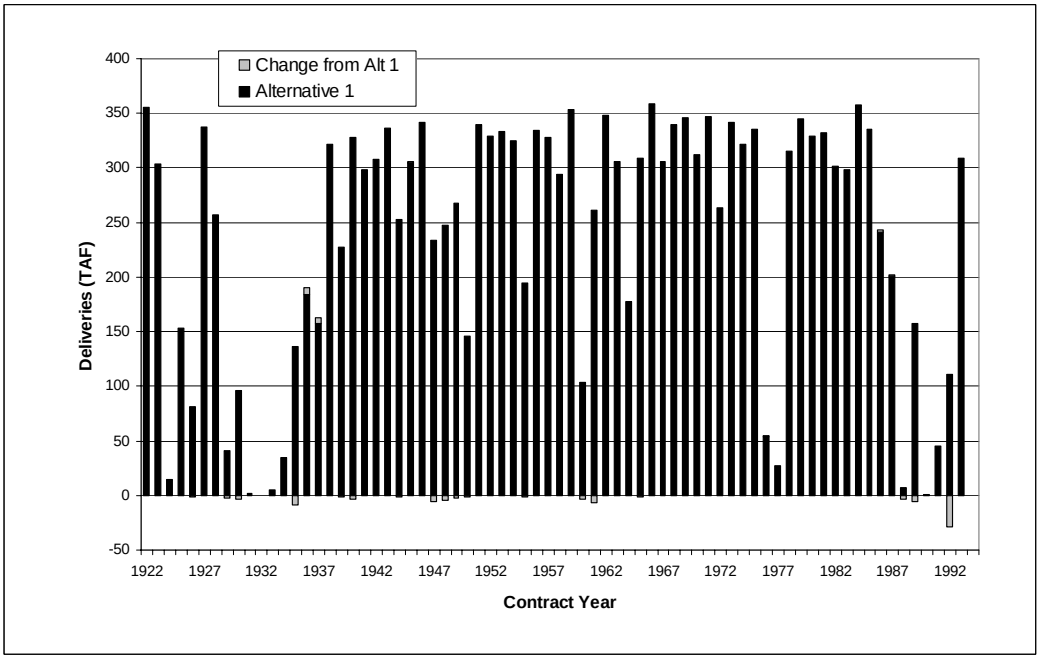


Figure 3.4.7-3. Simulated Annual CVP North-of-Delta Agricultural Water Service Deliveries, 2001 LOD (Alternative 6 comparison to Alternative 1)

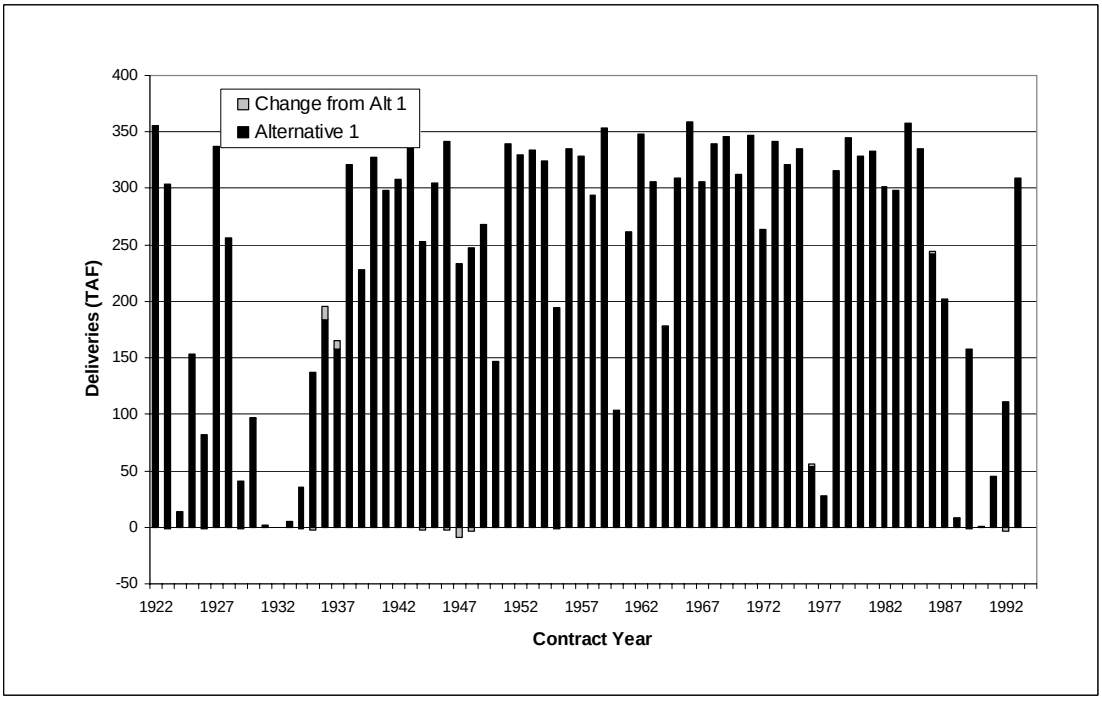


Table 3.4.7-1. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	55	59	71	71	62	31	356
1923	1	0	0	0	0	8	36	58	61	66	58	16	303
1924	6	1	0	0	0	0	1	1	2	1	1	1	14
1925	0	0	0	0	0	0	12	23	34	37	33	13	153
1926	5	0	0	0	0	1	5	14	17	17	15	8	81
1927	1	0	0	0	0	1	46	59	66	71	63	31	337
1928	2	0	0	0	0	0	28	48	54	54	48	24	257
1929	6	0	0	0	0	0	5	7	6	7	6	3	41
1930	1	0	0	0	0	0	10	16	21	21	19	8	96
1931	2	0	0	0	0	0	0	0	0	0	0	0	2
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	1	1	1	1	1	0	5
1934	0	0	0	0	0	0	5	6	7	7	6	3	35
1935	0	0	0	0	0	0	4	26	32	32	29	14	137
1936	1	0	0	0	0	0	21	33	34	40	36	17	184
1937	5	1	0	0	0	0	17	29	29	32	29	15	158
1938	1	0	0	0	0	0	30	58	72	72	63	25	321
1939	3	0	0	0	3	8	39	34	43	43	38	16	228
1940	4	1	0	0	0	0	36	50	71	72	63	30	328
1941	1	0	0	0	0	0	17	43	70	72	63	31	298
1942	2	0	0	0	0	0	19	50	71	72	63	31	308
1943	7	0	0	0	0	0	33	61	70	72	63	31	336
1944	8	0	0	0	0	2	32	40	49	52	47	23	253
1945	4	0	0	0	0	0	40	46	60	67	58	29	304
1946	0	0	0	0	0	1	55	60	68	67	61	29	341
1947	8	0	0	0	0	0	31	40	42	48	43	21	234
1948	0	0	0	0	1	0	6	34	55	67	59	25	247
1949	5	0	0	0	0	0	34	43	56	56	49	24	267
1950	7	0	0	0	0	0	20	25	28	28	25	12	146
1951	0	0	0	0	0	2	53	50	71	71	62	30	340
1952	1	0	0	0	0	0	40	61	64	71	63	31	329
1953	9	0	0	0	0	4	38	56	67	72	58	31	334
1954	7	0	0	0	0	0	30	60	69	72	55	31	324
1955	8	0	0	0	0	4	24	34	38	38	34	15	194
1956	4	0	0	0	0	5	48	49	67	72	63	28	335
1957	4	2	0	0	0	3	47	53	72	72	63	12	328
1958	0	0	0	0	0	0	20	47	65	70	63	30	294
1959	8	2	0	0	0	3	60	65	71	71	61	14	353
1960	9	2	0	0	0	0	12	15	20	19	17	9	104
1961	2	0	0	0	0	0	34	46	53	56	49	21	261
1962	7	0	0	0	0	0	49	61	68	72	62	30	348
1963	0	0	0	0	0	0	17	51	71	73	64	31	306
1964	2	0	0	0	0	4	31	31	32	34	30	14	178
1965	1	0	0	0	0	3	20	61	70	71	52	31	309
1966	10	0	0	0	0	2	55	64	69	69	61	30	359
1967	9	0	0	0	0	0	17	57	58	72	63	31	306
1968	8	0	0	0	0	0	48	61	66	72	54	31	339
1969	4	0	0	0	0	0	44	64	69	71	63	31	346
1970	4	0	0	0	0	0	45	58	58	63	56	28	312
1971	4	0	0	0	0	3	59	52	68	70	62	29	347
1972	8	0	0	0	0	10	41	43	48	50	45	18	264
1973	0	0	0	0	0	0	44	62	72	72	63	29	342
1974	1	0	0	0	0	0	33	62	71	61	63	31	321
1975	2	0	0	0	0	0	36	63	72	69	61	31	335
1976	0	0	0	0	3	3	7	9	10	10	7	4	54
1977	1	0	0	0	0	1	5	3	5	5	5	1	27
1978	1	0	0	0	0	0	25	59	72	72	63	24	315
1979	10	0	0	0	0	0	39	62	72	72	61	28	345
1980	1	0	0	0	0	0	40	57	66	71	63	30	329
1981	7	1	0	0	0	0	34	55	72	72	64	27	333
1982	0	0	0	0	0	0	24	60	62	72	63	19	302
1983	0	0	0	0	0	0	19	54	68	73	61	25	299
1984	7	0	0	0	0	2	55	65	69	70	59	30	357
1985	2	0	0	0	0	0	47	63	70	71	62	20	335
1986	5	0	0	0	0	0	27	43	53	52	47	15	242
1987	6	1	0	0	0	0	27	36	39	39	35	18	200
1988	4	0	0	0	0	0	1	1	1	1	1	0	7
1989	0	0	0	0	0	0	21	33	34	36	32	2	158
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	5	8	9	10	9	5	45
1992	1	0	0	0	0	0	12	21	21	24	21	11	111
1993	0	0	0	0	0	0	39	42	61	73	63	32	309
AVG:	3	0	0	0	0	1	28	41	49	51	44	20	238
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	10	2	0	0	3	10	60	65	72	73	64	32	359

Table 3.4.7-2. Simulated CVP North-of-Delta Agricultural Water Service Deliveries, Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	55	59	71	71	62	31	356
1923	1	0	0	0	0	8	36	58	61	66	58	16	303
1924	6	1	0	0	0	0	1	1	1	1	1	1	14
1925	0	0	0	0	0	0	12	23	34	37	33	13	153
1926	5	0	0	0	0	1	5	14	17	17	15	8	81
1927	1	0	0	0	0	1	46	59	66	71	63	31	337
1928	2	0	0	0	0	0	28	48	54	54	48	24	256
1929	6	0	0	0	0	0	5	6	6	7	6	3	39
1930	1	0	0	0	0	0	10	16	20	20	18	8	92
1931	2	0	0	0	0	0	0	0	0	0	0	0	2
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	1	1	1	1	1	0	5
1934	0	0	0	0	0	0	5	6	7	7	6	3	34
1935	0	0	0	0	0	0	2	24	30	30	27	13	127
1936	1	0	0	0	0	0	21	34	36	42	38	18	190
1937	5	1	0	0	0	0	17	30	30	33	30	15	163
1938	1	0	0	0	0	0	30	58	72	72	63	25	321
1939	3	0	0	0	3	8	39	34	43	42	38	15	227
1940	4	1	0	0	0	0	36	50	71	71	63	30	325
1941	1	0	0	0	0	0	17	43	70	72	63	31	298
1942	2	0	0	0	0	0	19	50	71	72	63	31	308
1943	7	0	0	0	0	0	33	61	70	72	63	31	336
1944	8	0	0	0	0	2	32	40	49	52	46	23	252
1945	4	0	0	0	0	0	40	46	61	67	59	29	306
1946	0	0	0	0	0	1	55	60	69	67	61	29	342
1947	8	0	0	0	0	0	30	39	41	47	42	21	228
1948	0	0	0	0	1	0	6	34	54	66	58	25	243
1949	5	0	0	0	0	0	34	42	56	55	49	24	265
1950	7	0	0	0	0	0	20	25	27	28	25	12	144
1951	0	0	0	0	0	2	53	50	71	71	62	30	340
1952	1	0	0	0	0	0	40	61	64	71	63	31	329
1953	9	0	0	0	0	4	38	56	67	72	58	31	334
1954	7	0	0	0	0	0	30	60	69	72	55	31	324
1955	8	0	0	0	0	4	24	34	37	37	33	15	193
1956	4	0	0	0	0	5	48	49	67	72	63	28	335
1957	4	2	0	0	0	3	47	53	72	72	63	12	328
1958	0	0	0	0	0	0	20	47	65	70	63	30	294
1959	8	2	0	0	0	3	60	65	71	71	61	14	353
1960	9	2	0	0	0	0	11	15	19	19	17	9	100
1961	2	0	0	0	0	0	33	45	52	55	48	21	255
1962	7	0	0	0	0	0	49	61	68	72	62	30	348
1963	0	0	0	0	0	0	17	51	71	73	64	31	306
1964	2	0	0	0	0	4	31	31	32	34	30	14	177
1965	1	0	0	0	0	2	20	61	70	71	51	31	308
1966	9	0	0	0	0	2	55	64	69	69	61	30	359
1967	9	0	0	0	0	0	17	57	58	72	63	31	306
1968	8	0	0	0	0	0	48	61	66	72	54	31	339
1969	4	0	0	0	0	0	44	64	69	71	63	31	346
1970	4	0	0	0	0	0	45	58	58	63	56	28	312
1971	4	0	0	0	0	3	59	52	68	70	62	29	347
1972	8	0	0	0	0	10	41	43	48	50	45	18	264
1973	0	0	0	0	0	0	44	62	72	72	63	29	342
1974	1	0	0	0	0	0	33	62	71	61	63	31	321
1975	2	0	0	0	0	0	36	63	72	69	61	31	335
1976	0	0	0	0	3	3	7	9	10	10	8	4	54
1977	1	0	0	0	0	1	5	3	5	5	5	1	27
1978	1	0	0	0	0	0	25	59	72	72	63	24	315
1979	10	0	0	0	0	0	39	62	72	72	61	28	345
1980	1	0	0	0	0	0	40	57	66	71	63	30	329
1981	7	1	0	0	0	0	34	55	72	72	64	27	333
1982	0	0	0	0	0	0	24	60	62	72	63	19	302
1983	0	0	0	0	0	0	19	54	68	73	61	25	299
1984	7	0	0	0	0	2	55	65	69	70	59	30	357
1985	2	0	0	0	0	0	47	63	70	71	62	20	335
1986	5	0	0	0	0	0	27	43	53	53	47	15	244
1987	6	1	0	0	0	0	27	36	39	39	35	18	202
1988	4	0	0	0	0	0	0	0	0	0	0	0	4
1989	0	0	0	0	0	0	20	31	33	35	31	2	152
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	5	8	9	10	9	4	45
1992	1	0	0	0	0	0	9	15	15	17	16	8	82
1993	0	0	0	0	0	0	39	42	61	73	63	32	309
AVG:	3	0	0	0	0	1	28	41	49	51	44	20	237
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	10	2	0	0	3	10	60	65	72	73	64	32	359

Table 3.4.7-3. Simulated CVP North-of-Delta Agricultural Water Service Deliveries, Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	55	59	71	71	62	31	356
1923	1	0	0	0	0	8	36	57	61	66	58	16	302
1924	6	1	0	0	0	0	1	1	1	1	1	1	14
1925	0	0	0	0	0	0	12	23	34	37	33	13	153
1926	5	0	0	0	0	1	5	13	17	17	14	8	80
1927	1	0	0	0	0	1	46	59	66	71	63	31	337
1928	2	0	0	0	0	0	28	48	53	54	48	24	256
1929	6	0	0	0	0	0	5	6	6	7	6	3	39
1930	1	0	0	0	0	0	10	17	21	21	19	8	97
1931	2	0	0	0	0	0	0	0	0	0	0	0	2
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	1	1	1	1	1	0	5
1934	0	0	0	0	0	0	5	6	7	7	6	3	34
1935	0	0	0	0	0	0	4	25	32	32	28	13	134
1936	1	0	0	0	0	0	22	35	37	43	39	18	195
1937	6	1	0	0	0	0	18	31	31	34	30	16	166
1938	1	0	0	0	0	0	30	58	72	72	63	25	321
1939	3	0	0	0	3	8	39	34	43	43	38	15	228
1940	4	1	0	0	0	0	36	50	71	72	63	30	328
1941	1	0	0	0	0	0	17	43	70	72	63	31	298
1942	2	0	0	0	0	0	19	50	71	72	63	31	308
1943	7	0	0	0	0	0	33	61	70	72	63	31	336
1944	8	0	0	0	0	2	32	40	49	52	46	23	251
1945	4	0	0	0	0	0	40	46	61	67	58	29	305
1946	0	0	0	0	0	1	54	60	68	66	60	29	339
1947	8	0	0	0	0	0	30	39	40	46	41	21	225
1948	0	0	0	0	1	0	6	34	54	66	58	25	244
1949	5	0	0	0	0	0	34	43	56	56	50	24	268
1950	8	0	0	0	0	0	21	25	28	28	25	12	147
1951	0	0	0	0	0	2	53	50	71	71	62	30	340
1952	1	0	0	0	0	0	40	61	64	71	63	31	329
1953	9	0	0	0	0	4	38	56	67	72	58	31	334
1954	7	0	0	0	0	0	30	60	69	72	55	31	324
1955	8	0	0	0	0	4	24	34	37	37	33	15	193
1956	4	0	0	0	0	5	48	49	67	72	63	28	335
1957	4	2	0	0	0	3	47	53	72	72	63	12	328
1958	0	0	0	0	0	0	20	47	65	70	63	30	294
1959	8	2	0	0	0	3	60	65	71	71	61	14	353
1960	9	2	0	0	0	0	12	15	20	19	17	9	103
1961	2	0	0	0	0	0	34	46	53	56	49	21	261
1962	7	0	0	0	0	0	49	61	68	72	62	30	348
1963	0	0	0	0	0	0	17	51	71	73	64	31	306
1964	2	0	0	0	0	4	31	32	32	35	30	14	179
1965	1	0	0	0	0	2	20	61	70	71	51	31	309
1966	9	0	0	0	0	2	55	64	69	69	61	30	359
1967	9	0	0	0	0	0	17	57	58	72	63	31	306
1968	8	0	0	0	0	0	48	61	66	72	54	31	339
1969	4	0	0	0	0	0	44	64	69	71	63	31	346
1970	4	0	0	0	0	0	45	58	58	63	56	28	312
1971	4	0	0	0	0	3	59	52	68	70	62	29	347
1972	8	0	0	0	0	10	41	43	48	50	45	18	264
1973	0	0	0	0	0	0	44	62	72	72	63	29	342
1974	1	0	0	0	0	0	33	62	71	61	63	31	321
1975	2	0	0	0	0	0	36	63	72	69	61	31	335
1976	0	0	0	0	3	3	8	10	10	10	8	4	56
1977	1	0	0	0	0	1	5	3	5	5	5	1	27
1978	1	0	0	0	0	0	25	59	72	72	63	24	315
1979	10	0	0	0	0	0	39	62	72	72	61	28	345
1980	1	0	0	0	0	0	40	57	66	71	63	30	329
1981	7	1	0	0	0	0	34	55	72	72	64	27	333
1982	0	0	0	0	0	0	24	60	62	72	63	19	302
1983	0	0	0	0	0	0	19	54	68	73	61	25	299
1984	7	0	0	0	0	2	55	65	69	70	59	30	357
1985	2	0	0	0	0	0	47	63	70	71	62	20	335
1986	5	0	0	0	0	0	27	43	53	53	47	15	244
1987	6	1	0	0	0	0	27	36	39	39	35	18	202
1988	4	0	0	0	0	0	1	1	1	1	1	0	8
1989	0	0	0	0	0	0	21	32	34	36	32	2	157
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	5	8	9	10	9	4	45
1992	1	0	0	0	0	0	12	20	20	23	21	11	107
1993	0	0	0	0	0	0	39	42	61	73	63	32	309
AVG:	3	0	0	0	0	1	28	41	49	51	44	20	238
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	10	2	0	0	3	10	60	65	72	73	64	32	359

Table 3.4.7-4. Simulated CVP North-of-Delta Agricultural Water Service Deliveries Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	-1
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	-1
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	-2	-1	-2	-2	-2	-1	-9
1936	0	0	0	0	0	0	1	1	1	1	1	1	6
1937	0	0	0	0	0	0	1	1	1	1	1	0	5
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	-1
1940	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-3
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-1
1945	0	0	0	0	0	0	0	0	0	0	0	0	1
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-5
1948	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1949	0	0	0	0	0	0	0	0	-1	-1	0	0	-2
1950	0	0	0	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	-2
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-3
1961	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-6
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	1
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	2
1987	0	0	0	0	0	0	0	0	0	0	0	0	2
1988	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-4
1989	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-6
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	-3	-6	-6	-6	-6	-3	-29
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	0	0	0	0	0	0	-3	-6	-6	-6	-6	-3	-29
MAX:	0	0	0	0	0	0	1	1	1	1	1	1	6

Table 3.4.7-5. Simulated CVP North-of-Delta Agricultural Water Service Deliveries, Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	-1
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	-2
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	-1
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	0	0	0	0	0	0	0	0	1
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	0	0	0	0	0	0	-2
1936	0	0	0	0	0	0	1	2	2	3	2	1	12
1937	0	0	0	0	0	0	1	1	1	2	1	1	8
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-2
1945	0	0	0	0	0	0	0	0	0	0	0	0	1
1946	0	0	0	0	0	0	0	0	-1	-1	0	0	-3
1947	0	0	0	0	0	0	-1	-2	-2	-2	-2	-1	-9
1948	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1949	0	0	0	0	0	0	0	0	0	0	0	0	1
1950	0	0	0	0	0	0	0	0	0	0	0	0	2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	1
1965	0	0	0	0	0	0	0	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	1	1	1	0	0	3
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	1	1	0	0	2
1987	0	0	0	0	0	0	0	0	0	0	0	0	2
1988	0	0	0	0	0	0	0	0	0	0	0	0	1
1989	0	0	0	0	0	0	0	0	0	0	0	0	-1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	-1	-2	-2	-2	-2	-1	-9
MAX:	0	0	0	0	0	0	1	2	2	3	2	1	12

Figure 3.4.7-4. Exceedence for Simulated Annual CVP North-of-Delta M&I Deliveries, 2001 LOD

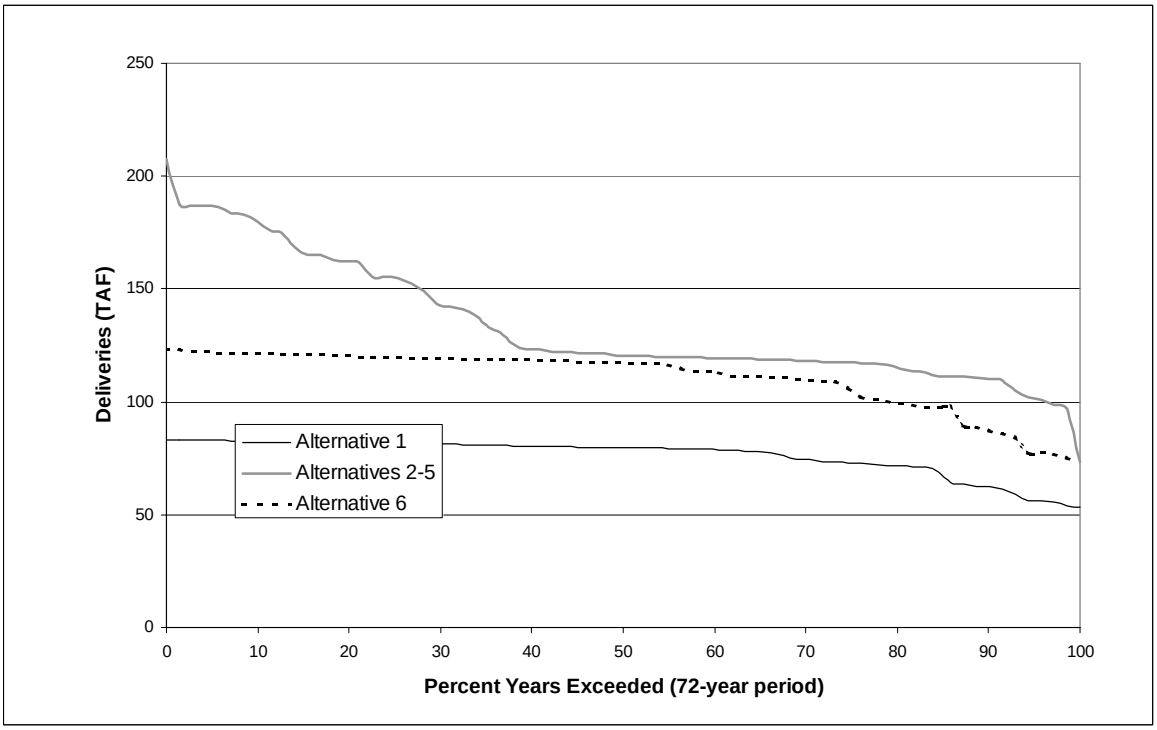


Figure 3.4.7-5. Simulated Annual CVP North-of-Delta M&I Deliveries, 2001 LOD (Alternative 2-5 comparison to Alternative 1)

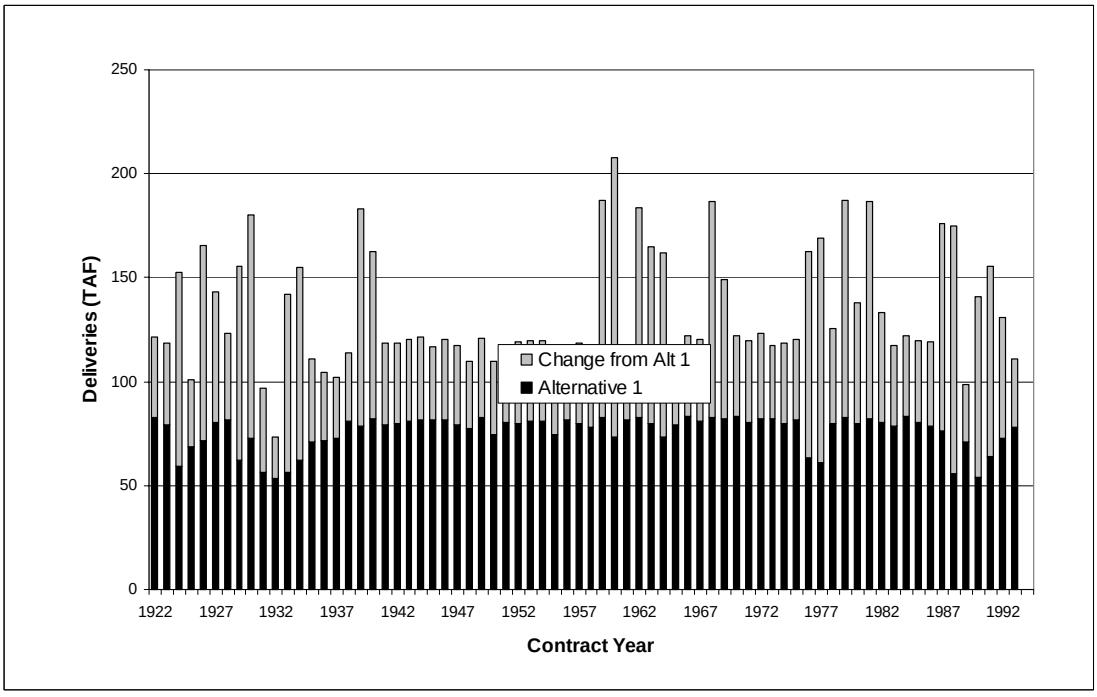


Figure 3.4.7-6. Simulated Annual CVP North-of-Delta M&I Deliveries, 2001 LOD (Alternative 6 comparison to Alternative 1)

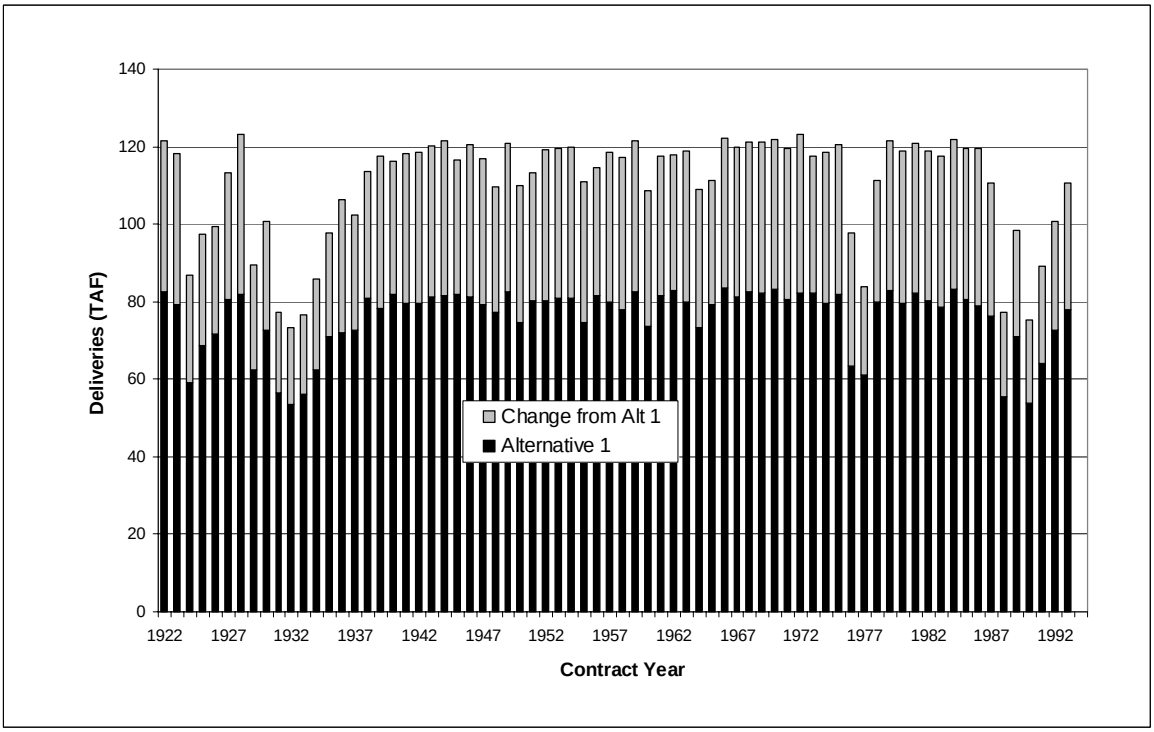


Table 3.4.7-6. Simulated CVP North-of-Delta M&I Deliveries (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	5	3	2	2	2	3	8	9	13	14	12	9	83
1923	4	3	2	2	2	4	5	10	12	14	13	8	79
1924	4	2	2	2	2	2	7	7	9	9	8	6	59
1925	3	2	2	2	2	2	6	8	11	12	11	8	69
1926	5	2	2	2	2	3	4	9	12	12	11	8	72
1927	4	3	2	2	2	3	7	10	12	14	13	9	80
1928	4	3	2	2	2	3	7	10	13	13	12	9	82
1929	5	2	2	2	2	2	6	8	9	10	9	7	62
1930	5	3	2	2	2	2	6	9	11	12	11	8	72
1931	4	2	1	1	1	2	7	6	8	9	8	6	56
1932	3	2	1	1	1	2	5	6	8	9	8	6	53
1933	4	2	1	1	1	2	6	6	9	9	8	6	56
1934	3	2	2	2	2	2	7	7	9	10	9	7	62
1935	4	2	2	2	2	2	3	9	12	12	11	8	71
1936	4	3	2	2	2	3	6	8	11	12	11	8	72
1937	5	3	2	2	2	2	6	9	11	12	11	8	73
1938	4	3	2	2	2	3	7	10	13	14	13	9	81
1939	4	3	2	2	2	3	9	8	12	13	12	8	78
1940	5	3	2	2	2	3	7	9	13	13	12	9	82
1941	4	3	2	2	2	3	4	8	13	14	13	10	79
1942	4	3	2	2	2	3	4	9	13	14	13	10	80
1943	5	3	2	2	2	3	5	10	12	14	13	9	81
1944	5	3	2	2	2	3	7	9	12	13	12	9	81
1945	5	3	2	2	2	3	8	9	12	14	13	9	82
1946	4	3	2	2	2	3	8	9	13	13	12	9	81
1947	5	3	2	2	2	3	7	10	11	13	12	9	79
1948	4	3	2	2	2	3	4	8	12	14	13	9	77
1949	5	3	2	2	2	3	8	9	13	13	12	9	83
1950	5	3	2	2	2	2	7	9	11	12	11	8	74
1951	4	3	2	2	2	3	8	9	13	13	12	9	80
1952	4	3	2	2	2	3	7	10	12	13	12	9	80
1953	6	3	2	2	2	3	6	9	12	13	12	9	81
1954	5	3	2	2	2	3	6	10	12	14	12	9	81
1955	5	3	2	2	2	4	6	9	11	12	11	8	75
1956	5	3	2	2	2	4	8	8	12	13	12	9	82
1957	4	3	2	2	2	3	7	8	13	14	13	8	80
1958	4	3	2	2	2	3	4	9	12	14	13	9	78
1959	5	3	2	2	2	3	8	10	13	13	12	7	83
1960	5	3	2	2	2	2	7	8	11	12	11	8	74
1961	5	3	2	2	2	3	7	10	13	14	12	9	82
1962	6	3	2	2	2	3	8	10	12	13	12	9	83
1963	4	3	2	2	2	3	5	9	13	14	13	10	80
1964	4	3	2	2	2	3	9	8	10	12	10	8	73
1965	4	3	2	2	2	3	5	10	13	14	11	9	79
1966	6	3	2	2	2	3	8	10	12	13	12	9	83
1967	6	3	2	2	2	3	4	10	12	14	13	10	81
1968	5	3	2	2	2	3	8	10	12	13	12	9	82
1969	5	3	2	2	2	3	7	10	12	13	12	9	82
1970	5	3	2	2	2	3	9	10	12	13	12	9	83
1971	4	3	2	2	2	3	8	9	12	13	12	9	81
1972	5	3	2	2	2	3	8	10	12	13	12	8	82
1973	4	3	2	2	2	3	8	10	13	13	12	9	82
1974	4	3	2	2	2	3	6	10	13	12	13	9	80
1975	4	3	2	2	2	3	7	10	13	13	12	9	82
1976	3	2	2	2	2	3	6	8	10	10	8	7	64
1977	4	2	2	2	2	3	8	6	9	10	9	5	61
1978	5	3	2	2	2	3	5	10	13	14	13	9	80
1979	6	3	2	2	2	3	7	10	13	14	12	9	83
1980	4	3	2	2	2	3	7	10	12	13	12	9	80
1981	5	3	2	2	2	3	7	9	13	13	13	9	82
1982	4	3	2	2	2	3	5	11	12	14	13	9	80
1983	4	3	2	2	2	3	4	10	13	14	13	9	78
1984	5	3	2	2	2	3	8	10	12	13	12	9	83
1985	4	3	2	2	2	3	8	10	12	13	12	8	81
1986	5	3	2	2	2	3	7	10	13	13	12	8	79
1987	5	3	2	2	2	2	7	9	11	12	11	8	76
1988	4	2	2	1	1	3	5	6	8	9	8	6	55
1989	5	2	2	2	2	2	6	10	11	12	11	6	71
1990	3	2	1	1	1	2	7	4	9	9	8	6	54
1991	4	2	2	2	2	2	6	8	10	11	10	7	64
1992	4	3	2	2	2	2	6	10	11	12	11	8	73
1993	4	3	2	2	2	3	7	8	12	13	12	9	78
AVG:	4	3	2	2	2	3	7	9	12	13	12	8	76
MIN:	3	2	1	1	1	2	3	4	8	9	8	5	53
MAX:	6	3	2	2	2	4	9	11	13	14	13	10	83

Table 3.4.7-7. Simulated CVP North-of-Delta M&I Deliveries (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	8	5	3	2	3	5	11	14	18	20	19	14	121
1923	7	5	3	2	3	6	9	14	17	20	19	12	118
1924	6	5	2	2	2	17	22	23	22	19	18	15	153
1925	6	2	2	2	2	5	11	14	17	18	14	9	101
1926	6	2	2	2	2	15	18	24	27	27	23	18	165
1927	15	12	11	4	2	5	10	14	18	20	19	14	143
1928	7	5	3	2	3	4	12	17	19	20	18	13	123
1929	6	3	2	2	2	17	21	24	22	20	19	16	155
1930	14	7	2	2	2	14	21	24	27	27	23	18	180
1931	14	11	2	1	1	6	13	13	11	10	9	5	97
1932	3	1	1	1	1	7	11	13	12	10	8	5	73
1933	3	2	1	1	1	16	21	22	22	19	18	15	142
1934	6	2	1	1	1	18	22	24	23	20	19	16	155
1935	13	7	2	2	2	4	8	15	18	18	14	9	111
1936	5	3	2	2	2	6	12	15	18	18	14	9	105
1937	6	3	2	2	2	5	11	15	17	17	14	9	102
1938	5	3	2	2	2	5	10	14	18	20	19	13	114
1939	7	5	3	2	2	15	24	24	28	28	26	18	183
1940	15	14	12	12	11	5	11	14	18	20	19	13	162
1941	7	5	3	2	3	5	9	13	18	20	19	14	118
1942	7	5	3	2	3	5	8	13	18	20	19	14	119
1943	8	5	3	2	3	5	9	14	17	20	19	14	120
1944	8	5	3	2	2	5	12	15	18	19	18	13	122
1945	6	4	3	2	2	4	12	13	17	20	19	14	117
1946	7	5	3	2	3	5	12	14	18	19	19	13	120
1947	8	5	3	2	2	5	13	16	17	19	16	10	117
1948	5	4	3	2	2	4	7	13	18	20	19	13	110
1949	8	5	3	2	3	4	12	14	18	20	19	14	121
1950	8	5	3	2	2	5	12	15	18	18	14	9	110
1951	5	3	2	2	2	5	12	13	18	20	19	13	113
1952	7	5	3	2	3	5	11	14	17	20	19	13	119
1953	8	5	3	2	3	5	10	13	17	20	19	14	120
1954	8	5	3	2	3	5	10	15	17	20	18	14	120
1955	8	5	3	2	2	6	12	15	18	18	14	9	111
1956	6	3	2	2	2	6	11	13	17	20	19	13	114
1957	7	6	3	2	3	5	11	13	18	20	19	12	119
1958	7	6	3	2	3	5	8	14	17	20	19	14	117
1959	8	6	3	2	3	15	21	24	27	29	28	21	187
1960	17	15	12	12	11	14	21	24	27	27	19	9	208
1961	6	3	2	2	2	4	12	16	19	20	18	13	116
1962	7	4	3	2	2	14	21	24	27	29	28	23	184
1963	16	15	12	12	11	5	9	14	18	20	19	14	165
1964	7	5	3	2	2	16	23	24	26	27	19	9	162
1965	5	3	2	2	2	5	8	15	18	20	18	14	111
1966	8	5	3	2	3	5	12	14	18	19	19	13	122
1967	8	5	3	2	3	5	9	15	17	20	19	14	120
1968	8	5	3	2	3	14	21	24	27	29	28	23	187
1969	17	15	12	2	3	5	11	15	18	20	19	14	149
1970	7	5	3	2	3	5	12	15	17	20	19	14	122
1971	7	5	3	2	3	5	12	13	17	19	19	13	119
1972	8	5	3	2	3	5	13	16	18	19	18	12	123
1973	6	4	3	2	2	5	12	14	18	20	19	13	117
1974	7	5	3	2	3	5	10	15	18	18	19	14	119
1975	7	5	3	2	3	5	11	15	18	20	19	14	121
1976	6	5	3	2	2	13	21	22	26	26	20	17	163
1977	13	11	2	1	1	18	23	22	23	20	19	15	169
1978	14	3	2	2	2	9	9	15	18	20	19	13	125
1979	8	5	3	2	3	14	20	24	27	29	28	23	187
1980	16	15	4	2	3	5	11	14	17	19	19	13	138
1981	8	6	3	2	3	14	20	23	27	29	28	22	186
1982	16	10	3	2	3	5	9	15	18	20	19	13	133
1983	7	5	3	2	3	5	9	14	18	20	19	13	118
1984	8	5	3	2	3	5	12	15	17	19	18	13	122
1985	7	5	3	2	3	5	12	15	17	19	19	12	120
1986	7	5	3	2	2	4	12	16	19	19	18	12	119
1987	7	4	3	2	2	15	22	25	27	27	23	19	176
1988	14	11	11	11	3	17	20	22	20	19	18	9	175
1989	4	2	2	2	2	4	11	16	17	18	14	7	98
1990	4	2	1	1	1	16	22	21	21	19	18	15	141
1991	4	2	2	1	2	12	21	21	25	26	21	17	155
1992	13	11	2	2	2	14	16	15	17	17	13	9	131
1993	5	3	2	2	2	5	10	12	17	20	19	14	111
AVG:	8	6	3	3	3	8	14	17	19	21	19	13	133
MIN:	3	1	1	1	1	4	7	12	11	10	8	5	73
MAX:	17	15	12	12	11	18	24	25	28	29	28	23	208

Table 3.4.7-8. Simulated CVP North-of-Delta M&I Deliveries (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	8	5	3	2	3	5	11	14	18	20	19	14	121
1923	7	5	3	2	3	6	9	14	17	20	19	12	118
1924	6	5	2	2	2	7	12	13	12	10	9	6	87
1925	3	2	2	2	2	5	11	14	17	18	14	9	97
1926	6	2	2	2	2	6	9	14	18	17	13	9	99
1927	5	3	2	2	2	5	10	14	18	20	19	14	113
1928	7	5	3	2	3	4	12	17	19	19	18	13	123
1929	6	3	2	2	2	8	12	15	13	11	10	7	90
1930	4	3	2	2	2	5	11	15	18	18	14	9	101
1931	5	2	1	1	1	6	13	13	11	10	9	5	77
1932	3	1	1	1	1	7	11	13	12	10	8	5	73
1933	3	2	1	1	1	7	12	12	12	10	9	6	77
1934	3	2	1	1	1	8	13	14	14	11	10	7	86
1935	4	2	2	2	2	4	8	15	18	18	14	9	98
1936	5	3	2	2	2	6	12	15	18	18	14	10	106
1937	6	3	2	2	2	5	11	15	17	17	14	9	102
1938	5	3	2	2	2	5	10	14	18	20	19	13	114
1939	7	5	3	2	2	5	15	14	18	19	16	9	117
1940	6	4	3	2	2	5	11	14	18	20	19	13	116
1941	7	5	3	2	3	5	9	13	18	20	19	14	118
1942	7	5	3	2	3	5	8	13	18	20	19	14	119
1943	8	5	3	2	3	5	9	14	17	20	19	14	120
1944	8	5	3	2	2	5	12	15	18	19	18	13	121
1945	6	4	3	2	2	4	12	13	17	20	19	14	117
1946	7	5	3	2	3	5	12	14	18	19	19	13	120
1947	8	5	3	2	2	5	13	16	17	19	16	10	117
1948	5	4	3	2	2	4	7	13	18	20	19	13	110
1949	8	5	3	2	3	4	12	14	18	20	19	14	121
1950	8	5	3	2	2	5	12	15	18	18	14	9	110
1951	5	3	2	2	2	5	12	13	18	20	19	13	113
1952	7	5	3	2	3	5	11	14	17	20	19	13	119
1953	8	5	3	2	3	5	10	13	17	20	19	14	120
1954	8	5	3	2	3	5	10	15	17	20	18	14	120
1955	8	5	3	2	2	6	12	15	18	18	14	9	111
1956	6	3	2	2	2	6	11	13	17	20	19	13	114
1957	7	6	3	2	3	5	11	13	18	20	19	12	119
1958	7	6	3	2	3	5	8	14	17	20	19	14	117
1959	8	6	3	2	3	5	12	15	18	19	19	11	121
1960	8	6	3	2	2	4	12	14	18	17	14	9	109
1961	6	3	2	2	2	4	12	16	19	20	19	13	117
1962	7	4	3	2	2	5	12	14	18	20	19	13	118
1963	7	5	3	2	3	5	9	14	18	20	19	14	119
1964	7	5	3	2	2	6	14	14	17	17	13	9	109
1965	5	3	2	2	2	5	8	15	18	20	18	14	111
1966	8	5	3	2	3	5	12	14	18	19	19	13	122
1967	8	5	3	2	3	5	9	15	17	20	19	14	120
1968	8	5	3	2	3	5	12	14	17	20	18	14	121
1969	7	5	3	2	3	5	11	15	18	20	19	14	121
1970	7	5	3	2	3	5	12	15	17	20	19	14	122
1971	7	5	3	2	3	5	12	13	17	19	19	13	119
1972	8	5	3	2	3	5	13	16	18	19	18	12	123
1973	6	4	3	2	2	5	12	14	18	20	19	13	117
1974	7	5	3	2	3	5	10	15	18	18	19	14	119
1975	7	5	3	2	3	5	11	15	18	20	19	14	121
1976	6	5	3	2	2	4	12	12	17	17	11	8	98
1977	4	2	1	1	1	8	14	12	14	11	10	5	84
1978	5	2	2	2	2	5	9	15	18	20	19	13	111
1979	8	5	3	2	3	5	11	14	18	20	19	13	122
1980	7	5	3	2	3	5	11	14	17	19	19	13	119
1981	8	6	3	2	3	5	11	14	18	20	19	13	121
1982	7	5	3	2	3	5	9	15	18	20	19	13	119
1983	7	5	3	2	3	5	9	14	18	20	19	13	118
1984	8	5	3	2	3	5	12	15	17	19	18	13	122
1985	7	5	3	2	3	5	12	15	17	19	19	12	120
1986	7	5	3	2	2	4	12	16	19	19	18	12	119
1987	7	4	3	2	2	5	13	16	18	18	14	9	111
1988	5	2	1	1	1	7	11	13	11	10	9	6	77
1989	4	2	2	2	2	4	11	16	17	18	14	7	98
1990	4	2	1	1	1	6	13	11	12	10	9	5	75
1991	4	2	2	1	2	3	12	12	16	16	12	8	89
1992	4	2	2	2	2	5	11	16	17	18	14	9	101
1993	5	3	2	2	2	5	10	12	17	20	19	14	111
AVG:	6	4	3	2	2	5	11	14	17	18	16	11	110
MIN:	3	1	1	1	1	3	7	11	11	10	8	5	73
MAX:	8	6	3	2	3	8	15	17	19	20	19	14	123

Table 3.4.7-9. Simulated CVP North-of-Delta M&I Deliveries (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	3	3	1	0	0	2	4	5	5	6	6	4	39
1923	3	3	1	0	0	2	4	4	5	6	6	4	39
1924	3	3	1	0	0	15	15	15	13	10	10	9	93
1925	3	0	0	0	0	3	5	6	6	5	3	1	32
1926	1	0	0	0	0	12	14	15	15	15	12	10	94
1927	11	9	9	2	0	2	4	4	5	6	6	4	63
1928	3	3	1	0	0	2	5	6	6	6	6	4	41
1929	1	1	1	0	0	15	16	16	13	10	10	9	93
1930	9	4	0	0	0	12	14	15	16	15	12	10	108
1931	11	9	0	0	0	4	6	7	3	1	0	0	40
1932	0	0	0	0	0	4	6	7	3	1	0	0	20
1933	0	0	0	0	0	15	15	15	13	10	10	9	86
1934	3	0	0	0	0	15	15	16	14	10	10	9	93
1935	9	4	0	0	0	2	4	6	6	6	3	1	40
1936	1	0	0	0	0	3	6	7	7	6	3	1	33
1937	1	0	0	0	0	3	5	6	6	5	3	1	30
1938	1	0	0	0	0	2	4	5	5	6	6	4	33
1939	3	3	1	0	0	12	15	16	15	16	14	10	105
1940	11	10	10	9	8	2	4	5	5	6	6	4	80
1941	3	3	1	0	0	2	4	5	5	6	6	4	39
1942	3	3	1	0	0	2	4	5	5	6	6	4	39
1943	3	3	1	0	0	2	4	4	5	6	6	4	39
1944	3	3	1	0	0	2	5	6	6	6	6	4	40
1945	2	1	1	0	0	2	4	5	5	6	6	4	35
1946	3	3	1	0	0	2	4	5	5	6	7	4	39
1947	3	3	1	0	0	3	6	6	6	6	4	1	38
1948	1	1	0	0	0	1	3	5	5	6	6	4	32
1949	3	3	1	0	0	2	4	5	5	6	6	4	38
1950	3	3	1	0	0	3	5	6	6	6	3	1	35
1951	1	0	0	0	0	2	4	5	5	6	6	4	33
1952	3	3	1	0	0	2	4	4	5	6	6	4	39
1953	3	3	1	0	0	2	4	4	5	6	7	4	39
1954	3	3	1	0	0	2	4	4	5	6	6	4	39
1955	3	3	1	0	0	3	5	6	7	6	3	1	36
1956	1	0	0	0	0	2	4	5	5	6	6	4	33
1957	3	3	1	0	0	2	4	5	5	6	6	4	39
1958	3	3	1	0	0	2	4	5	5	6	6	4	39
1959	3	3	1	0	0	12	13	14	14	16	16	14	105
1960	12	12	10	10	9	12	14	16	16	15	9	1	134
1961	1	0	0	0	0	1	5	6	6	6	6	4	35
1962	1	1	1	0	0	11	13	14	14	16	16	14	101
1963	12	12	10	10	9	2	4	5	5	6	6	4	85
1964	3	3	1	0	0	12	14	16	16	15	9	1	89
1965	1	0	0	0	0	2	3	4	5	6	6	4	32
1966	3	3	1	0	0	2	4	5	5	6	7	4	39
1967	3	3	1	0	0	2	4	4	5	6	6	4	39
1968	3	3	1	0	0	12	13	14	14	16	16	14	104
1969	12	12	10	0	0	2	4	4	5	6	6	4	67
1970	3	3	1	0	0	2	3	4	5	6	7	4	39
1971	3	3	1	0	0	2	4	5	5	6	7	4	39
1972	3	3	1	0	0	2	5	6	6	6	6	4	41
1973	2	1	1	0	0	2	4	4	5	6	6	4	35
1974	3	3	1	0	0	2	4	4	5	6	6	4	39
1975	3	3	1	0	0	2	4	4	5	6	6	4	39
1976	3	3	1	0	0	10	15	14	16	15	12	10	99
1977	9	9	0	0	0	15	15	16	13	10	10	9	108
1978	9	0	0	0	0	6	4	4	5	6	6	4	46
1979	3	3	1	0	0	12	13	14	14	16	16	14	104
1980	12	12	1	0	0	2	4	5	5	6	6	4	58
1981	3	3	1	0	0	12	13	14	14	16	16	14	104
1982	12	7	1	0	0	2	4	4	5	6	6	4	53
1983	3	3	1	0	0	2	4	4	5	6	6	4	39
1984	3	3	1	0	0	2	4	4	5	6	7	4	39
1985	3	3	1	0	0	2	4	4	5	6	6	4	39
1986	3	3	1	0	0	1	5	6	6	6	6	4	40
1987	1	1	1	0	0	12	15	16	16	15	12	10	100
1988	11	9	9	9	1	14	15	16	12	10	10	3	120
1989	0	0	0	0	0	2	5	6	6	6	3	1	27
1990	1	0	0	0	0	14	15	16	12	10	10	9	87
1991	0	0	0	0	0	10	15	14	16	15	11	10	91
1992	9	8	0	0	0	12	10	6	6	5	2	1	58
1993	1	0	0	0	0	2	4	5	5	6	6	4	33
AVG:	4	3	1	1	0	5	7	8	8	8	7	5	57
MIN:	0	0	0	0	0	1	3	4	3	1	0	0	20
MAX:	12	12	10	10	9	15	16	16	16	16	16	14	134

Table 3.4.7-10. Simulated CVP North-of-Delta M&I Deliveries (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	3	3	1	0	0	2	4	5	5	6	6	4	39
1923	3	3	1	0	0	2	4	4	5	6	6	4	39
1924	3	3	1	0	0	5	5	6	4	1	1	0	28
1925	0	0	0	0	0	3	5	6	6	5	3	1	29
1926	1	0	0	0	0	2	5	6	6	5	2	1	28
1927	1	0	0	0	0	2	4	4	5	6	6	4	33
1928	3	3	1	0	0	2	5	6	6	6	6	4	41
1929	1	1	1	0	0	6	6	7	4	1	1	0	27
1930	0	0	0	0	0	3	5	6	6	5	3	1	28
1931	1	0	0	0	0	4	6	7	3	1	0	0	21
1932	0	0	0	0	0	4	6	7	3	1	0	0	20
1933	0	0	0	0	0	5	5	6	4	1	1	0	20
1934	0	0	0	0	0	6	6	7	4	1	1	0	24
1935	0	0	0	0	0	2	5	6	6	6	3	1	27
1936	1	0	0	0	0	3	6	7	7	6	3	1	34
1937	1	0	0	0	0	3	5	6	6	5	3	1	30
1938	1	0	0	0	0	2	4	5	5	6	6	4	33
1939	3	3	1	0	0	3	6	6	6	6	4	1	39
1940	1	1	0	0	0	2	4	5	5	6	6	4	34
1941	3	3	1	0	0	2	4	5	5	6	6	4	39
1942	3	3	1	0	0	2	4	5	5	6	6	4	39
1943	3	3	1	0	0	2	4	4	5	6	6	4	39
1944	3	3	1	0	0	2	5	6	6	6	6	4	40
1945	2	1	1	0	0	2	4	5	5	6	6	4	35
1946	3	3	1	0	0	2	4	5	5	6	7	4	39
1947	3	3	1	0	0	3	6	6	6	6	4	1	38
1948	1	1	0	0	0	1	3	5	5	6	6	4	32
1949	3	3	1	0	0	2	4	5	5	6	7	4	38
1950	3	3	1	0	0	3	5	6	6	5	3	1	36
1951	1	0	0	0	0	2	4	5	5	6	6	4	33
1952	3	3	1	0	0	2	4	4	5	6	6	4	39
1953	3	3	1	0	0	2	4	4	5	6	7	4	39
1954	3	3	1	0	0	2	4	4	5	6	6	4	39
1955	3	3	1	0	0	3	5	6	7	6	3	1	36
1956	1	0	0	0	0	2	4	5	5	6	6	4	33
1957	3	3	1	0	0	2	4	5	5	6	6	4	39
1958	3	3	1	0	0	2	4	5	5	6	6	4	39
1959	3	3	1	0	0	2	4	4	5	6	7	5	39
1960	3	3	1	0	0	2	5	6	6	5	3	1	35
1961	1	0	0	0	0	1	5	6	6	6	6	4	36
1962	1	1	1	0	0	2	4	4	5	6	6	4	35
1963	3	3	1	0	0	2	4	5	5	6	6	4	39
1964	3	3	1	0	0	3	5	6	6	6	3	1	36
1965	1	0	0	0	0	2	3	4	5	6	6	4	32
1966	3	3	1	0	0	2	4	5	5	6	7	4	39
1967	3	3	1	0	0	2	4	4	5	6	6	4	39
1968	3	3	1	0	0	2	4	4	5	6	7	4	39
1969	3	3	1	0	0	2	4	4	5	6	6	4	39
1970	3	3	1	0	0	2	3	4	5	6	7	4	39
1971	3	3	1	0	0	2	4	5	5	6	7	4	39
1972	3	3	1	0	0	2	5	6	6	6	6	4	41
1973	2	1	1	0	0	2	4	4	5	6	6	4	35
1974	3	3	1	0	0	2	4	4	5	6	6	4	39
1975	3	3	1	0	0	2	4	4	5	6	6	4	39
1976	3	3	1	0	0	1	6	4	7	6	2	1	34
1977	0	0	0	0	0	5	6	7	4	1	1	0	23
1978	0	0	0	0	0	2	4	4	5	6	6	4	31
1979	3	3	1	0	0	2	4	4	5	6	6	4	39
1980	3	3	1	0	0	2	4	5	5	6	6	4	39
1981	3	3	1	0	0	2	4	4	5	6	6	4	39
1982	3	3	1	0	0	2	4	4	5	6	6	4	39
1983	3	3	1	0	0	2	4	4	5	6	6	4	39
1984	3	3	1	0	0	2	4	4	5	6	7	4	39
1985	3	3	1	0	0	2	4	4	5	6	6	4	39
1986	3	3	1	0	0	1	5	6	6	6	6	4	41
1987	1	1	1	0	0	3	5	6	7	6	3	1	34
1988	1	0	0	0	0	4	6	7	3	1	0	0	22
1989	0	0	0	0	0	2	5	6	6	5	3	1	27
1990	1	0	0	0	0	4	6	7	3	1	0	0	21
1991	0	0	0	0	0	1	6	4	6	6	2	1	25
1992	0	0	0	0	0	2	5	6	6	5	3	1	28
1993	1	0	0	0	0	2	4	5	5	6	6	4	33
AVG:	2	2	0	0	0	2	5	5	5	5	5	3	34
MIN:	0	0	0	0	0	1	3	4	3	1	0	0	20
MAX:	3	3	1	0	0	6	6	7	7	6	7	5	41

Figure 3.4.7-7. Exceedence for Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2001 LOD

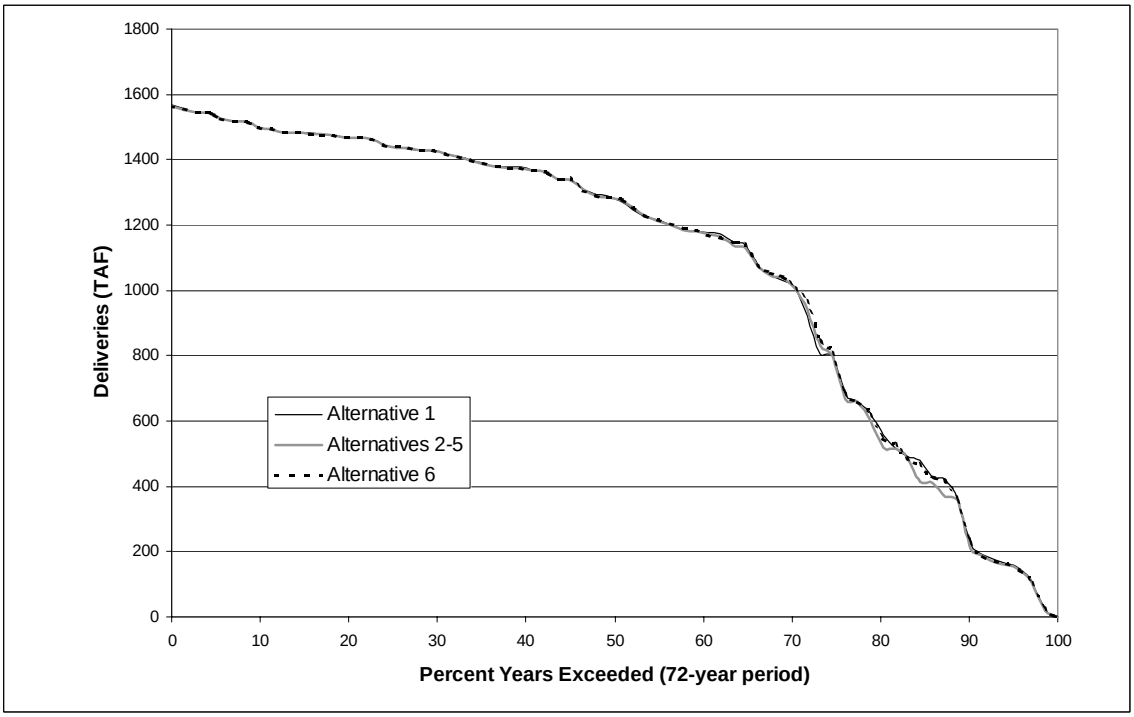


Figure 3.4.7-8. Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2001 LOD (Alternative 2-5 comparison to Alternative 1)

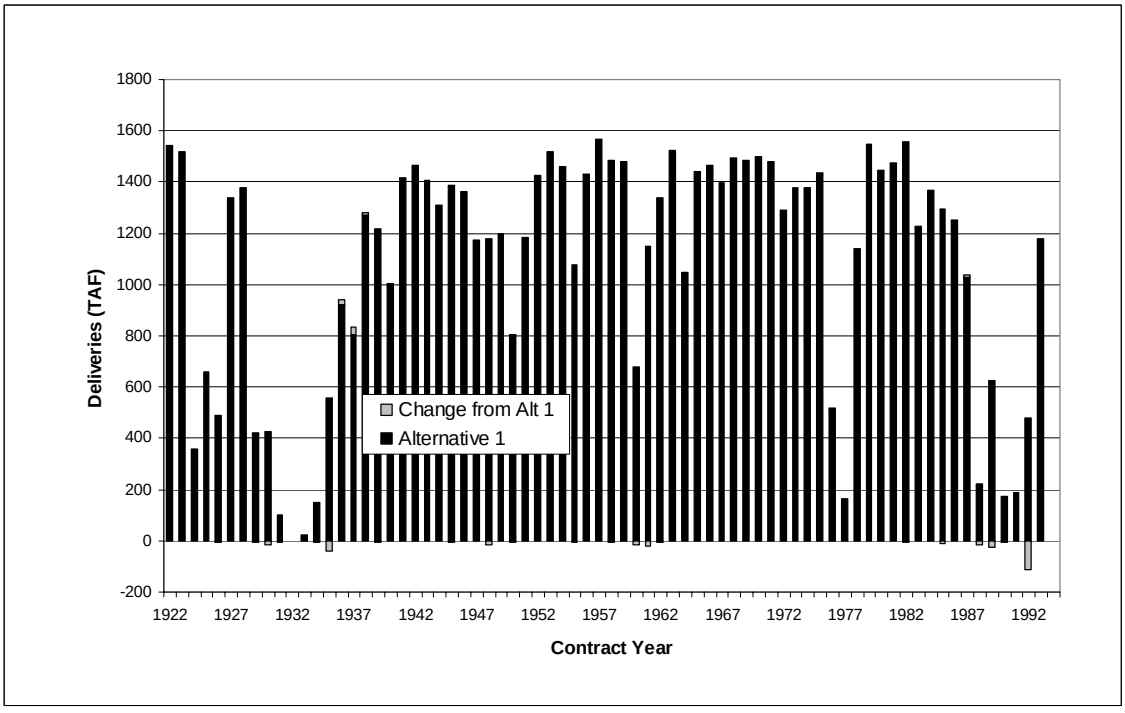


Figure 3.4.7-9. Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2001 LOD
(Alternative 6 comparison to Alternative 1)

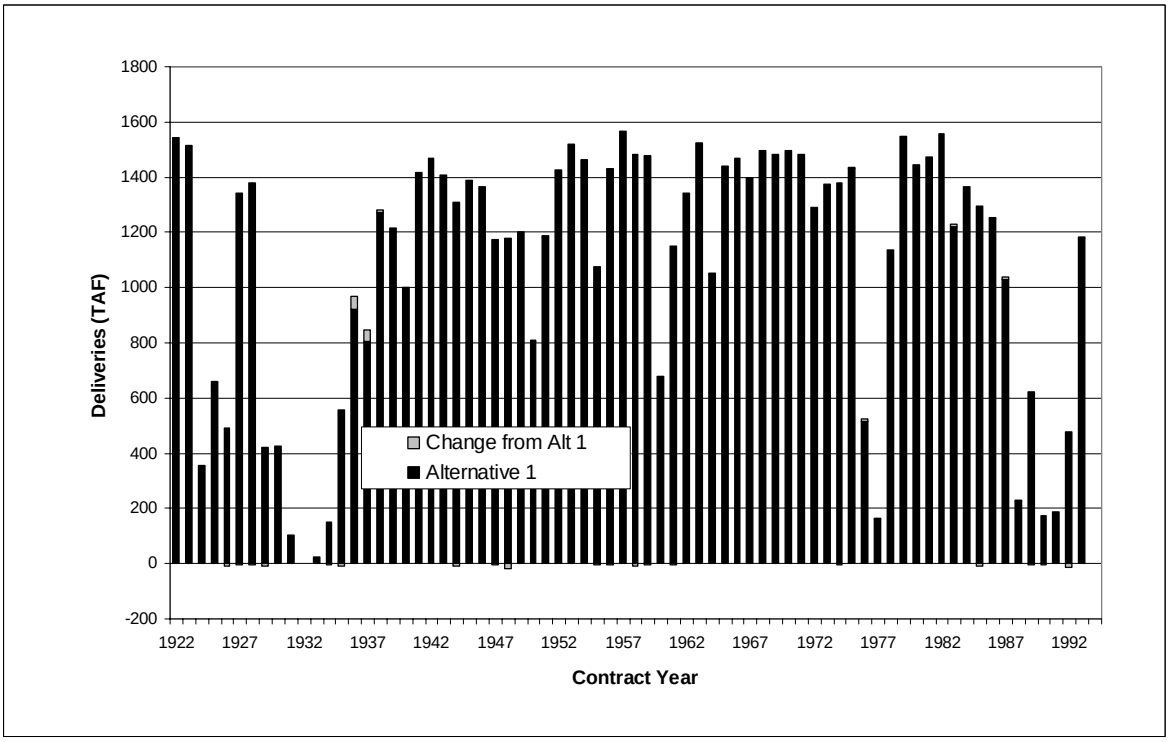


Table 3.4.7-11 Simulated CVP South-of-Delta Agricultural Deliveries (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	57	87	157	251	312	226	73	1545
1923	47	34	48	85	100	62	87	162	259	323	234	75	1517
1924	49	35	50	88	103	2	3	4	6	8	6	2	356
1925	1	1	1	2	3	33	46	88	141	175	127	41	658
1926	27	19	27	47	56	20	28	41	66	82	59	19	491
1927	12	9	13	22	26	62	87	170	273	339	246	79	1340
1928	51	37	53	92	109	50	86	138	222	276	200	64	1378
1929	42	30	43	75	88	9	12	19	30	37	27	9	420
1930	6	4	6	10	12	20	34	51	82	102	74	24	426
1931	15	11	16	28	33	0	0	0	0	0	0	0	103
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	1	2	3	5	6	4	1	23
1934	1	1	1	2	2	9	12	19	30	37	27	9	149
1935	6	4	6	10	12	0	23	76	122	152	110	36	557
1936	23	17	24	41	49	49	67	100	160	200	145	47	921
1937	30	22	31	54	64	20	55	81	130	162	118	38	805
1938	25	18	25	44	52	58	87	148	238	295	214	69	1273
1939	45	32	46	80	95	46	82	122	195	242	176	57	1216
1940	37	27	38	66	78	29	44	105	169	210	152	49	1003
1941	32	23	33	57	67	63	87	162	259	323	234	75	1415
1942	49	35	50	88	103	62	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	61	87	133	214	266	193	62	1310
1945	40	29	41	72	85	55	84	151	242	301	218	70	1389
1946	46	33	47	82	96	51	75	144	230	286	208	67	1363
1947	43	31	44	78	92	32	78	119	190	237	172	55	1172
1948	36	26	37	64	76	2	44	137	220	273	198	64	1177
1949	41	30	42	74	88	23	74	127	204	253	184	59	1200
1950	38	28	39	69	81	22	49	73	117	146	106	34	803
1951	22	16	23	40	47	62	87	137	219	272	198	64	1185
1952	41	30	42	74	87	46	87	157	251	312	227	73	1427
1953	47	34	48	85	100	62	87	162	260	323	234	76	1519
1954	49	35	50	88	104	50	80	155	248	308	224	72	1462
1955	47	34	48	84	99	47	67	100	161	200	145	47	1078
1956	30	22	31	54	64	54	87	167	268	333	241	78	1430
1957	50	36	52	90	107	63	87	166	266	331	240	77	1566
1958	50	36	51	90	106	48	83	157	251	312	227	73	1484
1959	47	34	48	85	100	61	87	156	250	311	226	73	1480
1960	47	34	48	84	100	9	33	50	80	99	72	23	681
1961	15	11	15	27	32	43	87	141	226	281	204	66	1149
1962	43	31	44	76	90	53	77	142	228	284	206	66	1340
1963	43	31	44	77	91	56	87	168	270	336	244	78	1525
1964	51	37	52	91	108	39	61	93	150	186	135	44	1047
1965	28	20	29	51	60	53	73	173	277	345	250	81	1439
1966	52	38	54	94	110	59	87	149	239	298	216	70	1466
1967	45	33	46	81	95	48	86	148	238	295	214	69	1399
1968	45	32	46	80	95	62	87	161	258	321	233	75	1494
1969	49	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	61	87	159	255	317	230	74	1498
1971	48	35	49	86	102	56	82	157	252	313	228	73	1481
1972	47	34	49	85	100	52	75	130	208	259	188	61	1288
1973	39	28	40	70	83	52	87	150	241	299	217	70	1376
1974	45	33	46	81	96	57	87	143	229	285	207	67	1378
1975	43	31	44	77	91	64	87	153	245	304	221	71	1432
1976	46	33	47	83	97	13	18	27	43	54	39	13	513
1977	8	6	8	15	17	7	9	14	22	28	20	7	162
1978	4	3	4	8	9	57	87	148	238	295	214	69	1138
1979	45	32	46	80	95	62	87	169	271	336	244	79	1546
1980	51	37	52	91	108	54	87	148	238	295	214	69	1445
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	45	80	171	275	342	248	80	1557
1983	52	37	53	93	109	47	75	116	186	231	168	54	1222
1984	35	25	36	63	74	62	87	151	242	301	218	70	1366
1985	46	33	47	82	96	51	75	135	216	268	183	63	1295
1986	41	29	42	73	86	47	76	131	210	262	190	61	1248
1987	40	29	41	71	84	21	69	104	166	207	150	48	1029
1988	31	23	32	56	66	1	1	2	3	4	3	1	224
1989	1	0	1	1	1	0	58	86	138	172	125	40	624
1990	26	19	27	47	55	0	0	0	0	0	0	0	174
1991	0	0	0	0	0	12	16	25	39	49	35	11	188
1992	7	5	8	13	16	13	39	58	93	116	84	27	479
1993	18	13	18	31	37	54	85	142	228	283	205	66	1180
AVG:	35	25	36	62	74	40	65	115	184	228	165	53	1081
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	57	42	59	103	122	64	87	173	277	345	250	81	1566

Table 3.4.7-12. Simulated CVP South-of-Delta Agricultural Deliveries (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	57	86	157	251	312	226	73	1544
1923	47	34	48	85	100	62	87	162	259	323	234	75	1517
1924	49	35	50	88	103	2	3	4	6	8	6	2	355
1925	1	1	1	2	2	33	45	88	141	175	127	41	658
1926	26	19	27	47	56	20	27	41	65	81	59	19	488
1927	12	9	13	22	26	62	87	170	273	339	246	79	1340
1928	51	37	53	92	109	50	86	138	221	275	200	64	1377
1929	42	30	43	75	88	9	12	18	28	35	25	8	412
1930	5	4	5	10	11	19	33	49	79	98	71	23	409
1931	15	11	15	27	32	0	0	0	0	0	0	0	99
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	1	2	3	4	5	4	1	20
1934	1	1	1	1	2	9	12	18	29	36	26	8	145
1935	6	4	6	10	12	0	12	72	115	143	104	34	517
1936	22	16	22	39	46	50	70	104	166	207	150	48	940
1937	31	23	32	56	66	21	56	84	135	167	121	39	832
1938	25	18	26	45	54	58	87	148	238	295	214	69	1278
1939	45	32	46	80	95	46	81	121	194	241	175	56	1212
1940	37	26	37	65	77	29	44	105	169	210	152	49	1001
1941	32	23	33	57	67	62	87	162	259	323	234	75	1415
1942	49	35	50	88	103	62	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	61	87	133	213	264	192	62	1307
1945	40	29	41	72	85	55	84	151	241	300	218	70	1385
1946	45	33	47	81	96	51	75	144	230	286	208	67	1362
1947	43	31	44	78	92	32	78	119	190	237	172	55	1171
1948	36	26	37	64	76	0	43	136	217	270	196	63	1164
1949	41	30	42	73	87	23	74	128	205	254	185	59	1200
1950	39	28	39	69	81	22	48	72	116	144	104	34	797
1951	22	16	22	39	46	62	87	137	219	272	198	64	1184
1952	41	30	42	74	87	46	87	157	251	312	227	73	1427
1953	47	34	48	85	100	62	87	162	260	323	234	76	1519
1954	49	35	50	88	103	50	80	155	248	308	224	72	1462
1955	47	34	48	84	99	47	67	99	159	198	144	46	1072
1956	30	22	31	54	64	54	87	167	268	333	241	78	1427
1957	50	36	52	90	107	63	87	166	266	331	240	77	1566
1958	50	36	51	90	106	47	81	156	250	311	226	73	1479
1959	47	34	48	84	100	61	87	156	250	311	226	73	1478
1960	47	34	48	84	100	9	32	48	77	96	69	22	667
1961	14	10	15	26	31	42	87	139	223	277	201	65	1131
1962	42	30	43	75	89	53	77	142	228	284	206	66	1337
1963	43	31	44	77	91	56	87	168	270	336	244	78	1525
1964	51	37	52	91	108	39	60	93	149	186	135	43	1043
1965	28	20	29	50	60	52	72	173	277	345	250	81	1438
1966	52	38	54	94	111	59	87	149	239	298	216	70	1466
1967	45	33	46	81	95	48	86	148	238	295	214	69	1399
1968	45	32	46	80	95	62	87	161	258	321	233	75	1494
1969	49	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	61	87	159	255	317	230	74	1498
1971	48	35	49	86	102	56	82	157	252	313	228	73	1481
1972	47	34	49	85	100	52	75	130	209	259	188	61	1290
1973	39	28	40	70	83	52	87	150	240	299	217	70	1376
1974	45	33	46	81	96	56	87	143	229	285	207	67	1376
1975	43	31	44	77	91	67	87	153	245	304	221	71	1435
1976	46	33	47	83	97	13	18	27	44	55	40	13	517
1977	8	6	8	15	17	7	9	14	22	27	20	6	161
1978	4	3	4	7	9	58	87	148	238	295	214	69	1137
1979	45	32	46	80	95	62	87	169	271	336	244	79	1546
1980	51	37	52	91	108	54	87	148	238	295	214	69	1445
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	45	79	171	273	340	247	79	1551
1983	51	37	53	92	109	48	75	117	188	233	169	55	1227
1984	35	26	36	63	75	62	87	151	242	301	218	70	1367
1985	46	33	47	82	96	51	74	133	213	265	183	62	1285
1986	40	29	41	72	85	47	76	133	212	264	192	62	1254
1987	40	29	41	72	85	22	70	104	167	208	151	49	1038
1988	32	23	32	56	67	0	0	0	0	0	0	0	210
1989	0	0	0	0	0	0	56	83	134	166	121	39	598
1990	25	18	26	45	53	0	0	0	0	0	0	0	167
1991	0	0	0	0	0	12	16	24	39	49	35	11	187
1992	7	5	8	13	16	13	29	43	68	85	62	20	368
1993	13	9	13	23	27	55	87	146	234	291	211	68	1180
AVG:	35	25	36	62	73	40	64	114	183	227	165	53	1078
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	57	42	59	103	122	67	87	173	277	345	250	81	1566

Table 3.4.7-13. Simulated CVP South-of-Delta Agricultural Deliveries (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	57	86	157	251	312	226	73	1544
1923	47	34	48	85	100	62	87	162	259	323	234	75	1517
1924	49	35	50	88	103	2	3	4	6	8	6	2	355
1925	1	1	1	2	2	33	46	88	141	175	127	41	658
1926	26	19	27	47	56	20	27	40	64	80	58	19	484
1927	12	9	12	22	26	62	87	170	273	339	246	79	1339
1928	51	37	53	92	109	50	85	138	221	275	199	64	1374
1929	42	30	43	75	88	9	12	18	28	35	26	8	412
1930	5	4	5	10	11	20	35	52	83	103	75	24	428
1931	16	11	16	28	33	0	0	0	0	0	0	0	104
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	1	2	3	4	6	4	1	21
1934	1	1	1	2	2	9	12	18	29	36	26	8	144
1935	5	4	6	10	12	0	21	75	120	150	109	35	546
1936	23	16	23	41	48	52	72	107	171	213	154	50	969
1937	32	23	33	58	68	22	57	85	137	170	123	40	849
1938	26	19	26	46	54	58	87	148	238	295	214	69	1281
1939	45	32	46	80	95	46	81	122	195	242	176	57	1215
1940	37	27	38	66	78	29	44	105	169	210	152	49	1003
1941	32	23	33	57	67	62	87	162	259	323	234	75	1415
1942	49	35	50	88	103	62	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	61	87	132	212	263	191	62	1303
1945	40	29	41	71	84	55	84	151	242	301	218	70	1388
1946	46	33	47	82	96	51	75	143	230	286	207	67	1362
1947	43	31	44	78	92	31	78	119	190	236	172	55	1169
1948	36	26	37	64	76	0	43	135	217	269	196	63	1162
1949	41	30	42	73	86	23	74	128	205	255	185	60	1202
1950	39	28	40	69	82	23	50	74	119	147	107	34	811
1951	22	16	23	40	47	62	87	137	219	272	198	64	1187
1952	41	30	42	74	87	46	87	157	251	312	227	73	1427
1953	47	34	48	85	100	62	87	162	260	323	234	75	1519
1954	49	35	50	88	103	50	80	155	248	308	224	72	1462
1955	47	34	48	84	99	47	67	100	159	198	144	46	1072
1956	30	22	31	54	64	54	87	167	268	333	241	78	1427
1957	50	36	52	90	107	63	87	166	266	331	240	77	1565
1958	50	36	51	90	106	47	81	156	250	310	225	73	1475
1959	47	34	48	84	99	61	87	156	250	311	226	73	1478
1960	47	34	48	84	100	9	33	50	80	99	72	23	680
1961	15	11	15	27	32	43	87	141	226	280	204	66	1146
1962	42	31	44	76	90	53	77	142	228	284	206	66	1340
1963	43	31	44	77	91	56	87	168	270	336	244	78	1525
1964	51	37	52	91	108	40	62	94	151	187	136	44	1052
1965	28	21	29	51	60	52	72	173	277	345	250	81	1440
1966	52	38	54	94	110	59	87	149	239	298	216	70	1466
1967	45	33	46	81	95	48	86	148	238	295	214	69	1399
1968	45	32	46	80	95	62	87	161	258	321	233	75	1494
1969	49	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	61	87	159	255	317	230	74	1498
1971	48	35	49	86	102	56	82	157	252	313	228	73	1481
1972	47	34	49	85	100	52	75	130	209	259	188	61	1290
1973	39	28	40	70	83	52	87	150	240	299	217	70	1376
1974	45	33	46	81	96	54	87	143	229	285	207	67	1375
1975	43	31	44	77	91	67	87	153	245	304	221	71	1435
1976	46	33	47	82	97	14	19	29	46	57	41	13	525
1977	9	6	9	15	18	7	9	14	22	28	20	6	164
1978	4	3	4	7	9	57	87	148	238	295	214	69	1137
1979	45	32	46	80	95	62	87	169	271	336	244	79	1546
1980	51	37	52	91	108	54	87	148	238	295	214	69	1446
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	45	80	172	275	342	248	80	1558
1983	52	37	53	93	110	47	75	117	187	233	169	54	1228
1984	35	26	36	63	75	62	87	151	242	301	218	70	1367
1985	46	33	47	82	96	51	74	133	213	264	185	62	1285
1986	40	29	41	72	85	47	77	133	213	264	192	62	1254
1987	40	29	41	72	85	22	70	105	168	208	151	49	1039
1988	32	23	32	57	67	1	2	2	4	5	4	1	229
1989	1	1	1	1	2	0	57	86	137	171	124	40	620
1990	26	19	26	46	55	0	0	0	0	0	0	0	172
1991	0	0	0	0	0	12	16	24	39	49	35	11	187
1992	7	5	8	13	16	13	38	56	90	112	81	26	466
1993	17	12	17	30	36	55	86	143	229	285	207	67	1185
AVG:	35	25	36	62	74	40	65	115	184	228	166	53	1082
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	57	42	59	103	122	67	87	173	277	345	250	81	1565

Table 3.4.7-14. Simulated CVP South-of-Delta Agricultural Deliveries (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-1
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1927	0	0	0	0	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	0	0	0	0	0	0	0	-2
1929	0	0	0	0	0	0	-1	-1	-2	-2	-1	0	-8
1930	0	0	0	-1	-1	-1	-1	-2	-3	-4	-3	-1	-17
1931	-1	0	-1	-1	-1	0	0	0	0	0	0	0	-4
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	-1	0	0	-2
1934	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1935	0	0	0	0	0	0	-11	-4	-7	-8	-6	-2	-39
1936	-1	-1	-1	-2	-3	2	2	4	6	7	5	2	19
1937	1	1	1	2	2	2	2	3	4	5	4	1	28
1938	1	1	1	1	2	0	0	0	0	0	0	0	5
1939	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1940	0	0	0	0	0	0	0	0	0	0	0	0	-2
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-3
1945	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1946	0	0	0	0	0	0	0	0	0	0	0	0	-2
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	-2	-1	-2	-2	-3	-2	-1	-13
1949	0	0	0	-1	-1	0	0	0	1	1	1	0	0
1950	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-6
1951	0	0	0	0	-1	0	0	0	0	0	0	0	-2
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-6
1956	0	0	0	0	-1	0	0	0	0	0	0	0	-2
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	-1	-1	0	-1	-1	-1	0	-5
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	-1	-1	-2	-3	-4	-3	-1	-14
1961	-1	0	-1	-1	-1	-1	0	-2	-3	-4	-3	-1	-18
1962	-1	0	-1	-1	-1	0	0	0	0	0	0	0	-4
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	-1	-1	0	0	0	0	0	-3
1965	0	0	0	0	0	0	-1	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	1	0	0	2
1973	0	0	0	0	0	0	0	0	0	0	0	0	-1
1974	0	0	0	0	0	-2	0	0	0	0	0	0	-2
1975	0	0	0	0	0	3	0	0	0	0	0	0	3
1976	0	0	0	0	0	0	0	0	1	1	1	0	3
1977	0	0	0	0	0	0	0	0	0	0	0	0	-1
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-7
1983	0	0	0	0	-1	0	1	1	1	2	1	0	5
1984	0	0	0	0	1	0	0	0	0	0	0	0	2
1985	0	0	0	0	0	-1	-1	-1	-2	-3	0	-1	-10
1986	0	0	0	-1	-1	0	0	1	2	3	2	1	6
1987	0	0	0	1	1	1	1	1	1	2	1	0	9
1988	0	0	0	0	1	-1	-1	-2	-3	-4	-3	-1	-14
1989	-1	0	-1	-1	-1	0	-2	-3	-5	-6	-4	-1	-26
1990	-1	-1	-1	-2	-2	0	0	0	0	0	0	0	-6
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	-1	-10	-15	-25	-31	-22	-7	-111
1993	-5	-3	-5	-8	-10	1	3	4	7	8	6	2	0
AVG:	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
MIN:	-5	-3	-5	-8	-10	-2	-11	-15	-25	-31	-22	-7	-111
MAX:	1	1	1	2	2	3	3	4	7	8	6	2	28

Table 3.4.7-15. Simulated CVP South-of-Delta Agricultural Deliveries (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-1
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	-1	-1	-2	-2	-1	0	-7
1927	0	0	0	-1	-1	0	0	0	0	0	0	0	-2
1928	0	0	0	0	0	0	-1	0	-1	-1	-1	0	-4
1929	0	0	0	0	0	0	-1	-1	-2	-2	-1	0	-8
1930	0	0	0	-1	-1	0	0	1	1	1	1	0	2
1931	0	0	0	0	0	0	0	0	0	0	0	0	1
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	-1
1934	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1935	0	0	0	0	0	0	-2	-1	-2	-2	-2	-1	-10
1936	0	0	0	-1	-1	3	4	7	11	13	10	3	48
1937	2	1	2	4	4	2	3	4	6	8	6	2	44
1938	1	1	1	2	3	0	0	0	0	0	0	0	8
1939	0	0	0	0	0	0	0	0	0	0	0	0	-1
1940	0	0	0	0	0	0	0	0	0	0	0	0	-1
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	-1	-2	-2	-2	-1	-7
1945	0	0	0	-1	-1	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	-1
1947	0	0	0	0	0	-1	0	0	0	0	0	0	-2
1948	0	0	0	0	0	-2	-1	-2	-3	-4	-3	-1	-16
1949	-1	0	-1	-1	-1	0	0	1	1	2	1	0	3
1950	0	0	0	0	1	1	1	1	1	2	1	0	8
1951	0	0	0	0	1	0	0	0	0	0	0	0	2
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-6
1956	0	0	0	0	-1	-1	0	0	0	0	0	0	-2
1957	0	0	0	0	0	-1	0	0	0	0	0	0	-1
1958	0	0	0	0	0	-1	-2	-1	-2	-2	-1	0	-9
1959	0	0	0	-1	-1	0	0	0	0	0	0	0	-2
1960	0	0	0	0	0	0	0	0	0	0	0	0	-1
1961	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	1	1	1	1	1	1	0	5
1965	0	0	0	0	0	0	0	0	0	0	0	0	1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	1	0	0	2
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	-3	0	0	0	0	0	0	-3
1975	0	0	0	0	0	3	0	0	0	0	0	0	3
1976	0	0	0	0	0	1	1	2	2	3	2	1	12
1977	0	0	0	1	1	0	0	0	0	0	0	0	2
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	1
1983	0	0	0	0	0	0	1	1	1	2	1	0	6
1984	0	0	0	0	1	0	0	0	0	0	0	0	2
1985	0	0	0	0	0	-1	-1	-2	-3	-4	2	-1	-10
1986	-1	0	-1	-1	-1	0	0	1	2	3	2	1	6
1987	0	0	0	1	1	1	1	1	1	2	1	0	10
1988	0	0	0	0	1	0	0	0	1	1	1	0	5
1989	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-5
1990	0	0	0	0	-1	0	0	0	0	0	0	0	-2
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	0	-1	-2	-3	-4	-3	-1	-14
1993	-1	0	-1	-1	-1	1	1	1	2	2	2	1	5
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	1
MIN:	-1	0	-1	-1	-1	-3	-2	-2	-3	-4	-3	-1	-16
MAX:	2	1	2	4	4	3	4	7	11	13	10	3	48

Figure 3.4.7-10. Exceedence for Simulated Annual CVP South-of-Delta M&I Deliveries, 2001 LOD

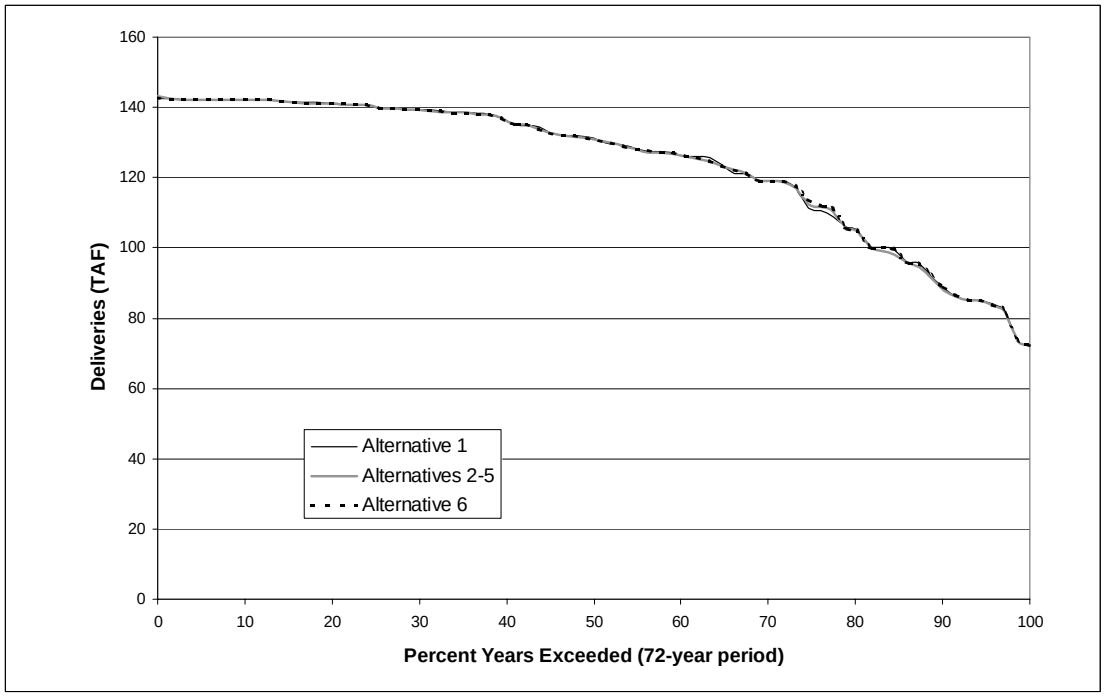


Figure 3.4.7-11. Simulated Annual CVP South-of-Delta M&I Deliveries, 2001 LOD (Alternative 2-5 comparison to Alternative 1)

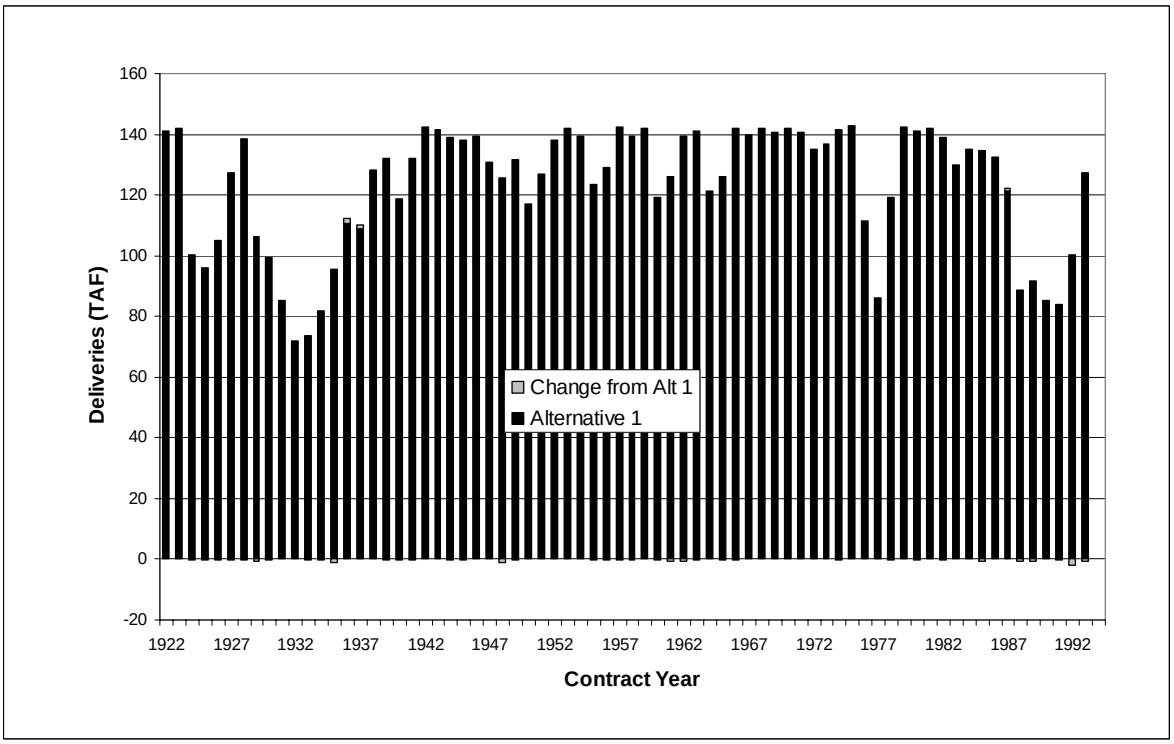


Figure 3.4.7-12. Simulated Annual CVP South-of-Delta M&I Deliveries, 2001 LOD (Alternative 6 comparison to Alternative 1)

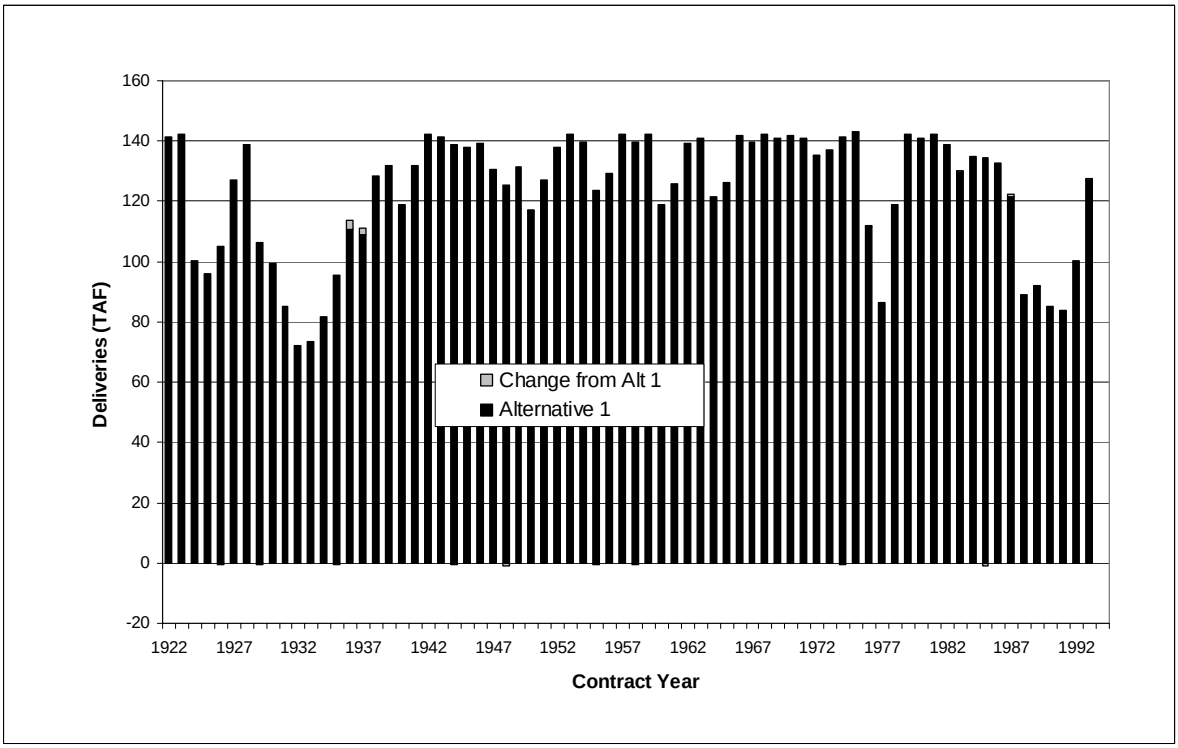


Table 3.4.7-16. Simulated CVP South-of-Delta M&I Deliveries (TAF), Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	13	11	11	11	13	14	16	141
1923	11	14	14	9	4	14	11	11	11	13	14	16	142
1924	11	14	14	9	4	8	6	6	6	7	7	8	100
1925	6	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	11	9	8	8	9	10	11	105
1927	8	10	10	7	3	14	11	11	11	13	14	16	127
1928	11	14	14	9	4	12	11	11	11	12	14	15	139
1929	10	14	14	9	4	9	7	7	7	8	9	9	106
1930	6	8	9	6	3	11	9	8	8	10	11	12	100
1931	8	11	11	7	3	7	6	5	5	6	7	8	85
1932	5	7	7	5	2	7	6	5	5	6	7	8	72
1933	5	7	7	5	2	8	6	6	6	7	7	8	73
1934	5	7	7	5	2	9	7	7	7	8	9	9	82
1935	6	8	9	6	3	7	8	8	8	10	11	12	96
1936	8	11	11	7	3	12	9	9	9	10	11	12	111
1937	8	11	11	7	3	11	9	8	8	10	11	12	109
1938	8	11	11	7	3	13	11	11	11	13	14	16	128
1939	11	14	14	9	4	11	11	10	10	11	13	14	132
1940	9	12	13	8	4	11	9	9	9	10	11	12	119
1941	9	11	12	8	3	14	11	11	11	13	14	16	132
1942	11	14	14	9	4	14	11	11	11	13	14	16	142
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	14	11	10	10	12	14	15	139
1945	10	13	14	9	4	13	11	11	11	13	14	16	138
1946	11	14	14	9	4	12	10	11	11	13	14	16	139
1947	11	14	14	9	4	11	10	10	10	11	12	14	131
1948	9	12	13	8	4	8	9	11	11	12	14	15	126
1949	10	14	14	9	4	11	10	10	10	12	13	14	132
1950	10	13	13	9	4	11	9	8	8	10	11	12	117
1951	8	11	11	7	3	14	11	11	11	12	14	15	127
1952	10	14	14	9	4	11	11	11	11	13	14	16	138
1953	11	14	14	9	4	14	11	11	11	13	14	16	142
1954	11	14	14	9	4	12	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	9	9	10	11	12	124
1956	8	11	11	7	3	12	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	142
1958	11	14	14	9	4	11	11	11	11	13	14	16	140
1959	11	14	14	9	4	14	11	11	11	13	14	16	142
1960	11	14	14	9	4	9	9	8	8	10	11	12	119
1961	8	11	11	7	3	11	11	11	11	13	14	15	126
1962	11	14	14	9	4	12	10	11	11	13	14	16	139
1963	11	14	14	9	4	13	11	11	11	13	14	16	141
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	10	11	11	13	14	16	126
1966	11	14	14	9	4	13	11	11	11	13	14	16	142
1967	11	14	14	9	4	12	11	11	11	13	14	16	140
1968	11	14	14	9	4	14	11	11	11	13	14	16	142
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	14	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	14	16	141
1972	11	14	14	9	4	12	10	10	10	12	13	14	135
1973	10	13	13	9	4	12	11	11	11	13	14	16	137
1974	11	14	14	9	4	13	11	11	11	13	14	16	141
1975	11	14	14	9	4	14	11	11	11	13	14	16	142
1976	11	14	14	9	4	10	8	7	7	8	9	10	111
1977	7	9	9	6	3	9	7	6	6	7	8	9	86
1978	6	8	8	5	2	13	11	11	11	13	14	16	119
1979	11	14	14	9	4	14	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	10	11	11	13	14	16	139
1983	11	14	14	9	4	11	10	9	9	11	12	13	130
1984	9	12	12	8	4	14	11	11	11	13	14	16	135
1985	11	14	14	9	4	12	10	11	11	12	12	15	135
1986	10	13	14	9	4	11	10	10	10	12	13	15	133
1987	10	13	13	9	4	11	10	9	9	10	11	12	121
1988	8	11	11	8	3	8	6	6	6	7	7	8	89
1989	5	7	7	5	2	7	9	8	8	10	11	12	92
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	8	7	7	8	9	10	84
1992	7	9	9	6	3	10	9	8	8	10	11	12	100
1993	8	11	11	7	3	12	11	11	11	13	14	15	127
AVG:	9	12	13	8	4	11	10	10	10	11	12	14	124
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	72
MAX:	11	14	14	9	4	14	11	11	11	13	14	16	142

Table 3.4.7-17. Simulated CVP South-of-Delta M&I Deliveries (TAF), Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	13	11	11	11	13	14	16	141
1923	11	14	14	9	4	14	11	11	11	13	14	16	142
1924	11	14	14	9	4	8	6	6	6	7	7	8	100
1925	6	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	11	9	8	8	9	10	11	105
1927	8	10	10	7	3	14	11	11	11	13	14	16	127
1928	11	14	14	9	4	12	11	11	11	12	14	15	139
1929	10	14	14	9	4	9	7	7	7	8	8	9	106
1930	6	8	8	6	3	10	9	8	8	10	11	12	99
1931	8	11	11	7	3	7	6	5	5	6	7	8	85
1932	5	7	7	5	2	7	6	5	5	6	7	8	72
1933	5	7	7	5	2	8	6	6	6	7	7	8	73
1934	5	7	7	5	2	9	7	7	7	8	9	9	82
1935	6	8	9	6	3	7	7	8	8	10	11	12	94
1936	8	11	11	7	3	12	10	9	9	10	11	12	112
1937	8	11	11	8	3	11	9	8	8	10	11	12	110
1938	8	11	11	7	3	13	11	11	11	13	14	16	128
1939	11	14	14	9	4	11	11	10	10	11	13	14	132
1940	9	12	13	8	4	11	9	9	9	10	11	12	119
1941	9	11	12	8	3	14	11	11	11	13	14	16	132
1942	11	14	14	9	4	14	11	11	11	13	14	16	142
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	14	11	10	10	12	14	15	139
1945	10	13	14	9	4	13	11	11	11	13	14	16	138
1946	11	14	14	9	4	12	10	11	11	13	14	16	139
1947	11	14	14	9	4	11	10	10	10	11	12	14	131
1948	9	12	13	8	4	7	9	11	11	12	14	15	125
1949	10	14	14	9	4	11	10	10	10	12	13	14	131
1950	10	13	13	9	4	11	9	8	8	10	11	12	117
1951	8	11	11	7	3	14	11	11	11	12	14	15	127
1952	10	14	14	9	4	11	11	11	11	13	14	16	138
1953	11	14	14	9	4	14	11	11	11	13	14	16	142
1954	11	14	14	9	4	12	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	8	8	10	11	12	123
1956	8	11	11	7	3	12	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	142
1958	11	14	14	9	4	11	11	11	11	13	14	16	139
1959	11	14	14	9	4	14	11	11	11	13	14	16	142
1960	11	14	14	9	4	9	9	8	8	10	11	12	119
1961	8	11	11	7	3	11	11	11	11	13	14	15	125
1962	10	14	14	9	4	12	10	11	11	13	14	16	139
1963	11	14	14	9	4	13	11	11	11	13	14	16	141
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	10	11	11	13	14	16	126
1966	11	14	14	9	4	13	11	11	11	13	14	16	142
1967	11	14	14	9	4	12	11	11	11	13	14	16	140
1968	11	14	14	9	4	14	11	11	11	13	14	16	142
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	14	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	14	16	141
1972	11	14	14	9	4	12	10	10	10	12	13	15	135
1973	10	13	13	9	4	12	11	11	11	13	14	16	137
1974	11	14	14	9	4	13	11	11	11	13	14	16	141
1975	11	14	14	9	4	15	11	11	11	13	14	16	143
1976	11	14	14	9	4	10	8	7	7	8	9	10	112
1977	7	9	9	6	3	9	7	6	6	7	8	9	86
1978	6	8	8	5	2	13	11	11	11	13	14	16	119
1979	11	14	14	9	4	14	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	10	11	11	13	14	16	139
1983	11	14	14	9	4	11	10	10	9	11	12	13	130
1984	9	12	12	8	4	14	11	11	11	13	14	16	135
1985	11	14	14	9	4	12	10	10	10	12	12	15	134
1986	10	13	14	9	4	11	10	10	10	12	14	15	133
1987	10	13	14	9	4	11	10	9	9	10	11	12	122
1988	8	11	11	8	3	7	6	5	5	6	7	8	88
1989	5	7	7	5	2	7	9	8	8	10	11	12	91
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	8	7	7	8	9	10	84
1992	7	9	9	6	3	9	9	8	8	9	10	11	98
1993	8	10	10	7	3	13	11	11	11	13	14	16	127
AVG:	9	12	13	8	4	11	10	10	10	11	12	14	124
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	72
MAX:	11	14	14	9	4	15	11	11	11	13	14	16	143

Table 3.4.7-18. Simulated CVP South-of-Delta M&I Deliveries (TAF), Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	13	11	11	11	13	14	16	141
1923	11	14	14	9	4	14	11	11	11	13	14	16	142
1924	11	14	14	9	4	8	6	6	6	7	7	8	100
1925	6	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	11	9	8	8	9	10	11	105
1927	8	10	10	7	3	14	11	11	11	13	14	16	127
1928	11	14	14	9	4	12	11	11	11	12	14	15	138
1929	10	14	14	9	4	9	7	7	7	8	8	9	106
1930	6	8	8	6	3	11	9	8	8	10	11	12	99
1931	8	11	11	7	3	7	6	5	5	6	7	8	85
1932	5	7	7	5	2	7	6	5	5	6	7	8	72
1933	5	7	7	5	2	8	6	6	6	7	7	8	73
1934	5	7	7	5	2	9	7	7	7	8	8	9	82
1935	6	8	9	6	3	7	8	8	8	10	11	12	95
1936	8	11	11	7	3	12	10	9	9	10	12	13	114
1937	9	11	12	8	3	11	9	8	8	10	11	12	111
1938	8	11	11	7	3	13	11	11	11	13	14	16	128
1939	11	14	14	9	4	11	11	10	10	11	13	14	132
1940	9	12	13	8	4	11	9	9	9	10	11	12	119
1941	9	11	12	8	3	14	11	11	11	13	14	16	132
1942	11	14	14	9	4	14	11	11	11	13	14	16	142
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	14	11	10	10	12	13	15	138
1945	10	13	14	9	4	13	11	11	11	13	14	16	138
1946	11	14	14	9	4	12	10	11	11	13	14	16	139
1947	11	14	14	9	4	11	10	10	10	11	12	14	131
1948	9	12	13	8	4	7	9	11	11	12	14	15	125
1949	10	13	14	9	4	11	10	10	10	12	13	14	131
1950	10	13	13	9	4	11	9	8	8	10	11	12	117
1951	8	11	11	7	3	14	11	11	11	12	14	15	127
1952	10	14	14	9	4	11	11	11	11	13	14	16	138
1953	11	14	14	9	4	14	11	11	11	13	14	16	142
1954	11	14	14	9	4	12	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	8	8	10	11	12	123
1956	8	11	11	7	3	12	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	142
1958	11	14	14	9	4	11	11	11	11	13	14	16	139
1959	11	14	14	9	4	14	11	11	11	13	14	16	142
1960	11	14	14	9	4	9	9	8	8	10	11	12	119
1961	8	11	11	7	3	11	11	11	11	13	14	15	126
1962	10	14	14	9	4	12	10	11	11	13	14	16	139
1963	11	14	14	9	4	13	11	11	11	13	14	16	141
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	10	11	11	13	14	16	126
1966	11	14	14	9	4	13	11	11	11	13	14	16	142
1967	11	14	14	9	4	12	11	11	11	13	14	16	140
1968	11	14	14	9	4	14	11	11	11	13	14	16	142
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	14	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	14	16	141
1972	11	14	14	9	4	12	10	10	10	12	13	15	135
1973	10	13	13	9	4	12	11	11	11	13	14	16	137
1974	11	14	14	9	4	12	11	11	11	13	14	16	141
1975	11	14	14	9	4	15	11	11	11	13	14	16	143
1976	11	14	14	9	4	10	8	7	7	8	9	10	112
1977	7	9	9	6	3	9	7	6	6	7	8	9	87
1978	6	8	8	5	2	13	11	11	11	13	14	16	119
1979	11	14	14	9	4	14	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	10	11	11	13	14	16	139
1983	11	14	14	9	4	11	10	10	9	11	12	13	130
1984	9	12	12	8	4	14	11	11	11	13	14	16	135
1985	11	14	14	9	4	12	10	10	10	12	12	15	134
1986	10	13	14	9	4	11	10	10	10	12	14	15	133
1987	10	13	14	9	4	11	10	9	9	10	11	12	122
1988	8	11	11	8	3	8	6	6	6	7	7	8	89
1989	5	7	7	5	2	7	9	8	8	10	11	12	92
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	8	7	7	8	9	10	84
1992	7	9	9	6	3	10	9	8	8	10	11	12	100
1993	8	11	11	7	3	13	11	11	11	13	14	16	128
AVG:	9	12	13	8	4	11	10	10	10	11	12	14	124
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	72
MAX:	11	14	14	9	4	15	11	11	11	13	14	16	143

Table 3.4.7-19. Simulated CVP South-of-Delta M&I Deliveries (TAF), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	-1	0	0	0	0	0	-1
1936	0	0	0	0	0	0	0	0	0	0	0	0	2
1937	0	0	0	0	0	0	0	0	0	0	0	0	1
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	-1
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	1	0	0	0	0	0	0	1
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-1
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	1
1988	0	0	0	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	0	0	0	0	-1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	-2
1993	0	0	0	0	0	0	0	0	0	0	0	0	-1
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	-1	0	0	0	0	0	-2
MAX:	0	0	0	0	0	1	0	0	0	0	0	0	2

Table 3.4.7-20. Simulated CVP South-of-Delta M&I Deliveries (TAF), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	1	0	0	0	0	0	1	3
1937	0	0	0	0	0	0	0	0	0	0	0	0	2
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	-1
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	-1	0	0	0	0	0	0	-1
1975	0	0	0	0	0	1	0	0	0	0	0	0	1
1976	0	0	0	0	0	0	0	0	0	0	0	0	1
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-1
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	1
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	-1	0	0	0	0	0	0	-1
MAX:	0	0	0	0	0	1	0	0	0	0	0	1	3

3.4.8 SWP Deliveries

This section reports State Water Project delivery results for the 2001 LOD. As in section 3.4.7, delivery results are separated into North-of-Delta and South-of-Delta categories. Figures illustrate overall trends and compare each Action alternative to Alternative 1. Monthly results and Action alternative comparisons to Alternative 1 are portrayed in tables.

Figure 3.4.8-1. Exceedence for Simulated Annual SWP Agricultural Deliveries, 2001 LOD

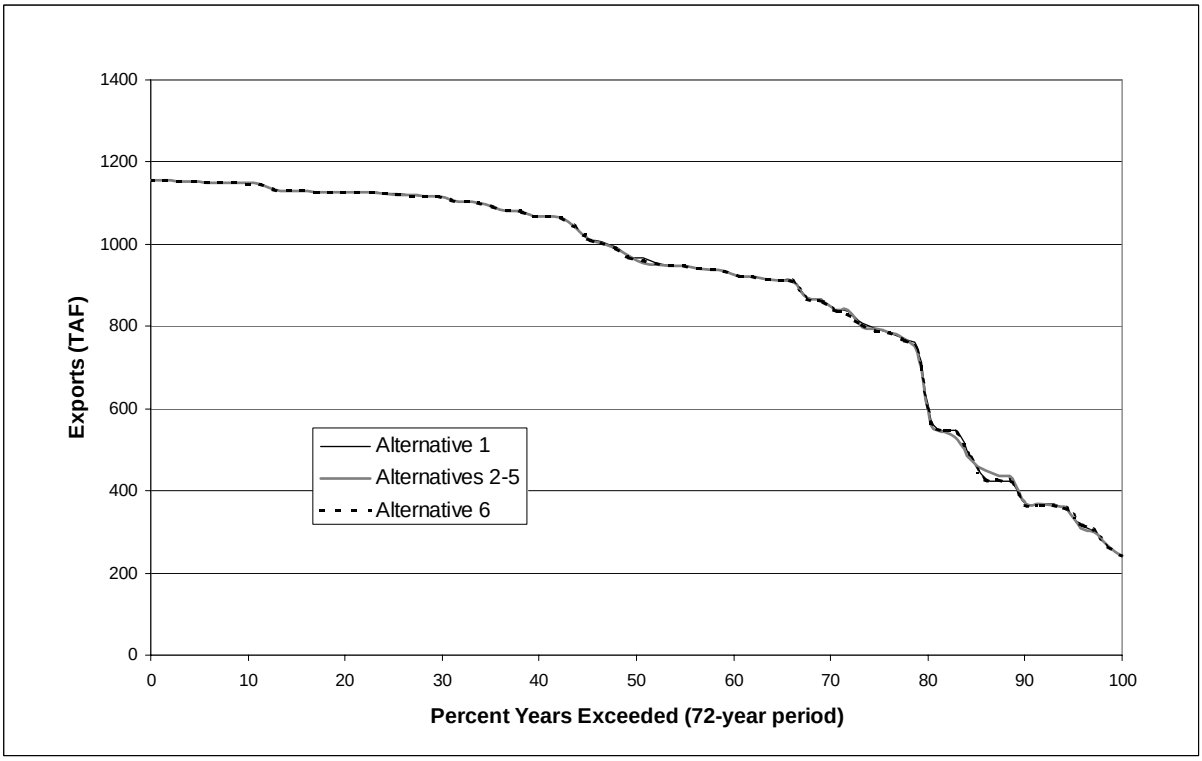


Figure 3.4.8-2. Simulated Annual SWP Agricultural Deliveries, 2001 LOD (Alternatives 2-5 comparison to Alternative 1)

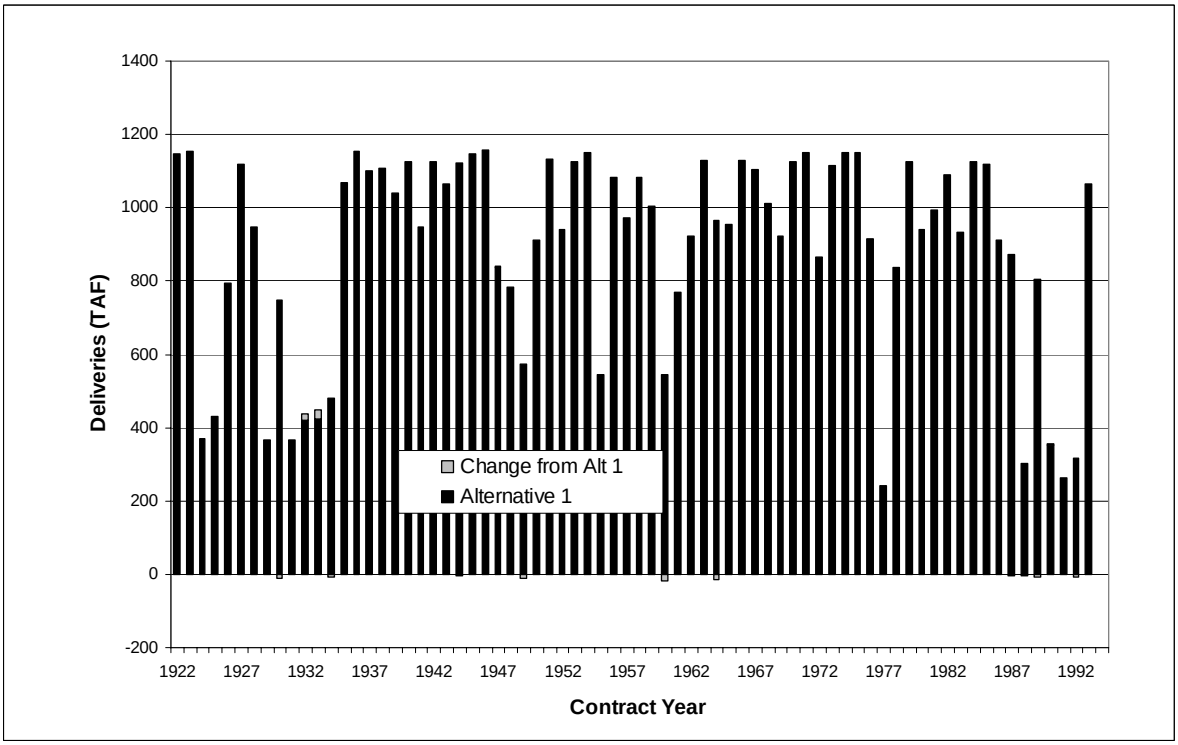


Figure 3.4.8-3. Simulated Annual SWP Agricultural Deliveries, 2001 LOD (Alternative 6 comparison to Alternative 1)

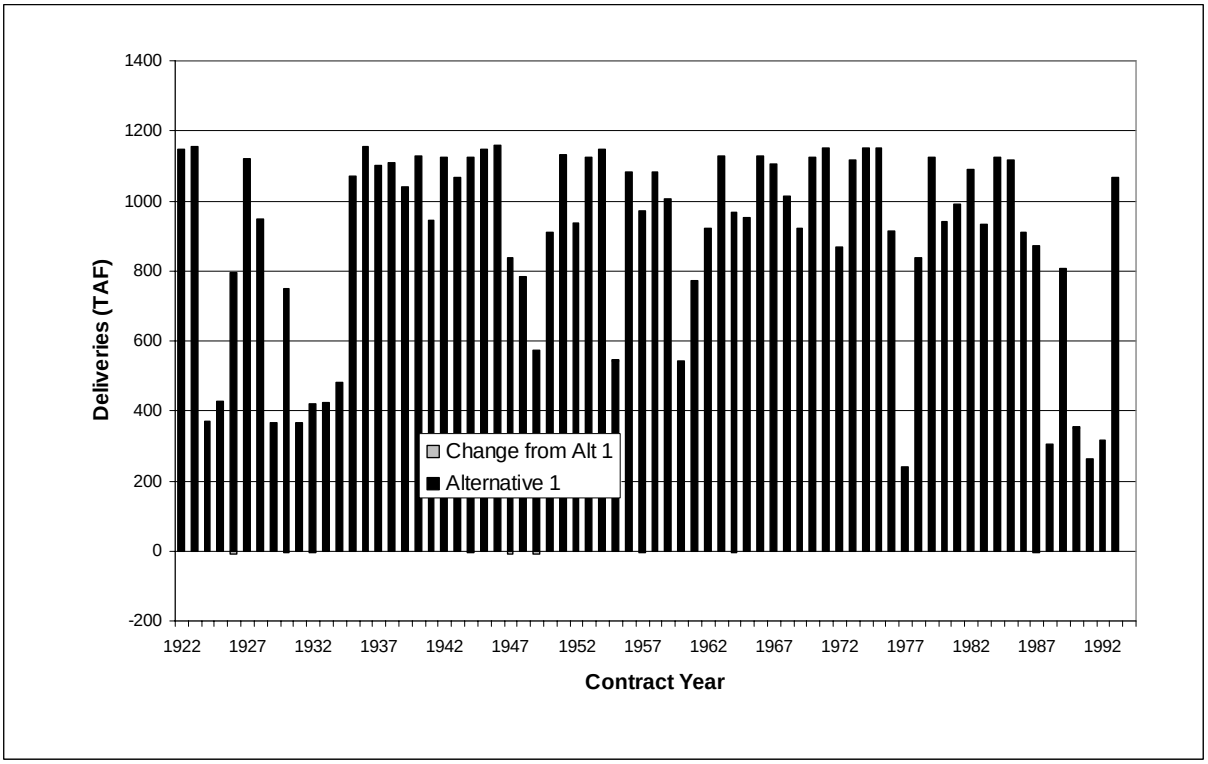


Table 3.4.8-1. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	37	53	91	127	203	198	200	107	1146
1923	37	37	44	28	47	52	89	124	200	195	196	104	1153
1924	35	35	42	7	11	14	22	31	50	48	48	25	369
1925	9	9	10	6	11	21	35	50	81	78	78	41	429
1926	14	14	17	8	21	35	50	96	158	152	150	79	794
1927	27	27	33	13	34	54	92	128	204	199	201	108	1119
1928	37	37	44	23	43	44	71	98	161	155	154	81	949
1929	28	28	33	7	12	14	24	33	55	53	52	28	367
1930	10	9	11	7	25	31	64	89	146	141	140	73	747
1931	25	25	30	8	13	14	25	34	56	54	54	28	367
1932	10	10	12	7	18	21	34	47	77	74	73	39	420
1933	13	13	16	9	19	18	33	46	75	72	72	38	424
1934	13	13	16	7	15	22	39	54	88	85	84	44	481
1935	15	15	18	6	17	23	74	135	218	213	216	118	1069
1936	40	40	48	5	15	52	94	130	209	204	206	111	1155
1937	38	38	45	7	13	33	91	127	203	199	201	108	1102
1938	36	36	44	27	45	50	85	119	192	187	188	99	1107
1939	34	34	41	28	47	49	79	110	180	174	173	91	1041
1940	31	31	38	4	12	48	95	131	210	206	208	112	1127
1941	38	38	45	22	37	42	71	99	162	156	155	81	946
1942	28	28	34	28	47	52	89	124	200	195	196	104	1125
1943	36	36	43	27	45	50	82	113	185	179	178	93	1066
1944	32	32	39	13	29	47	92	127	204	199	201	108	1123
1945	37	37	45	12	21	47	94	130	208	203	205	110	1148
1946	38	38	46	28	47	50	90	125	200	195	197	104	1157
1947	36	36	43	9	15	22	66	92	152	146	145	76	838
1948	26	26	31	4	10	9	25	99	162	156	154	81	783
1949	25	25	29	7	12	14	45	63	103	99	98	52	572
1950	18	18	21	6	17	34	78	109	178	172	170	90	910
1951	30	30	36	26	47	52	90	124	200	195	197	104	1132
1952	35	35	42	22	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	49	90	125	200	195	197	105	1126
1954	36	36	43	22	42	51	90	126	202	197	199	106	1149
1955	36	36	44	9	21	22	36	51	84	81	80	42	543
1956	15	15	17	26	47	52	90	125	200	195	197	104	1082
1957	36	36	44	23	43	44	73	102	167	161	159	84	971
1958	29	29	35	18	45	50	86	120	193	188	189	100	1082
1959	34	34	41	24	42	48	77	107	175	168	167	88	1005
1960	30	30	36	4	8	13	41	58	94	91	90	47	543
1961	16	16	19	8	17	25	66	91	150	144	143	75	770
1962	26	26	31	5	8	28	78	109	178	172	171	90	921
1963	30	30	36	21	47	46	90	126	202	197	199	106	1129
1964	36	36	43	22	44	43	73	101	166	160	159	83	967
1965	29	29	34	21	47	44	74	102	168	162	160	84	954
1966	29	29	35	28	47	52	89	124	200	195	196	104	1129
1967	36	36	43	13	45	51	87	120	194	189	190	100	1104
1968	34	34	41	28	47	46	77	107	175	169	167	88	1012
1969	30	30	36	14	38	42	72	100	164	157	156	82	921
1970	28	28	34	28	47	50	90	125	200	195	197	104	1126
1971	36	36	43	27	47	47	90	125	201	196	197	105	1150
1972	36	36	43	21	37	40	64	89	146	141	140	73	866
1973	25	25	30	18	47	53	90	125	201	196	198	105	1115
1974	36	36	43	28	47	52	89	124	200	195	196	104	1152
1975	36	36	43	27	45	52	90	124	200	195	197	104	1150
1976	35	35	42	25	38	42	68	95	156	150	149	78	914
1977	27	27	32	4	7	8	13	18	30	29	29	15	240
1978	5	5	6	4	24	43	74	102	168	162	160	84	839
1979	28	28	34	19	41	51	91	126	202	198	199	106	1125
1980	36	36	43	17	37	42	71	99	163	157	156	82	940
1981	29	29	34	21	40	45	78	108	178	171	170	89	992
1982	31	31	37	27	45	50	85	119	192	187	188	99	1090
1983	34	34	41	22	37	42	71	99	162	156	155	81	934
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	44	23	36	41	89	123	198	193	195	103	1117
1986	34	34	41	6	13	44	73	101	165	159	158	83	910
1987	27	27	33	14	26	32	70	97	159	153	152	80	871
1988	27	13	47	5	12	12	18	26	42	40	40	21	304
1989	7	7	9	7	11	12	74	103	169	162	161	85	806
1990	29	21	42	5	11	13	23	32	52	50	50	26	353
1991	9	9	11	4	7	8	21	29	48	46	46	24	263
1992	8	8	10	5	8	13	26	36	59	57	56	30	317
1993	10	10	12	7	48	53	91	127	203	198	200	107	1066
AVG:	28	28	34	16	31	38	70	98	160	155	155	82	893
MIN:	5	5	6	4	7	8	13	18	30	29	29	15	240
MAX:	40	40	48	28	48	54	95	135	218	213	216	118	1157

Table 3.4.8-2. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	37	53	91	127	203	198	200	107	1146
1923	37	37	44	28	47	52	89	124	200	195	196	104	1153
1924	35	35	42	7	11	14	22	30	50	48	47	25	367
1925	9	9	10	6	11	21	35	50	81	78	78	41	428
1926	14	14	17	8	22	35	50	96	157	152	150	79	793
1927	27	27	33	12	34	54	92	128	204	199	201	108	1119
1928	37	37	44	23	43	44	71	98	161	155	154	81	949
1929	28	28	33	7	12	14	24	33	54	52	52	27	365
1930	9	9	11	7	24	29	63	88	144	139	138	73	736
1931	25	25	30	8	13	14	25	34	57	54	54	28	367
1932	10	10	12	7	19	22	35	49	80	77	77	40	437
1933	14	14	17	9	20	19	35	49	80	77	76	40	449
1934	14	14	16	7	15	22	38	53	86	83	82	43	474
1935	15	15	18	6	17	23	74	135	218	213	216	118	1068
1936	40	40	48	5	15	51	94	131	209	204	207	112	1155
1937	38	38	45	7	13	32	92	127	203	199	201	108	1102
1938	36	36	43	27	45	50	85	119	192	187	188	99	1107
1939	34	34	41	28	47	49	79	110	180	174	173	91	1041
1940	31	31	38	4	12	48	95	131	210	206	208	112	1127
1941	38	38	45	22	37	42	71	99	162	156	155	81	946
1942	28	28	34	28	47	52	89	124	200	195	196	104	1125
1943	36	36	43	27	45	50	82	113	185	179	178	93	1066
1944	32	32	39	13	29	47	91	127	204	199	201	107	1120
1945	37	37	45	12	21	47	94	130	208	203	205	110	1148
1946	38	38	46	28	47	51	89	124	200	195	197	104	1157
1947	36	36	43	9	15	22	67	93	152	146	145	76	841
1948	26	26	31	4	10	9	25	99	162	156	154	81	784
1949	25	25	29	7	12	14	44	61	100	97	96	50	560
1950	17	17	21	6	18	34	78	109	178	172	170	90	910
1951	30	30	36	27	47	52	89	124	200	195	196	104	1133
1952	35	35	42	22	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	49	90	125	200	195	197	105	1126
1954	36	36	43	22	42	51	90	126	202	197	199	106	1149
1955	36	36	44	9	21	22	36	51	84	81	80	42	543
1956	15	15	17	26	47	52	90	125	200	195	197	104	1082
1957	36	36	44	23	42	43	73	102	167	161	159	84	971
1958	29	29	35	18	45	50	86	120	193	188	189	100	1082
1959	34	34	41	24	42	48	77	107	175	168	167	88	1004
1960	30	30	36	4	7	13	39	55	90	87	86	45	524
1961	15	15	18	9	17	26	66	92	150	145	144	75	771
1962	26	26	31	5	8	28	78	109	178	172	170	90	920
1963	30	30	35	20	47	46	91	126	202	197	199	106	1128
1964	36	36	43	22	43	42	72	100	163	157	156	82	952
1965	28	28	34	21	47	44	74	102	168	162	160	84	953
1966	29	29	35	28	47	52	89	124	200	195	196	104	1129
1967	36	36	43	13	45	51	87	120	194	189	190	100	1104
1968	34	34	41	28	47	46	77	107	175	169	167	88	1012
1969	30	30	36	14	38	42	72	100	164	158	156	82	921
1970	28	28	34	28	47	50	90	125	200	195	197	104	1126
1971	36	36	43	27	47	47	90	125	201	196	197	105	1150
1972	36	36	43	21	37	40	64	89	146	141	140	73	866
1973	25	25	30	18	47	53	90	125	201	196	198	105	1115
1974	36	36	43	28	47	52	89	124	200	195	196	104	1152
1975	36	36	43	27	45	52	90	125	200	195	197	104	1150
1976	35	35	42	24	38	42	68	95	156	150	149	78	914
1977	27	27	32	4	7	8	13	18	30	29	29	15	240
1978	5	5	6	4	23	43	74	103	168	162	161	84	839
1979	29	29	34	19	41	52	91	126	202	198	199	106	1125
1980	36	36	43	17	37	42	71	99	163	157	156	82	940
1981	29	29	34	21	40	45	78	108	177	171	169	89	990
1982	31	31	37	27	45	50	85	119	192	187	188	99	1089
1983	34	34	41	22	37	42	71	99	162	156	155	81	934
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	44	23	35	41	88	123	198	193	194	103	1116
1986	34	34	41	6	13	44	73	101	165	159	158	83	910
1987	27	27	33	13	26	32	70	97	159	153	152	80	868
1988	27	12	47	5	12	12	18	25	41	40	39	21	299
1989	7	7	9	6	11	12	73	102	167	161	159	84	797
1990	28	26	36	5	11	13	23	32	52	50	50	26	354
1991	9	9	11	4	7	8	21	29	48	46	46	24	263
1992	8	8	10	5	8	13	25	35	57	55	55	29	308
1993	10	10	12	7	47	53	91	127	203	198	200	107	1065
AVG:	28	28	34	16	31	38	69	98	159	155	155	82	892
MIN:	5	5	6	4	7	8	13	18	30	29	29	15	240
MAX:	40	40	48	28	47	54	95	135	218	213	216	118	1157

Table 3.4.8-3. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	37	53	91	127	203	198	200	107	1146
1923	37	37	44	28	47	52	89	124	200	195	196	104	1153
1924	35	35	42	7	11	14	22	30	50	48	47	25	366
1925	9	9	10	6	11	21	35	49	81	78	77	41	427
1926	14	14	16	8	21	34	49	95	156	151	149	79	787
1927	27	27	32	12	34	54	92	128	204	199	201	108	1118
1928	37	37	44	23	43	44	71	98	161	155	154	81	948
1929	28	28	33	7	12	14	24	33	55	53	52	27	366
1930	9	9	11	7	25	30	64	88	145	140	138	73	741
1931	25	25	30	8	13	14	25	34	56	54	54	28	365
1932	10	10	12	7	18	20	33	46	76	73	73	38	416
1933	13	13	16	9	19	18	33	46	75	73	72	38	425
1934	13	13	16	7	15	22	39	54	88	85	84	44	480
1935	15	15	18	6	17	23	74	135	218	213	216	118	1069
1936	40	40	48	5	15	51	94	131	209	204	207	111	1155
1937	38	38	45	7	13	32	92	127	204	199	201	108	1102
1938	36	36	43	27	45	50	85	119	192	187	188	99	1107
1939	34	34	41	28	47	49	79	110	180	174	173	91	1041
1940	31	31	38	4	12	48	95	131	210	206	208	112	1127
1941	38	38	45	22	37	42	71	99	162	156	155	81	946
1942	28	28	34	28	47	52	89	124	200	195	196	104	1125
1943	36	36	43	27	45	50	82	113	185	179	178	93	1066
1944	32	32	39	13	29	47	91	127	203	198	200	107	1119
1945	37	37	44	12	21	47	93	130	208	203	205	110	1148
1946	38	38	45	28	47	50	90	125	200	195	197	104	1157
1947	36	36	43	9	15	21	66	92	150	145	143	75	830
1948	26	26	31	4	10	10	25	99	162	156	155	81	784
1949	25	25	30	7	12	14	44	62	101	97	96	51	562
1950	17	17	21	6	17	34	78	109	178	172	170	90	909
1951	30	30	36	26	47	52	89	124	200	195	197	104	1132
1952	35	35	42	22	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	49	90	125	200	195	197	105	1126
1954	36	36	43	22	42	51	90	126	202	197	199	106	1149
1955	36	36	44	9	21	22	37	52	85	82	81	43	547
1956	15	15	18	26	47	52	90	125	200	195	197	104	1082
1957	36	36	44	22	40	42	73	102	167	161	159	84	966
1958	29	29	35	18	45	50	86	120	193	188	189	100	1082
1959	34	34	41	24	42	48	77	107	175	168	167	88	1004
1960	30	30	36	4	8	13	41	57	94	90	89	47	540
1961	16	16	19	8	17	25	66	91	150	144	143	75	770
1962	26	26	31	5	8	28	78	109	178	172	171	90	922
1963	30	30	36	21	47	46	90	126	202	197	199	106	1129
1964	36	36	43	21	44	42	72	101	165	159	158	83	961
1965	29	29	34	21	47	44	74	102	168	162	160	84	954
1966	29	29	35	28	47	52	89	124	200	195	196	104	1129
1967	36	36	43	13	45	51	87	120	194	189	190	100	1104
1968	34	34	41	28	47	46	77	107	175	169	167	88	1012
1969	30	30	36	14	38	42	72	100	164	158	156	82	921
1970	28	28	34	28	47	50	90	125	200	195	197	104	1126
1971	36	36	43	27	47	47	90	125	201	196	197	105	1150
1972	36	36	43	21	37	40	64	89	146	141	140	73	866
1973	25	25	30	18	47	53	90	125	201	196	198	105	1115
1974	36	36	43	28	47	52	89	124	200	195	196	104	1152
1975	36	36	43	27	45	52	90	125	200	195	197	104	1150
1976	35	35	42	24	38	42	68	95	156	150	149	78	914
1977	27	27	32	4	7	8	13	18	30	29	29	15	240
1978	5	5	6	4	24	43	74	102	168	162	160	84	839
1979	29	28	34	19	41	52	91	126	202	198	199	106	1125
1980	36	36	43	17	37	42	71	99	163	157	156	82	940
1981	29	29	34	21	40	45	78	108	178	171	170	89	991
1982	31	31	37	27	45	50	85	119	192	187	188	99	1089
1983	34	34	41	22	37	42	71	99	162	156	155	81	934
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	44	23	35	41	88	123	198	193	195	103	1116
1986	34	34	41	6	13	44	73	101	165	159	158	83	910
1987	27	27	33	13	25	32	69	96	158	152	151	79	864
1988	27	15	44	5	12	12	18	26	42	41	40	21	304
1989	7	7	9	7	11	12	74	102	168	162	160	84	804
1990	29	22	41	5	11	13	23	32	52	50	50	26	353
1991	9	9	11	4	7	8	21	29	48	47	46	24	264
1992	8	8	10	5	8	13	26	36	59	57	56	30	317
1993	10	10	12	7	48	53	91	127	203	198	200	107	1066
AVG:	28	28	34	16	31	38	69	98	159	155	155	82	892
MIN:	5	5	6	4	7	8	13	18	30	29	29	15	240
MAX:	40	40	48	28	48	54	95	135	218	213	216	118	1157

Table 3.4.8-4. Simulated Annual SWP Agricultural Deliveries (TAF) Alternative 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-2
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	-1	-1	-1	-1	-2	-2	-2	-1	-11
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	1	1	2	2	3	3	3	2	17
1933	1	1	1	0	1	1	2	3	5	4	4	2	25
1934	1	1	1	0	0	0	-1	-1	-2	-2	-2	-1	-7
1935	0	0	0	0	0	0	-1	0	0	0	0	0	-1
1936	0	0	0	0	-1	-1	0	0	0	0	0	0	0
1937	0	0	0	0	0	-1	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	-1	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-3
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	2
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	-1	-2	-3	-3	-3	-1	-12
1950	0	0	-1	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	1	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	-1
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	0	-2	-3	-4	-4	-4	-2	-20
1961	-1	-1	-1	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	-1	0	0	0	0	0	0	0	0
1964	0	0	0	-1	-1	-1	-1	-2	-3	-3	-3	-1	-15
1965	0	0	-1	0	0	0	0	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	-1	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	-1	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	-2
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-2
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	-3
1988	0	-1	1	0	0	0	0	-1	-1	-1	-1	0	-5
1989	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-9
1990	0	5	-6	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-9
1993	0	0	0	0	0	0	0	0	0	0	0	0	-1
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-1	-1	-6	-1	-1	-1	-2	-3	-4	-4	-4	-2	-20
MAX:	1	5	1	1	1	1	2	3	5	4	4	2	25

Table 3.4.8-5. Simulated Annual SWP Agricultural Deliveries (TAF)Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1925	0	0	0	0	0	0	0	0	0	0	0	0	-2
1926	0	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-7
1927	0	0	0	0	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	0	0	0	0	0	0	0	-1
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-7
1931	0	0	0	0	0	0	0	0	0	0	0	0	-1
1932	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1933	0	0	0	0	0	0	0	0	0	0	0	0	2
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	-1	-1	0	0	0	0	0	0	0
1937	0	0	0	0	0	-1	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-4
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	-1	-1	-2	-1	-1	-1	-8
1948	0	0	0	0	0	0	0	0	0	0	0	0	1
1949	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-10
1950	0	0	0	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	1	1	1	0	3
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	-1	-3	-2	0	0	0	0	0	0	-6
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1961	0	0	0	0	0	0	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	0	0	0	0	0	1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	-1	-1	0	0	0	-1	-1	-1	0	-5
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	-2
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-2
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-7
1988	0	2	-2	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	-2
1990	0	2	-2	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	0	0	0	0	0	0	1
1992	0	0	0	0	0	0	0	0	0	0	0	0	1
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	0	0	-2	-1	-3	-2	-1	-1	-2	-2	-2	-1	-10
MAX:	0	2	0	0	0	0	0	0	1	1	1	0	3

Figure 3.4.8-4. Exceedence for Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2001 LOD

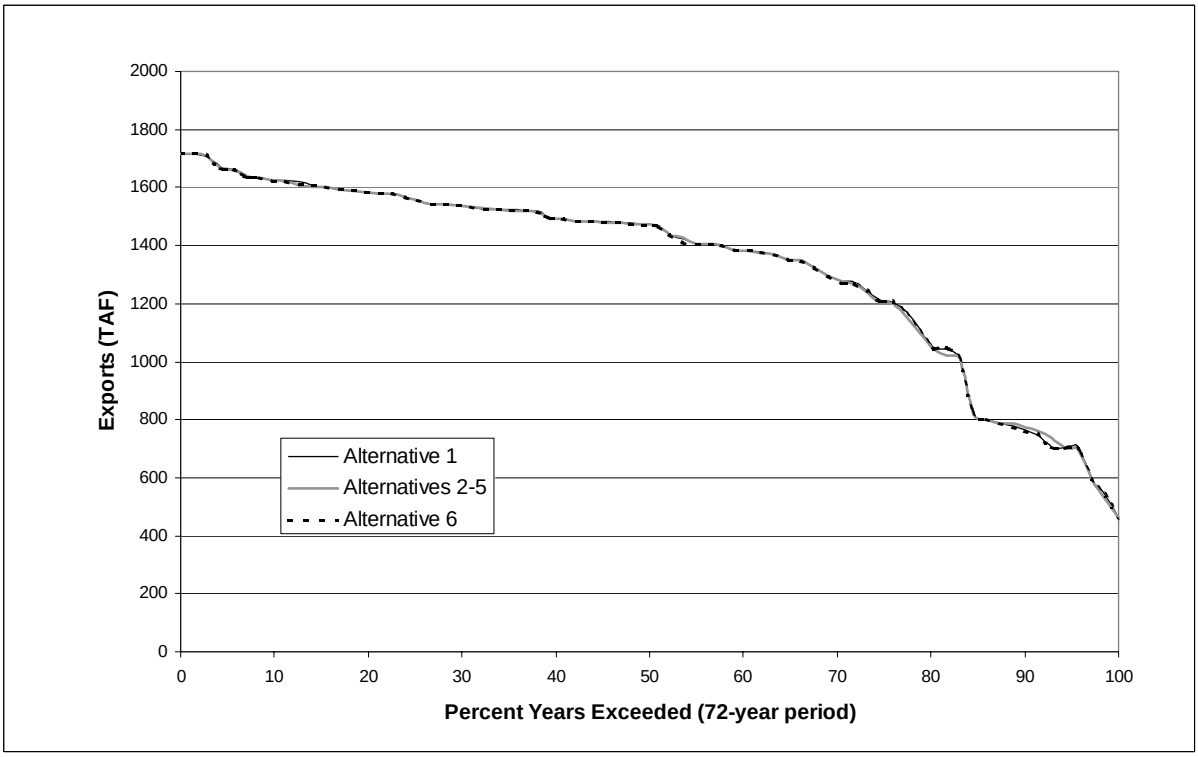


Figure 3.4.8-5. Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2001 LOD (Alternatives 2-5 comparison to Alternative 1)

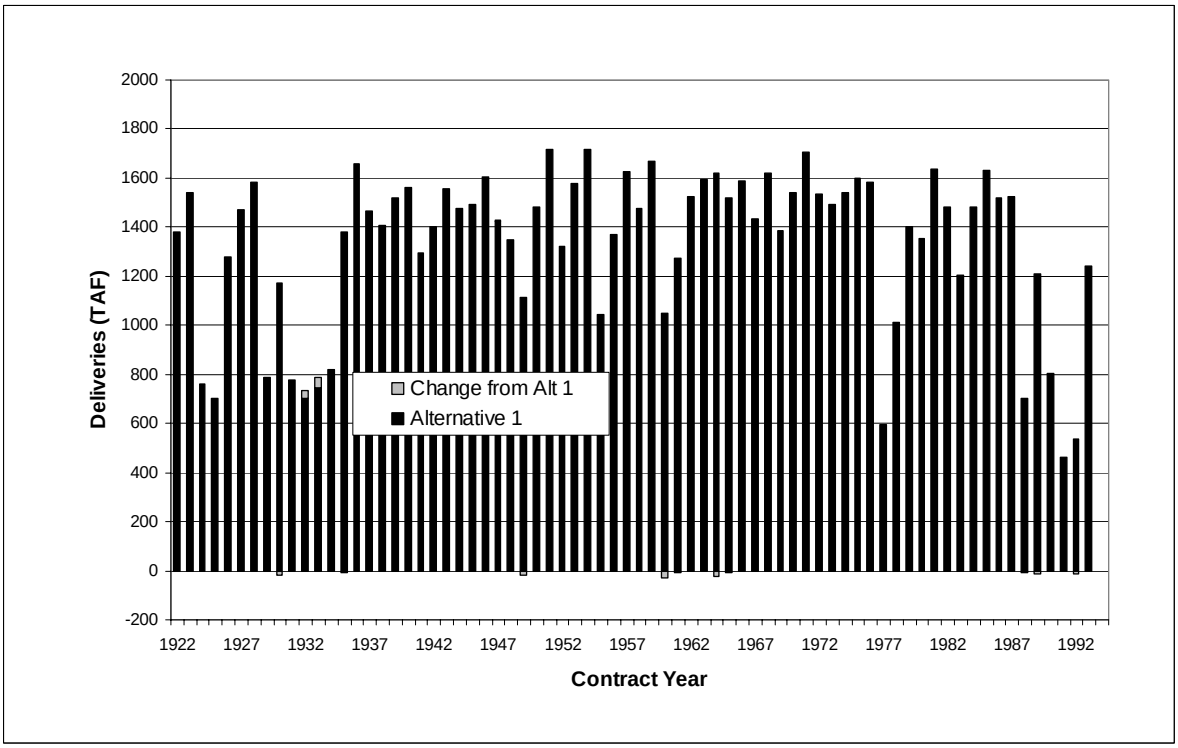


Figure 3.4.8-6. Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2001 LOD (Alternatives 6 comparison to Alternative 1)

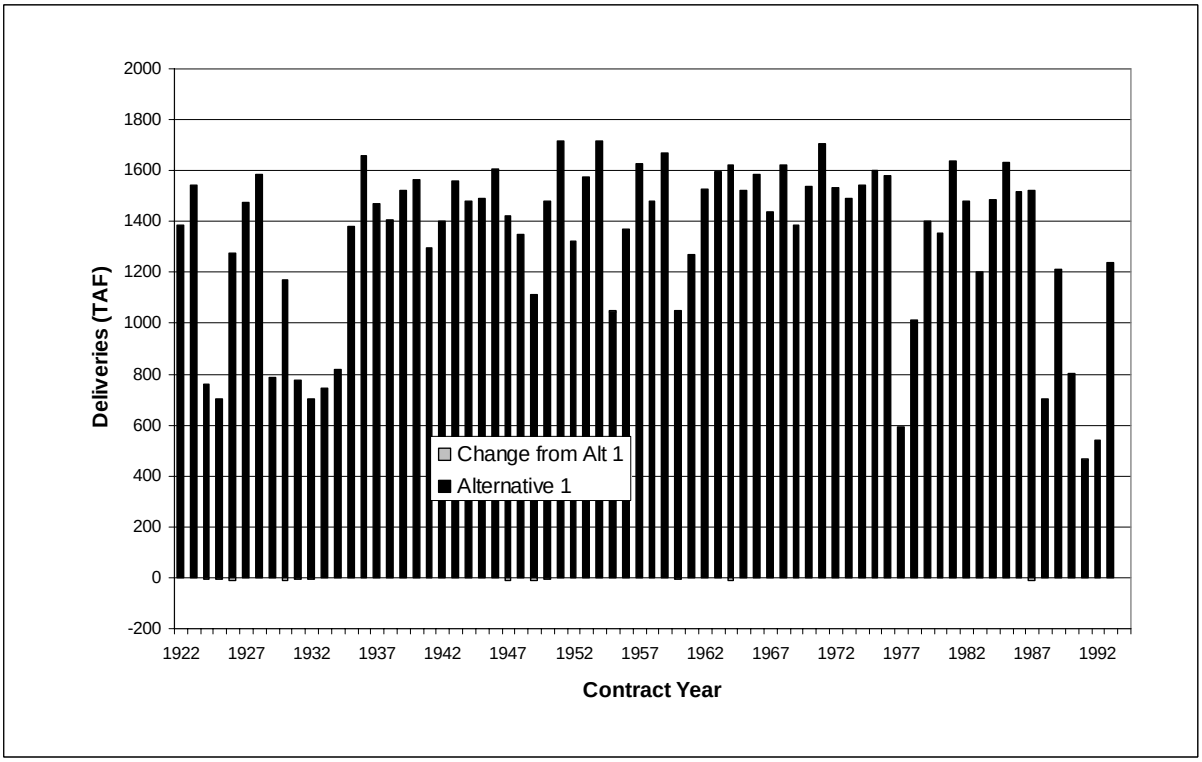


Table 3.4.8-6. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	144	127	118	72	76	84	88	121	138	145	139	131	1383
1923	115	101	94	92	94	103	109	150	170	179	172	161	1542
1924	142	125	116	27	28	34	33	46	52	55	53	49	762
1925	44	38	36	24	27	54	55	76	87	92	88	82	703
1926	73	64	59	32	54	88	78	149	169	178	171	161	1278
1927	142	125	116	51	86	94	100	136	155	164	157	147	1472
1928	129	113	105	94	105	110	108	147	168	177	170	159	1584
1929	140	124	115	28	30	34	37	50	57	60	58	54	788
1930	48	42	39	30	65	77	101	138	157	165	159	149	1171
1931	131	116	107	33	31	34	38	51	59	62	59	56	777
1932	49	43	40	28	46	52	52	71	81	85	82	77	704
1933	68	60	56	36	47	45	50	69	78	83	79	74	746
1934	65	58	53	30	39	56	60	82	94	99	95	89	820
1935	78	69	64	23	44	58	119	166	189	199	191	179	1380
1936	157	139	128	21	39	116	123	168	191	202	194	182	1660
1937	160	141	131	28	32	83	103	142	161	170	163	153	1469
1938	135	119	110	78	80	88	92	126	144	152	146	137	1405
1939	120	106	98	90	91	101	106	145	165	174	167	157	1522
1940	138	122	113	17	30	113	119	164	186	196	188	177	1564
1941	156	137	127	65	67	73	78	106	121	127	122	115	1295
1942	101	89	82	84	86	95	100	137	156	164	158	148	1402
1943	130	115	107	90	92	101	107	146	166	175	168	158	1557
1944	139	123	114	53	73	97	102	140	159	167	161	151	1478
1945	134	118	109	48	52	102	108	148	168	177	170	159	1493
1946	140	124	115	92	94	103	109	149	169	178	171	161	1605
1947	142	125	116	39	37	54	106	145	165	173	166	156	1423
1948	137	121	112	18	26	23	39	157	178	188	180	169	1348
1949	150	132	122	29	29	34	72	98	112	118	113	106	1114
1950	93	82	76	25	44	87	124	170	194	204	196	184	1481
1951	162	143	132	96	98	107	113	155	177	186	179	168	1716
1952	148	130	121	69	71	78	82	112	128	134	129	121	1322
1953	108	95	88	96	98	108	114	156	178	187	180	169	1577
1954	149	131	121	89	101	112	118	161	183	193	186	174	1718
1955	153	135	125	36	53	54	55	77	88	93	89	84	1043
1956	73	64	60	88	89	98	104	142	162	171	164	154	1368
1957	136	120	111	94	96	106	111	152	173	183	175	165	1625
1958	145	128	119	75	84	92	97	133	151	159	153	143	1479
1959	126	111	103	99	104	118	117	160	182	191	184	173	1669
1960	152	134	124	17	19	34	66	91	103	108	104	98	1050
1961	86	76	71	34	43	64	104	143	162	171	164	154	1272
1962	136	120	111	19	21	71	122	166	189	199	192	180	1526
1963	158	139	129	85	89	98	104	142	162	170	163	153	1594
1964	135	119	110	92	106	105	111	152	173	182	175	164	1623
1965	144	127	118	84	86	95	100	137	156	165	158	148	1521
1966	131	115	107	92	94	104	110	150	171	180	173	162	1588
1967	143	126	117	54	82	91	96	131	149	157	151	141	1436
1968	123	109	101	96	98	108	114	156	178	188	180	169	1621
1969	150	132	123	59	76	84	88	121	138	145	139	130	1384
1970	115	101	94	92	94	103	109	149	170	179	172	161	1539
1971	142	125	116	99	101	111	117	161	183	192	185	173	1705
1972	153	135	125	87	94	100	98	134	152	160	154	144	1533
1973	127	112	104	74	89	97	103	141	160	169	162	152	1491
1974	134	118	109	88	90	99	105	143	163	172	165	155	1541
1975	136	120	111	92	94	104	109	150	170	179	172	162	1601
1976	142	126	116	100	96	105	104	142	162	170	164	154	1581
1977	135	119	111	18	18	19	20	28	31	33	32	30	594
1978	26	23	21	17	61	86	90	124	141	148	142	133	1013
1979	118	104	96	79	83	91	97	132	150	158	152	143	1403
1980	126	111	103	71	78	86	90	124	141	148	142	133	1352
1981	119	105	97	86	102	111	118	162	184	194	186	175	1637
1982	154	136	126	80	81	90	95	130	147	155	149	140	1481
1983	123	109	101	65	66	73	77	106	120	127	121	114	1202
1984	100	89	82	91	93	102	108	147	167	176	169	159	1483
1985	141	124	115	94	89	102	113	154	175	185	173	167	1633
1986	157	138	128	23	32	103	109	149	169	178	171	161	1519
1987	142	125	116	56	65	80	109	149	170	179	172	161	1523
1988	141	124	116	21	31	29	28	38	44	46	44	41	703
1989	36	32	30	27	28	30	119	163	186	196	188	176	1212
1990	155	136	127	20	28	32	35	48	55	58	55	52	803
1991	46	40	37	17	17	19	33	46	52	55	52	49	463
1992	43	38	35	20	21	33	40	55	63	66	64	60	539
1993	53	47	43	30	88	97	102	140	159	168	161	151	1240
AVG:	121	107	99	58	67	81	91	127	145	152	146	137	1331
MIN:	26	23	21	17	17	19	20	28	31	33	32	30	463
MAX:	162	143	132	100	106	118	124	170	194	204	196	184	1718

Table 3.4.8-7. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	144	127	118	72	76	84	88	121	138	145	139	131	1383
1923	115	101	94	92	94	103	109	150	170	179	172	161	1542
1924	142	125	116	27	28	34	33	45	52	54	52	49	759
1925	43	38	35	24	27	54	55	76	87	91	88	82	701
1926	73	64	59	32	55	89	78	149	169	178	171	160	1277
1927	141	125	115	50	86	94	100	137	155	164	157	147	1472
1928	129	113	105	94	105	110	108	147	168	177	170	159	1584
1929	140	124	115	28	30	34	37	50	57	60	58	54	786
1930	48	42	39	30	62	74	100	136	155	164	157	147	1153
1931	130	114	106	33	32	34	38	52	59	62	59	56	775
1932	52	45	42	28	48	54	54	74	84	89	85	80	737
1933	71	63	58	36	50	48	54	73	83	88	84	79	787
1934	70	61	57	30	38	55	59	81	92	97	93	87	818
1935	77	67	63	23	43	57	118	166	189	199	191	180	1374
1936	158	139	129	20	37	117	123	168	192	202	194	182	1660
1937	161	142	131	28	32	81	104	142	161	170	163	153	1469
1938	135	119	110	78	80	88	92	126	144	152	146	137	1406
1939	120	106	98	90	91	101	106	145	165	174	167	157	1522
1940	138	122	113	17	30	113	120	164	186	196	188	177	1564
1941	156	137	127	65	67	73	78	106	121	127	122	115	1295
1942	101	89	82	84	86	95	100	137	156	164	158	148	1402
1943	130	115	107	90	92	101	107	146	166	175	168	158	1557
1944	139	123	114	52	73	97	102	140	159	168	161	151	1478
1945	134	118	109	48	52	102	108	148	168	177	170	159	1493
1946	140	124	115	92	94	103	109	149	169	178	171	161	1605
1947	142	125	116	39	37	54	106	145	165	174	167	157	1426
1948	138	121	112	18	26	23	39	157	179	188	181	169	1350
1949	150	132	122	29	29	34	70	96	109	115	110	103	1097
1950	91	80	74	25	45	87	125	171	194	204	196	184	1476
1951	162	143	133	96	98	107	113	155	177	186	179	168	1716
1952	148	130	121	69	71	78	82	112	128	134	129	121	1322
1953	108	95	88	96	98	108	114	156	178	187	180	169	1577
1954	149	131	121	89	101	112	118	161	183	193	186	174	1718
1955	153	135	125	36	53	54	55	77	88	93	89	84	1043
1956	73	64	60	88	89	98	104	142	162	171	164	154	1368
1957	136	120	111	94	96	106	111	152	173	183	175	165	1624
1958	145	128	118	75	84	92	97	133	151	159	153	144	1479
1959	126	111	103	99	104	118	117	160	182	191	184	172	1668
1960	152	134	124	17	19	33	63	86	98	103	99	93	1022
1961	82	73	67	35	43	65	104	143	163	171	165	154	1266
1962	136	120	111	19	21	71	122	166	189	199	192	180	1527
1963	158	139	129	84	89	98	104	142	162	170	164	153	1594
1964	135	119	110	88	106	103	109	149	170	179	172	161	1601
1965	142	125	116	85	86	95	100	137	156	165	158	148	1514
1966	131	115	107	92	94	104	110	150	171	180	173	162	1588
1967	143	126	117	53	82	91	96	131	149	157	151	141	1436
1968	123	109	101	96	98	108	114	156	178	188	180	169	1622
1969	150	132	123	57	76	84	88	121	138	145	139	131	1384
1970	115	101	94	92	94	103	109	149	170	179	172	161	1539
1971	142	125	116	99	101	111	117	161	183	192	185	173	1705
1972	153	135	125	87	94	100	98	134	152	160	154	144	1533
1973	127	112	104	74	89	98	103	141	160	169	162	152	1490
1974	134	118	109	88	90	99	105	143	163	172	165	155	1541
1975	136	120	111	92	94	104	109	150	170	179	172	162	1601
1976	142	126	116	100	96	105	104	142	162	170	164	154	1580
1977	135	119	111	18	18	19	20	28	31	33	32	30	593
1978	26	23	21	17	59	86	90	124	141	148	142	134	1012
1979	118	104	96	77	83	92	97	132	151	159	152	143	1403
1980	126	111	103	69	78	86	90	124	141	148	142	134	1351
1981	119	105	97	85	101	111	118	162	184	194	186	175	1637
1982	154	136	126	80	81	90	95	130	147	155	149	140	1482
1983	123	109	101	65	66	73	77	106	120	127	121	114	1202
1984	100	89	82	91	93	102	108	147	167	176	169	159	1483
1985	141	124	115	93	88	102	113	154	175	185	174	167	1633
1986	157	138	128	23	32	103	109	149	169	178	171	161	1518
1987	142	125	116	55	65	80	109	149	169	178	171	161	1519
1988	141	124	115	21	30	29	27	37	43	45	43	40	696
1989	36	31	29	27	28	29	118	162	184	194	186	174	1197
1990	154	135	126	21	29	32	35	49	55	58	56	52	801
1991	46	41	38	17	17	19	33	45	52	55	52	49	464
1992	43	38	35	20	20	33	39	54	61	64	62	58	527
1993	51	45	42	30	88	97	102	140	159	168	161	151	1235
AVG:	121	107	99	58	66	81	91	127	144	152	146	137	1330
MIN:	26	23	21	17	17	19	20	28	31	33	32	30	464
MAX:	162	143	133	100	106	118	125	171	194	204	196	184	1718

Table 3.4.8-8. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	144	127	118	72	76	84	88	121	138	145	139	131	1383
1923	115	101	94	92	94	103	109	150	170	179	172	161	1542
1924	142	125	116	27	28	34	33	45	52	54	52	49	758
1925	43	38	35	24	27	54	54	76	86	91	87	82	698
1926	72	64	59	32	53	87	77	148	168	177	170	160	1266
1927	141	124	115	50	86	94	100	137	155	164	157	147	1469
1928	129	113	105	93	105	110	108	147	168	177	170	159	1584
1929	140	124	115	28	30	34	37	50	57	60	58	54	786
1930	48	42	39	30	64	76	100	137	156	164	158	148	1161
1931	130	115	106	33	31	34	37	51	58	62	59	55	773
1932	49	43	40	28	46	51	51	70	80	84	81	76	698
1933	67	59	55	36	47	46	51	69	79	83	80	75	747
1934	66	58	54	30	39	56	60	82	93	98	94	89	819
1935	78	69	64	23	44	58	119	166	189	199	191	179	1379
1936	157	139	129	21	38	117	123	168	192	202	194	182	1659
1937	161	142	131	28	32	80	104	142	162	170	163	153	1468
1938	135	119	110	78	80	88	92	126	144	152	146	137	1406
1939	120	106	98	90	91	101	106	145	165	174	167	157	1522
1940	138	122	113	17	30	113	119	164	186	196	188	177	1564
1941	156	137	127	65	67	73	78	106	121	127	122	115	1295
1942	101	89	82	84	86	95	100	137	156	164	158	148	1402
1943	130	115	107	90	92	101	107	146	166	175	168	158	1557
1944	139	123	114	53	74	97	102	140	159	167	161	151	1478
1945	134	118	109	49	52	102	108	147	168	177	170	159	1493
1946	140	124	115	92	94	103	109	149	169	178	171	161	1604
1947	142	125	116	37	36	53	105	143	163	172	165	155	1411
1948	136	120	111	18	26	23	39	157	179	188	181	170	1347
1949	150	132	122	29	29	34	70	96	109	115	111	104	1101
1950	91	81	75	25	44	87	124	170	194	204	196	184	1475
1951	162	143	132	96	98	107	113	155	177	186	179	168	1715
1952	148	130	121	69	71	78	82	112	128	134	129	121	1322
1953	108	95	88	96	98	108	114	156	178	187	180	169	1577
1954	149	131	121	89	101	112	118	161	183	193	186	174	1718
1955	153	135	125	36	54	54	56	78	89	94	90	84	1048
1956	74	65	60	88	89	98	104	142	162	171	164	154	1370
1957	136	120	111	90	97	103	112	153	174	184	176	165	1622
1958	146	128	119	74	84	92	97	133	151	159	153	144	1481
1959	127	111	103	98	105	118	117	160	182	191	184	173	1668
1960	152	134	124	17	19	33	66	90	102	108	103	97	1046
1961	86	76	70	34	43	64	104	143	162	171	164	154	1270
1962	136	120	111	19	21	71	122	166	189	199	192	180	1525
1963	158	139	129	84	89	98	104	142	162	170	163	153	1594
1964	135	119	110	86	106	104	110	151	172	181	174	163	1612
1965	144	127	118	85	86	95	100	137	156	165	158	148	1520
1966	131	115	107	92	94	104	110	150	171	180	173	162	1588
1967	143	126	117	53	82	91	96	131	149	157	151	141	1436
1968	123	109	101	96	98	108	114	156	178	188	180	169	1622
1969	150	132	123	58	76	84	88	121	138	145	139	130	1384
1970	115	101	94	92	94	103	109	149	170	179	172	161	1539
1971	142	125	116	99	101	111	117	161	183	192	185	173	1705
1972	153	135	125	87	94	100	98	134	152	160	154	144	1533
1973	127	112	104	74	89	98	103	141	160	169	162	152	1490
1974	134	118	109	88	90	99	105	143	163	172	165	155	1541
1975	136	120	111	92	94	104	109	150	170	179	172	162	1601
1976	142	126	116	99	96	105	104	142	162	170	164	154	1580
1977	135	119	111	18	18	19	20	28	31	33	32	30	594
1978	26	23	21	17	61	86	90	124	141	148	142	133	1013
1979	118	104	96	79	83	91	97	132	150	158	152	143	1403
1980	126	111	103	71	78	86	90	124	141	148	142	133	1352
1981	119	105	97	84	101	111	118	162	184	194	186	175	1636
1982	154	136	126	80	81	90	95	130	147	155	149	140	1482
1983	123	109	101	65	66	73	77	106	120	127	121	114	1202
1984	100	89	82	91	93	102	108	147	167	176	169	159	1483
1985	141	124	115	93	89	102	113	154	175	185	174	167	1633
1986	157	138	128	23	32	103	109	149	169	178	171	161	1518
1987	142	125	116	54	64	79	108	148	169	178	171	160	1513
1988	140	123	115	22	31	29	28	39	44	46	44	42	703
1989	37	32	30	27	28	30	119	163	185	195	187	176	1209
1990	155	136	127	21	28	32	35	48	55	58	55	52	803
1991	46	40	37	17	17	19	33	46	52	55	52	49	464
1992	43	38	35	20	21	33	41	56	63	67	64	60	540
1993	53	47	43	30	88	97	102	140	159	168	161	151	1240
AVG:	121	107	99	58	66	81	91	127	144	152	146	137	1330
MIN:	26	23	21	17	17	19	20	28	31	33	32	30	464
MAX:	162	143	132	99	106	118	124	170	194	204	196	184	1718

Table 3.4.8-9. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-3
1925	0	0	0	0	0	0	0	0	0	0	0	0	-2
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-3
1930	0	0	0	-1	-3	-3	-1	-2	-2	-2	-2	-2	-18
1931	-1	-1	-1	1	0	0	0	0	0	0	0	0	-2
1932	3	2	2	0	2	2	2	3	4	4	4	4	32
1933	3	3	3	0	3	3	3	4	5	5	5	5	42
1934	4	4	3	0	-1	-1	-1	-2	-2	-2	-2	-2	-2
1935	-2	-1	-1	0	-1	-1	-1	0	0	1	0	0	-6
1936	0	0	0	-1	-2	0	0	0	0	0	0	0	1
1937	0	0	0	0	0	-2	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	1
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	-1	-1	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	1	1	1	0	3
1948	0	0	0	0	0	0	0	0	0	0	0	0	1
1949	0	0	0	0	0	0	-2	-3	-3	-3	-3	-3	-17
1950	-2	-2	-2	0	0	0	0	0	0	0	0	0	-5
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	-1	-3	-4	-5	-5	-5	-4	-28
1961	-4	-3	-3	1	1	1	0	0	0	0	0	0	-6
1962	0	0	0	0	0	0	0	0	0	0	0	0	1
1963	0	0	0	-1	0	0	0	0	0	0	0	0	0
1964	0	0	0	-4	0	-2	-2	-3	-3	-3	-3	-3	-22
1965	-2	-2	-2	0	0	0	0	0	0	0	0	0	-6
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	-2	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	-2	0	0	0	0	0	0	0	-1
1979	0	0	0	-2	0	0	0	0	0	0	0	0	0
1980	0	0	0	-2	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	-1
1987	0	0	0	-1	-1	-1	0	0	0	0	0	0	-4
1988	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-7
1989	-1	-1	-1	0	0	0	-1	-2	-2	-2	-2	-2	-15
1990	-2	-2	-1	0	0	0	0	0	1	1	1	0	-1
1991	0	0	0	0	0	0	0	0	0	0	0	0	1
1992	0	0	0	0	0	0	-1	-2	-2	-2	-2	-2	-13
1993	-2	-2	-1	0	0	0	0	0	0	0	0	0	-5
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-4	-3	-3	-4	-3	-3	-3	-4	-5	-5	-5	-4	-28
MAX:	4	4	3	1	3	3	3	4	5	5	5	5	42

Table 3.4.8-10. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-4
1925	0	0	0	0	0	0	0	0	0	0	0	0	-4
1926	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-11
1927	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-3
1928	0	0	0	-1	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-10
1931	-1	-1	-1	0	0	0	0	0	0	0	0	0	-4
1932	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-6
1933	-1	-1	-1	0	0	0	0	0	0	0	0	0	1
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	0	0	0	0	0	0	-1
1936	0	0	0	0	-1	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	-3	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	1
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	1	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	-1	-1	-1	-1	-1	-2	-2	-2	-1	-12
1948	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1949	0	0	0	0	0	0	-2	-2	-2	-3	-2	-2	-13
1950	-2	-2	-2	0	0	0	0	0	0	0	0	0	-6
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	1	0	0	1	1	1	1	1	5
1956	1	1	0	0	0	0	0	0	0	0	0	0	2
1957	0	0	0	-4	0	-3	1	1	1	1	1	1	-3
1958	1	0	0	-1	0	0	0	0	0	0	0	0	1
1959	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-4
1961	-1	-1	0	0	0	0	0	0	0	0	0	0	-2
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	-6	0	-1	-1	-1	-1	-1	-1	-1	-10
1965	0	0	0	0	0	0	0	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1982	0	0	0	0	0	0	0	0	0	0	0	0	1
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	-1
1987	0	0	0	-2	-2	-2	-1	-1	-1	-1	-1	-1	-10
1988	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-3
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	1
1992	0	0	0	0	0	0	0	0	0	0	0	0	1
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-2	-2	-2	-6	-2	-3	-2	-2	-2	-3	-2	-2	-13
MAX:	1	1	0	1	1	0	1	1	1	1	1	1	5

Figure 3.4.8-7. Exceedence for Simulated Annual SWP M&I Deliveries Other than MWD, 2001 LOD

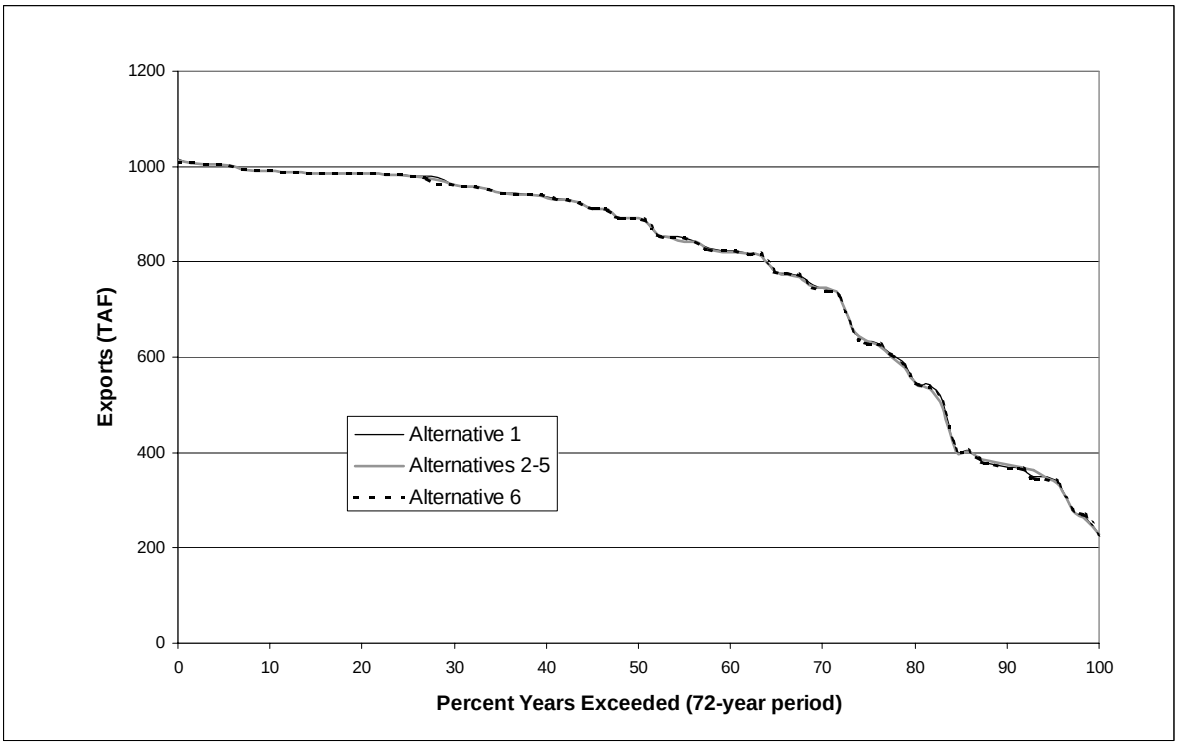


Figure 3.4.8-8. Simulated Annual SWP M&I Deliveries Other than MWD, 2001 LOD (Alternatives 2-5 comparison to Alternative 1)

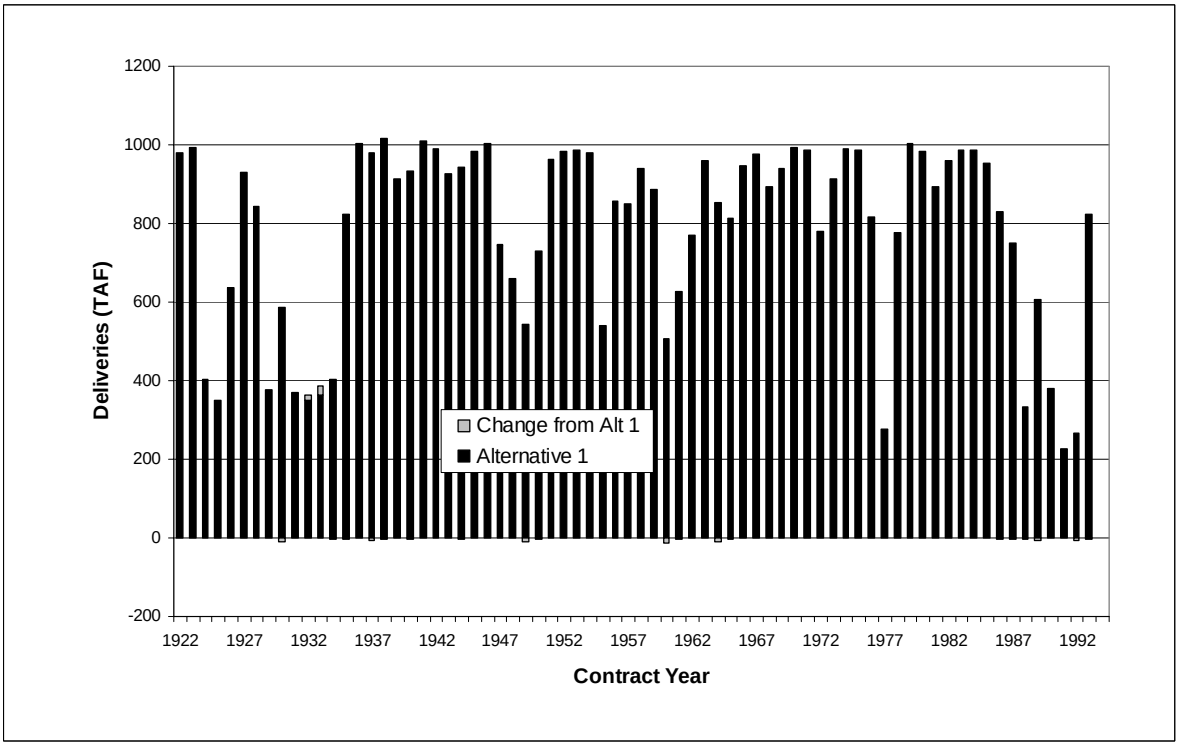


Figure 3.4.8-9. Simulated Annual SWP M&I Deliveries Other than MWD, 2001 LOD (Alternatives 6 comparison to Alternative 1)

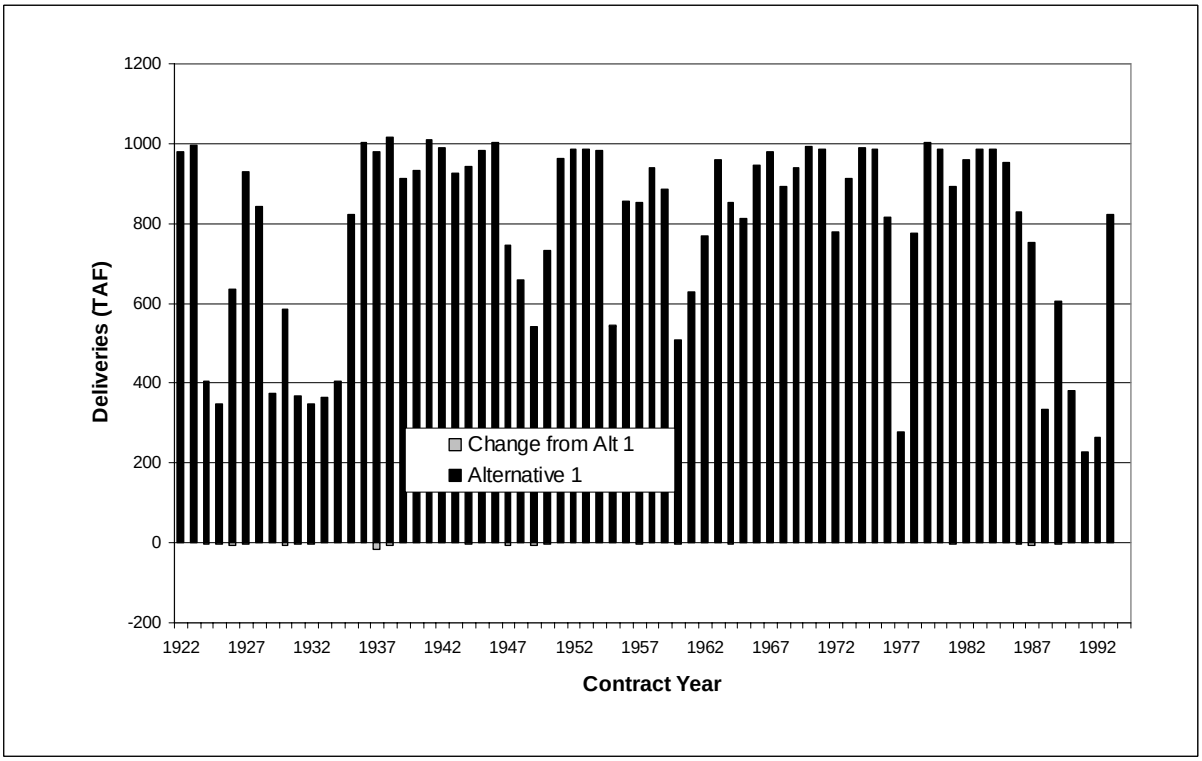


Table 3.4.8-11. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	87	70	55	29	40	66	83	98	107	124	120	101	979
1923	88	72	60	46	50	66	80	95	104	121	116	97	995
1924	87	71	55	11	12	18	20	23	26	30	28	24	404
1925	21	17	14	10	11	26	32	39	42	49	47	39	348
1926	35	28	23	13	23	45	45	76	83	96	92	77	636
1927	68	55	46	20	37	66	84	100	108	126	121	102	931
1928	89	73	60	37	46	54	63	75	81	93	92	79	842
1929	69	55	44	11	13	17	22	26	28	32	32	27	375
1930	24	19	15	12	27	38	59	70	76	88	86	73	586
1931	63	50	42	13	13	17	22	26	29	33	32	27	369
1932	24	19	15	11	20	26	30	36	39	45	44	38	348
1933	33	27	21	14	20	23	30	35	38	44	43	37	365
1934	32	26	20	12	16	29	35	42	45	52	50	44	404
1935	39	30	25	9	19	28	69	108	117	134	131	114	824
1936	103	83	69	8	16	65	87	103	111	127	124	108	1004
1937	98	78	61	11	14	40	89	105	113	130	127	111	979
1938	98	80	67	46	50	63	80	96	103	118	115	100	1015
1939	88	70	57	46	51	62	71	84	91	104	101	88	912
1940	79	63	49	7	13	60	88	104	112	128	124	108	934
1941	97	80	66	37	50	64	82	96	103	117	115	100	1008
1942	89	72	60	46	50	63	81	95	103	116	114	99	988
1943	92	70	57	46	50	62	74	87	93	105	102	89	926
1944	83	64	50	21	31	59	85	100	107	121	119	104	943
1945	92	77	64	19	22	58	87	102	109	124	122	106	982
1946	93	78	65	46	50	61	82	96	103	117	114	99	1004
1947	91	70	59	15	16	26	62	73	79	89	88	76	744
1948	65	55	46	7	11	11	23	80	86	97	95	82	659
1949	76	60	49	12	12	17	42	50	54	61	60	51	542
1950	47	37	29	10	19	42	72	87	93	105	102	89	732
1951	79	65	54	42	50	65	80	97	103	116	113	99	963
1952	86	73	61	46	50	63	80	97	103	116	113	99	985
1953	92	72	60	46	50	61	80	97	103	116	113	99	987
1954	91	72	60	35	45	62	81	99	104	118	115	100	982
1955	93	73	61	14	23	27	32	40	43	48	47	41	541
1956	37	29	24	42	50	66	80	97	103	116	113	99	855
1957	90	75	58	37	45	53	65	79	84	94	92	80	851
1958	70	60	49	30	50	65	82	98	104	117	114	100	939
1959	93	75	58	39	44	60	69	82	87	98	96	84	886
1960	76	62	47	7	8	16	39	46	49	56	54	47	508
1961	43	34	28	14	18	31	61	73	78	88	85	75	628
1962	69	54	45	8	9	35	73	88	93	105	102	90	770
1963	78	67	55	34	50	56	82	99	105	118	115	100	959
1964	90	74	62	36	47	54	65	79	83	93	90	79	853
1965	72	58	48	34	50	56	66	80	84	94	91	80	813
1966	73	58	47	46	50	66	81	97	102	115	112	98	945
1967	90	71	59	21	51	65	83	100	105	118	115	101	978
1968	93	73	60	46	50	55	69	83	88	98	95	83	892
1969	75	60	48	23	51	65	83	98	106	118	114	99	940
1970	93	75	61	46	50	60	82	96	105	116	112	97	992
1971	91	72	60	44	50	59	83	97	105	116	112	97	986
1972	90	71	59	34	40	52	59	69	75	82	79	68	779
1973	62	50	40	29	50	65	84	98	106	117	113	98	912
1974	89	75	62	46	50	63	83	96	104	115	111	96	991
1975	89	72	60	45	48	64	83	97	105	115	112	97	986
1976	88	73	60	40	42	55	63	73	79	88	84	72	816
1977	67	54	42	7	8	10	12	14	15	17	16	14	277
1978	13	10	9	7	26	60	90	105	110	125	119	103	776
1979	96	80	66	31	44	63	85	100	105	120	113	98	1001
1980	90	74	62	28	45	65	85	100	105	120	113	98	985
1981	92	77	60	34	43	55	73	86	90	103	97	84	892
1982	75	64	53	46	50	63	83	98	103	117	112	95	959
1983	86	73	61	46	50	63	81	98	105	118	112	95	986
1984	88	71	59	46	50	64	81	98	105	118	111	95	985
1985	88	73	60	37	38	50	81	98	105	118	112	93	954
1986	93	81	68	9	14	69	66	80	86	96	91	77	829
1987	72	60	47	22	28	39	64	78	84	94	89	75	751
1988	70	48	55	9	13	15	17	20	21	24	23	20	334
1989	18	14	11	11	12	15	69	82	89	104	99	83	607
1990	76	50	62	8	12	16	21	24	27	31	29	25	380
1991	23	19	15	7	8	9	19	23	25	29	28	23	227
1992	21	18	13	8	9	16	24	28	31	36	34	28	265
1993	26	22	17	12	51	66	83	98	106	124	118	100	823
AVG:	73	59	48	26	34	48	65	79	85	96	93	80	785
MIN:	13	10	9	7	8	9	12	14	15	17	16	14	227
MAX:	103	83	69	46	51	69	90	108	117	134	131	114	1015

Table 3.4.8-12. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternatives 2-5, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	87	70	55	28	40	66	83	98	107	124	120	101	979
1923	88	72	60	46	50	66	80	95	104	121	116	97	995
1924	87	71	55	11	12	17	19	23	25	29	28	24	402
1925	21	17	14	9	11	26	32	39	42	49	47	39	347
1926	35	28	23	13	23	45	45	75	83	96	92	77	635
1927	68	55	45	20	36	66	84	100	108	126	121	102	930
1928	89	73	60	37	46	54	63	75	81	93	92	79	842
1929	69	55	44	11	13	17	21	26	28	32	31	27	374
1930	23	19	15	12	26	36	58	69	75	87	85	72	577
1931	63	50	41	13	13	18	22	26	29	33	32	27	368
1932	25	20	16	11	20	28	32	38	41	47	46	39	363
1933	35	28	22	14	21	24	31	37	41	47	46	39	385
1934	34	28	22	12	16	28	34	41	44	51	49	43	402
1935	38	29	24	9	18	28	68	108	117	134	132	115	821
1936	103	83	69	8	16	64	87	103	111	127	124	109	1004
1937	98	79	62	11	14	40	88	104	112	128	126	110	972
1938	96	79	66	45	50	64	80	96	103	118	115	100	1012
1939	88	70	57	46	51	62	71	84	91	104	101	88	912
1940	79	60	49	7	13	59	88	104	112	128	124	108	931
1941	97	80	66	37	50	64	82	96	104	117	115	100	1009
1942	89	72	60	46	50	63	81	95	103	116	114	99	989
1943	92	70	57	46	50	62	74	87	93	105	102	89	926
1944	83	64	50	21	31	59	85	100	106	121	119	104	941
1945	92	77	64	19	22	58	87	102	109	124	122	106	981
1946	93	78	65	46	50	62	81	96	103	117	114	99	1004
1947	90	70	59	15	16	27	63	73	79	90	88	76	746
1948	65	56	46	7	11	11	23	80	86	98	95	82	660
1949	76	60	49	11	12	17	41	48	52	59	58	50	534
1950	46	36	29	10	19	42	72	87	93	105	102	89	729
1951	79	65	54	43	50	65	80	97	103	116	113	99	964
1952	86	73	61	46	50	63	80	97	103	116	113	99	985
1953	92	72	60	46	50	61	80	97	103	116	113	99	987
1954	91	72	60	35	45	62	81	99	104	118	115	100	982
1955	93	73	61	14	23	27	32	40	43	48	47	41	541
1956	37	29	24	42	50	66	80	97	103	116	113	99	855
1957	90	75	58	37	45	53	65	79	84	94	92	80	851
1958	70	60	49	30	50	65	82	98	104	117	114	100	939
1959	93	75	59	39	44	60	69	82	87	98	95	83	885
1960	76	62	47	7	8	16	37	44	47	53	51	45	494
1961	41	32	27	14	18	32	61	73	78	88	85	75	625
1962	69	54	45	8	9	35	73	88	93	105	102	89	769
1963	78	66	55	33	50	57	82	99	105	118	115	100	958
1964	90	74	62	35	46	53	64	78	82	92	89	78	842
1965	71	57	47	34	50	56	66	80	84	94	91	80	811
1966	73	58	47	46	50	66	81	97	102	115	112	98	945
1967	90	71	59	21	51	65	83	100	105	118	115	101	978
1968	93	73	60	46	50	55	69	83	88	98	95	83	892
1969	75	60	48	23	51	65	83	98	106	118	114	99	940
1970	93	75	61	46	50	60	82	96	105	116	112	97	992
1971	91	72	60	44	50	59	83	97	105	116	112	97	986
1972	91	71	59	34	40	52	59	69	75	82	79	68	779
1973	62	50	40	29	50	65	84	98	106	117	113	98	912
1974	89	75	62	46	50	63	83	96	104	115	111	96	991
1975	89	72	60	44	48	64	83	97	105	115	112	97	985
1976	88	73	60	39	42	55	63	73	79	88	84	72	816
1977	67	54	42	7	8	10	12	14	15	17	16	14	277
1978	13	10	9	7	25	57	90	106	110	126	119	103	774
1979	97	80	67	31	43	63	85	100	105	120	113	98	1002
1980	90	74	62	28	44	65	85	100	105	120	113	98	984
1981	92	77	60	34	43	54	73	86	90	103	97	83	891
1982	75	64	53	46	50	63	83	98	103	117	112	95	959
1983	86	73	61	46	50	63	81	98	105	118	112	95	986
1984	88	71	59	46	50	64	81	98	105	118	111	95	985
1985	88	73	60	37	37	50	81	98	105	118	112	93	952
1986	92	80	66	9	14	69	66	80	86	96	91	77	825
1987	72	60	47	22	27	39	64	78	83	93	88	75	749
1988	69	45	58	8	13	15	16	20	21	24	22	19	330
1989	18	14	11	11	12	14	68	81	88	103	98	82	599
1990	75	51	59	8	12	16	21	25	27	31	30	25	380
1991	23	19	15	7	8	9	19	23	25	29	28	23	228
1992	21	18	13	8	9	16	23	27	30	34	33	27	259
1993	25	21	16	12	51	66	83	98	106	124	118	100	820
AVG:	73	59	48	26	33	48	65	79	85	96	93	80	784
MIN:	13	10	9	7	8	9	12	14	15	17	16	14	228
MAX:	103	83	69	46	51	69	90	108	117	134	132	115	1012

Table 3.4.8-13. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternative 6, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	87	70	55	28	40	66	83	98	107	124	120	101	979
1923	88	72	60	46	50	66	80	95	104	121	116	97	995
1924	87	71	55	11	12	17	19	23	25	29	28	24	402
1925	20	17	14	9	11	26	32	39	42	49	47	39	346
1926	35	28	23	13	22	44	45	75	82	95	92	76	630
1927	67	54	45	20	36	66	84	100	108	126	121	102	929
1928	89	73	61	37	45	54	63	75	81	93	92	79	841
1929	69	55	44	11	13	17	21	26	28	32	31	27	374
1930	23	19	15	12	27	37	58	70	75	87	85	72	581
1931	63	50	42	13	13	17	22	26	28	33	32	27	367
1932	24	19	15	11	19	26	30	36	39	45	44	37	345
1933	33	27	21	14	20	23	30	35	38	44	43	37	366
1934	32	26	20	12	16	28	35	42	45	52	50	44	403
1935	39	30	25	9	19	28	69	108	117	134	131	114	823
1936	103	83	69	8	16	64	87	103	111	127	124	108	1004
1937	98	79	62	11	14	39	87	103	111	127	124	109	962
1938	95	77	64	45	50	63	80	96	103	118	115	100	1008
1939	88	70	57	46	51	62	71	84	91	104	101	88	912
1940	79	63	49	7	13	60	88	104	112	128	124	108	934
1941	97	80	66	36	50	64	82	96	104	117	115	100	1008
1942	89	72	60	46	50	63	81	95	103	116	114	99	989
1943	92	70	57	46	50	62	74	87	93	105	102	89	926
1944	83	64	50	21	31	59	85	99	106	120	118	104	940
1945	92	77	64	19	22	58	87	102	109	124	121	106	981
1946	93	78	65	46	50	61	82	96	103	117	114	99	1004
1947	91	70	59	15	15	26	62	72	78	89	87	75	738
1948	65	55	46	7	11	12	23	80	86	98	95	82	658
1949	76	60	49	11	12	17	41	49	52	59	58	50	536
1950	46	37	29	10	19	42	72	87	93	105	102	89	729
1951	79	65	54	43	50	65	80	97	103	116	113	99	963
1952	86	73	61	46	50	63	80	97	103	116	113	99	985
1953	92	72	60	46	50	61	80	97	103	116	113	99	987
1954	91	72	60	35	45	62	81	99	104	118	115	100	982
1955	93	73	61	14	23	27	33	40	43	48	47	41	544
1956	38	29	24	42	50	66	80	97	103	116	113	99	856
1957	90	75	58	36	43	51	65	79	84	95	92	81	850
1958	71	61	49	29	50	65	82	98	104	117	114	100	941
1959	93	75	59	39	44	60	69	82	87	98	96	84	886
1960	76	62	47	7	8	16	38	46	49	55	54	47	506
1961	43	34	28	14	18	31	61	73	78	88	85	74	627
1962	68	53	44	8	9	35	73	88	94	106	102	90	770
1963	78	67	55	34	50	56	82	99	105	118	115	100	959
1964	90	74	62	34	47	53	65	79	83	93	91	79	849
1965	73	58	48	34	50	56	66	80	84	94	91	80	814
1966	73	58	47	46	50	66	81	97	102	115	112	98	945
1967	90	71	59	21	51	65	83	100	105	118	115	101	978
1968	93	73	60	46	50	55	69	83	88	98	95	83	892
1969	75	60	48	23	51	65	83	98	106	118	114	99	940
1970	93	75	61	46	50	60	82	96	105	116	112	97	992
1971	91	72	60	44	50	59	83	97	105	116	112	97	986
1972	91	71	59	34	40	52	59	69	75	82	79	68	779
1973	62	50	40	29	50	65	84	98	106	117	113	98	912
1974	89	75	62	46	50	63	83	96	104	115	111	96	991
1975	89	72	60	44	48	64	83	97	105	115	112	97	985
1976	88	73	60	39	42	55	63	73	79	88	84	72	816
1977	67	54	42	7	8	10	12	14	15	17	16	14	277
1978	13	10	9	7	26	59	90	105	110	125	119	103	775
1979	96	80	66	31	43	63	85	100	105	120	113	98	1002
1980	90	74	62	28	45	65	85	100	105	120	113	98	985
1981	92	77	60	33	43	55	73	86	90	103	97	83	891
1982	75	64	53	46	50	63	83	98	103	117	112	95	959
1983	86	73	61	46	50	63	81	98	105	118	112	95	986
1984	88	71	59	46	50	64	81	98	105	118	111	95	985
1985	88	73	60	37	37	50	81	98	105	118	112	93	952
1986	92	80	67	9	14	69	66	80	86	96	91	77	825
1987	72	60	47	21	27	39	64	77	83	93	88	75	746
1988	69	47	56	9	13	15	17	20	22	24	23	20	333
1989	18	14	11	11	12	15	69	82	89	104	98	83	605
1990	75	53	59	8	12	16	21	24	27	31	29	25	380
1991	23	19	15	7	8	9	19	23	25	29	28	23	228
1992	21	18	13	8	9	16	24	28	31	36	34	28	266
1993	26	22	17	12	51	66	83	98	106	124	118	100	823
AVG:	73	59	48	26	33	48	65	79	85	96	93	80	784
MIN:	13	10	9	7	8	9	12	14	15	17	16	14	228
MAX:	103	83	69	46	51	69	90	108	117	134	131	114	1008

Table 3.4.8-14. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-2
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	-1	-2	-1	-1	-1	-1	-1	-1	-9
1931	-1	-1	0	0	0	0	0	0	0	0	0	0	-1
1932	1	0	1	0	1	1	1	2	2	2	2	2	15
1933	2	1	1	0	1	1	2	2	2	3	3	2	21
1934	2	2	1	0	0	-1	-1	-1	-1	-1	-1	-1	-2
1935	-1	-1	-1	0	0	0	-1	0	0	0	0	0	-3
1936	0	0	0	0	-1	-2	0	0	0	0	0	0	0
1937	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-7
1938	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-4
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	-3	0	0	0	-1	0	0	0	0	0	0	-3
1941	0	0	0	-1	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-2
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	1	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	2
1948	0	0	0	0	0	0	0	0	0	0	0	0	1
1949	0	0	0	0	0	0	-1	-1	-1	-2	-2	-1	-9
1950	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	1	0	0	0	0	0	0	0	0	1
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	0	-2	-2	-2	-3	-2	-2	-14
1961	-2	-2	-1	0	0	1	0	0	0	0	0	0	-3
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	-1	0	0	0	0	0	0	0	-1
1964	0	0	0	-2	-1	-1	-1	-1	-1	-1	-1	-1	-11
1965	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	-1	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	-1	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	-1	-3	0	0	0	0	0	0	-1
1979	0	0	0	-1	0	0	0	0	0	0	0	0	1
1980	0	0	0	-1	-1	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	-1
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-1
1986	-1	-1	-1	0	0	0	0	0	0	0	0	0	-3
1987	0	0	0	0	0	0	0	0	0	0	0	0	-2
1988	0	-3	3	0	0	0	0	0	0	-1	-1	0	-4
1989	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-7
1990	-1	1	-2	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-6
1993	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-2	-3	-2	-2	-1	-3	-2	-2	-2	-3	-2	-2	-14
MAX:	2	2	3	1	1	1	2	2	2	3	3	2	21

Table 3.4.8-15. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternative 6 minus Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-2
1925	0	0	0	0	0	0	0	0	0	0	0	0	-2
1926	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-6
1927	0	0	0	0	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	-1	0	-1	-1	-1	-1	-1	-5
1931	-1	0	0	0	0	0	0	0	0	0	0	0	-2
1932	0	0	0	0	0	0	0	0	0	0	0	0	-3
1933	0	0	0	0	0	0	0	0	0	0	0	0	1
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	-1	-1	0	0	0	0	0	0	-1
1937	0	0	0	0	0	-1	-2	-2	-2	-3	-3	-3	-17
1938	-2	-3	-2	0	0	0	0	0	0	0	0	0	-8
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	-1
1941	0	0	0	-1	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	-1	-1	0	-3
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-6
1948	-1	-1	0	0	0	0	0	0	0	0	0	0	-1
1949	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-7
1950	-1	-1	-1	0	0	0	0	0	0	0	0	0	-3
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	3
1956	0	0	0	0	0	0	0	0	0	0	0	0	1
1957	0	0	0	-2	-3	-2	1	1	1	1	1	1	-2
1958	1	1	1	-1	0	0	0	0	0	0	0	0	2
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	-2
1961	0	0	0	0	0	0	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	-2	-1	0	0	0	0	0	0	0	-4
1965	0	0	0	0	0	0	0	0	0	0	0	0	1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	-1	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	-1	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-1
1986	-1	-1	-1	0	0	0	0	0	0	0	0	0	-3
1987	0	0	0	-1	-1	-1	0	0	0	-1	-1	0	-5
1988	0	-2	1	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	-1
1990	0	3	-3	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	1
1992	0	0	0	0	0	0	0	0	0	0	0	0	1
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-2	-3	-3	-2	-3	-2	-2	-2	-2	-3	-3	-3	-17
MAX:	1	3	1	0	0	0	1	1	1	1	1	1	3

3.4.9. Discussion of CALSIM II results

CALSIM II provides a reasonable representation of CVP/SWP operations for planning-level analyses of the potential effects of the FRWP on the CVP/SWP systems, as well as environmental programs and requirements such as CVPIA 3406(b)(2), EWA, minimum instream flows, and Delta salinity requirements. In a few isolated months over the 72-year simulation period there are instances where small changes in system conditions trigger disproportionately large changes in CVP/SWP system operations that are not a direct result of the FRWP. These isolated cases result from CALSIM II's generalized rules and simplified representation of the CVP/SWP systems. Some of these changes in CVP/SWP operations that CALSIM II simulates as occurring in a single month would normally occur over a number of months and not result in the large changes in reservoir storage and flows simulated by the model.

This section outlines specific results of the 2001 LOD CALSIM II action alternatives in comparison to Alternative 1. While the body of the EIR discusses the appropriate conclusions regarding potential impacts of the FRWP, this appendix section focuses on a few specific monthly changes in the model results that appear to be larger than anticipated and assesses the extent that these changes are a direct effect of the FRWP. All years listed are water years (October - September).

3.4.9.1 Alternatives 2-5 comparison to Alternative 1

July 1931

The CALSIM II results for the 2001 LOD Alternatives 2-5 study show a slight increase in Lake Oroville storage and SWP deliveries in WY's 1932 and 1933 in comparison to the 2001 LOD Alternative 1 study. This simultaneous increase in Lake Oroville carryover storage and SWP deliveries during these dry period years appear counter-intuitive and is caused by a shift in CVP/SWP coordinated operations in the Delta in July of 1931. This shift allows the SWP to increase Banks Pumping Plant exports slightly and reduce Lake Oroville releases. This results in a net increase in Oroville carryover storage of up to 68 taf in comparison to Alternative 1. The increase of 2%-3% in SWP deliveries in 1932 and 1933 is supported by drawdown in SWP San Luis Reservoir storage of 71 taf as of September 1933. In July 1934 the additional carry over storage in Lake Oroville is released and the resulting Oroville storage at the end of the September 1934 is 26 taf less than that of Alternative 1. The Lake Oroville release is moved into the SWP portion of San Luis Reservoir and results in a September 1934 San Luis Reservoir carry over that is equal to that of Alternative 1.

September 1963

In September 1963, simulated SWP storage in Lake Oroville and San Luis Reservoir appears to drop by a combined total of 104 TAF in the Alternatives 2-5 study in comparison to Alternative 1. This reduction in SWP storage is not a result of FRWP operations, but is caused by a change in EWA operations resulting from a lower estimate of the SWP incidental water supply gain from CVP 3406(b)(2) operations. In the Alternatives 2-5 study, the EWA water supply requirement is 83 TAF lower than in Alternative 1 for South-of-Delta SWP users in August 1963. This combined with a reduction in the amount of EWA water purchased in September 1963 in the Alternatives 2-5 study causes the apparent reduction in storage.

July 1973

In July of 1973, there is a shift of simulated SWP storage from San Luis Reservoir to Lake Oroville in the Alternatives 2-5 study in comparison to Alternative 1. This shift is caused by a reduction in Oroville releases in July as a result of CALSIM attempting to rebalance Oroville and SWP San Luis reservoir storage levels. This reservoir rebalancing is not a direct effect of the FRWP and is caused by a slight difference in SWP storage conditions at the end of June 1973, as compared with Alternative 1. In actual operations this movement of water would probably be spread out over a longer period, but as a result of the simplified logic in the CALSIM model the entire amount is moved in a single month.

November 1974

In November 1974 simulated Lake Oroville releases increase Delta outflow by about 115 TAF as compared to Alternative 1. This increased release is caused by the elevated Oroville storage that results from the reservoir rebalancing noted above in July 1973. Oroville storage must be reduced to meet flood control requirements and the water cannot be exported to San Luis Reservoir since Banks Pumping Plant is already at capacity. As noted above, this release would probably be spread over a number of months in actual operations.

July 1978

In July of 1978, simulated Lake Oroville storage decreases by 130 TAF in Alternatives 2-5 as compared to Alternative 1, as a result of the transfer of EWA water from Lake Oroville to the EWA account in San Luis Reservoir. In the Alternative 1 simulation this transfer does not occur because Lake Oroville storage encroaches into flood control space in the spring of 1978 and the entire amount of EWA storage in the reservoir is transferred over to the SWP, since stored EWA water is assumed to spill first. In Alternatives 2-5, simulated storage in Lake Oroville does not encroach into flood control space in the spring, allowing EWA to retain its Lake Oroville storage, which is then moved to San Luis Reservoir in July. This is not an effect of the FRWP, but rather an EWA re-operation triggered by a slight difference in Lake Oroville storage.

3.4.9.2 Alternative 6 comparison to Alternative 1

February 1936

Simulated Delta outflow is 170 TAF lower in Alternative 6 than in Alternative 1 in February 1936. About 90 TAF of this reduction in outflow is attributable to decreased Mokelumne River inflows as a result of EBMUD's re-operation of the Mokelumne River system in Alternative 6. The remaining 80 TAF is exported through Tracy Pumping Plant and pumped into available space in the CVP portion of San Luis Reservoir that is available as a result of a lower entering month storage level in Alternative 6.

July 1942

Simulated Lake Oroville storage drops 100 TAF in July as a result of releases for Delta requirements and to increase Delta exports. About 78 TAF of this release is pumped out of the Delta and into SWP San Luis Reservoir storage with the remainder going to meet Delta salinity control requirements as a result of reduced Mokelumne River inflows to the Delta. In actual operations this release of water would probably be spread out over a number of months, but as a result of the simplified logic in the CALSIM model the entire amount is moved in a single month.

October 1942

In October 1942 , Sacramento River inflow to the Delta decreases by approximately 700 CFS. All facilities, including Lake Shasta and Lake Oroville, are making releases to comply with flood control operating criteria. The reduction in flood control releases is caused by lower entering storage levels as a result of higher releases made during the preceding July through September to meet Delta water quality requirements. This CVP/SWP reoperation is a response to a shift in EBMUD operations that causes a reduction in summer Mokelumne River inflows to the Delta. Under actual operations this reoperation in October would be spread over a number of months and the large reduction in Delta inflows would not occur in a single month as simulated by the simplified logic in CALSIM II.

November 1943

Similar to the CVP/SWP reoperation described for October of 1942, Lake Oroville storage entering November of 1943 is reduced below the Alternative 1 level as a result of the reduction in storage described for July 1942. Therefore, Oroville flood control releases in November are reduced by almost 100 taf as compared to Alternative 1. This causes a decrease of 1600 cfs in Sacramento River inflow to the Delta. As noted for July 1942, this SWP reoperation would not have occurred in a single month as shown in the CALSIM results.

July 1956

In July 1956, simulated Lake Oroville storage increases 255 TAF in Alternative 6 over Alternative 1 because of a reduction in releases for export to San Luis Reservoir. As a result, simulated SWP San Luis Reservoir storage decreases by a similar amount. The change in reservoir balancing is caused by a higher San Luis Reservoir storage at the end of June that does not trigger the release of water from Lake Oroville in July. Oroville releases increase in August to bring storage levels within 84 TAF of the Alternative 1 level.

January 1964

The simulated Lake Oroville storage entering January 1964 is about 150 TAF less than that in Alternative 1.As a result, roughly 145 TAF is retained in Lake Oroville in Alternative 6 instead of being released for flood control purposes and flowing out of the Delta as simulated in Alternative 1.

July 1973

Similar to July 1956, a slight increase in SWP San Luis Reservoir storage in June does not trigger the release of water from Lake Oroville in July. As a result, there is a 169 TAF increase in Lake Oroville storage and a corresponding reduction in SWP San Luis Reservoir storage in July. In actual operations this reduction in Oroville release would probably be spread out over a number of months, but as a result of the simplified logic in the CALSIM model the entire amount retained in a single month.

November 1974

In Alternative 6 roughly 110 TAF more water is released from Lake Oroville for flood control purposes and flows out of the Delta in November. CALSIM II is compensating for an elevated Oroville storage condition carried over from 1973 as described above. This exaggerated adjustment in Lake Oroville storage results in an overestimate of changes in simulated Delta salinity, as this release would normally be spread over a number of months.

September 1974

In September 1974, Sacramento River inflow to the Delta decreases by approximately 900 CFS. This is caused by a reduction in Lake Oroville flood control releases as compared to Alternative 1. The reduction is a result of a lower entering storage level due to higher releases made during the preceding July and August to meet Delta water quality requirements. This reoperation of Lake Oroville is a response to a shift in EBMUD operations that causes a reduction in summer Mokelumne River inflows to the Delta. Under actual operations this reoperation in September would be spread over a number of months and the large reduction in Delta inflows would not occur in a single month as simulated by the simplified logic in CALSIM II.

July 1993

A slight decrease in Alternative 6 June 1993 SWP San Luis Reservoir storage triggers a release of 325 TAF from Lake Oroville in July and causes a similar increase in San Luis Reservoir storage. This release substantially increases Delta inflow and causes a resulting decrease in CVP Shasta Lake releases that result in an increase of Shasta storage of about 70 TAF as compared to Alternative 1. This exaggerated adjustment in Lake Oroville storage results in an overestimate of changes in simulated Delta salinity, as this release would normally be spread over a number of months.

3.4.9.3 Conclusion

Using CALSIM II in a long-term comparative fashion, as it was designed, provides a reasonable basis for assessing project impacts when the results are used in a statistical sense. The isolated months described above are not representative of the potential affects of the FRWP and the differences between project alternatives must be carefully analyzed to differentiate between realistic effects and these isolated modeling artifacts.

3.4.10 EBMUD-as-Delta-Export study

The CALSIM II studies presented in this appendix are all based on the assumption that, for the purposes of the Coordinated Operations Agreement (COA), EBMUD's diversions at Freeport are a Sacramento Valley inbasin use. To test the sensitivity of the modeling results to this assumption, a side-bar modeling study was prepared in which EBMUD's diversions were assumed instead to be a Delta export (side-bar study). The side-bar study was for Alternatives 2-5, 2001 LOD. The results of the base Alternatives 2-5 CALSIM II study (base study) and those for the side-bar study are compared in this section of the Modeling Technical Appendix.

Figures 3.4.10-1 through 3.4.10-4 plot selected CVP and SWP parameters expressed as a percentage of the maximum value in Alternative 1. Values for Alternative 1, the base Alternatives 2-5 study and the side-bar study are displayed for the periods indicated.

Table 3.4.10-1 lists long-term and dry-year average values for project diversions, system flows, system storage, and deliveries. The difference between simulation results for the base study and the side-bar study is also shown in this table, expressed in both TAF/yr and percent change from the base study.

The difference in annual average values between the base and side-bar studies are listed in Tables 3.4.10-2 and 3.4.10-3 for each of the 72 years simulated. Table 3.4.10-2 focuses on the CVP system, while Table 3.4.10-3 lists SWP system parameters.

The following is a key to the abbreviations used in Tables 3.4.10-2 and 3.4.10-3.

CVPagSys	CVP deliveries to North-of-Delta agricultural contractors
CVPmiSys	CVP deliveries to North-of-Delta municipal and industrial contractors
CVPagS	CVP deliveries to South-of-Delta agricultural contractors
CVPmiS	CVP deliveries to South-of-Delta municipal and industrial contractors
SWPag	SWP deliveries to North-of-Delta agricultural contractors (not including Feather River Service Area)
SWPmwd	SWP deliveries to the Metropolitan Water District
SWPmi	SWP deliveries municipal and industrial contractors (including Metropolitan Water District)
Feather	SWP deliveries to Feather River Service Area
Int.	SWP Article 21 Interruptible supplies

Figure 3.4.10-1 Comparison of Selected CVP and SWP Parameters, Sensitivity to COA Assumption, Alternatives 2-5, 2001 LOD (Average of All Years)

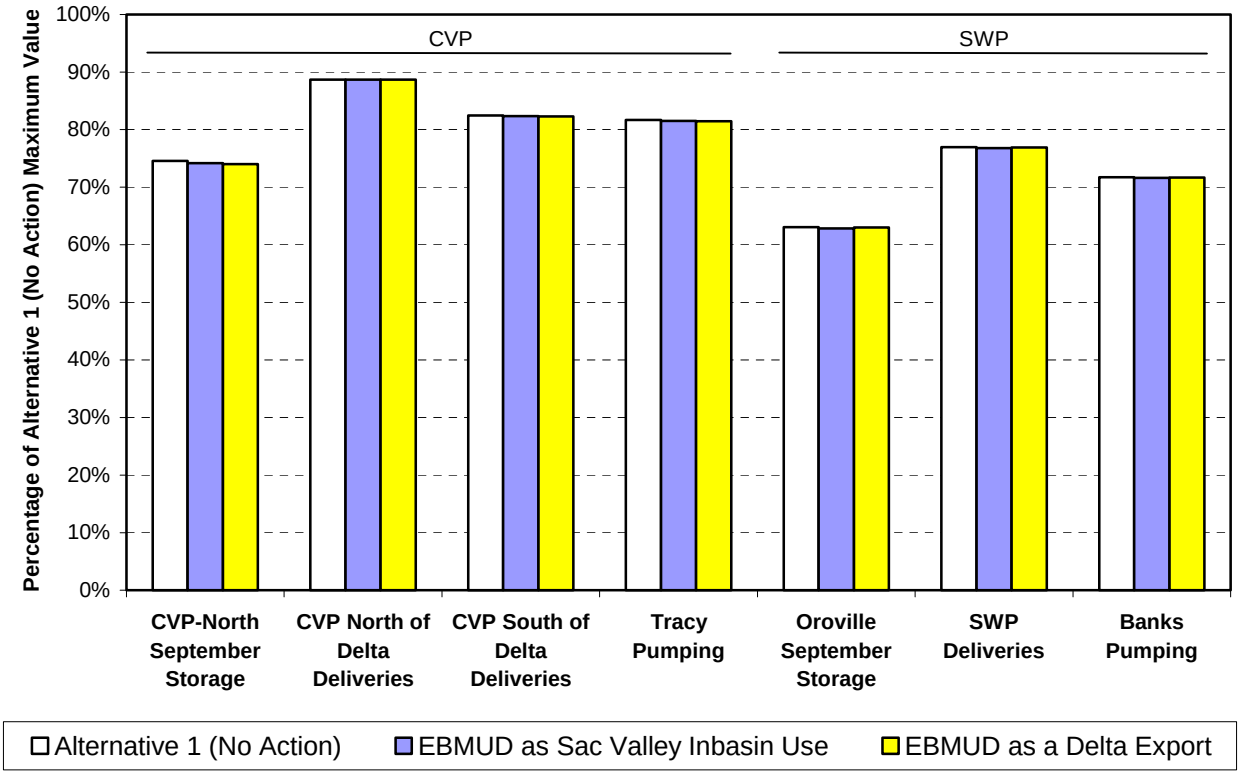


Figure 3.4.10-2 Comparison of Selected CVP and SWP Parameters, Sensitivity to COA Assumption, Alternatives 2-5, 2001 LOD (Dry Period WY 1928-1934)

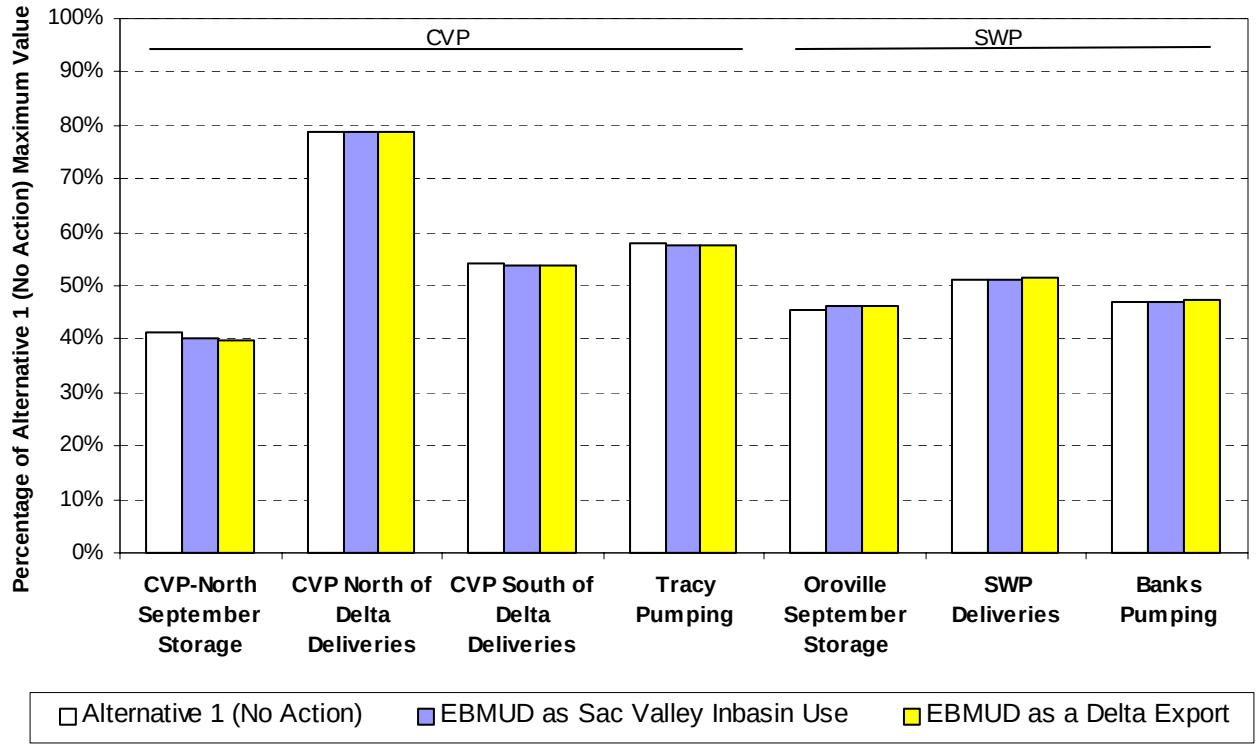


Figure 3.4.10-3 Comparison of Selected CVP and SWP Parameters, Sensitivity to COA Assumption, Alternatives 2-5, 2001 LOD (Dry Period WY 1976-1977)

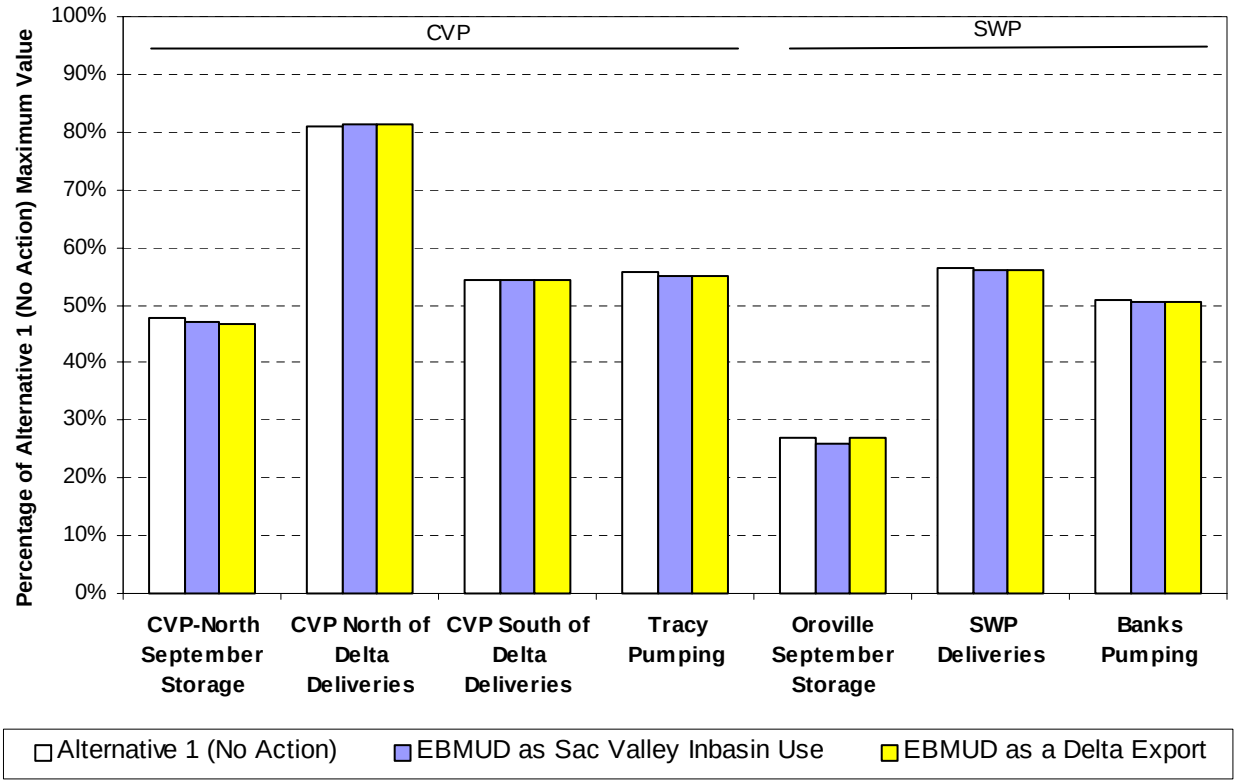


Figure 3.4.10-4 Comparison of Selected CVP and SWP Parameters, Sensitivity to COA Assumption, Alternatives 2-5, 2001 LOD (Dry Period WY 1987-1992)

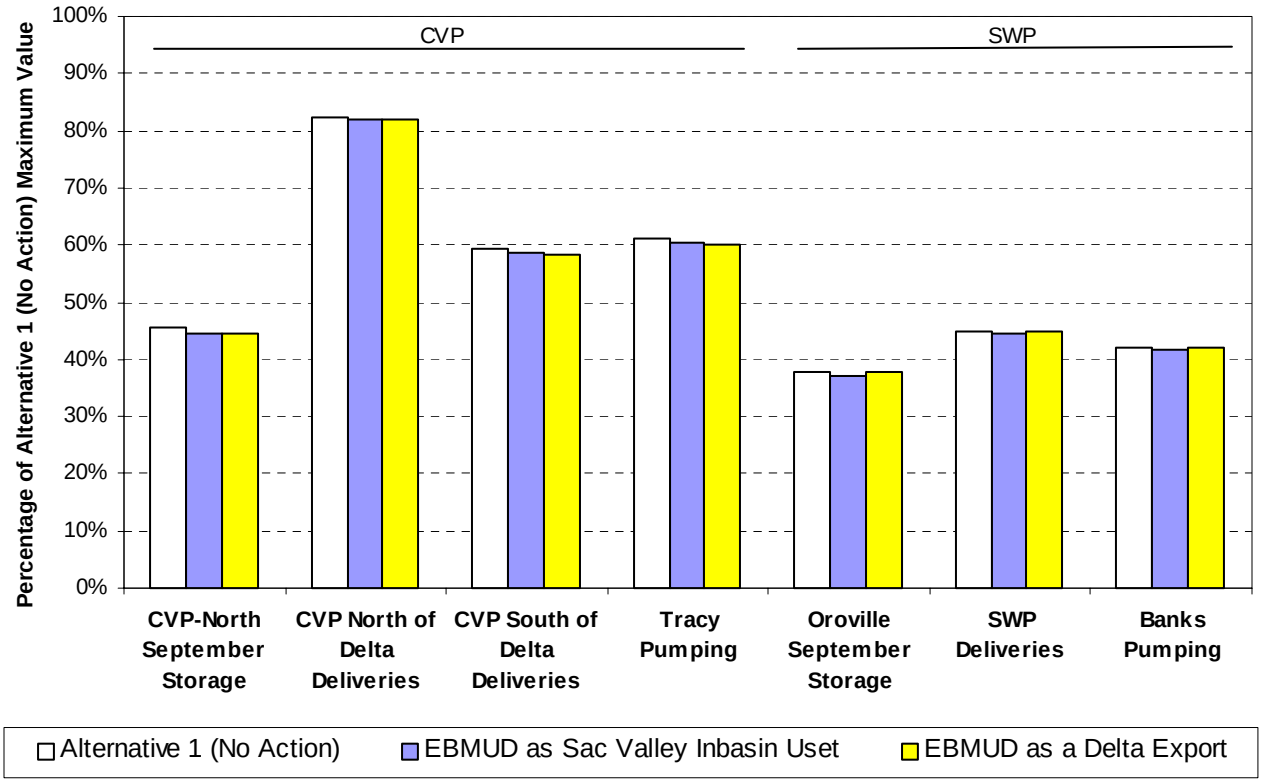


Table 3.4.10-1 Summary, EBMUD-as-Sacramento-River-inbasin-use study compared with EBMUD-as-Delta-export study, Alternatives 2-5, 2001 LOD

	Inbasin study		Export study		Inbasin study minus Export study			
	All years	Dry period	All years	Dry period	All years	Dry period	Average	Dry
	TAF/yr	TAF/yr	TAF/yr	TAF/yr	TAF/yr	TAF/yr	% change	% change
FRWP Deliveries								
EBMUD CVP	23	43	23	43	0	0	0.0%	0.0%
SCWA CVP	40	29	39	29	0	0	-0.1%	-0.1%
SCWA Appropriated Excess	17	9	17	9	0	0	1.0%	0.1%
SCWA "Other" Water	15	17	15	17	0	0	0.0%	0.0%
System Flows (Average Annual Values)								
Total Delta Inflow	21,120	11,624	21,119	11,629	-1	5	0.0%	0.0%
Total Delta Outflow	14,440	6,593	14,439	6,592	-1	0	0.0%	0.0%
Tracy Export	2,296	1,626	2,294	1,623	-2	-2	-0.1%	-0.1%
Banks Export CVP	164	64	165	62	1	-1	0.6%	-1.8%
Banks Export SWP	2,999	1,889	3,001	1,897	2	9	0.1%	0.5%
Total Delta Export	5,566	3,772	5,566	3,777	0	5	0.0%	0.1%
Trinity Import	692	447	692	447	1	0	0.1%	-0.1%
Trinity River	526	418	526	418	0	0	-0.1%	0.0%
Keswick Release	6,235	4,378	6,235	4,382	1	4	0.0%	0.1%
Oroville Release	3,839	2,630	3,837	2,631	-2	1	-0.1%	0.0%
Folsom Release	2,528	1,613	2,528	1,612	0	0	0.0%	0.0%
System Storage (End of September)								
Trinity Storage	1,314	594	1,311	586	-3	-8	-0.2%	-1.3%
Whiskeytown Lake	234	226	234	221	0	-4	-0.2%	-1.9%
Shasta Storage	2,656	1,452	2,651	1,440	-5	-12	-0.2%	-0.8%
Folsom Lake	498	381	498	379	0	-2	0.0%	-0.5%
Total CVP North-of-Delta Storage	4,702	2,652	4,694	2,626	-8	-26	-0.2%	-1.0%
Oroville Storage	2,105	1,542	2,112	1,547	6	5	0.3%	0.3%
CVP SL Storage	260	308	259	307	0	-2	-0.1%	-0.5%
SWP SL Storage	308	269	308	278	1	9	0.2%	3.5%
Total San Luis Storage	568	577	568	585	0	8	0.0%	1.4%
North of Delta Deliveries								
CVP Delivery Settlement NoD	1,836	1,774	1,836	1,774	0	0	0.0%	0.0%
CVP Delivery Ag Service NoD	237	61	237	61	0	-1	-0.2%	-0.9%
CVP Delivery M&I NoD	31	29	31	29	0	0	0.0%	0.0%
CVP Delivery Refuge NoD	106	95	106	95	0	0	0.0%	0.0%
Total CVP Delivery NoD	2,210	1,959	2,209	1,959	0	0	0.0%	0.0%
CCWD M&I	144	142	144	142	0	0	0.0%	0.0%
SWP Feather River Delivery	990	901	990	901	0	0	0.0%	0.0%
Feather River NP Surface Water Use	294	294	294	294	0	0	0.0%	0.0%
North of Delta NP Surface Water Use	3,542	3,532	3,542	3,532	0	0	0.0%	0.0%
South of Delta Deliveries								
CVP Delivery Exchange SoD	849	759	849	759	0	0	0.0%	0.0%
CVP Delivery Ag Service SoD	1078	352	1075	349	-2	-3	-0.2%	-0.8%
CVP Delivery M&I SoD	124	94	124	94	0	0	-0.1%	-0.1%
CVP Delivery Refuge SoD	280	252	280	252	0	0	0.0%	0.0%
Total CVP Delivery South w/ CVC	2591	1663	2588	1659	-2	-3	-0.1%	-0.2%
SWP Delivery MWD	1330	949	1332	952	2	4	0.1%	0.4%
SWP Entitlement A Delivery	3071	2026	3074	2035	3	9	0.1%	0.4%
SWP Article 21 Delivery	136	113	136	114	0	1	-0.2%	1.2%

Note

1) "All years" is the average annual value for the 72-year simulation period (WY1922-1993).

2) "Dry period" is the average annual value for the WY1928-1934 dry period.

3) Annual values are based on water years (From October through September).

4) SWP Entitlement A Delivery includes MWD Delivery but not Article 21 Delivery.

5) CCWD is not included in either North or South of Delta.

6) Delivery values are taken from JPOD steps of CALSIM simulation and the rest are taken from EWA steps.

7) Reported CVP North M&I deliveries do not include American River division and FRWP deliveries.

Table 3.4.10-2 Annual Comparison for CVP System, EBMUD-as-Sacramento-River-inbasin-use study compared with EBMUD-as-Delta-export study, Alternatives 2-5, 2001 LOD

	Sac River	September Storage (TAF)					Delta Export (TAF)		CVP Deliveries (TAF)				CVP Deliveries (% change)			
Year	Index	Trinity	Shasta	Folsom	TotCVP_N	CVP SL	Tracy	BanksCVP	CVPAg_N	CVPmi_N	CVPAg_S	CVPmi_S	CVPagSys	CVPmiSys	CVPagS	CVPmiS
1922	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1923	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1924	5	-1	-6	-6	-13	0	1	0	0	0	1	0	0.07%	0.07%	0.07%	0.07%
1925	4	-1	-4	0	-5	0	-2	0	-1	0	-3	0	-0.27%	0.00%	-0.27%	0.00%
1926	4	-16	9	-2	-9	-4	-12	9	0	0	-2	0	-0.06%	-0.06%	-0.06%	-0.06%
1927	1	-16	0	0	-16	0	4	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1928	2	-7	1	9	3	1	-4	-7	-3	0	-11	-1	-0.87%	-0.87%	-0.87%	-0.87%
1929	5	-1	-28	-1	-30	-1	8	-1	1	0	1	0	0.31%	0.31%	0.31%	0.31%
1930	4	-1	-25	-1	-26	-3	-10	-1	-2	0	-8	0	-0.59%	0.00%	-0.59%	0.00%
1931	5	-2	-1	-11	-14	0	-6	1	0	0	-2	0	0.00%	0.00%	0.00%	0.00%
1932	4	-16	-6	0	-22	-1	-1	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1933	5	-16	-20	-2	-38	0	1	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1934	5	-12	-5	-7	-23	-5	-5	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1935	3	-12	-25	0	-38	6	-4	-1	-3	0	-14	0	-0.79%	0.00%	-0.79%	0.00%
1936	3	-6	-20	0	-27	4	-17	-1	-3	0	-15	-1	-0.82%	-0.82%	-0.82%	-0.82%
1937	3	-6	1	0	-5	-11	-27	-1	-2	0	-12	-1	-0.62%	0.00%	-0.62%	0.00%
1938	1	0	0	0	0	6	9	3	0	0	-2	0	0.00%	0.00%	0.00%	0.00%
1939	4	-3	-6	-3	-12	-1	-11	0	-1	0	-3	0	-0.25%	-0.25%	-0.25%	-0.25%
1940	2	-7	0	1	-6	6	1	0	-2	0	-6	0	-0.69%	0.00%	-0.32%	-0.32%
1941	1	0	0	0	0	0	-8	1	0	0	-1	0	0.00%	0.00%	0.00%	0.00%
1942	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1943	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1944	4	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1945	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1946	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1947	4	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1948	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1949	4	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1950	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1951	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1952	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1953	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1954	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1955	4	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1956	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1957	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1958	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1959	3	-1	-23	0	-24	-1	-1	8	0	0	0	0	0.00%	0.00%	-0.03%	0.00%
1960	4	13	-30	-14	-30	0	-45	46	-1	0	-6	0	-0.38%	-0.17%	-0.38%	-0.17%
1961	4	9	-66	74	17	-19	-3	0	0	0	-4	0	-0.15%	-0.15%	-0.19%	-0.19%
1962	3	9	-10	-2	-3	-2	17	10	0	0	0	0	0.00%	0.00%	0.02%	0.02%
1963	1	0	0	0	0	-1	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1964	4	-1	-4	-1	-7	-8	0	0	0	0	-1	0	-0.03%	0.00%	-0.03%	0.00%
1965	1	0	0	0	-1	0	6	1	0	0	0	0	-0.10%	0.00%	0.02%	0.00%
1966	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1967	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1968	3	-1	-16	0	-18	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1969	1	0	0	0	0	-1	-2	3	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1970	1	0	0	0	0	0	1	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1971	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1972	3	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1973	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1974	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1975	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1976	5	0	-9	0	-9	-6	2	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1977	5	-9	-12	-12	-33	0	-2	0	-1	0	-2	0	-0.16%	-0.16%	-0.16%	-0.16%
1978	2	-28	0	0	-28	2	0	0	0	0	-1	0	0.00%	0.00%	0.00%	0.00%
1979	3	-27	-10	-3	-40	0	-3	5	0	0	0	0	0.00%	0.00%	-0.04%	0.00%
1980	2	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1981	4	0	-9	-2	-11	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1982	1	0	0	0	0	-4	-1	0	0	0	3	0	0.00%	0.00%	0.24%	0.00%
1983	1	0	0	0	0	0	2	0	0	0	-1	0	0.00%	0.00%	-0.17%	-0.17%
1984	1	0	0	0	0	0	-1	0	0	0	-1	0	0.00%	0.00%	0.00%	0.00%
1985	4	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.01%	0.01%
1986	1	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1987	4	-2	-9	-4	-15	0	-1	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1988	5	-2	-29	1	-30	-1	-1	-1	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1989	4	-5	-14	6	-13	0	-6	-1	-2	0	-8	0	-0.59%	0.00%	-0.59%	0.00%
1990	5	-5	26	2	24	-4	-5	0	0	0	-2	0	0.00%	0.00%	0.00%	0.00%
1991	5	-4	3	-26	-27	-4	0	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
1992	5	-3	-3	4	-3	9	-3	-3	-9	0	-36	-2	-2.64%	-2.64%	-2.64%	-2.64%
1993	2	-3	0	0	-3	15	0	0	0	0	-9	-1	0.00%	0.00%	0.00%	0.00%
Avg.		-3	-5	0	-7	0	-2	1	0	0	-2	0	-0.12%	-0.07%	-0.11%	-0.07%
Max.		-28	-66	-26	-40	-19	-45	-7	-9	0	-36	-2	-2.64%	-2.64%	-2.64%	-2.64%
Min.		13	26	74	24	15	17	46	1	0	3	0	0.31%	0.31%	0.31%	0.31%

Table 3.4.10-3 Annual Comparison for SWP System, EBMUD-as-Sacramento-River-inbasin-use study compared with EBMUD-as-Delta-export study, Alternatives 2-5, 2001 LOD

	Sac River	September Storage (TAF)		Delta Export (TAF)	SWP Deliveries (TAF)					SWP Deliveries (% change)		
Year	Index	Oroville	SWP SL	Banks SWP	SWPag	SWPmwd	SWPmi	Feather	Int.	SWPag	SWPmwd	SWPother
1922	2	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1923	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1924	5	23	-4	2	0	0	0	0	0	0.02%	0.02%	0.03%
1925	4	39	-34	4	5	7	10	0	0	0.46%	0.51%	0.47%
1926	4	40	-2	25	11	17	26	0	-31	0.86%	1.04%	0.86%
1927	1	1	2	8	1	5	7	0	-5	-0.12%	-0.14%	-0.19%
1928	2	1	0	0	0	0	-1	0	3	0.00%	0.00%	0.00%
1929	5	19	9	6	1	1	2	0	0	0.11%	0.13%	0.11%
1930	4	-30	57	65	7	11	16	0	1	0.60%	0.64%	0.59%
1931	5	7	0	-38	2	5	7	0	0	0.12%	0.12%	0.12%
1932	4	5	-3	-1	2	-4	-4	0	5	0.12%	0.15%	0.12%
1933	5	17	3	-3	2	3	5	0	0	0.18%	0.20%	0.19%
1934	5	18	0	31	7	11	17	0	0	0.70%	0.78%	0.72%
1935	3	17	2	7	1	4	6	0	-6	-0.11%	-0.19%	-0.15%
1936	3	0	7	1	0	-1	-1	0	0	-0.08%	-0.06%	-0.13%
1937	3	0	6	-2	0	0	6	0	-1	-0.03%	-0.06%	1.02%
1938	1	-3	-6	-2	0	0	3	0	3	0.00%	0.00%	-0.01%
1939	4	19	0	6	0	0	0	0	4	0.00%	0.00%	0.00%
1940	2	1	0	2	0	0	0	0	-2	-0.09%	-0.02%	-0.13%
1941	1	0	0	-2	0	0	0	0	0	0.00%	0.00%	-0.01%
1942	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1943	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1944	4	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1945	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1946	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1947	4	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1948	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1949	4	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1950	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1951	2	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1952	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1953	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1954	2	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1955	4	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1956	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1957	2	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1958	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1959	3	16	0	12	1	1	2	0	0	0.10%	0.10%	0.10%
1960	4	24	-1	22	7	10	14	-2	0	0.69%	0.73%	0.72%
1961	4	-17	0	0	6	11	16	0	0	0.43%	0.41%	0.42%
1962	3	-1	0	-11	-10	1	-6	0	0	-1.11%	0.15%	-1.15%
1963	1	8	12	3	-1	1	-2	0	6	-0.02%	-0.01%	-0.02%
1964	4	10	0	-1	4	6	9	0	0	0.40%	0.45%	0.40%
1965	1	0	0	1	0	2	3	0	-1	0.00%	0.00%	0.00%
1966	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1967	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1968	3	15	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1969	1	0	1	1	0	0	0	0	0	-0.03%	-0.10%	-0.05%
1970	1	0	0	-2	0	0	0	0	0	0.00%	0.00%	0.00%
1971	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1972	3	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1973	2	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1974	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1975	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1976	5	11	1	4	0	0	0	0	4	0.00%	0.00%	0.00%
1977	5	42	0	-3	0	0	0	0	0	0.00%	0.00%	0.00%
1978	2	35	3	-1	0	1	2	0	0	-0.11%	-0.22%	-0.57%
1979	3	2	-8	2	0	0	-2	0	-1	-0.04%	-0.10%	-0.07%
1980	2	0	0	8	0	0	0	0	0	0.00%	-0.01%	-0.02%
1981	4	11	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1982	1	0	0	4	0	0	0	0	0	0.00%	0.00%	0.00%
1983	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1984	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1985	4	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1986	1	0	0	0	0	0	0	0	0	0.00%	0.00%	0.00%
1987	4	15	0	-1	0	0	0	0	0	0.00%	0.00%	0.00%
1988	5	21	0	-10	2	3	4	0	0	0.22%	0.23%	0.22%
1989	4	32	0	-10	6	9	13	0	0	0.57%	0.62%	0.61%
1990	5	2	4	35	1	4	6	0	0	0.05%	0.06%	0.05%
1991	5	20	0	-8	0	1	1	0	0	0.03%	0.03%	0.03%
1992	5	27	-10	-10	8	12	18	-1	0	0.89%	1.07%	0.94%
1993	2	1	3	-1	1	5	7	0	-1	-0.02%	-0.01%	-0.03%
Avg.		6	1	2	1	2	3	0	0	0.07%	0.09%	0.07%
Max.		-30	-34	-38	-10	-4	-6	-2	-31	-1.11%	-0.22%	-1.15%
Min.		42	57	65	11	17	26	0	6	0.89%	1.07%	1.02%

3.5 SIMULATION RESULTS FOR 2020 LOD

This section provides detailed results from the CALSIM II analyses of the FRWP Action alternatives in comparison to the Alternative 1 (No Action) study at a 2020 Level of Development. Results are displayed in both contract year and water year formats where appropriate, and are typically presented in both exceedence and time series formats. Comparative analyses are emphasized, but absolute data is provided in some instances. Results for the dry periods of WY 1928-1934 and WY 1987-1992 are also included, since impacts from the FRWP could potentially be the greatest in these periods. The sections below provide simulated Freeport Project diversions, reservoir storage, river flow, Delta flow, Delta export, CVP delivery, and SWP delivery data.

3.5.1 Summary Results

Several types of figures are provided in this section to give an overview of the hydrologic modeling results. The emphasis is on the incremental effect of Alternatives 2-5 (Joint Project) compared with Alternative 1 (No-Action), although some comparisons with Alternative 6 are also included. Four periods are evaluated: the full simulation period (WY 1922-1993) and three dry periods (WY 1928-1934, WY 1976-1977, and WY 1987-1992).

Figures 3.5.1-1 through 3.5.1-4 show the average change in simulated flows at several key locations and compare these values with the base values in Alternative 1. These figures only show the incremental change associated with Alternatives 2-5

Figures 3.5.1-5 through 3.5.1-8 show the average change in simulated carryover storage (end of September) for key North-of-the-Delta CVP and SWP reservoirs, as well as Delta exports to the south. For comparison, base values in Alternative 1 are also shown. This set of figures only shows the incremental change associated with Alternatives 2-5

The percentage of the Alternative 1 (No-Action) values for selected parameters are displayed for the action alternatives in Figures 3.5.1-9 through 3.5.1-12. This highlights the relative magnitude of the potential change associated with the FRWP alternatives, as simulated in the modeling.

The last set of figures in this section, Figures 3.5.1-13 through 3.5.1-16, plots selected CVP and SWP parameters expressed as a percentage of the maximum value in Alternative 1. This shows the general state of the CVP during each period, as well as the difference between the FRWP alternatives. For example, over the entire simulation period, CVP North-of-the Delta carryover storage is approximately 72% of the maximum in any year. However, during the dry year period of 1928-1934, CVP North-of-the-Delta storage is closer to 40% of the maximum in any year of the Alternative 1 simulation.

Figure 3.5.1-1 Average Change in Simulated Flows, Alternatives 2-5, 2020 LOD (Average of All Years)

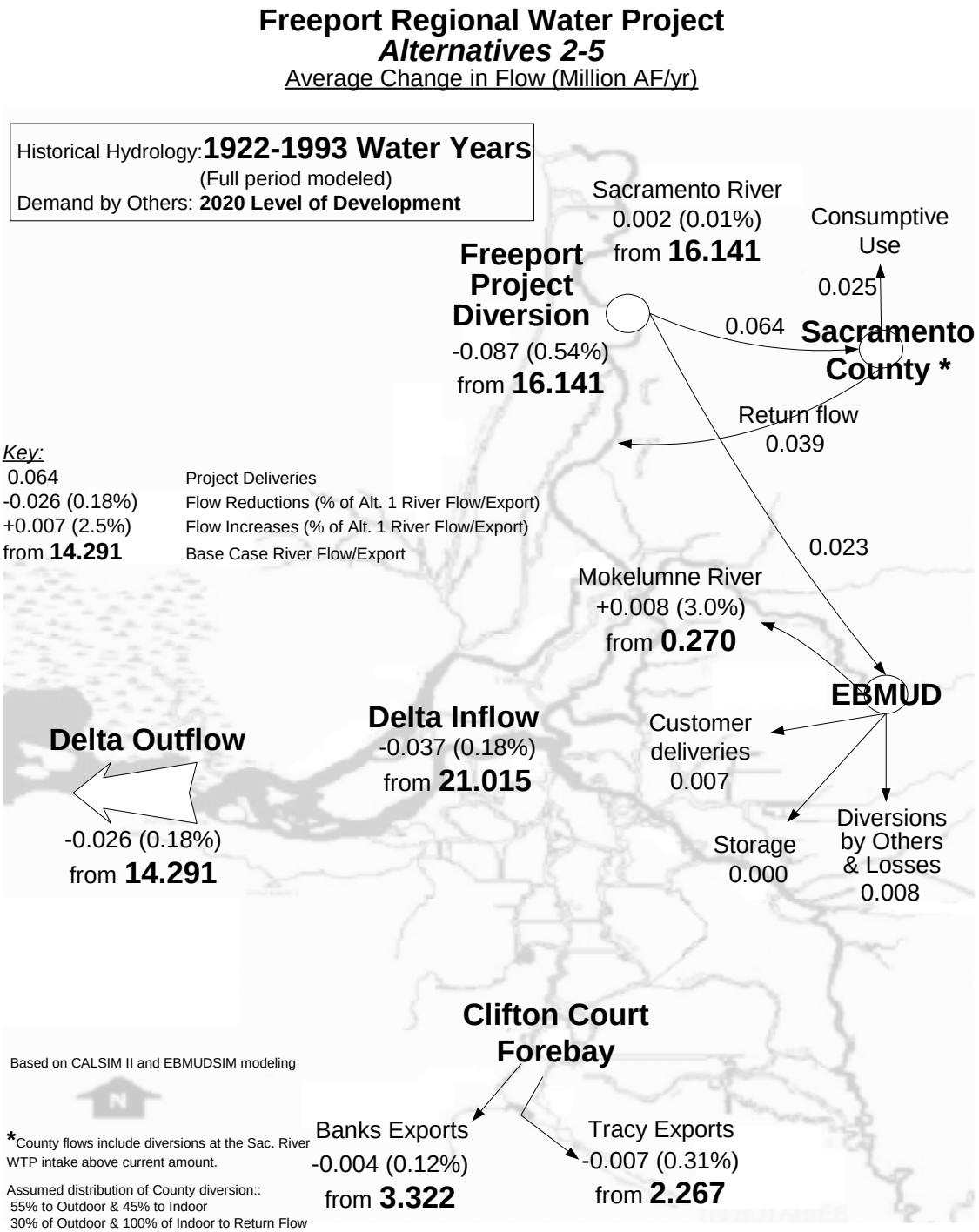


Figure 3.5.1-2 Average Change in Simulated Flows, Alternatives 2-5, 2020 LOD (Dry Period WY 1928-1934)

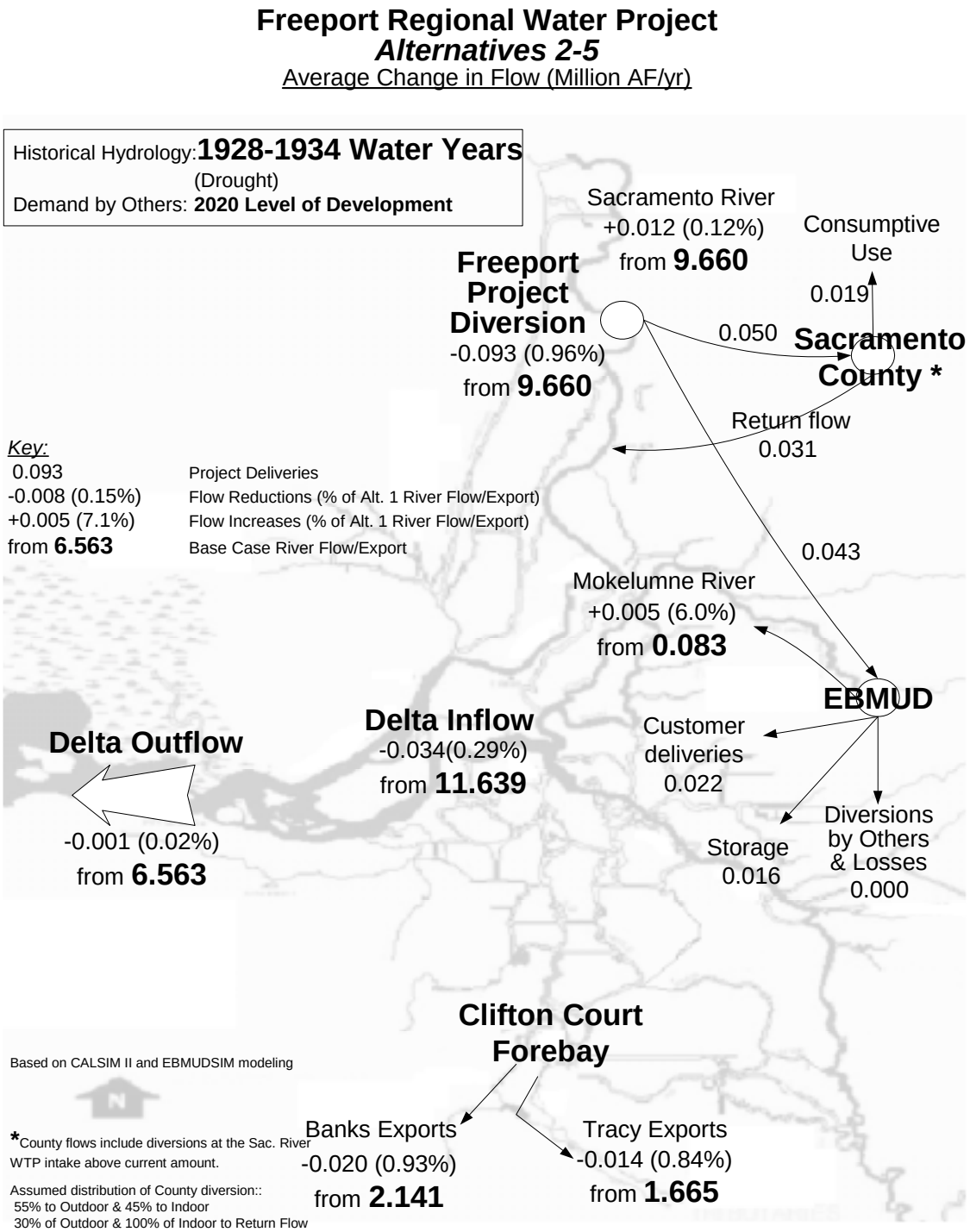


Figure 3.5.1-3 Average Change in Simulated Flows, Alternatives 2-5, 2020 LOD (Dry Period WY 1976-1977)

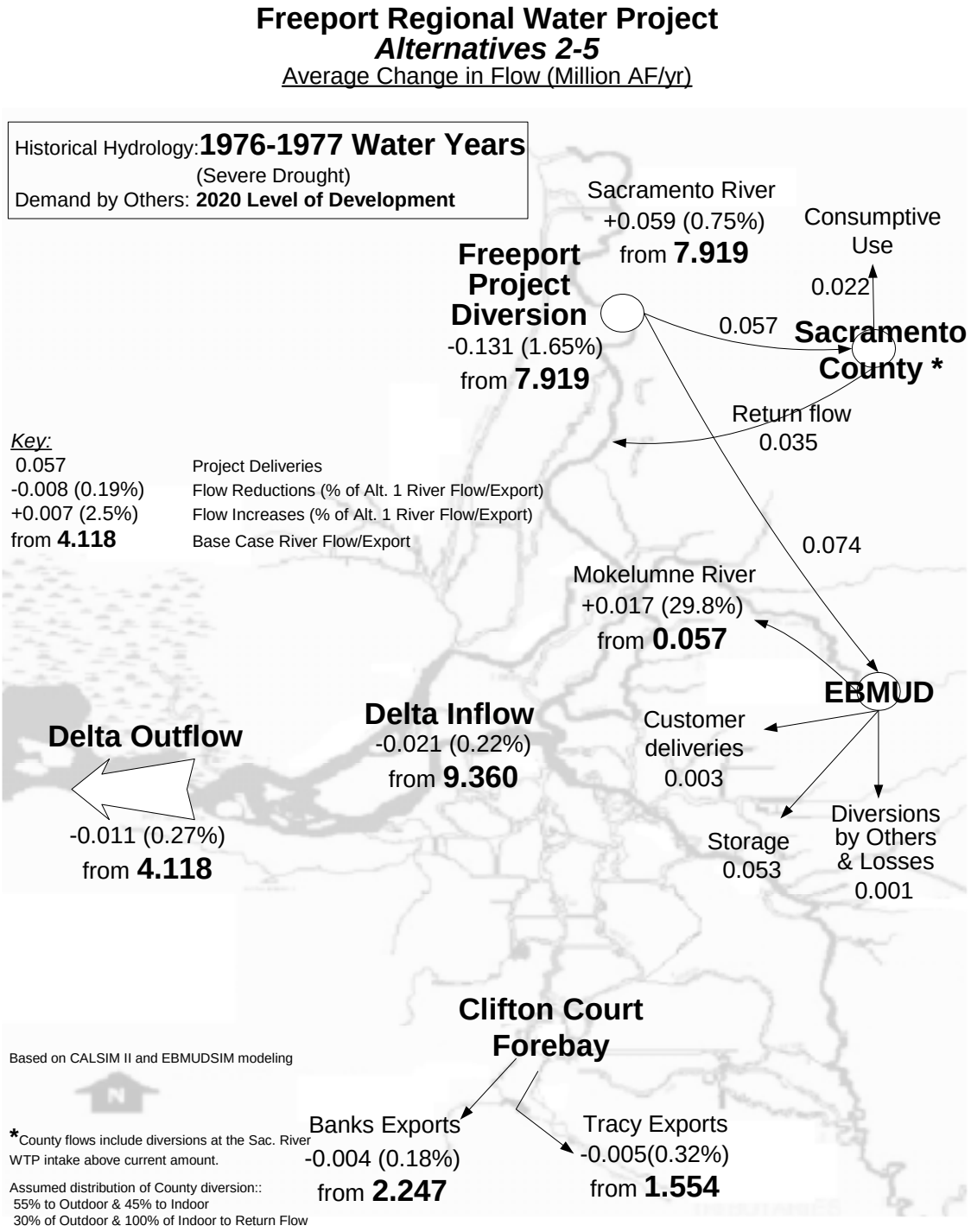


Figure 3.5.1-4 Average Change in Simulated Flows, Alternatives 2-5, 2020 LOD (Dry Period WY 1987-1992)

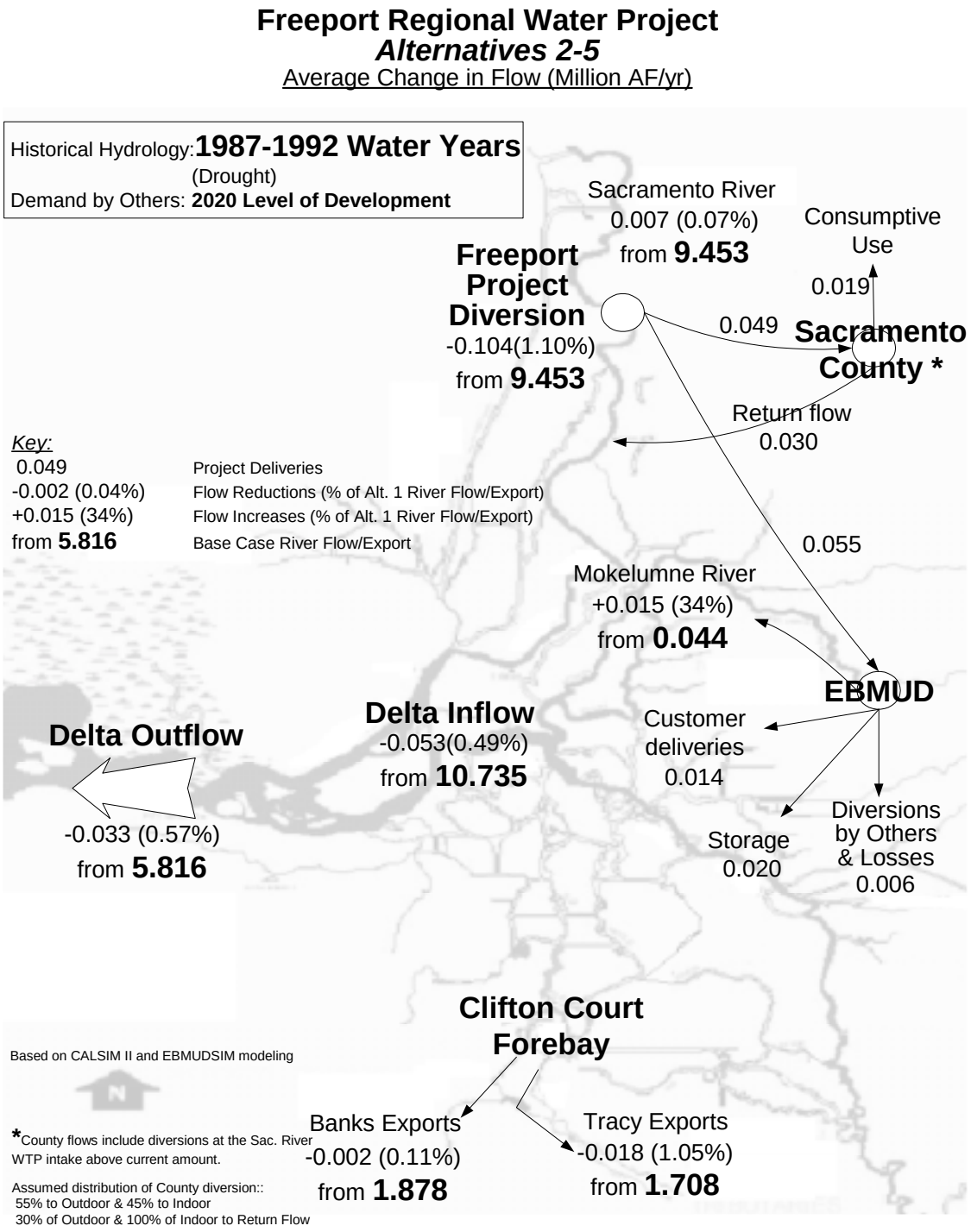


Figure 3.5.1-5 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2020 LOD (Average of All Years)

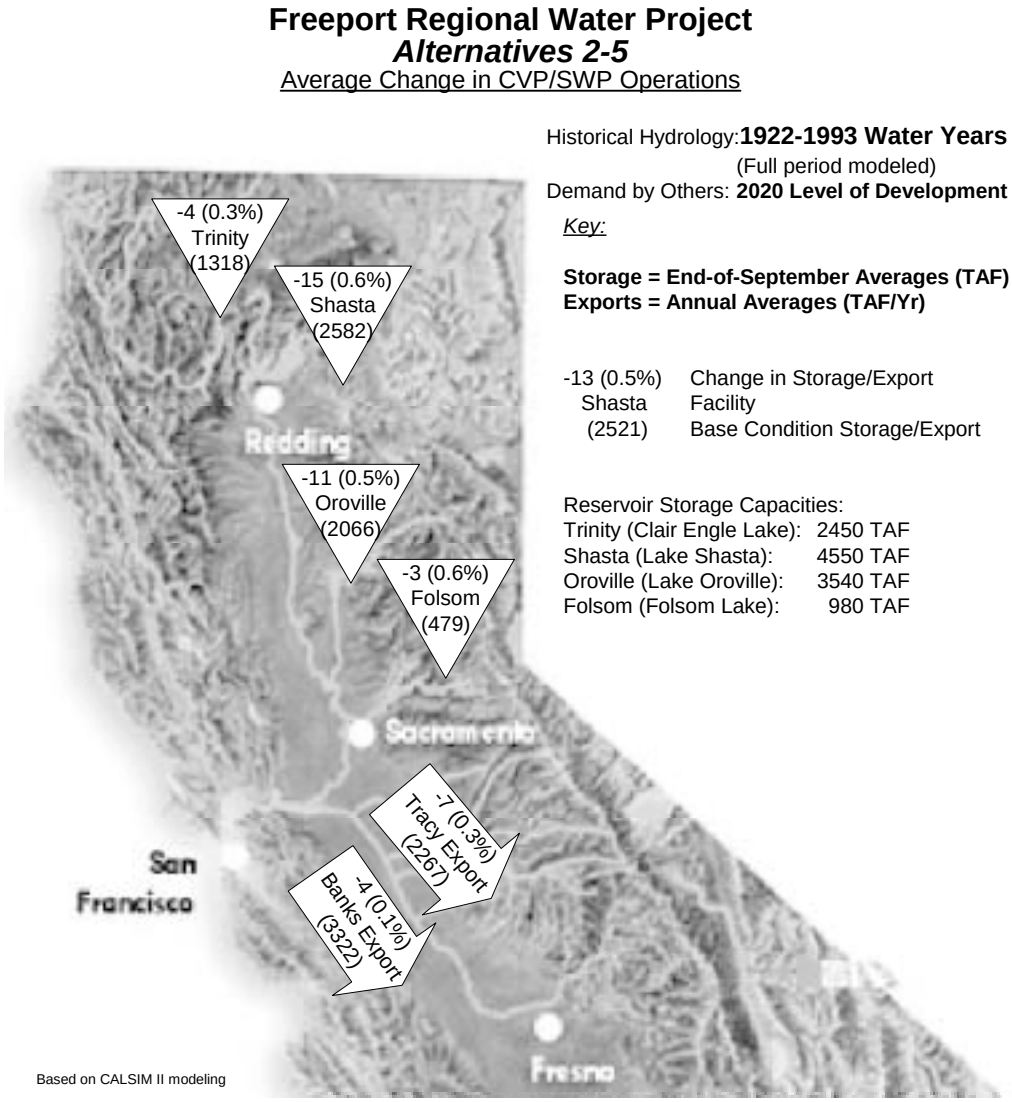


Figure 3.5.1-6 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2020 LOD (Dry Period WY 1928-1934)

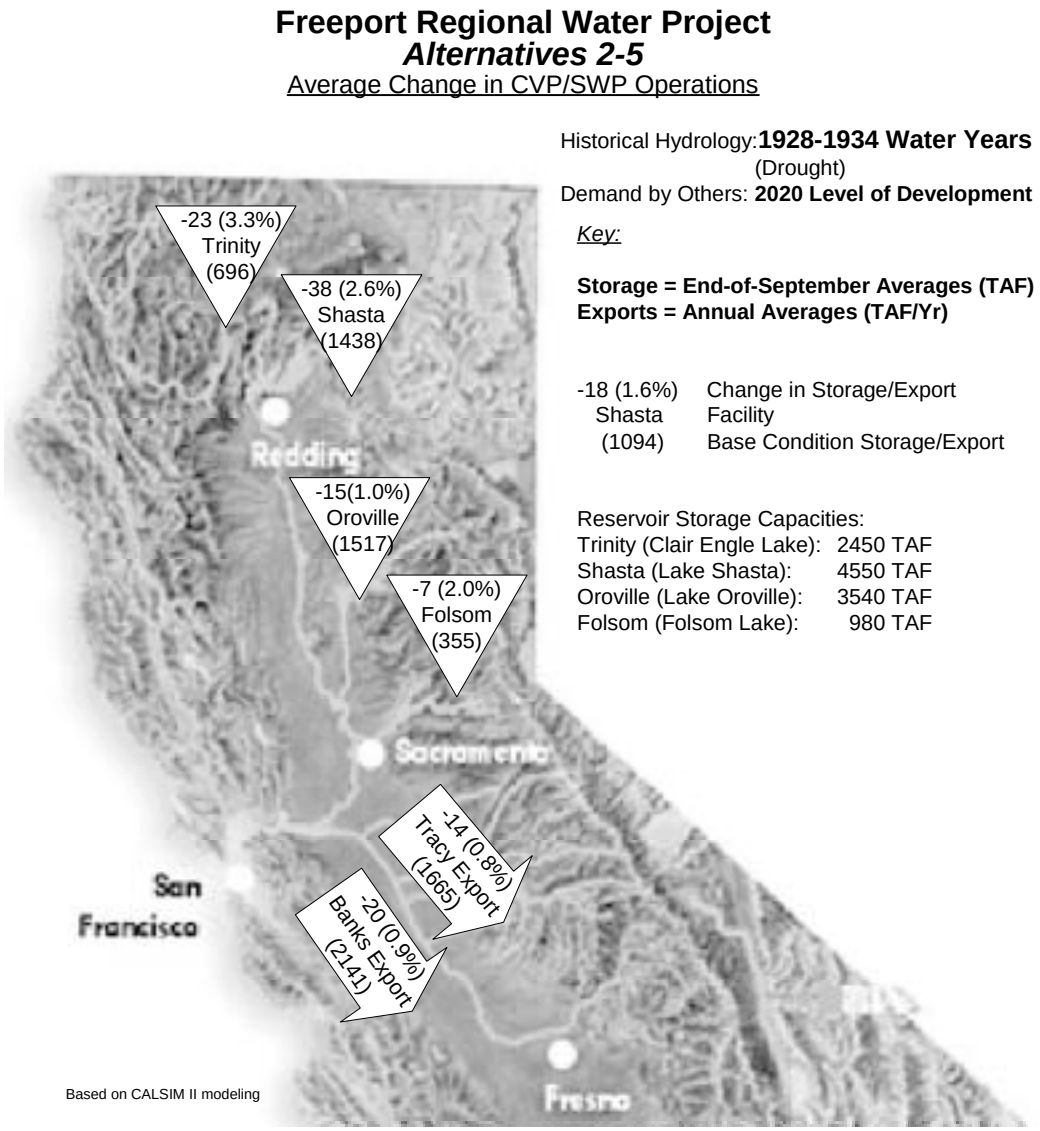


Figure 3.5.1-7 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2020 LOD (Dry Period WY 1976-1977)

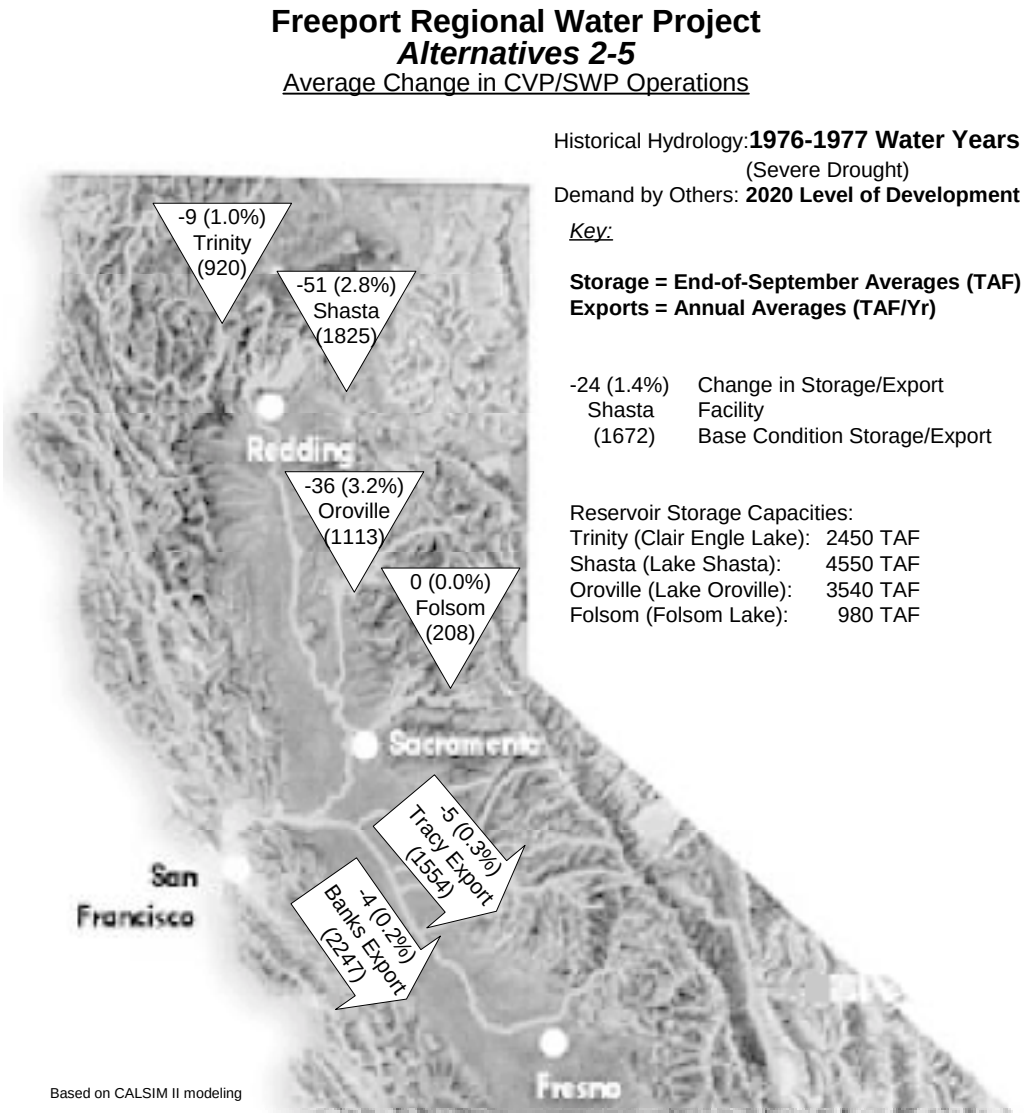


Figure 3.5.1-8 Average Change in Simulated CVP/SWP Operations, Alternatives 2-5, 2020 LOD (Dry Period WY 1987-1992)

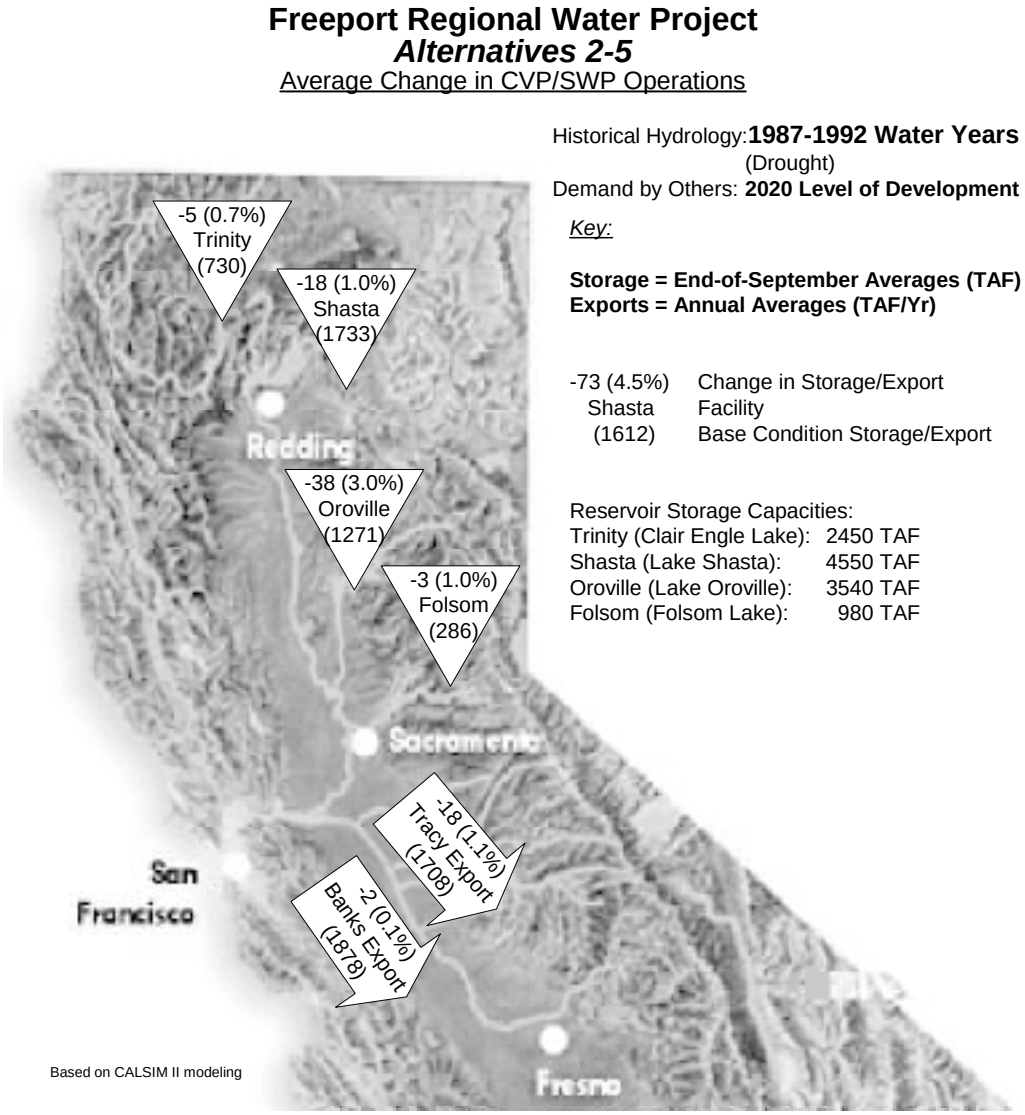


Figure 3.5.1-9 Comparison of Alternatives for Selected Parameters, 2020 LOD (Average of All Years)

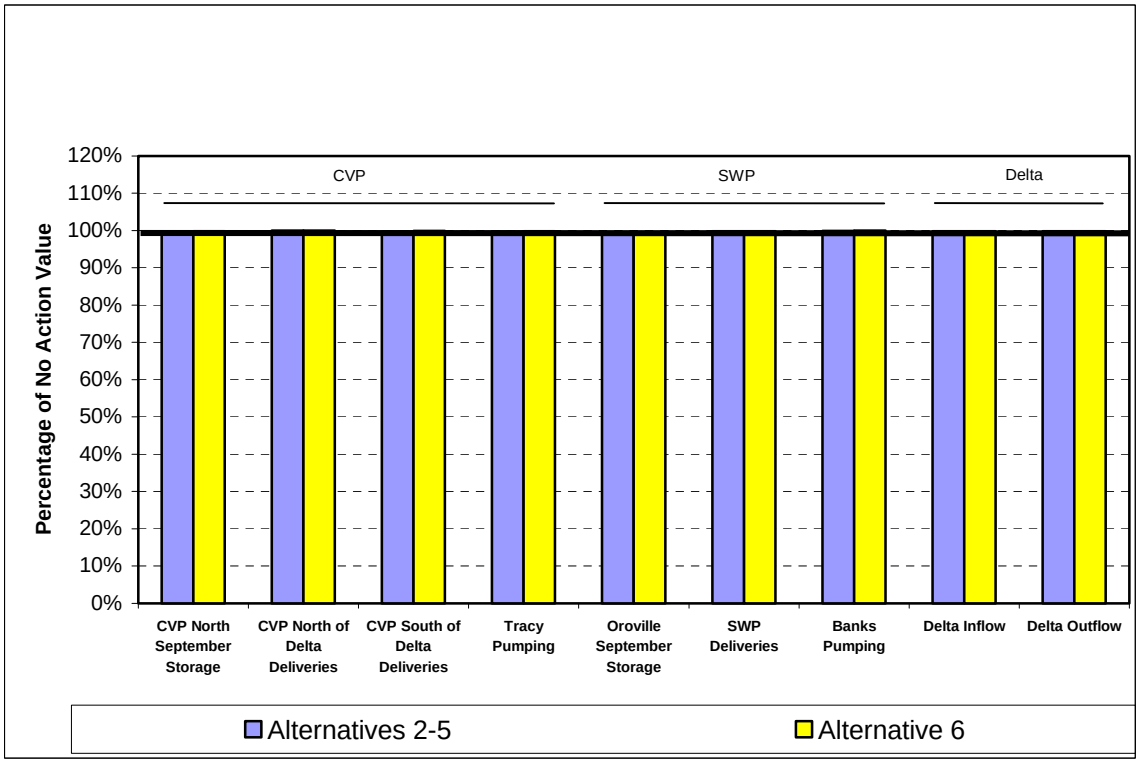


Figure 3.5.1-10 Comparison of Alternatives for Selected Parameters, 2020 LOD (Dry Period WY 1928-1934)

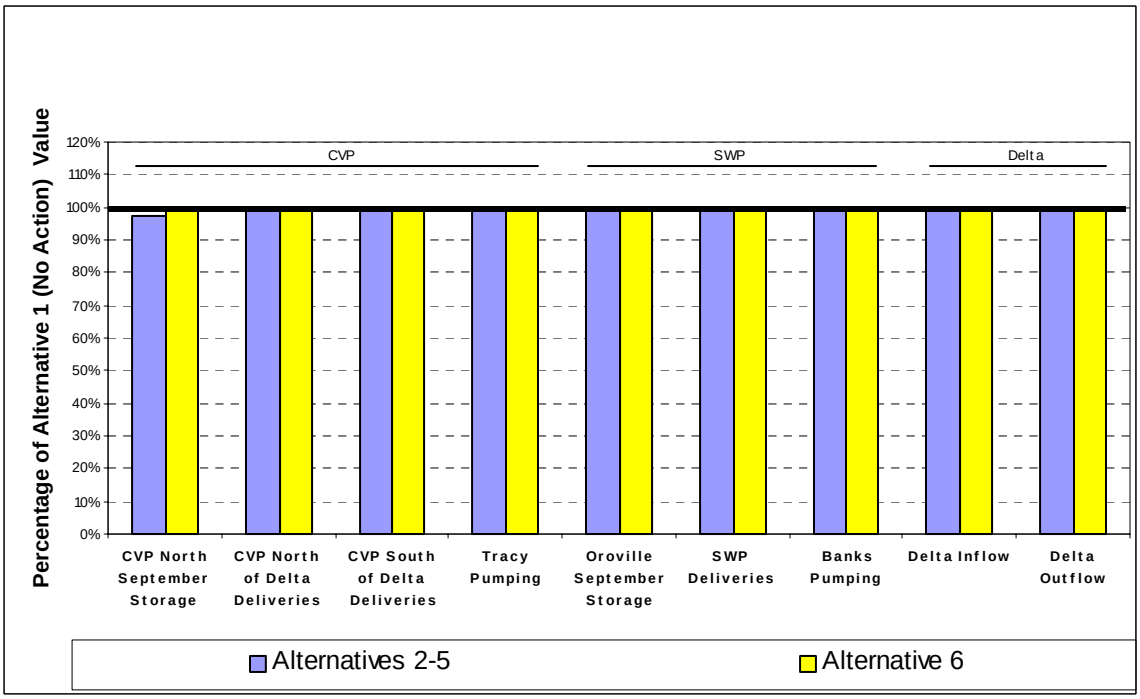


Figure 3.5.1-11 Comparison of Alternatives for Selected Parameters, 2020 LOD (Dry Period WY 1976-1977)

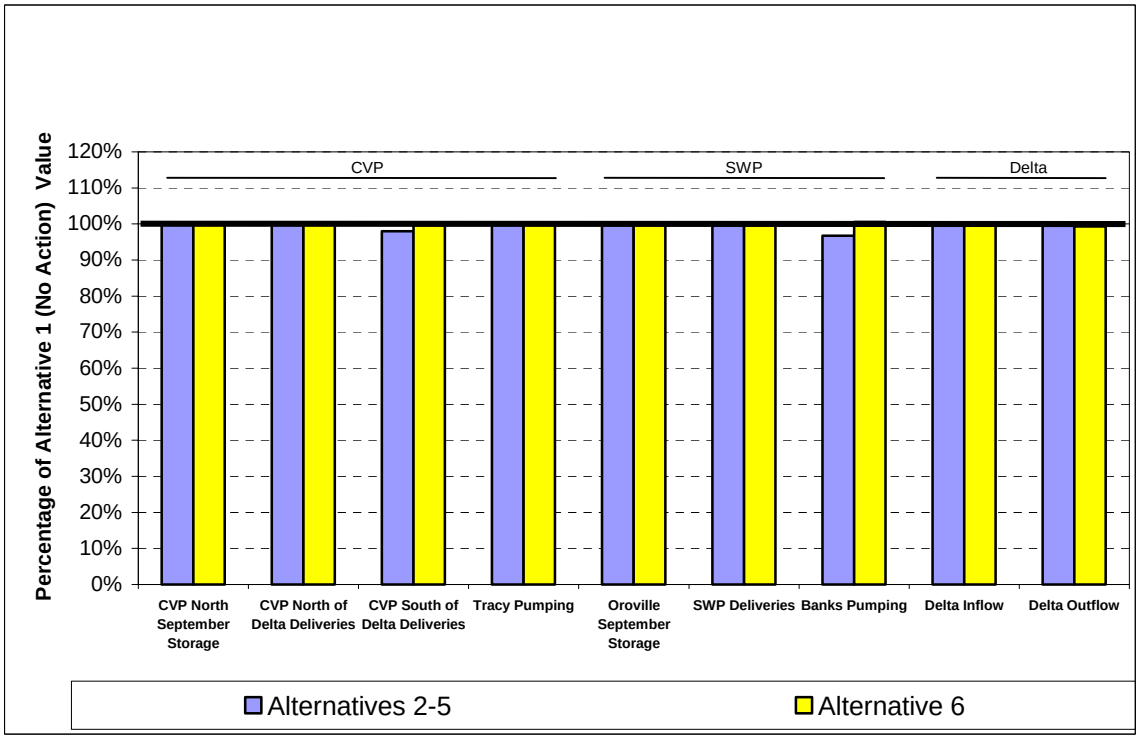


Figure 3.5.1-12 Comparison of Alternatives for Selected Parameters, 2020 LOD (Dry Period WY 1987-1992)

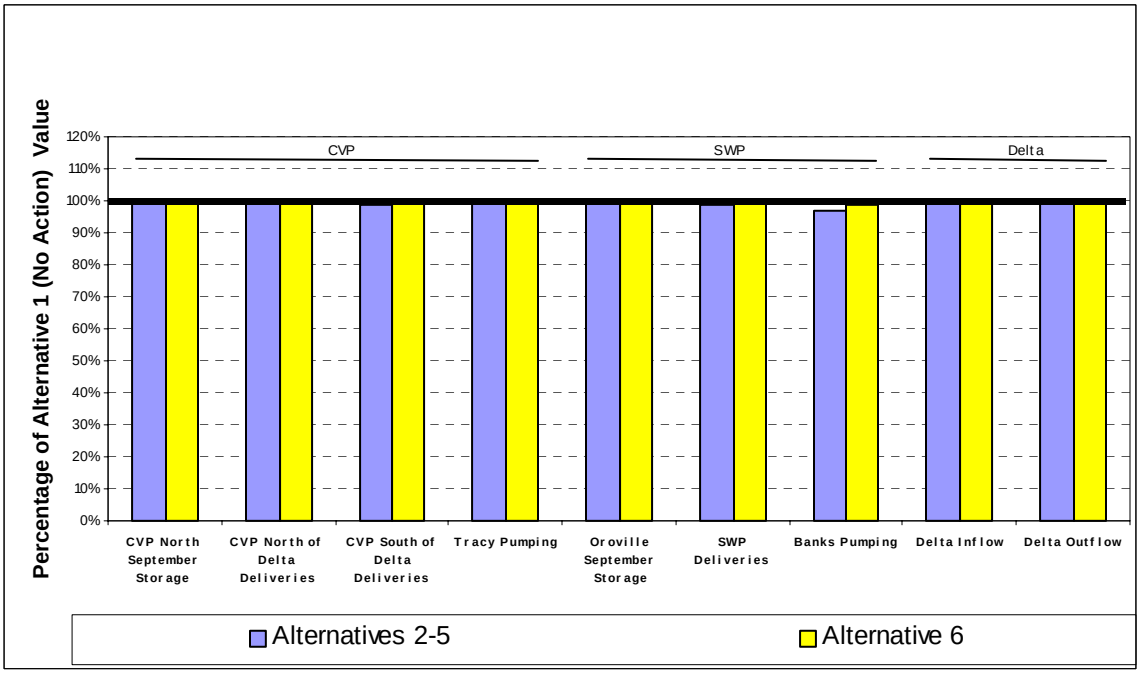


Figure 3.5.1-13 Comparison of Alternatives for Selected CVP and SWP Parameters, 2020 LOD (Average of All Years)

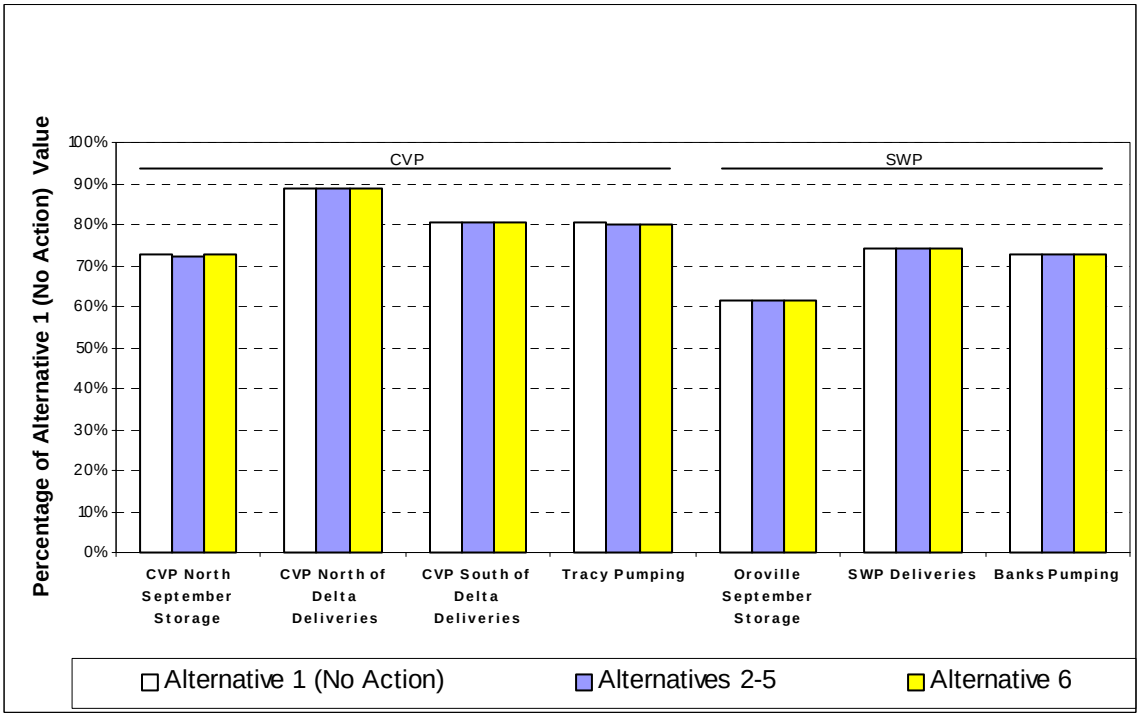


Figure 3.5.1-14 Comparison of Alternatives for Selected CVP and SWP Parameters, 2020 LOD (Dry Period WY 1928-1934)

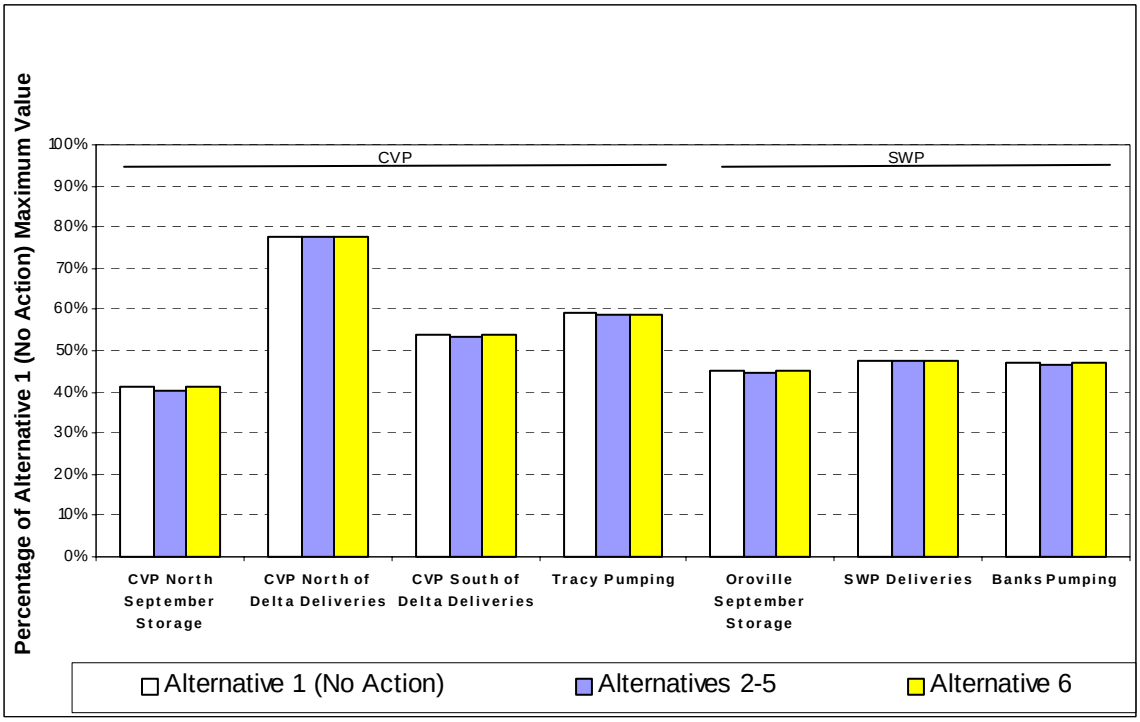


Figure 3.5.1-15 Comparison of Alternatives for Selected CVP and SWP Parameters, 2020 LOD (Dry Period WY 1976-1977)

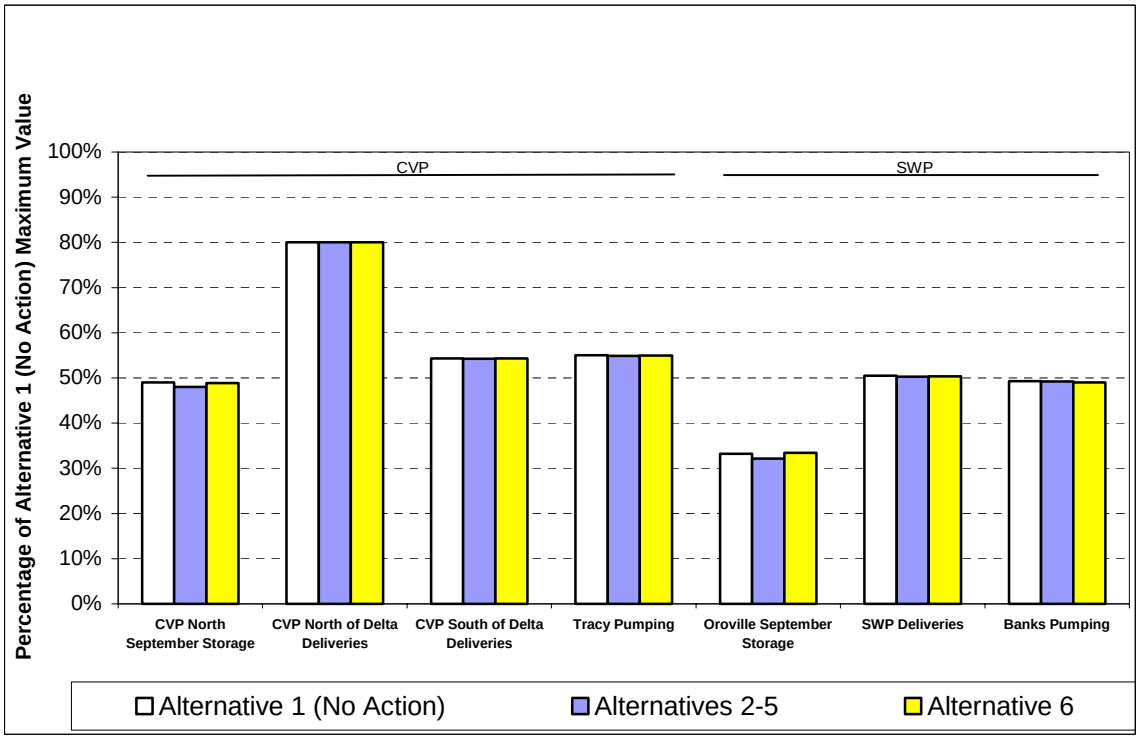
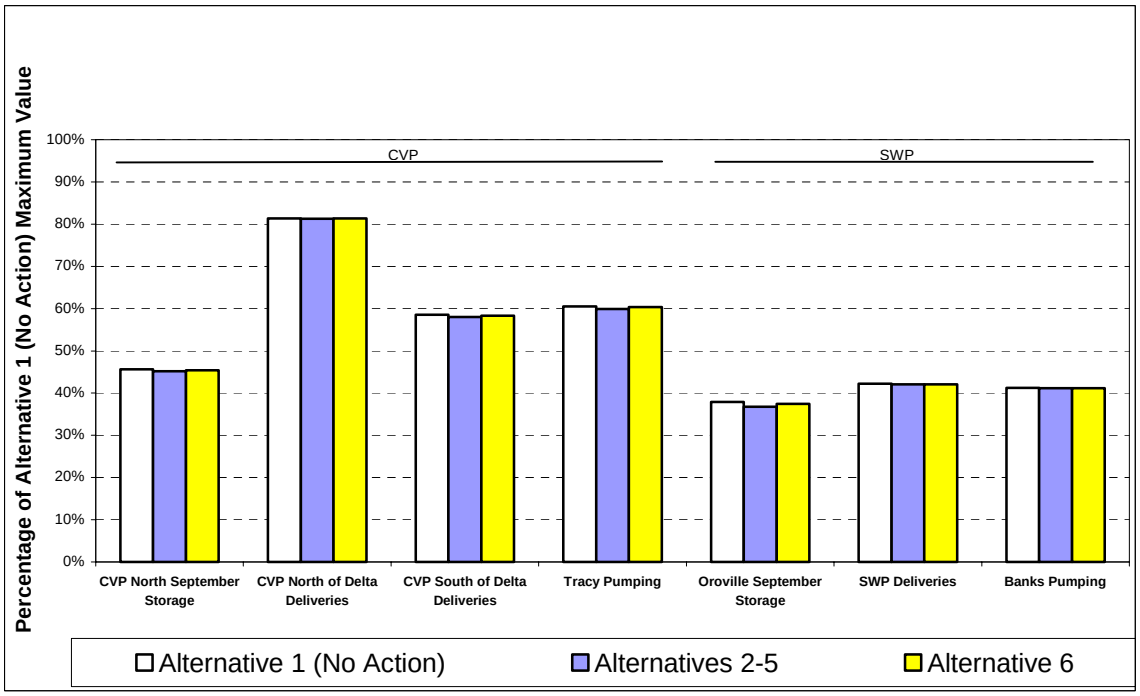
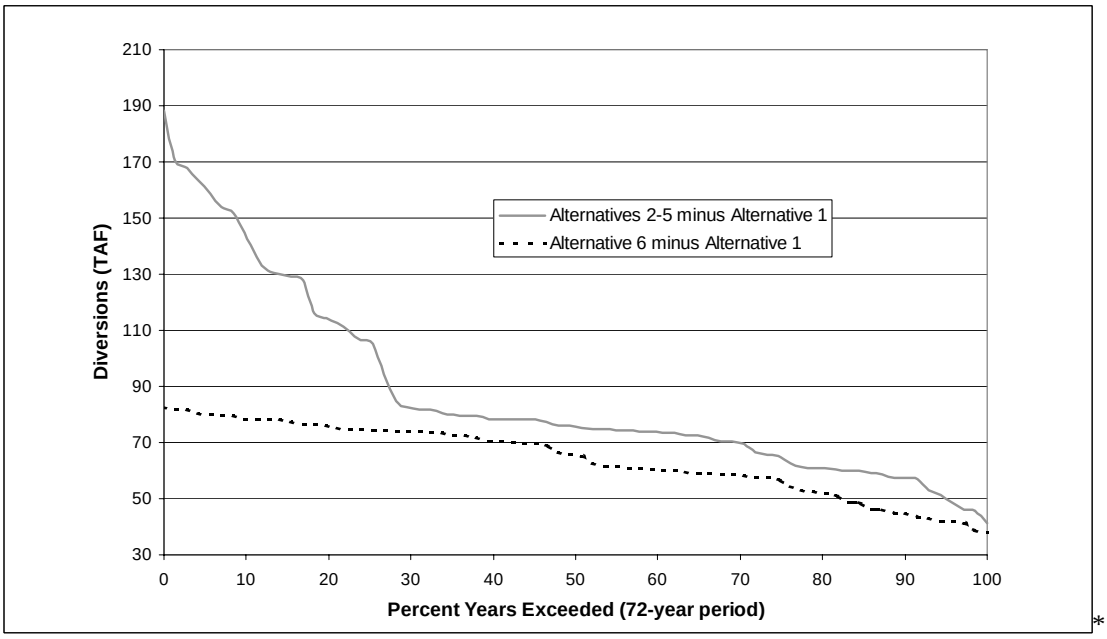


Figure 3.5.1-16 Comparison of Alternatives for Selected CVP and SWP Parameters, 2020 LOD (Dry Period WY 1987-1992)



3.5.2 Freeport Project Diversions

The figures below display annual exceedence data for the combined FRWP, including EBMUD diversions at Freeport, SCWA diversions at Freeport, and SCWA diversions at the Sacramento River Water Treatment Plant. Data for each individual FRWP component follow the presentation of the overall FRWP diversion results.



*Alternative 1 diversions consist of only SCWA diversions at Sacramento River WTP

Figure 3.5.2-1 Exceedence for Simulated Annual Project Diversions, 2020 LOD (Contract Year)

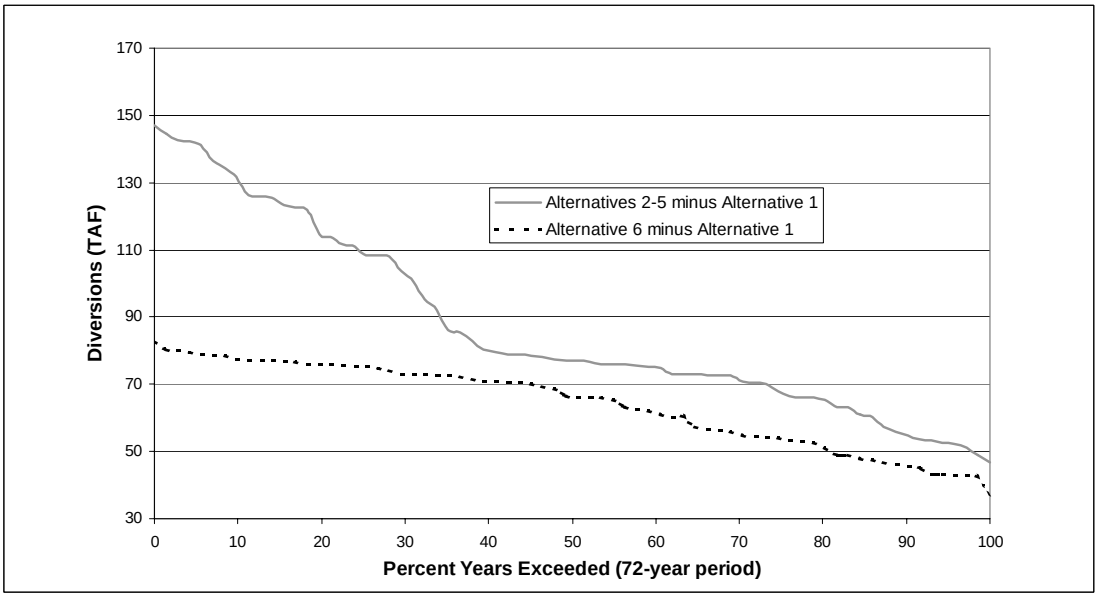


Figure 3.5.2-2 Exceedence for Simulated Annual Project Diversions, 2020 LOD (Water Year)

Figures 3.5.2-3 and -4 are stacked bar charts which show the differences in deliveries between the Action alternatives and Alternative 1 for each of the FRWP diversions. There are no EBMUD diversions at Freeport in Alternative 6, as is reflected in the chart. Figures 3.5.2-5 and -6 show the same data in water year format.

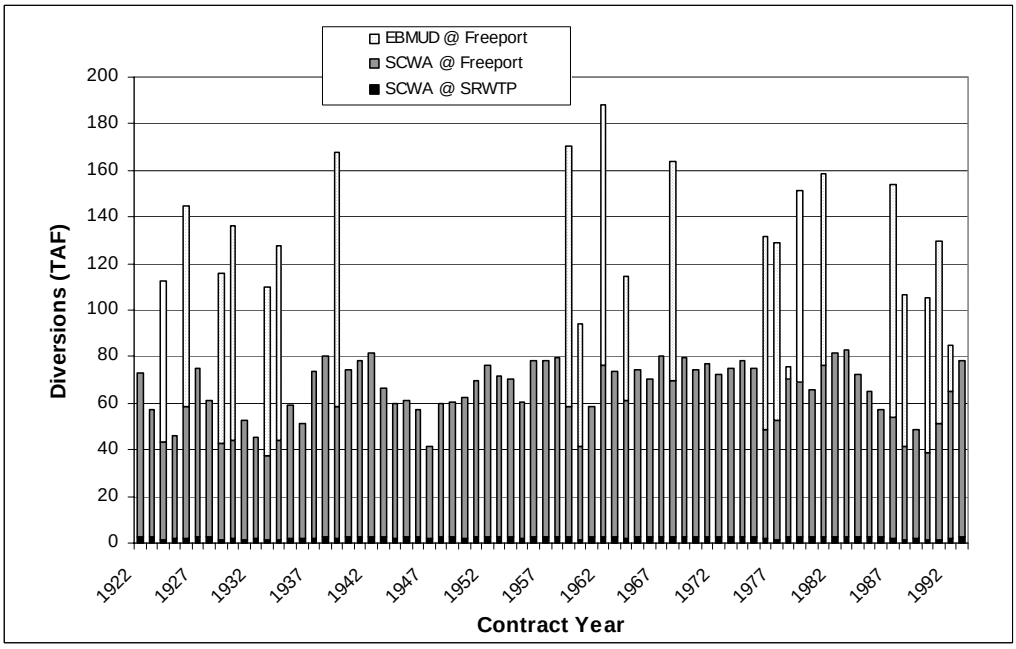


Figure 3.5.2-3 Simulated Annual Project Diversions, 2020 LOD (Contract Year) Alternatives 2-5 minus Alternative 1

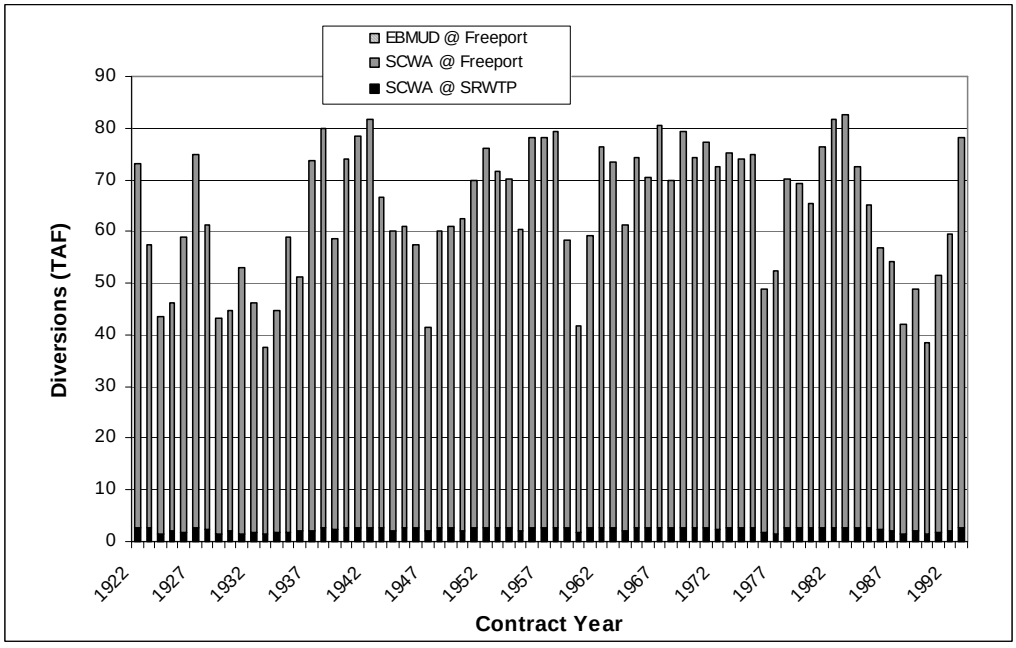


Figure 3.5.2-4 Simulated Annual Project Diversions, 2020 LOD (Contract Year) Alternative 6 minus Alternative 1

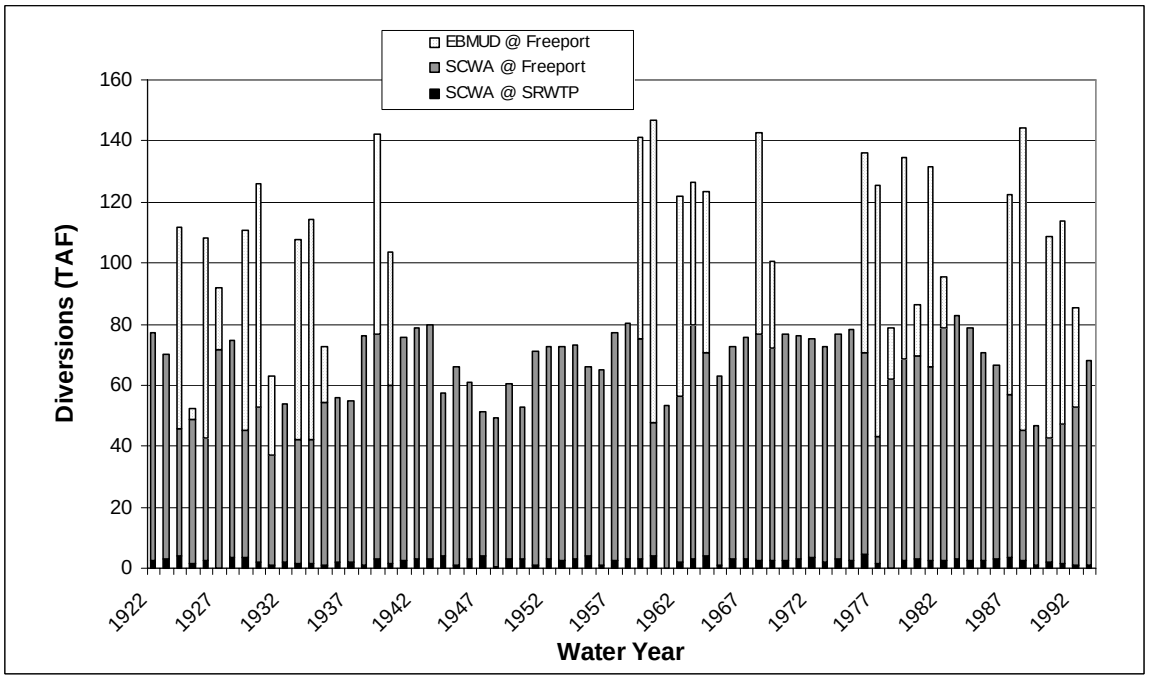


Figure 3.5.2-5 Simulated Annual Project Diversions, 2020 LOD (Water Year) Alternatives 2-5 minus Alternative 1

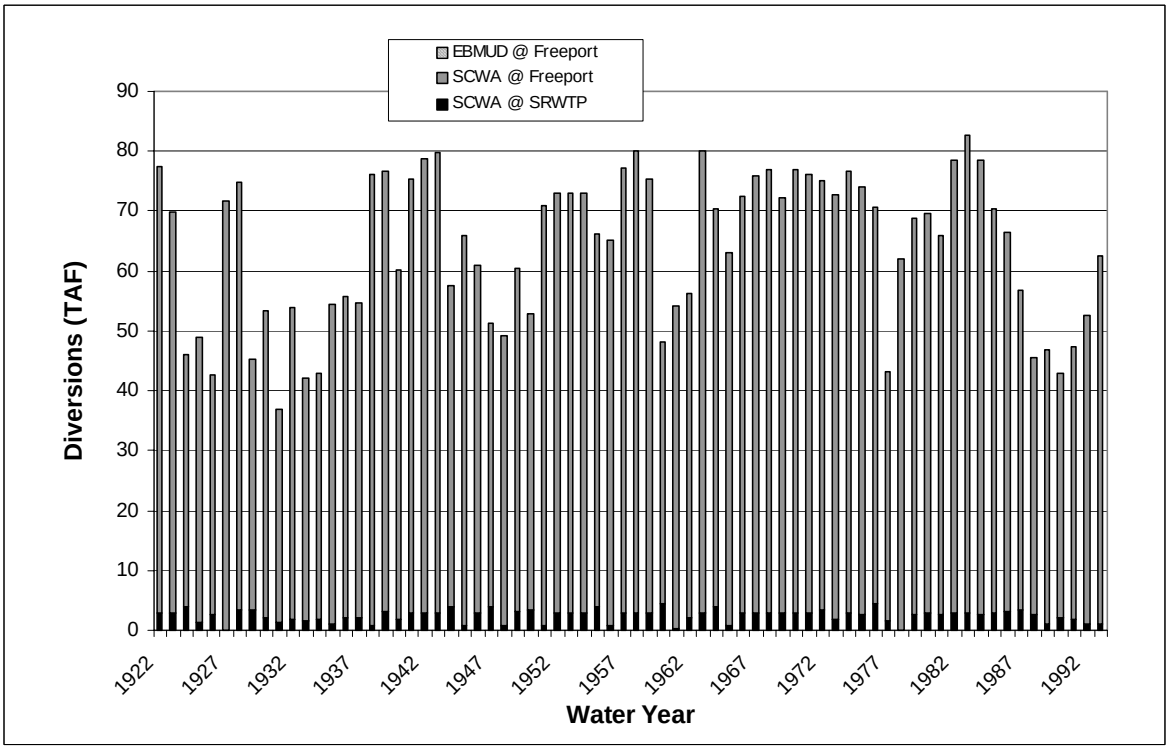


Figure 3.5.2-6 Simulated Annual Project Diversions, 2020 LOD (Water Year) Alternative 6 minus Alternative 1

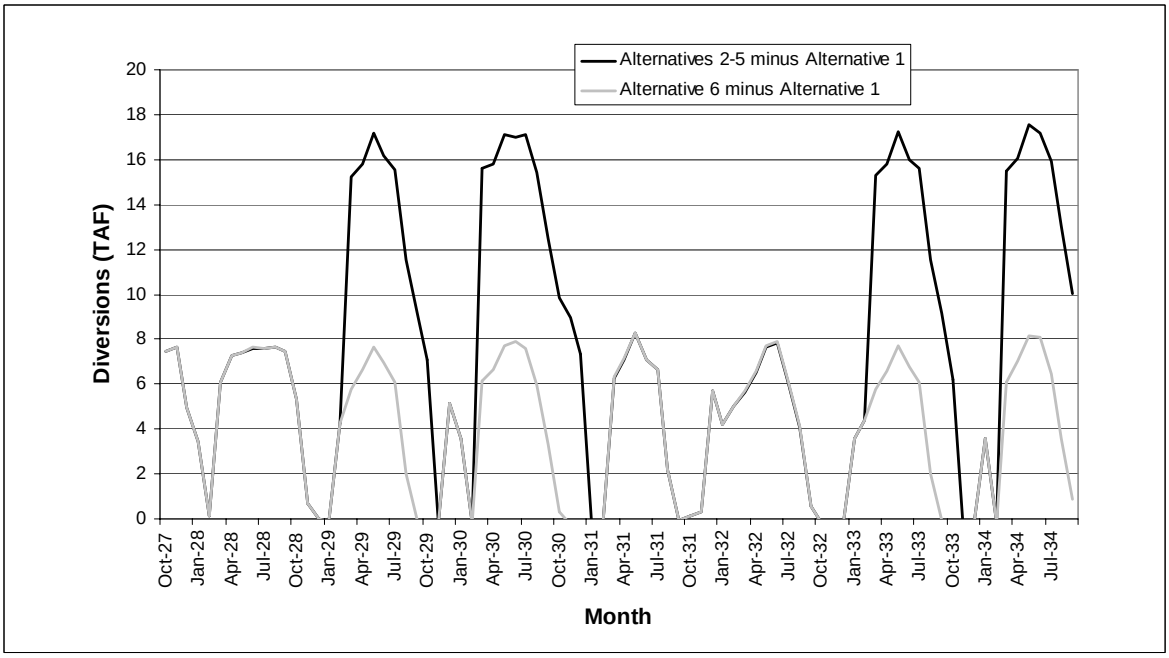


Figure 3.5.2-7 Simulated Monthly Project Diversions, 2020 LOD (Dry Period WY 1928-1934)

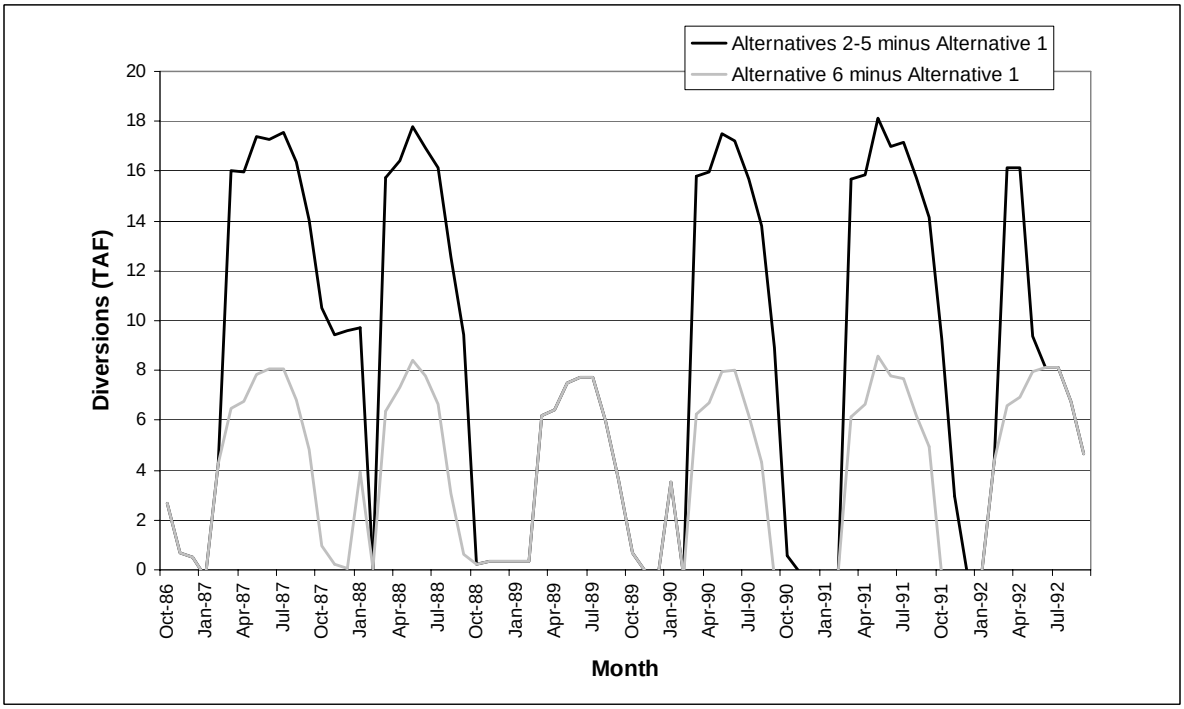


Figure 3.5.2-8 Simulated Monthly Project Diversions, 2020 LOD (Dry Period WY 1987-1992)

Table 3.5.2-1. Simulated Total Project Diversions (TAF), Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.4	6.2	5.0	3.4	4.3	6.0	6.2	8.3	7.9	7.5	7.5	7.7	77.3
1923	7.5	6.2	5.0	3.4	0.1	5.3	6.4	7.2	7.5	7.5	7.5	6.3	69.9
1924	2.4	2.3	0.7	0.1	4.3	16.0	16.6	14.8	16.6	16.4	12.2	9.2	111.6
1925	3.6	0.6	0.6	0.6	5.2	5.6	6.5	7.6	7.8	7.1	5.9	1.1	52.2
1926	0.6	0.0	-0.2	-0.2	4.3	15.1	15.9	17.1	17.0	15.5	13.5	9.7	108.4
1927	9.5	16.8	6.6	3.6	4.4	6.0	7.2	7.2	7.9	7.5	7.5	7.7	91.9
1928	7.5	7.7	5.0	3.4	0.1	6.1	7.3	7.4	7.6	7.6	7.6	7.4	74.8
1929	5.3	0.7	0.0	-0.2	4.3	15.3	15.8	17.2	16.2	15.6	11.5	9.2	110.9
1930	7.1	-0.2	5.1	3.6	-0.2	15.6	15.8	17.1	17.0	17.1	15.4	12.5	125.9
1931	9.8	9.0	7.3	-0.2	-0.2	6.3	7.1	8.3	7.1	6.6	2.2	0.0	63.2
1932	0.1	0.3	5.7	4.2	5.0	5.6	6.5	7.6	7.8	6.0	4.1	0.6	53.6
1933	-0.1	-0.2	-0.2	3.6	4.4	15.3	15.8	17.2	16.0	15.6	11.5	9.2	107.9
1934	6.2	-0.2	-0.2	3.6	-0.2	15.5	16.1	17.5	17.1	15.9	13.1	10.0	114.5
1935	9.6	8.7	0.1	4.0	0.1	6.2	7.7	7.5	7.7	7.7	7.3	6.0	72.5
1936	1.3	-0.1	-0.2	3.5	4.3	6.1	6.4	7.6	7.8	7.7	6.6	4.7	55.7
1937	0.6	0.0	-0.2	-0.2	4.3	6.1	7.4	7.5	7.8	7.7	7.6	6.2	54.7
1938	2.8	7.8	5.0	3.5	4.3	6.0	7.2	8.2	7.9	7.5	7.5	8.2	76.0
1939	8.7	6.0	5.0	3.4	4.2	15.7	15.6	17.2	17.0	17.3	16.9	15.3	142.2
1940	10.2	9.8	9.5	13.1	10.4	6.0	7.2	7.3	7.5	7.5	7.6	7.7	103.8
1941	7.0	3.6	5.0	3.4	4.3	6.0	7.5	8.3	7.5	7.5	7.5	8.0	75.5
1942	7.4	6.0	5.0	3.4	4.3	6.0	7.5	8.3	7.9	7.5	7.5	8.0	78.8
1943	8.6	7.7	5.0	3.4	4.3	6.0	7.3	7.2	7.5	7.5	7.5	7.7	79.7
1944	7.1	3.8	0.7	0.1	4.3	5.6	6.5	7.5	7.8	7.1	6.0	1.1	57.4
1945	0.7	7.8	5.0	0.6	4.3	5.5	6.2	7.3	7.5	7.5	7.4	6.1	66.0
1946	2.5	2.3	5.0	3.4	0.1	5.5	6.1	7.3	7.5	7.5	7.6	6.2	61.1
1947	2.4	2.3	0.7	0.1	4.3	5.6	6.4	7.5	7.8	7.1	5.9	1.1	51.2
1948	0.7	0.0	-0.2	-0.2	-0.3	5.6	6.5	8.3	7.5	7.5	7.5	6.2	49.1
1949	3.7	2.3	0.7	0.1	4.3	6.1	6.3	7.4	7.6	7.6	7.7	6.5	60.2
1950	2.7	0.7	0.5	3.5	4.3	5.6	6.5	7.5	7.7	7.0	5.9	0.9	52.8
1951	0.7	7.8	5.0	3.5	4.3	6.0	6.1	7.3	7.5	7.5	7.6	7.6	70.9
1952	5.2	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.5	7.6	8.2	72.9
1953	8.6	6.0	5.0	3.4	0.4	5.1	6.3	7.3	7.5	7.5	7.6	8.2	72.9
1954	6.1	7.7	0.7	3.4	4.3	6.0	7.3	7.2	7.5	7.5	7.5	7.7	72.9
1955	7.1	3.9	5.0	3.4	0.1	6.0	6.5	7.5	7.8	7.7	6.5	4.7	66.3
1956	0.6	0.0	5.0	3.5	4.3	5.9	6.2	8.3	7.9	7.5	7.6	8.3	65.2
1957	8.7	6.0	4.5	3.0	4.3	6.0	6.2	8.3	7.5	7.5	7.5	7.7	77.1
1958	8.7	6.1	5.0	3.4	4.3	6.0	7.5	8.2	7.9	7.5	7.5	8.1	80.2
1959	8.6	6.0	4.5	3.4	4.3	15.0	15.5	16.9	16.8	17.2	17.3	15.7	141.0
1960	11.9	11.5	10.2	9.7	13.1	15.2	15.7	17.2	16.9	15.5	9.6	0.6	146.9
1961	-0.1	-0.2	-0.2	-0.2	4.4	6.2	6.5	7.5	7.7	7.7	7.8	6.4	53.4
1962	2.3	0.8	0.5	0.7	4.4	15.0	15.3	16.7	16.7	17.0	16.9	15.4	121.8
1963	18.3	16.9	14.5	13.0	12.8	5.2	7.4	8.2	7.5	7.5	7.5	7.6	126.3
1964	7.0	7.7	4.4	3.4	0.1	15.0	15.6	17.9	17.0	17.2	12.5	5.4	123.4
1965	0.7	0.0	5.0	3.5	4.3	5.2	7.5	7.2	7.5	7.5	7.6	7.1	63.1
1966	4.4	7.7	5.0	3.4	4.3	5.4	6.1	7.3	7.5	7.6	7.6	6.3	72.5
1967	2.4	7.7	5.0	3.4	4.3	6.0	7.5	8.1	7.9	8.0	7.5	8.2	75.9
1968	8.6	6.0	5.0	3.4	4.3	15.5	15.4	16.8	16.7	17.0	17.1	16.8	142.6
1969	14.7	11.5	14.5	3.4	4.3	6.0	7.2	8.2	7.9	7.5	7.6	7.7	100.5
1970	8.7	6.0	5.0	3.4	4.3	6.0	6.1	7.2	7.5	7.5	7.6	7.5	76.9
1971	5.0	7.7	5.0	3.4	3.7	6.0	6.1	8.3	7.5	7.5	7.6	8.2	76.0
1972	7.4	6.0	5.0	3.4	4.3	6.0	6.3	7.4	7.6	7.6	7.6	6.6	75.2
1973	2.8	7.7	5.0	3.5	4.3	6.0	6.2	7.2	7.5	7.5	7.6	7.6	72.8
1974	5.2	7.7	5.0	3.4	4.3	6.0	7.2	7.2	7.5	7.6	7.5	8.2	76.8
1975	8.7	6.0	5.0	3.2	4.3	6.0	6.2	8.2	7.5	7.5	7.5	8.2	78.3
1976	8.7	6.0	4.5	0.1	4.2	16.2	16.4	17.8	17.4	17.2	16.2	11.5	136.3
1977	9.8	7.6	0.4	0.4	0.4	16.0	16.5	18.0	17.1	16.4	12.8	10.1	125.5
1978	10.0	2.0	0.6	4.4	5.2	11.9	7.4	7.2	7.5	7.5	7.5	7.7	78.9
1979	7.1	3.9	0.7	3.4	4.3	15.6	15.5	16.7	16.7	17.0	17.0	16.6	134.4
1980	14.3	9.6	5.0	3.4	4.3	6.0	6.3	7.3	7.5	7.5	7.6	7.6	86.2
1981	5.1	2.3	0.7	3.4	4.3	15.6	15.5	16.8	16.8	17.1	17.1	16.9	131.7
1982	14.9	15.1	5.1	3.6	4.4	6.0	7.5	8.1	7.9	7.5	7.5	8.0	95.4
1983	8.7	7.7	5.0	3.4	4.3	6.0	7.5	8.2	7.9	8.0	8.0	8.1	82.8
1984	8.6	7.7	5.0	3.4	4.3	5.9	6.1	7.2	7.5	7.5	7.6	7.7	78.6
1985	5.5	7.7	5.0	0.5	4.3	5.5	6.2	7.2	7.5	7.5	7.5	6.2	70.5
1986	2.4	2.3	5.0	3.4	4.3	6.1	6.4	7.4	7.6	7.6	7.6	6.5	66.5
1987	2.7	0.7	0.5	-0.3	4.3	16.0	16.0	17.4	17.3	17.6	16.3	14.0	122.5
1988	10.5	9.4	9.6	9.7	0.1	15.8	16.4	17.8	16.9	16.1	12.6	9.4	144.3
1989	0.2	0.3	0.4	0.4	0.4	6.2	6.4	7.5	7.7	7.7	5.9	3.6	46.8
1990	0.7	-0.1	-0.2	3.5	-0.2	15.8	15.9	17.5	17.2	15.7	13.8	8.9	108.5
1991	0.6	-0.1	-0.1	-0.1	-0.1	15.7	15.8	18.1	17.0	17.2	15.7	14.2	113.9
1992	9.3	2.9	-0.2	-0.2	4.4	16.1	16.1	9.4	8.1	8.1	6.7	4.7	85.5
1993	1.1	0.2	5.5	4.0	4.8	6.0	7.2	8.3	7.9	7.5	7.5	7.7	67.9
AVG:	5.9	5.0	3.8	3.0	3.7	8.8	9.4	10.3	10.2	10.0	9.2	7.8	87.2
MIN:	-0.1	-0.2	-0.2	-0.3	-0.3	5.1	6.1	7.2	7.1	6.0	2.2	0.0	46.8
MAX:	18.3	16.9	14.5	13.1	13.1	16.2	16.6	18.1	17.4	17.6	17.3	16.9	146.9

Table 3.5.2-2. Simulated Total Project Diversions (TAF), Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.4	6.2	5.0	3.4	4.3	6.0	6.2	8.3	7.9	7.5	7.5	7.7	77.3
1923	7.5	6.2	5.0	3.4	0.1	5.3	6.4	7.2	7.5	7.5	7.5	6.3	69.9
1924	2.4	2.3	0.7	0.1	4.3	6.5	7.4	5.3	7.4	6.9	2.7	0.0	46.0
1925	0.4	0.6	0.6	0.6	5.2	5.6	6.5	7.6	7.8	7.1	5.9	1.1	49.0
1926	0.6	0.0	-0.2	-0.2	4.3	5.6	6.7	7.6	7.8	6.0	4.0	0.5	42.7
1927	-0.1	7.6	5.1	3.6	4.4	6.0	7.2	7.2	7.9	7.5	7.5	7.7	71.7
1928	7.5	7.7	5.0	3.4	0.1	6.1	7.3	7.4	7.6	7.6	7.7	7.4	74.8
1929	5.3	0.7	0.0	-0.2	4.3	5.8	6.6	7.7	7.0	6.1	2.0	0.0	45.3
1930	-0.3	-0.2	5.1	3.6	-0.2	6.1	6.7	7.7	7.9	7.6	5.9	3.3	53.3
1931	0.3	-0.2	-0.2	-0.2	-0.2	6.3	7.1	8.3	7.1	6.6	2.2	0.0	37.0
1932	0.1	0.3	5.7	4.2	5.0	5.7	6.6	7.7	7.9	6.1	4.1	0.6	54.0
1933	-0.1	-0.2	-0.2	3.6	4.4	5.8	6.6	7.7	6.8	6.1	2.0	0.0	42.2
1934	-0.2	-0.2	-0.2	3.6	-0.2	6.1	7.0	8.2	8.1	6.5	3.6	0.8	43.0
1935	0.0	0.1	0.1	4.0	0.1	6.2	7.7	7.5	7.7	7.7	7.3	6.0	54.5
1936	1.3	-0.1	-0.2	3.5	4.3	6.1	6.4	7.6	7.8	7.7	6.6	4.7	55.7
1937	0.6	0.0	-0.2	-0.2	4.3	6.1	7.4	7.5	7.8	7.7	7.6	6.2	54.7
1938	2.8	7.8	5.0	3.5	4.3	6.0	7.2	8.2	7.9	7.5	7.5	8.2	76.0
1939	8.7	6.0	5.0	3.4	4.2	6.2	6.4	7.7	7.8	7.8	7.4	6.1	76.7
1940	0.7	0.6	0.0	3.6	4.4	6.0	7.2	7.3	7.5	7.5	7.6	7.7	60.2
1941	7.0	3.6	5.0	3.4	4.3	6.0	7.5	8.3	7.5	7.5	7.5	8.0	75.5
1942	7.4	6.0	5.0	3.4	4.3	6.0	7.5	8.3	7.9	7.5	7.5	8.0	78.8
1943	8.6	7.7	5.0	3.4	4.3	6.0	7.3	7.2	7.5	7.5	7.5	7.7	79.7
1944	7.1	3.8	0.7	0.1	4.3	5.6	6.5	7.5	7.8	7.1	6.0	1.1	57.4
1945	0.7	7.8	5.0	0.6	4.3	5.5	6.2	7.3	7.5	7.5	7.4	6.1	65.9
1946	2.5	2.3	5.0	3.4	0.1	5.5	6.1	7.3	7.5	7.5	7.6	6.2	61.1
1947	2.4	2.3	0.7	0.1	4.3	5.6	6.4	7.5	7.8	7.1	5.9	1.1	51.2
1948	0.7	0.0	-0.2	-0.2	-0.3	5.6	6.5	8.3	7.5	7.5	7.5	6.2	49.1
1949	3.7	2.3	0.7	0.1	4.3	6.1	6.4	7.5	7.6	7.6	7.7	6.5	60.4
1950	2.7	0.7	0.5	3.5	4.3	5.6	6.5	7.5	7.7	7.0	5.9	0.9	52.8
1951	0.7	7.8	5.0	3.5	4.3	6.0	6.1	7.3	7.5	7.5	7.6	7.6	70.9
1952	5.2	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.5	7.6	8.2	72.9
1953	8.6	6.0	5.0	3.4	0.4	5.1	6.3	7.3	7.5	7.5	7.6	8.2	72.9
1954	6.1	7.7	0.7	3.4	4.3	6.0	7.3	7.2	7.5	7.5	7.5	7.7	72.9
1955	7.1	3.9	5.0	3.4	0.1	6.0	6.5	7.5	7.8	7.7	6.5	4.7	66.3
1956	0.6	0.0	5.0	3.5	4.3	5.9	6.2	8.3	7.9	7.5	7.6	8.3	65.2
1957	8.7	6.0	4.5	3.0	4.3	6.0	6.2	8.3	7.5	7.5	7.5	7.7	77.1
1958	8.7	6.1	5.0	3.4	4.3	6.0	7.5	8.2	7.9	7.5	7.5	8.1	80.2
1959	8.6	6.0	4.5	3.4	4.3	5.5	6.3	7.4	7.6	7.6	7.7	6.5	75.3
1960	2.4	2.3	0.7	0.1	4.4	5.8	6.6	7.7	7.8	6.0	3.6	0.6	48.0
1961	-0.1	-0.2	-0.2	-0.2	4.4	6.2	6.6	7.6	7.8	7.8	7.9	6.4	54.0
1962	2.4	0.8	0.5	0.7	4.4	5.5	6.1	7.2	7.5	7.5	7.4	6.2	56.2
1963	8.7	7.7	5.0	3.4	4.3	5.2	7.4	8.2	7.5	7.5	7.5	7.6	79.9
1964	7.0	7.7	4.4	3.4	0.1	5.5	6.3	8.4	7.8	7.7	6.5	5.4	70.5
1965	0.7	0.0	5.0	3.5	4.3	5.2	7.5	7.2	7.5	7.5	7.6	7.1	63.1
1966	4.4	7.7	5.0	3.4	4.3	5.4	6.1	7.3	7.5	7.6	7.6	6.3	72.5
1967	2.4	7.7	5.0	3.4	4.3	6.0	7.5	8.1	7.9	8.0	7.5	8.2	75.9
1968	8.6	6.0	5.0	3.4	4.3	6.0	6.2	7.3	7.5	7.5	7.6	7.6	76.9
1969	5.2	2.3	5.0	3.4	4.3	6.0	7.2	8.2	7.9	7.5	7.6	7.7	72.2
1970	8.7	6.0	5.0	3.4	4.3	6.0	6.1	7.2	7.5	7.5	7.6	7.5	76.9
1971	5.0	7.7	5.0	3.4	3.7	6.0	6.1	8.3	7.5	7.5	7.6	8.2	76.0
1972	7.4	6.0	5.0	3.4	4.3	6.0	6.3	7.4	7.6	7.6	7.6	6.6	75.2
1973	2.8	7.7	5.0	3.5	4.3	6.0	6.2	7.2	7.5	7.5	7.6	7.6	72.8
1974	5.2	7.7	5.0	3.4	4.3	6.0	7.2	7.2	7.5	7.6	7.5	8.2	76.8
1975	8.7	6.0	0.7	3.2	4.3	6.0	6.2	8.2	7.5	7.5	7.5	8.2	74.0
1976	8.7	6.0	4.5	0.1	4.2	6.7	7.2	8.3	8.2	7.7	6.7	2.3	70.7
1977	0.3	0.4	0.4	0.4	0.4	6.5	7.3	8.5	7.9	6.9	3.3	0.9	43.1
1978	0.5	0.6	0.6	4.4	5.2	6.0	7.4	7.2	7.5	7.5	7.5	7.7	62.0
1979	7.1	3.9	0.7	3.4	4.3	6.0	6.3	7.2	7.5	7.5	7.5	7.4	68.7
1980	4.8	2.3	5.0	3.4	4.3	6.0	6.3	7.3	7.5	7.5	7.6	7.6	69.5
1981	5.1	2.3	0.7	3.4	4.3	6.1	6.3	7.3	7.6	7.6	7.6	7.7	66.0
1982	5.4	7.8	5.1	3.6	4.4	6.0	7.5	8.1	7.9	7.5	7.5	8.0	78.6
1983	8.7	7.7	5.0	3.4	4.3	6.0	7.5	8.2	7.9	8.0	8.0	8.1	82.8
1984	8.6	7.7	5.0	3.4	4.3	5.9	6.1	7.2	7.5	7.5	7.6	7.7	78.6
1985	5.5	7.7	5.0	0.5	4.3	5.5	6.2	7.2	7.5	7.5	7.5	6.2	70.5
1986	2.4	2.3	5.0	3.4	4.3	6.1	6.4	7.4	7.6	7.6	7.6	6.5	66.5
1987	2.7	0.7	0.5	-0.3	4.3	6.5	6.8	7.9	8.1	8.1	6.8	4.8	56.8
1988	1.0	0.2	0.1	3.9	0.1	6.4	7.4	8.4	7.8	6.6	3.1	0.6	45.5
1989	0.2	0.3	0.4	0.4	0.4	6.2	6.4	7.5	7.7	7.7	5.9	3.6	46.8
1990	0.7	-0.1	-0.2	3.5	-0.2	6.3	6.7	8.0	8.0	6.2	4.3	-0.3	42.8
1991	-0.2	-0.1	-0.1	-0.1	-0.1	6.1	6.6	8.6	7.8	7.7	6.2	5.0	47.4
1992	-0.2	-0.2	-0.2	-0.2	4.4	6.6	6.9	8.0	8.1	8.1	6.7	4.7	52.7
1993	1.1	0.2	0.2	4.0	4.8	6.0	7.2	8.3	7.9	7.5	7.5	7.7	62.5
AVG:	3.9	3.6	2.9	2.5	3.4	5.9	6.7	7.7	7.7	7.4	6.7	5.5	63.9
MIN:	-0.3	-0.2	-0.2	-0.3	-0.3	5.1	6.1	5.3	6.8	6.0	2.0	-0.3	37.0
MAX:	8.7	7.8	5.7	4.4	5.2	6.7	7.7	8.6	8.2	8.1	8.0	8.3	82.8

Figures 3.5.2-9 throught 3.5.2-14 display time series and exceedence data for deliveries to EBMUD on contract year and water bases, as well as dry period deliveries.

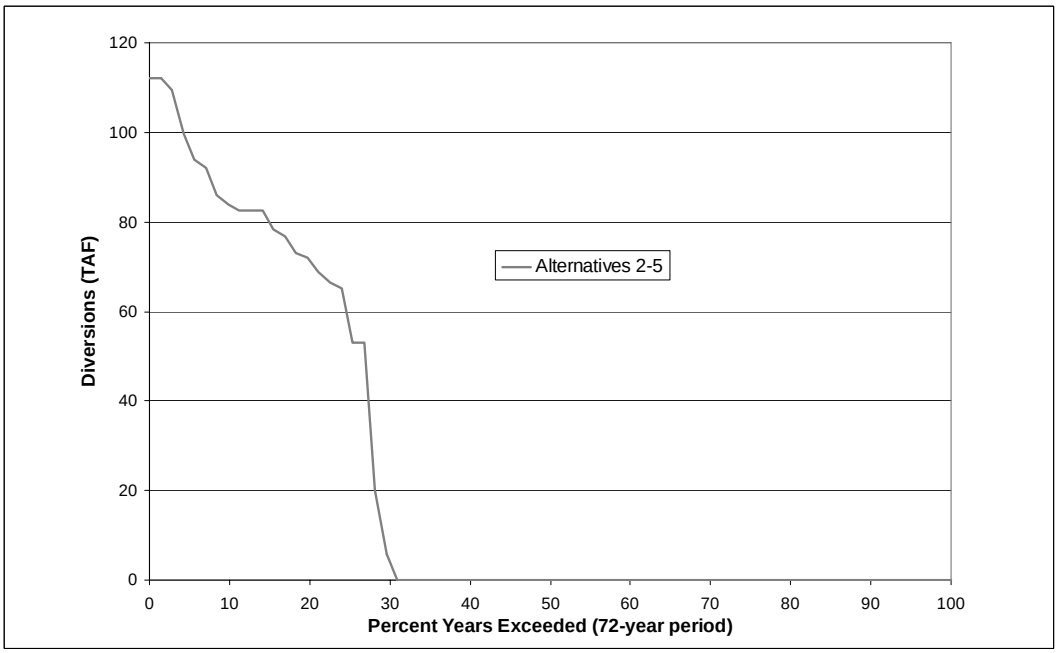


Figure 3.5.2-9 Exceedence for Simulated Annual Deliveries to EBMUD, 2020 LOD (Contract Year)

EBMUD deliveries occur in the FRWP only in Alternatives 2-5. In Alternative 6, EBMUD gains greater supply reliability through re-operation of the Mokelumne River system. The exceedence charts illustrate EBMUD's use of CVP water through the FRWP during dry periods.

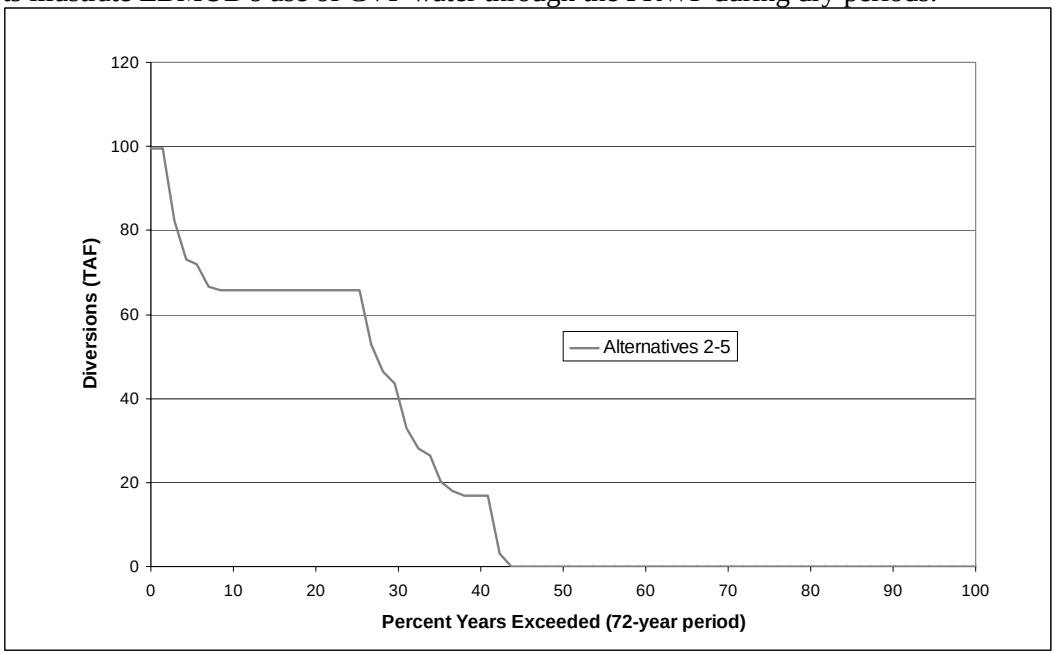


Figure 3.5.2-10 Exceedence for Simulated Annual Deliveries to EBMUD, 2020 LOD (Water Year)

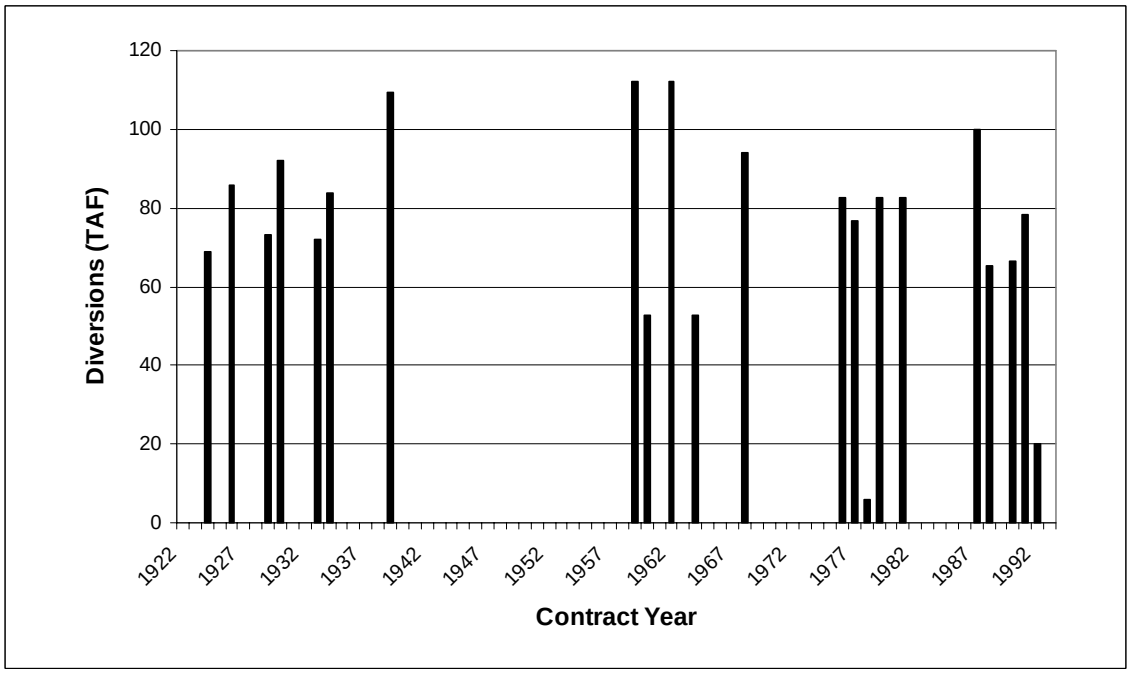


Figure 3.5.2-11 Simulated Annual Deliveries to EBMUD, 2020 LOD (Contract Year, Alternatives 2-5)

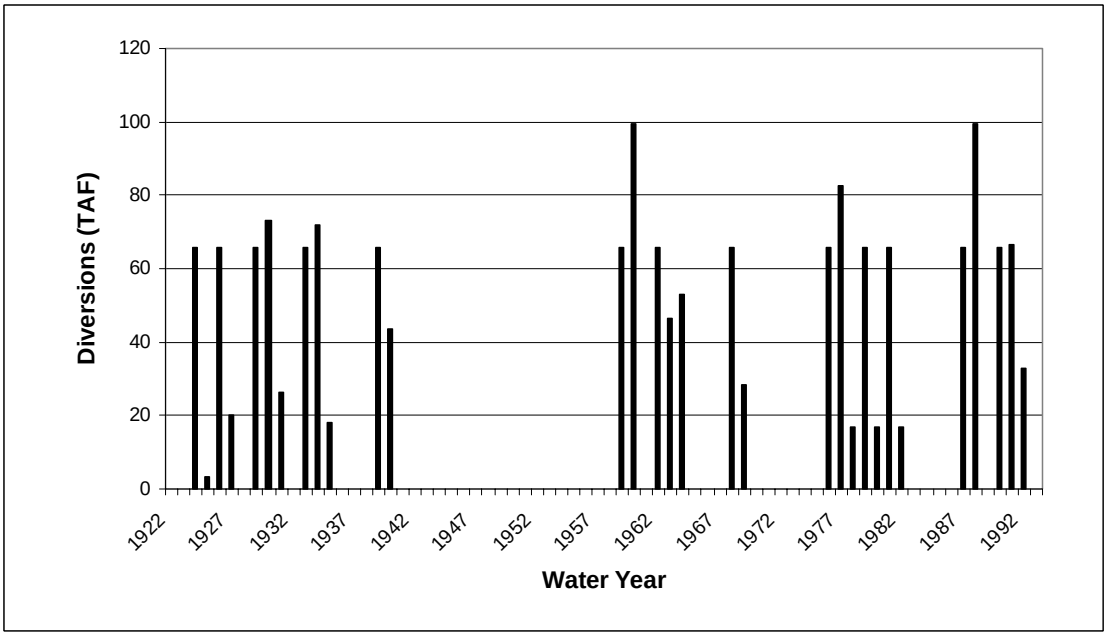


Figure 3.5.2-12 Simulated Annual Deliveries to EBMUD, 2020 LOD (Water Year, Alternatives 2-5)

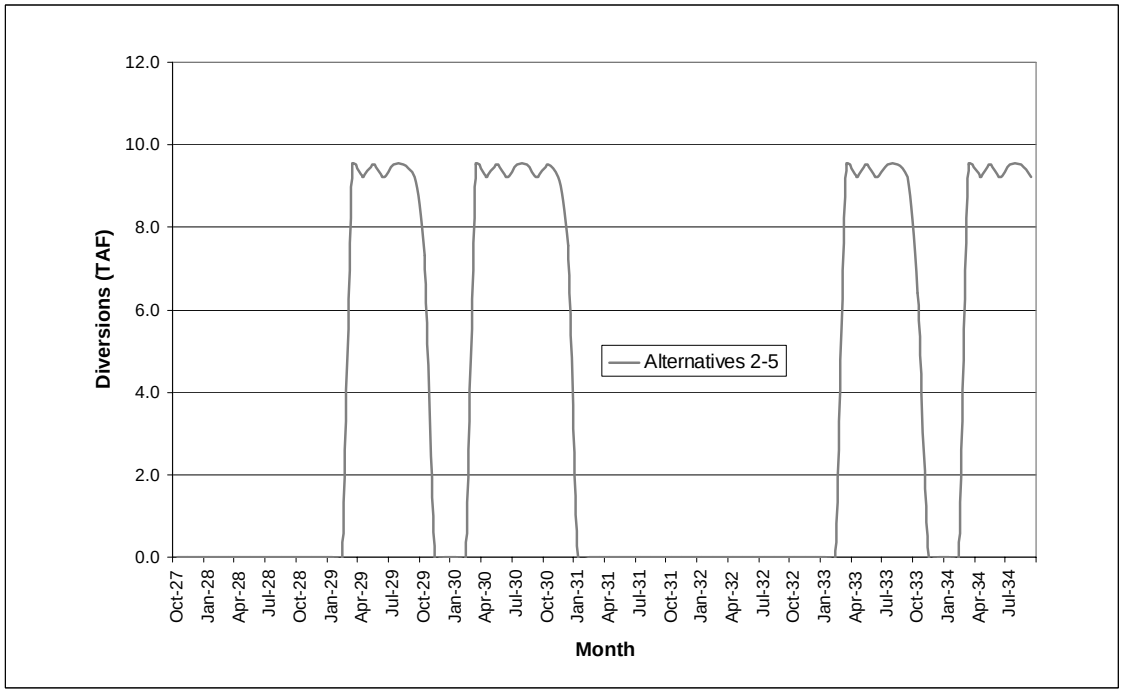


Figure 3.5.2-13 Simulated Monthly Deliveries to EBMUD, 2020 LOD (Dry Period WY 1928-1934)

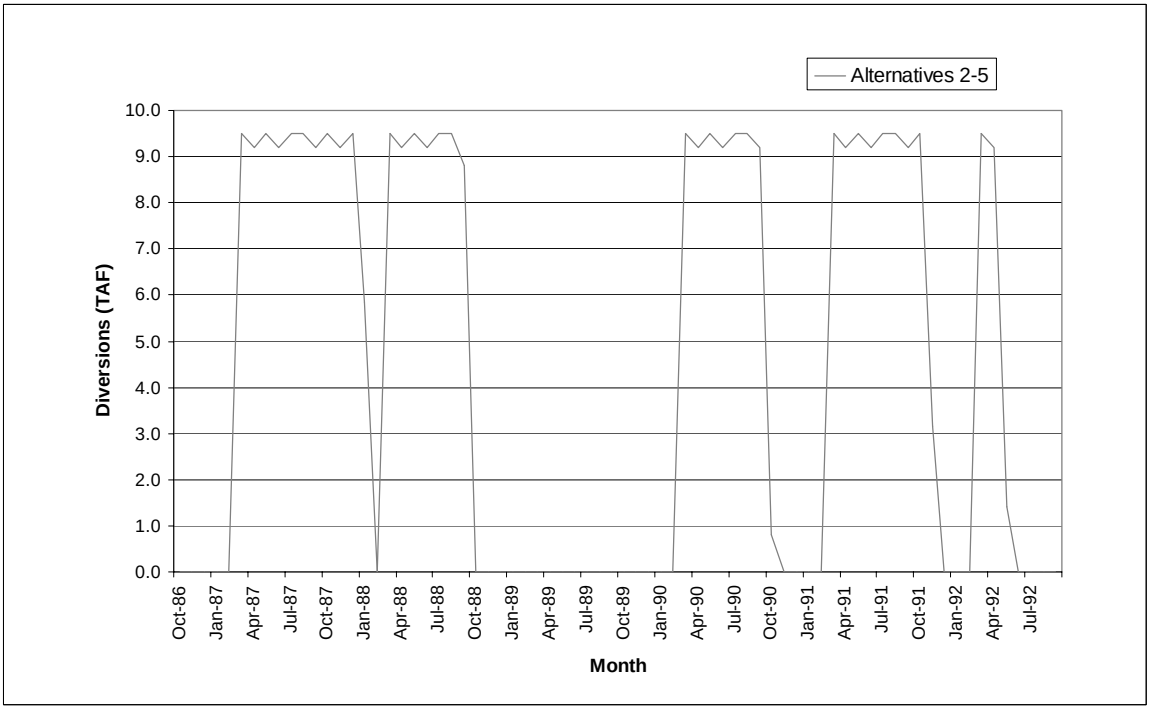


Figure 3.5.2-14 Simulated Monthly Deliveries to EBMUD, 2020 LOD (Dry Period WY 1987-1992)

Table 3.5.2-3 provides the monthly-simulated EBMUD deliveries from the Alternatives 2-5 study. Tables 3.5.2-4 through 3.5.2-6 display total SCWA Diversions at Freeport and the Sacramento River Water Treatment Plant.

Table 3.5.2-3. Simulated EBMUD Diversions @ Freeport (TAF)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1925	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
1926	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1927	9.5	9.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1930	7.3	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	73.0
1931	9.5	9.2	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.3
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1934	6.4	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	72.1
1935	9.5	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1940	9.5	9.2	9.5	9.5	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1960	9.5	9.2	9.5	9.5	8.7	9.5	9.2	9.5	9.2	9.5	6.0	0.0	99.4
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1963	9.5	9.2	9.5	9.5	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.3
1964	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	6.0	0.0	52.9
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1969	9.5	9.2	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1977	9.5	7.3	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	82.4
1978	9.5	1.4	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	16.8
1979	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1980	9.5	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8
1981	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1982	9.5	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1988	9.5	9.2	9.5	5.8	0.0	9.5	9.2	9.5	9.2	9.5	9.5	8.8	99.3
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	65.7
1991	0.8	0.0	0.0	0.0	0.0	9.5	9.2	9.5	9.2	9.5	9.5	9.2	66.5
1992	9.5	3.2	0.0	0.0	0.0	9.5	9.2	1.4	0.0	0.0	0.0	0.0	32.8
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	2.0	1.4	0.8	0.5	0.3	2.9	2.7	2.7	2.6	2.6	2.5	2.3	23.2
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	9.5	9.2	9.5	9.5	8.7	9.5	9.2	9.5	9.2	9.5	9.5	9.2	99.4

Table 3.5.2-4. Simulated SCWA Total Diversions (TAF), Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.3
1923	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.9	1.0	1.0	0.9	0.6	7.1
1924	0.4	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.4	0.3	4.7
1925	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.5	4.9
1926	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.6	0.6	0.6	0.5	4.9
1927	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.9	1.0	1.0	0.9	0.6	6.6
1928	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.8	0.9	0.9	0.8	0.5	6.4
1929	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.5	0.5	0.5	0.3	4.5
1930	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.4	4.9
1931	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.5	0.5	0.5	0.3	4.1
1932	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.6	0.5	0.4	4.4
1933	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.5	0.5	0.5	0.3	4.1
1934	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.5	0.6	0.6	0.5	0.4	4.4
1935	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.7	0.7	0.7	0.6	5.1
1936	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.7	0.7	0.7	0.5	5.3
1937	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.8	0.7	0.5	5.4
1938	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.8	1.0	1.0	1.0	0.6	6.8
1939	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.8	0.8	0.7	0.5	6.2
1940	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	6.9
1941	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.0	1.0	1.0	0.9	7.2
1942	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.0	1.0	1.0	0.8	7.1
1943	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1944	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.7	0.7	0.7	0.5	5.9
1945	0.3	0.2	0.2	0.2	0.2	0.3	0.8	0.8	1.0	1.0	1.0	0.6	6.8
1946	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1947	0.5	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.7	0.8	0.7	0.5	5.9
1948	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.7	1.0	1.0	1.0	0.9	6.4
1949	0.5	0.3	0.3	0.3	0.3	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.8
1950	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.8	0.7	0.7	0.5	5.8
1951	0.2	0.2	0.2	0.2	0.2	0.4	0.9	0.8	1.0	1.0	0.9	0.6	6.8
1952	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.1
1953	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1954	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1955	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.7	0.8	0.7	0.4	5.9
1956	0.3	0.2	0.2	0.2	0.2	0.4	0.8	0.8	1.0	1.0	0.9	0.6	6.8
1957	0.4	0.4	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.0	0.7	7.2
1958	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.0	1.0	1.0	0.7	7.1
1959	0.5	0.4	0.3	0.3	0.3	0.4	0.8	0.9	1.0	1.0	0.9	0.5	7.2
1960	0.5	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.7	0.7	0.6	0.4	5.4
1961	0.3	0.2	0.2	0.2	0.2	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.2
1962	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1963	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.8	7.1
1964	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.7	0.7	0.6	0.4	5.8
1965	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	0.9	0.6	6.5
1966	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	0.9	1.0	0.8	0.6	7.2
1967	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.2
1968	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1969	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1970	0.4	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1.0	0.9	0.6	7.2
1971	0.4	0.3	0.3	0.3	0.3	0.4	0.9	0.8	1.0	1.0	0.9	0.6	7.1
1972	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.8	0.9	0.9	0.8	0.5	6.7
1973	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.0
1974	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	0.9	0.9	0.6	7.1
1975	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1976	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.4	5.0
1977	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.5	0.6	0.5	0.3	4.2
1978	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	1.0	0.6	6.4
1979	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1980	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.6	7.0
1981	0.5	0.4	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	1.0	0.6	7.4
1982	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.0	1.0	1.0	1.0	0.8	7.2
1983	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.1
1984	0.5	0.3	0.3	0.3	0.3	0.4	0.9	0.9	0.9	1.0	0.8	0.6	7.3
1985	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.1
1986	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	0.9	0.8	0.5	6.7
1987	0.4	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.7	0.7	0.6	0.5	5.8
1988	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.5	0.4	4.5
1989	0.3	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	0.7	0.7	0.4	5.1
1990	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.5	0.4	0.3	4.0
1991	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.6	0.5	0.4	4.1
1992	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.7	0.7	0.5	5.1
1993	0.3	0.3	0.2	0.2	0.2	0.3	0.8	0.8	0.9	1.0	0.9	0.6	6.7
AVG:	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.9	0.9	0.8	0.5	6.3
MIN:	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.3	4.0
MAX:	0.5	0.4	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	1.0	0.9	7.4

Table 3.5.2-5. Simulated SCWA Total Diversions (TAF), Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.9	6.5	5.3	3.8	4.6	6.3	7.0	9.1	8.9	8.5	8.5	8.4	84.6
1923	7.9	6.5	5.3	3.8	0.5	5.8	7.0	8.1	8.5	8.5	8.5	6.9	77.1
1924	2.8	2.7	1.0	0.5	4.6	6.7	7.8	5.8	7.9	7.4	3.2	0.3	50.6
1925	0.6	0.7	0.8	0.8	5.4	5.8	7.0	8.2	8.5	7.9	6.7	1.6	53.9
1926	1.0	0.2	0.0	0.0	4.6	5.9	7.0	8.2	8.5	6.7	4.7	1.0	47.6
1927	0.2	7.8	5.3	3.8	4.6	6.3	7.9	8.1	8.9	8.5	8.5	8.4	78.2
1928	7.9	8.0	5.3	3.8	0.5	6.3	7.9	8.2	8.5	8.5	8.4	8.0	81.2
1929	5.7	1.0	0.3	0.1	4.6	5.9	7.0	8.1	7.4	6.6	2.5	0.3	49.7
1930	0.0	0.0	5.3	3.8	0.0	6.3	7.1	8.2	8.5	8.3	6.6	3.7	57.8
1931	0.6	0.0	0.0	0.0	0.0	6.5	7.6	8.7	7.5	7.2	2.7	0.3	41.0
1932	0.3	0.5	5.9	4.3	5.2	5.9	7.0	8.2	8.5	6.7	4.7	1.0	58.0
1933	0.2	0.0	0.0	3.8	4.6	5.9	7.0	8.1	7.3	6.6	2.5	0.3	46.3
1934	0.0	0.0	0.0	3.8	0.0	6.3	7.4	8.5	8.5	7.0	4.1	1.2	46.8
1935	0.3	0.3	0.3	4.2	0.3	6.3	7.9	8.2	8.5	8.5	8.0	6.6	59.5
1936	1.6	0.2	0.0	3.8	4.6	6.3	7.0	8.2	8.5	8.5	7.2	5.2	61.1
1937	1.0	0.2	0.0	0.0	4.6	6.3	7.9	8.2	8.5	8.5	8.3	6.7	60.1
1938	3.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	82.8
1939	9.1	6.4	5.3	3.8	4.6	6.5	7.1	8.3	8.6	8.6	8.1	6.6	82.7
1940	1.1	0.9	0.3	3.9	4.7	6.3	7.9	8.1	8.5	8.5	8.5	8.4	67.0
1941	7.4	4.0	5.3	3.8	4.6	6.3	7.9	9.1	8.5	8.5	8.5	8.8	82.7
1942	7.9	6.4	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	85.9
1943	9.1	8.0	5.3	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.4	86.9
1944	7.6	4.1	1.0	0.5	4.6	5.8	7.0	8.2	8.5	7.9	6.7	1.6	63.4
1945	1.0	8.0	5.3	0.9	4.6	5.8	7.0	8.1	8.5	8.5	8.4	6.8	72.7
1946	2.8	2.7	5.3	3.8	0.5	5.8	7.0	8.1	8.5	8.5	8.5	6.8	68.1
1947	2.8	2.7	1.0	0.5	4.6	5.8	7.0	8.2	8.5	7.9	6.7	1.6	57.2
1948	1.0	0.2	0.0	0.0	0.0	5.8	6.9	9.1	8.5	8.5	8.5	7.1	55.5
1949	4.2	2.7	1.0	0.5	4.6	6.3	7.1	8.2	8.5	8.5	8.5	7.1	67.0
1950	3.1	1.0	0.8	3.8	4.6	5.8	7.0	8.2	8.5	7.7	6.7	1.4	58.6
1951	1.0	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	77.7
1952	5.6	2.7	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	80.0
1953	9.1	6.4	5.3	3.8	0.7	5.5	7.0	8.1	8.5	8.5	8.5	8.8	80.1
1954	6.6	8.0	1.0	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.4	80.1
1955	7.6	4.2	5.3	3.8	0.5	6.3	7.0	8.2	8.5	8.5	7.2	5.2	72.2
1956	1.0	0.2	5.3	3.8	4.6	6.3	7.0	9.1	8.9	8.5	8.5	8.8	71.9
1957	9.1	6.4	4.8	3.4	4.6	6.3	7.0	9.1	8.5	8.5	8.5	8.4	84.4
1958	9.1	6.5	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	87.3
1959	9.1	6.4	4.8	3.8	4.6	5.9	7.1	8.2	8.6	8.6	8.6	7.0	82.6
1960	2.8	2.7	1.0	0.5	4.7	5.8	7.1	8.2	8.3	6.7	4.2	1.0	52.9
1961	0.2	0.0	0.0	0.0	4.6	6.5	7.2	8.3	8.6	8.6	8.6	7.0	59.6
1962	2.8	1.1	0.8	1.1	4.7	5.8	7.0	8.1	8.5	8.5	8.3	6.8	63.3
1963	9.1	8.0	5.3	3.8	4.6	5.5	7.9	9.1	8.5	8.5	8.5	8.4	87.1
1964	7.4	8.0	4.8	3.8	0.5	5.8	7.0	9.0	8.5	8.5	7.1	5.9	76.3
1965	1.0	0.2	5.3	3.8	4.6	5.5	7.9	8.1	8.5	8.5	8.5	7.7	69.5
1966	4.9	8.0	5.3	3.8	4.6	5.8	7.0	8.1	8.5	8.5	8.5	6.9	79.7
1967	2.8	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	9.0	8.5	8.8	83.0
1968	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	84.2
1969	5.6	2.7	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.4	79.5
1970	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.1	84.1
1971	5.4	8.0	5.3	3.8	4.1	6.3	7.0	9.1	8.5	8.5	8.5	8.8	83.2
1972	7.9	6.3	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.5	8.5	7.1	81.9
1973	3.1	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	79.8
1974	5.6	8.0	5.3	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.8	83.9
1975	9.1	6.4	5.3	3.5	4.6	6.3	7.0	9.1	8.5	8.5	8.5	8.8	85.5
1976	9.1	6.4	4.8	0.5	4.6	7.0	7.7	8.8	8.8	8.3	7.2	2.7	75.7
1977	0.6	0.6	0.6	0.6	0.6	6.7	7.9	8.9	8.5	7.4	3.8	1.2	47.3
1978	0.7	0.7	0.8	4.6	5.4	6.3	7.9	8.1	8.5	8.5	8.5	8.4	68.4
1979	7.6	4.2	1.0	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.1	76.0
1980	5.1	2.7	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	76.5
1981	5.6	2.7	1.0	3.8	4.6	6.4	7.1	8.2	8.6	8.6	8.6	8.3	73.4
1982	5.7	8.1	5.4	3.9	4.7	6.3	7.9	9.1	8.9	8.5	8.5	8.8	85.8
1983	9.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	9.0	9.0	8.8	89.8
1984	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.3	85.9
1985	5.8	8.0	5.3	0.9	4.6	5.8	7.0	8.1	8.5	8.5	8.4	6.8	77.6
1986	2.8	2.7	5.3	3.8	4.6	6.3	7.1	8.2	8.5	8.5	8.5	7.0	73.2
1987	3.1	1.0	0.8	0.0	4.6	6.7	7.4	8.5	8.8	8.8	7.5	5.3	62.5
1988	1.3	0.5	0.3	4.1	0.3	6.5	7.6	8.7	8.3	7.2	3.6	1.0	49.5
1989	0.5	0.5	0.6	0.6	0.6	6.3	7.0	8.2	8.5	8.5	6.7	4.0	51.9
1990	1.0	0.2	0.0	3.8	0.0	6.5	7.2	8.3	8.5	6.7	4.8	0.0	46.8
1991	0.0	0.1	0.1	0.1	0.1	6.3	7.1	9.1	8.4	8.2	6.7	5.3	51.5
1992	0.0	0.0	0.0	0.0	4.6	6.8	7.5	8.6	8.8	8.9	7.4	5.1	57.8
1993	1.4	0.5	5.8	4.3	5.1	6.3	7.9	9.1	8.9	8.5	8.5	8.4	74.6
AVG:	4.3	3.9	3.3	2.8	3.7	6.2	7.3	8.4	8.5	8.2	7.5	6.1	70.3
MIN:	0.0	0.0	0.0	0.0	0.0	5.5	6.9	5.8	7.3	6.6	2.5	0.0	41.0
MAX:	9.1	8.1	5.9	4.6	5.4	7.0	7.9	9.1	8.9	9.0	9.0	8.8	89.8

Table 3.5.2-6. Simulated SCWA Total Diversions (TAF), Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	7.9	6.5	5.3	3.8	4.6	6.3	7.0	9.1	8.9	8.5	8.5	8.4	84.6
1923	7.9	6.5	5.3	3.8	0.5	5.8	7.0	8.1	8.5	8.5	8.5	6.9	77.1
1924	2.8	2.7	1.0	0.5	4.6	6.7	7.8	5.8	7.9	7.4	3.2	0.3	50.7
1925	0.6	0.7	0.8	0.8	5.4	5.8	7.0	8.2	8.5	7.9	6.7	1.6	53.9
1926	1.0	0.2	0.0	0.0	4.6	5.9	7.0	8.2	8.5	6.7	4.7	1.0	47.6
1927	0.2	7.8	5.3	3.8	4.6	6.3	7.9	8.1	8.9	8.5	8.5	8.4	78.2
1928	7.9	8.0	5.3	3.8	0.5	6.3	7.9	8.2	8.5	8.5	8.4	8.0	81.2
1929	5.7	1.0	0.3	0.1	4.6	5.9	7.1	8.2	7.5	6.6	2.5	0.3	49.8
1930	0.0	0.0	5.3	3.8	0.0	6.3	7.2	8.3	8.6	8.3	6.6	3.7	58.1
1931	0.6	0.0	0.0	0.0	0.0	6.5	7.6	8.7	7.5	7.2	2.7	0.3	41.1
1932	0.3	0.5	5.9	4.3	5.2	5.9	7.1	8.2	8.5	6.7	4.7	1.0	58.4
1933	0.2	0.0	0.0	3.8	4.6	5.9	7.0	8.1	7.3	6.6	2.5	0.3	46.3
1934	0.0	0.0	0.0	3.8	0.0	6.3	7.5	8.7	8.7	7.1	4.1	1.2	47.4
1935	0.3	0.3	0.3	4.2	0.3	6.3	7.9	8.2	8.5	8.5	8.0	6.6	59.5
1936	1.6	0.2	0.0	3.8	4.6	6.3	7.0	8.2	8.5	8.5	7.2	5.2	61.1
1937	1.0	0.2	0.0	0.0	4.6	6.3	7.9	8.2	8.5	8.5	8.3	6.7	60.1
1938	3.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	82.8
1939	9.1	6.4	5.3	3.8	4.6	6.5	7.1	8.3	8.6	8.6	8.1	6.6	82.9
1940	1.1	0.9	0.3	3.9	4.7	6.3	7.9	8.1	8.5	8.5	8.5	8.4	67.1
1941	7.4	4.0	5.3	3.8	4.6	6.3	7.9	9.1	8.5	8.5	8.5	8.8	82.7
1942	7.9	6.4	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	85.9
1943	9.1	8.0	5.3	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.4	86.9
1944	7.6	4.1	1.0	0.5	4.6	5.8	7.0	8.2	8.5	7.9	6.7	1.6	63.4
1945	1.0	8.0	5.3	0.9	4.6	5.8	7.0	8.1	8.5	8.5	8.4	6.8	72.7
1946	2.8	2.7	5.3	3.8	0.5	5.8	7.0	8.1	8.5	8.5	8.5	6.8	68.2
1947	2.8	2.7	1.0	0.5	4.6	5.8	7.0	8.2	8.5	7.9	6.7	1.6	57.2
1948	1.0	0.2	0.0	0.0	0.0	5.8	6.9	9.1	8.5	8.5	8.5	7.1	55.5
1949	4.2	2.7	1.0	0.5	4.6	6.3	7.1	8.2	8.5	8.5	8.5	7.1	67.2
1950	3.1	1.0	0.8	3.8	4.6	5.8	7.0	8.2	8.5	7.7	6.7	1.4	58.6
1951	1.0	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	77.7
1952	5.6	2.7	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	80.0
1953	9.1	6.4	5.3	3.8	0.7	5.5	7.0	8.1	8.5	8.5	8.5	8.8	80.1
1954	6.6	8.0	1.0	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.4	80.1
1955	7.6	4.2	5.3	3.8	0.5	6.3	7.0	8.2	8.5	8.5	7.2	5.2	72.2
1956	1.0	0.2	5.3	3.8	4.6	6.3	7.0	9.1	8.9	8.5	8.5	8.8	71.9
1957	9.1	6.4	4.8	3.4	4.6	6.3	7.0	9.1	8.5	8.5	8.5	8.4	84.4
1958	9.1	6.5	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.8	87.3
1959	9.1	6.4	4.8	3.8	4.6	5.9	7.1	8.2	8.6	8.6	8.6	7.0	82.6
1960	2.8	2.7	1.0	0.5	4.7	5.9	7.2	8.3	8.4	6.7	4.2	1.0	53.4
1961	0.2	0.0	0.0	0.0	4.6	6.5	7.3	8.4	8.8	8.8	8.7	7.0	60.3
1962	2.8	1.1	0.8	1.1	4.7	5.8	7.0	8.1	8.5	8.5	8.3	6.8	63.4
1963	9.1	8.0	5.3	3.8	4.6	5.5	7.9	9.1	8.5	8.5	8.5	8.4	87.1
1964	7.4	8.0	4.8	3.8	0.5	5.8	7.0	9.0	8.5	8.5	7.1	5.9	76.3
1965	1.0	0.2	5.3	3.8	4.6	5.5	7.9	8.1	8.5	8.5	8.5	7.7	69.5
1966	4.9	8.0	5.3	3.8	4.6	5.8	7.0	8.1	8.5	8.5	8.5	6.9	79.7
1967	2.8	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	9.0	8.5	8.8	83.0
1968	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	84.2
1969	5.6	2.7	5.3	3.8	4.6	6.3	7.9	9.1	8.9	8.5	8.5	8.4	79.5
1970	9.1	6.4	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.1	84.1
1971	5.4	8.0	5.3	3.8	4.1	6.3	7.0	9.1	8.5	8.5	8.5	8.8	83.2
1972	7.9	6.3	5.3	3.8	4.6	6.3	7.0	8.2	8.5	8.5	8.5	7.1	81.9
1973	3.1	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	79.8
1974	5.6	8.0	5.3	3.8	4.6	6.3	7.9	8.1	8.5	8.5	8.5	8.8	83.9
1975	9.1	6.4	1.0	3.5	4.6	6.3	7.0	9.1	8.5	8.5	8.5	8.8	81.2
1976	9.1	6.4	4.8	0.5	4.6	7.0	7.7	8.8	8.8	8.3	7.2	2.7	75.7
1977	0.6	0.6	0.6	0.6	0.6	6.7	7.9	8.9	8.5	7.4	3.8	1.2	47.3
1978	0.7	0.7	0.8	4.6	5.4	6.3	7.9	8.1	8.5	8.5	8.5	8.4	68.4
1979	7.6	4.2	1.0	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.1	76.0
1980	5.1	2.7	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.2	76.5
1981	5.6	2.7	1.0	3.8	4.6	6.4	7.1	8.2	8.6	8.6	8.6	8.3	73.4
1982	5.7	8.1	5.4	3.9	4.7	6.3	7.9	9.1	8.9	8.5	8.5	8.8	85.8
1983	9.1	8.0	5.3	3.8	4.6	6.3	7.9	9.1	8.9	9.0	9.0	8.8	89.8
1984	9.1	8.0	5.3	3.8	4.6	6.3	7.0	8.1	8.5	8.5	8.5	8.3	85.9
1985	5.8	8.0	5.3	0.9	4.6	5.8	7.0	8.1	8.5	8.5	8.4	6.8	77.6
1986	2.8	2.7	5.3	3.8	4.6	6.3	7.1	8.2	8.5	8.5	8.5	7.0	73.2
1987	3.1	1.0	0.8	0.0	4.6	6.7	7.4	8.5	8.8	8.8	7.5	5.3	62.5
1988	1.3	0.5	0.3	4.1	0.3	6.6	7.8	8.9	8.3	7.2	3.6	1.0	50.0
1989	0.5	0.5	0.6	0.6	0.6	6.3	7.0	8.2	8.5	8.5	6.7	4.0	51.9
1990	1.0	0.2	0.0	3.8	0.0	6.5	7.2	8.3	8.5	6.7	4.8	0.0	46.8
1991	0.0	0.1	0.1	0.1	0.1	6.3	7.1	9.1	8.4	8.2	6.7	5.3	51.5
1992	0.0	0.0	0.0	0.0	4.6	6.8	7.5	8.6	8.8	8.9	7.4	5.1	57.8
1993	1.4	0.5	0.4	4.3	5.1	6.3	7.9	9.1	8.9	8.5	8.5	8.4	69.2
AVG:	4.3	3.9	3.1	2.8	3.7	6.2	7.4	8.4	8.5	8.2	7.5	6.1	70.2
MIN:	0.0	0.0	0.0	0.0	0.0	5.5	6.9	5.8	7.3	6.6	2.5	0.0	41.1
MAX:	9.1	8.1	5.9	4.6	5.4	7.0	7.9	9.1	8.9	9.0	9.0	8.8	89.8

Figures 3.5.2-15 throught 3.5.2-20 display time series and exceedence data for deliveries to SCWA at the Sacramento River Water Treatment Plant on contract year and water bases, as well as dry period deliveries. Unlike the EBMUD or SCWA Freeport diversions, the SCWA diversion at the Sacramento River WTP occurs in all studies, though the volume increases under the Action alternatives.

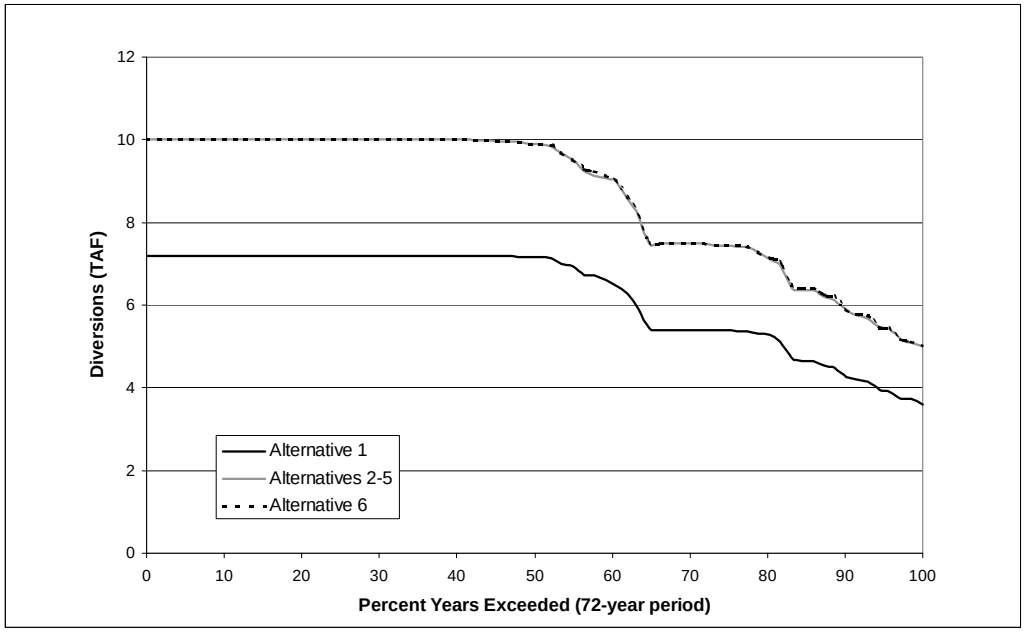


Figure 3.5.2-15 Exceedence for Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Contract Year)

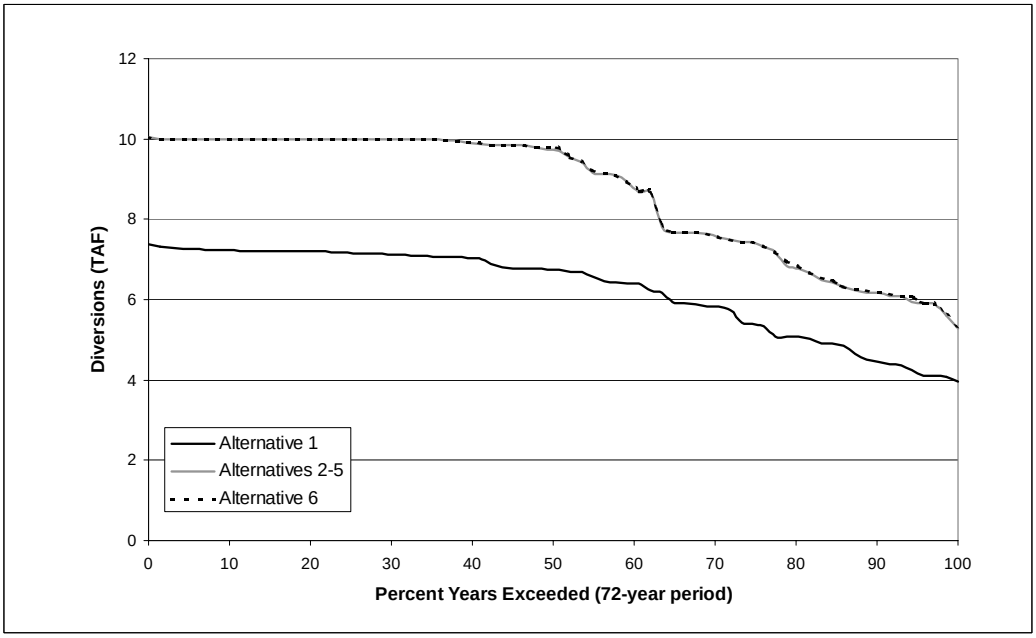


Figure 3.5.2-16 Exceedence for Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Water Year)

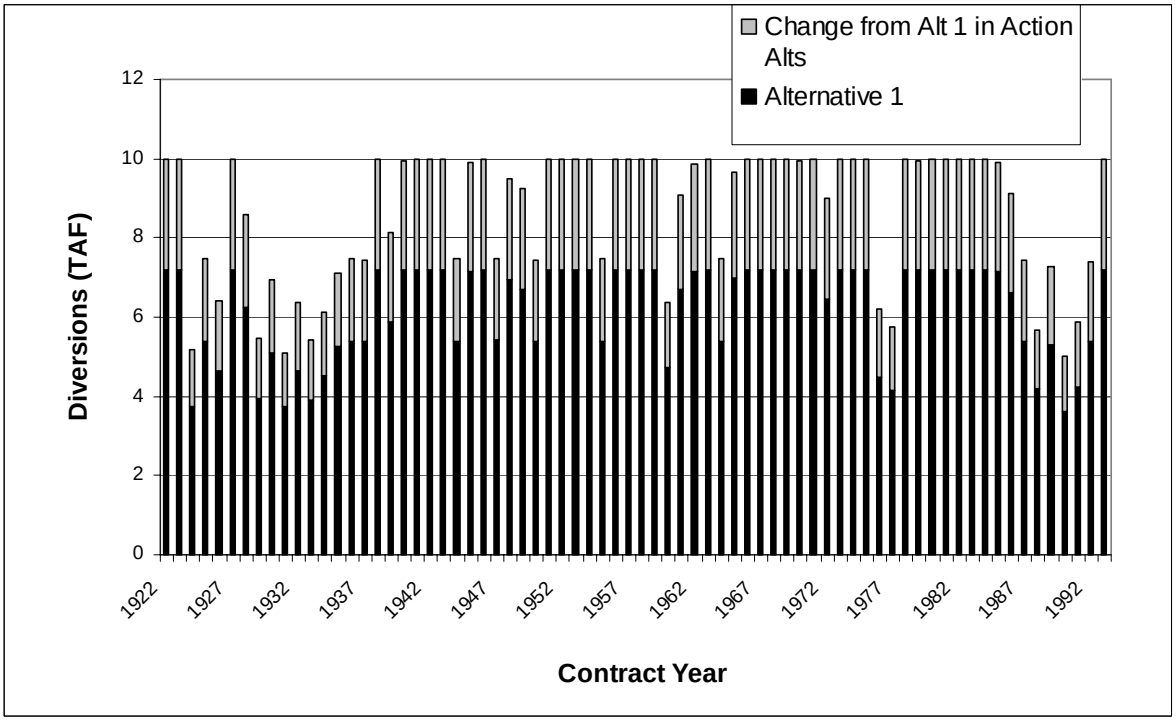


Figure 3.5.2-17 Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Contract Year)

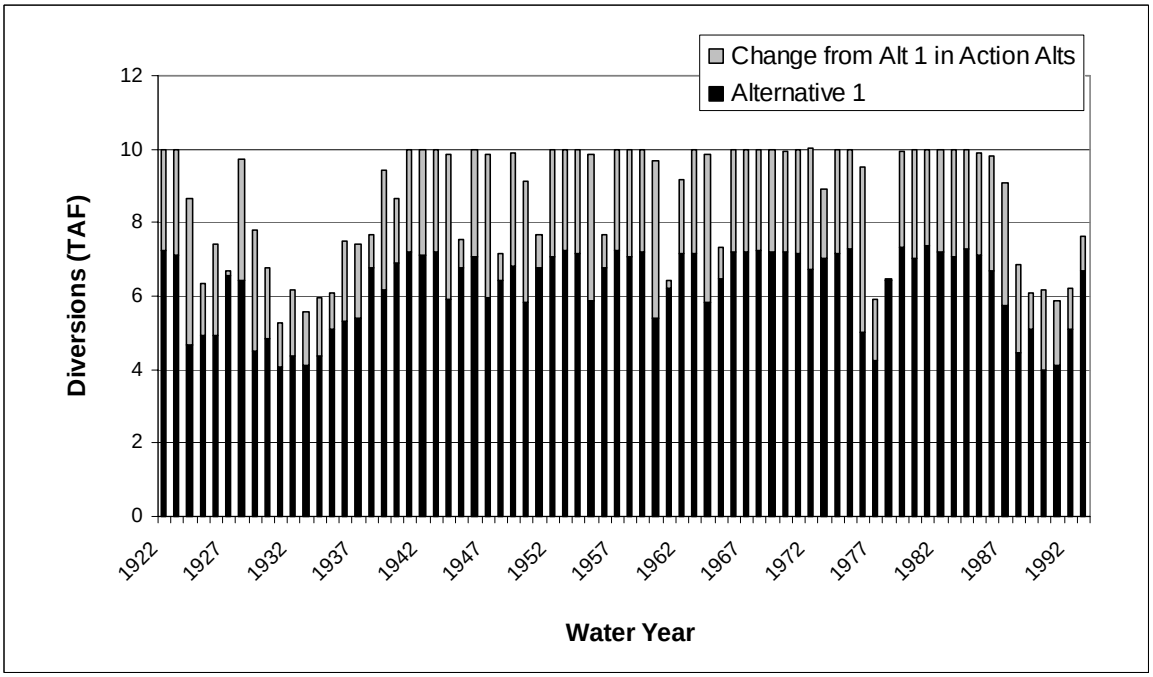


Figure 3.5.2-18 Simulated Annual Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Water Year)

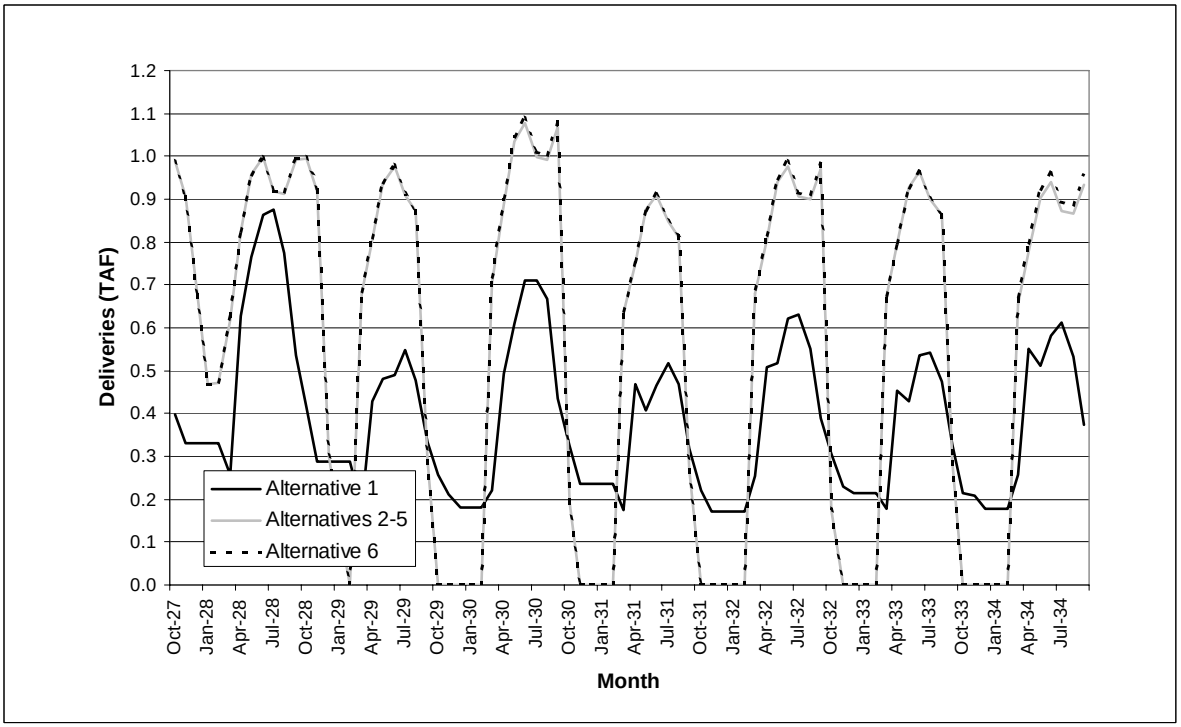


Figure 3.5.2-19 Simulated Monthly Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Dry Period 1928-1934)

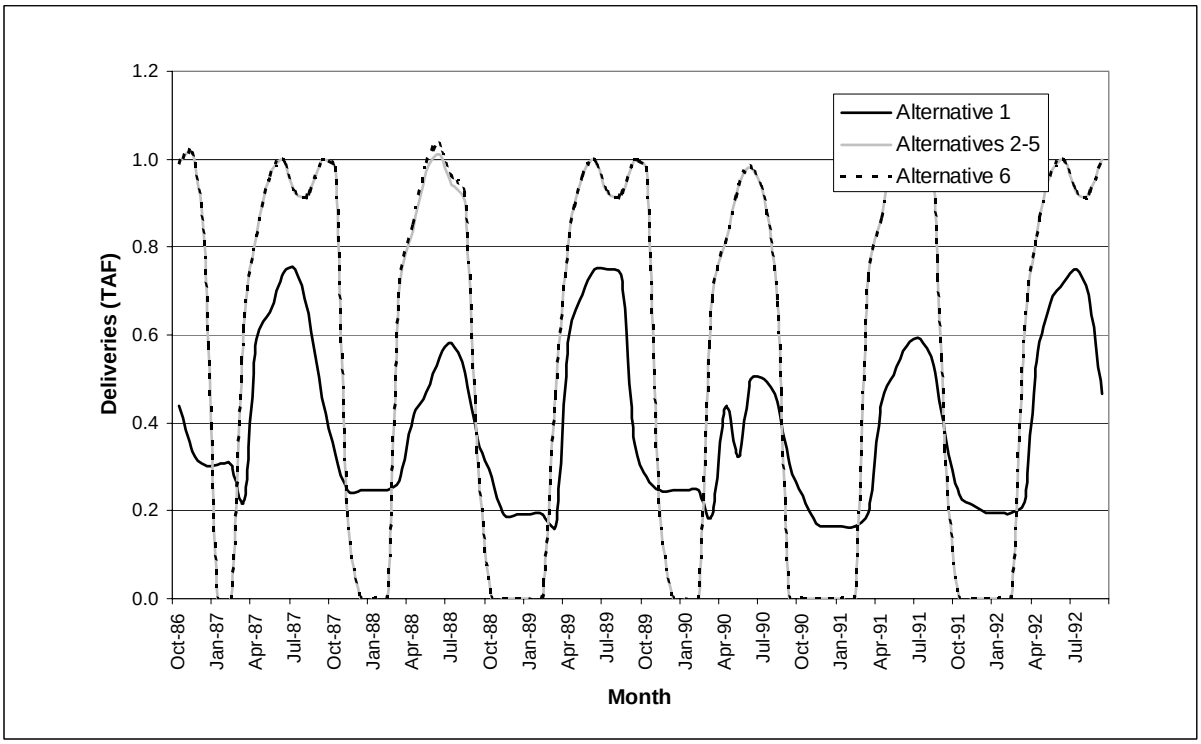


Figure 3.5.2-20 Simulated Monthly Deliveries to SCWA at Sacramento River Water Treatment Plant, 2020 LOD (Dry Period WY 1987-1992)

Table 3.5.2-7. Simulated SCWA CVP Diversions @ Sacramento River WTP (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	1.0	0.6	7.3
1923	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.9	1.0	1.0	0.9	0.6	7.1
1924	0.4	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.4	0.3	4.7
1925	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.5	4.9
1926	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.6	0.6	0.6	0.5	4.9
1927	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.9	1.0	1.0	0.9	0.6	6.6
1928	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.8	0.9	0.9	0.8	0.5	6.4
1929	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.5	0.5	0.5	0.3	4.5
1930	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.4	4.9
1931	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.5	0.5	0.5	0.3	4.1
1932	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.6	0.5	0.4	4.4
1933	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.5	0.5	0.5	0.3	4.1
1934	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.5	0.6	0.6	0.5	0.4	4.4
1935	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.7	0.7	0.7	0.6	5.1
1936	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.7	0.7	0.7	0.5	5.3
1937	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.8	0.7	0.5	5.4
1938	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.8	1.0	1.0	1.0	0.6	6.8
1939	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.8	0.8	0.7	0.5	6.2
1940	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	6.9
1941	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.0	1.0	1.0	0.9	7.2
1942	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.0	1.0	1.0	0.8	7.1
1943	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1944	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.7	0.7	0.7	0.5	5.9
1945	0.3	0.2	0.2	0.2	0.2	0.3	0.8	0.8	1.0	1.0	1.0	0.6	6.8
1946	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	1.0	1.0	0.9	0.6	7.1
1947	0.5	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.7	0.8	0.7	0.5	5.9
1948	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.7	1.0	1.0	1.0	0.9	6.4
1949	0.5	0.3	0.3	0.3	0.3	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.8
1950	0.5	0.3	0.3	0.3	0.3	0.2	0.5	0.7	0.7	0.7	0.7	0.5	5.8
1951	0.2	0.2	0.2	0.2	0.2	0.4	0.9	0.8	1.0	1.0	0.9	0.6	6.8
1952	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.1
1953	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1954	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.0	1.0	0.9	0.6	7.2
1955	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.7	0.8	0.7	0.4	5.9
1956	0.3	0.2	0.2	0.2	0.2	0.4	0.8	0.8	1.0	1.0	0.9	0.6	6.8
1957	0.4	0.4	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.0	0.7	7.2
1958	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.0	1.0	1.0	0.7	7.1
1959	0.5	0.4	0.3	0.3	0.3	0.4	0.8	0.9	1.0	1.0	0.9	0.5	7.2
1960	0.5	0.4	0.3	0.3	0.3	0.2	0.5	0.5	0.7	0.7	0.6	0.4	5.4
1961	0.3	0.2	0.2	0.2	0.2	0.2	0.7	0.8	0.9	0.9	0.8	0.6	6.2
1962	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1963	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.8	7.1
1964	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.7	0.7	0.6	0.4	5.8
1965	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	0.9	0.6	6.5
1966	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.8	0.9	1.0	0.8	0.6	7.2
1967	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.2
1968	0.5	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.2
1969	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	0.9	0.6	7.2
1970	0.4	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1.0	0.9	0.6	7.2
1971	0.4	0.3	0.3	0.3	0.3	0.4	0.9	0.8	1.0	1.0	0.9	0.6	7.1
1972	0.5	0.3	0.3	0.3	0.3	0.4	0.7	0.8	0.9	0.9	0.8	0.5	6.7
1973	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.0
1974	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	0.9	0.9	0.6	7.1
1975	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1976	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.4	5.0
1977	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.5	0.6	0.5	0.3	4.2
1978	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.0	1.0	1.0	0.6	6.4
1979	0.5	0.3	0.3	0.3	0.3	0.3	0.7	0.9	1.0	1.0	1.0	0.6	7.3
1980	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.6	7.0
1981	0.5	0.4	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	1.0	0.6	7.4
1982	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.0	1.0	1.0	1.0	0.8	7.2
1983	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	0.7	7.1
1984	0.5	0.3	0.3	0.3	0.3	0.4	0.9	0.9	0.9	1.0	0.8	0.6	7.3
1985	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.9	1.0	1.0	0.9	0.6	7.1
1986	0.4	0.3	0.3	0.3	0.3	0.3	0.7	0.8	0.9	0.9	0.8	0.5	6.7
1987	0.4	0.3	0.3	0.3	0.3	0.2	0.6	0.7	0.7	0.7	0.6	0.5	5.8
1988	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.5	0.4	4.5
1989	0.3	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.7	0.7	0.7	0.4	5.1
1990	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.5	0.4	0.3	4.0
1991	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.6	0.5	0.4	4.1
1992	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.7	0.7	0.7	0.5	5.1
1993	0.3	0.3	0.2	0.2	0.2	0.3	0.8	0.8	0.9	1.0	0.9	0.6	6.7
AVG:	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.7	0.9	0.9	0.8	0.5	6.3
MIN:	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.3	4.0
MAX:	0.5	0.4	0.3	0.3	0.3	0.5	0.9	1.0	1.0	1.0	1.0	0.9	7.4

Table 3.5.2-8. Simulated SCWA CVP Diversions @ Sacramento River WTP (TAF) Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1923	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1924	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.9	0.9	0.8	0.3	8.7
1925	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1926	1.0	0.2	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	7.4
1927	0.2	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.7
1928	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1929	1.0	0.9	0.3	0.1	0.0	0.7	0.8	0.9	1.0	0.9	0.9	0.3	7.8
1930	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.1	1.0	1.0	1.1	6.8
1931	0.2	0.0	0.0	0.0	0.0	0.6	0.8	0.9	0.9	0.8	0.8	0.3	5.3
1932	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	6.2
1933	0.2	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	0.3	5.6
1934	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	0.9	0.9	0.9	0.9	6.0
1935	0.2	0.0	0.0	0.0	0.0	0.5	0.7	1.0	1.0	0.9	0.9	1.0	6.1
1936	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.5
1937	1.0	0.2	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	7.4
1938	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1939	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.9	0.9	0.9	0.9	9.4
1940	0.9	0.9	0.3	0.1	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	8.7
1941	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1942	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1943	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1944	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1945	1.0	0.2	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1946	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1947	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1948	1.0	0.2	0.0	0.0	0.0	0.4	0.6	1.0	1.0	0.9	0.9	1.0	7.2
1949	1.0	0.9	0.7	0.5	0.5	0.6	0.9	1.0	1.0	0.9	0.9	1.0	9.9
1950	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.1
1951	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1952	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1953	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1954	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1955	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1956	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1957	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1958	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1959	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1960	1.0	0.9	0.7	0.5	0.5	0.5	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1961	0.2	0.0	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	6.4
1962	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.2
1963	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1964	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1965	1.0	0.2	0.0	0.0	0.0	0.6	0.7	1.0	1.0	0.9	0.9	1.0	7.3
1966	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1967	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1968	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1969	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1970	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1971	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1972	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	0.9	1.0	10.0
1973	1.0	1.0	0.3	0.1	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	8.9
1974	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1975	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1976	1.0	0.9	0.7	0.5	0.5	0.7	0.8	0.9	1.0	0.9	0.9	0.9	9.5
1977	0.2	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	1.0	0.9	0.3	5.9
1978	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.5
1979	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1980	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1981	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1982	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1983	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1984	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1985	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1986	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1987	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.1
1988	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	0.3	6.8
1989	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.0	1.0	0.9	0.9	1.0	6.1
1990	1.0	0.2	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1991	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.0	1.0	0.9	0.3	5.9
1992	0.0	0.0	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	6.2
1993	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
AVG:	0.8	0.6	0.4	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.9	0.9	8.6
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	0.9	0.8	0.7	0.0	5.3
MAX:	1.0	1.0	0.8	0.5	0.5	0.7	0.9	1.0	1.1	1.0	1.0	1.1	10.0

Table 3.5.2-9. Simulated SCWA CVP Diversions @ Sacramento River WTP (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1923	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1924	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.9	0.9	0.8	0.3	8.7
1925	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1926	1.0	0.2	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	7.4
1927	0.2	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.7
1928	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.7
1929	1.0	0.9	0.3	0.1	0.0	0.7	0.8	0.9	1.0	0.9	0.9	0.3	7.8
1930	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.1	1.0	1.0	1.1	6.8
1931	0.2	0.0	0.0	0.0	0.0	0.6	0.8	0.9	0.9	0.8	0.8	0.3	5.3
1932	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.3
1933	0.2	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	0.3	5.6
1934	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.9	1.0	6.1
1935	0.2	0.0	0.0	0.0	0.0	0.5	0.7	1.0	1.0	0.9	0.9	1.0	6.1
1936	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.5
1937	1.0	0.2	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	7.4
1938	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1939	1.0	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.9	0.9	0.9	0.9	9.4
1940	0.9	0.9	0.3	0.1	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	8.7
1941	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1942	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1943	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1944	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1945	1.0	0.2	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	7.6
1946	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1947	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1948	1.0	0.2	0.0	0.0	0.0	0.4	0.6	1.0	1.0	0.9	0.9	1.0	7.2
1949	1.0	0.9	0.7	0.5	0.5	0.6	0.9	1.0	1.0	1.0	1.0	1.0	9.9
1950	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.1
1951	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1952	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1953	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1954	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1955	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1956	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.7
1957	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1958	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1959	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1960	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1961	0.2	0.0	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	6.5
1962	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.2
1963	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1964	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1965	1.0	0.2	0.0	0.0	0.0	0.6	0.7	1.0	1.0	0.9	0.9	1.0	7.3
1966	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1967	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1968	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1969	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1970	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1971	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1972	1.0	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.0	1.0	0.9	1.0	10.0
1973	1.0	1.0	0.3	0.1	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	8.9
1974	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1975	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1976	1.0	0.9	0.7	0.5	0.5	0.7	0.8	0.9	1.0	0.9	0.9	0.9	9.5
1977	0.2	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	1.0	0.9	0.3	5.9
1978	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	6.5
1979	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1980	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1981	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1982	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1983	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1984	1.0	0.9	0.7	0.5	0.5	0.7	0.8	1.0	1.0	0.9	0.9	1.0	10.0
1985	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.9
1986	1.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.8
1987	1.0	1.0	0.8	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	9.1
1988	1.0	0.2	0.0	0.0	0.0	0.7	0.9	1.0	1.0	1.0	0.9	0.3	7.0
1989	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.0	1.0	0.9	0.9	1.0	6.1
1990	1.0	0.2	0.0	0.0	0.0	0.7	0.8	0.9	1.0	0.9	0.7	0.0	6.2
1991	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	1.1	1.0	0.9	0.3	5.9
1992	0.0	0.0	0.0	0.0	0.0	0.6	0.8	1.0	1.0	0.9	0.9	1.0	6.2
1993	1.0	0.2	0.0	0.0	0.0	0.7	0.8	1.0	1.0	0.9	0.9	1.0	7.6
AVG:	0.8	0.6	0.4	0.3	0.3	0.7	0.8	1.0	1.0	0.9	0.9	0.9	8.7
MIN:	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	0.9	0.8	0.7	0.0	5.3
MAX:	1.0	1.0	0.8	0.5	0.5	0.7	0.9	1.0	1.1	1.0	1.0	1.1	10.0

Figures 3.5.2-21 through 3.5.2-26 display time series and exceedence data for deliveries to SCWA at Freeport on a contract year and water basis, as well as dry period deliveries. Unlike the EBMUD or SCWA Freeport diversions which are only CVP contract water, the SCWA diversions at Freeport are comprised of CVP contract water, appropriated surplus Delta flows, and "Other" water (see Section 3.2 of this appendix for more details).

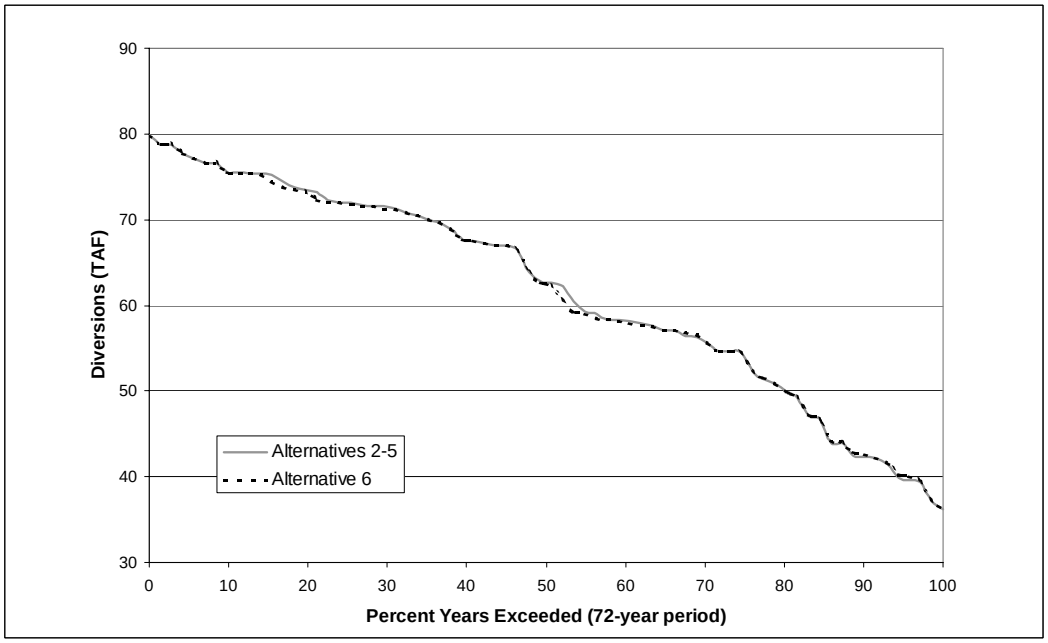


Figure 3.5.2-21 Exceedence for Simulated Annual Deliveries to SCWA at Freeport, 2020 LOD (Contract Year)

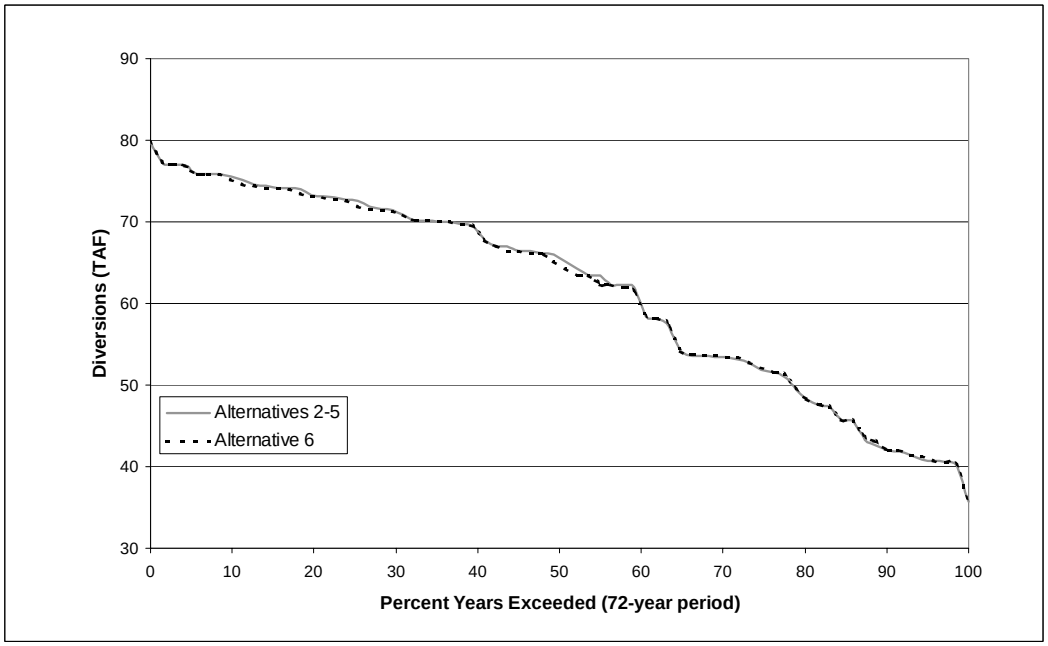


Figure 3.5.2-22 Exceedence for Simulated Annual Deliveries to SCWA at Freeport, 2020 LOD (Water Year)

The following two tables show annual delivery time series data for the SCWA diversion at Freeport. Since Alternative 1 does not divert SCWA water at Freeport, the charts include only the data from Alternatives 2-5 and Alternative 6. Since there is virtually no change in diversions between the Action alternatives, actual diversions are plotted for Alternatives 2-5 but represent Alternative 6 diversions as well.

Dry year data is provided following the time series plots. Tables then display the simulated diversions at SCWA for each of the three types of water, along with a comparison of each of the Action alternatives back to Alternative 1.

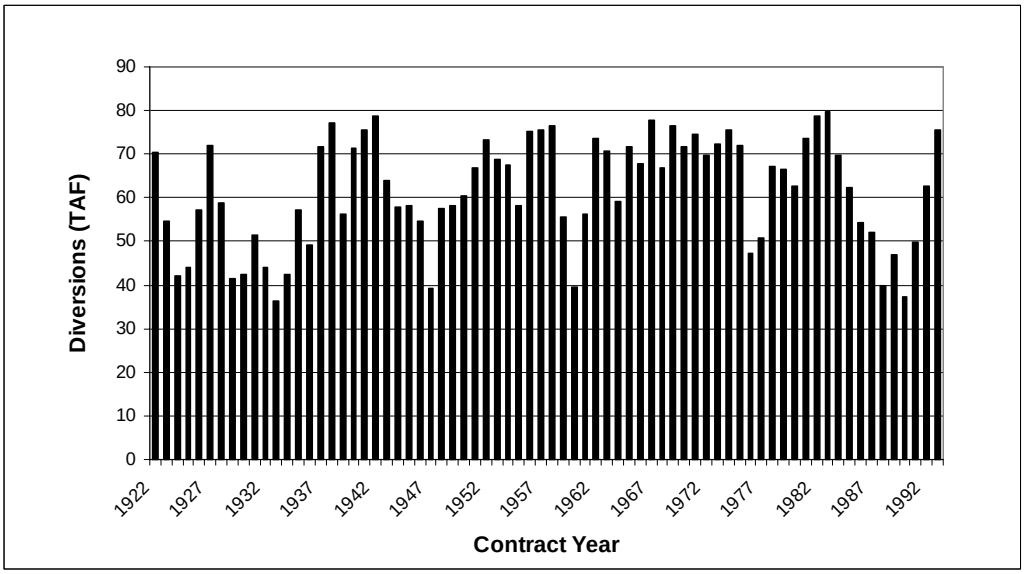


Figure 3.5.2-23 Simulated Annual Deliveries to SCWA at Freeport, 2020 LOD (Contract Year)

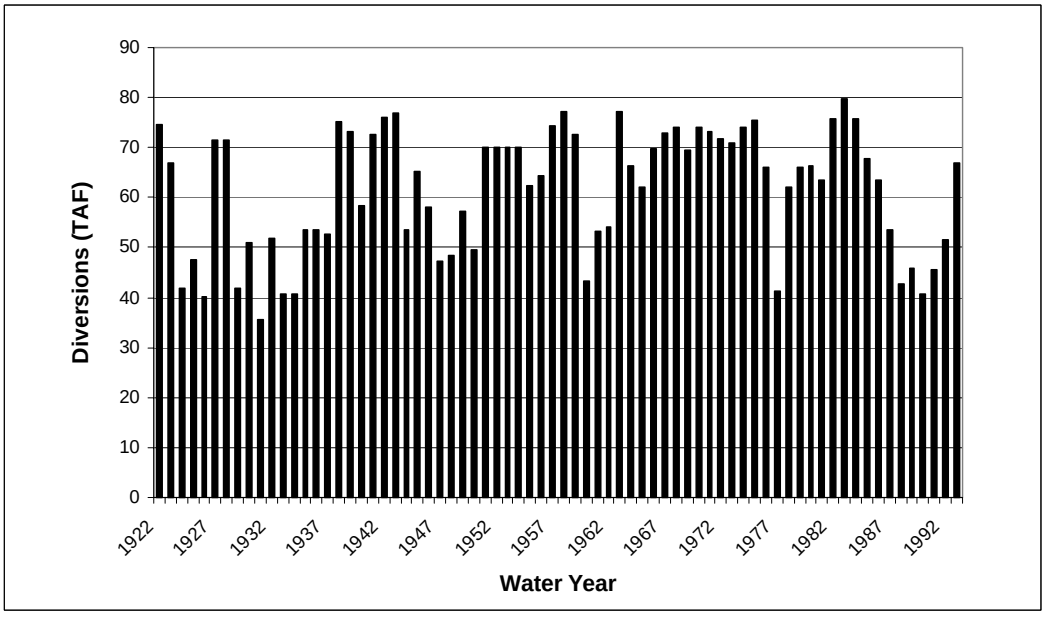


Figure 3.5.2-24 Simulated Annual Deliveries to SCWA at Freeport, 2020 LOD (Water Year)

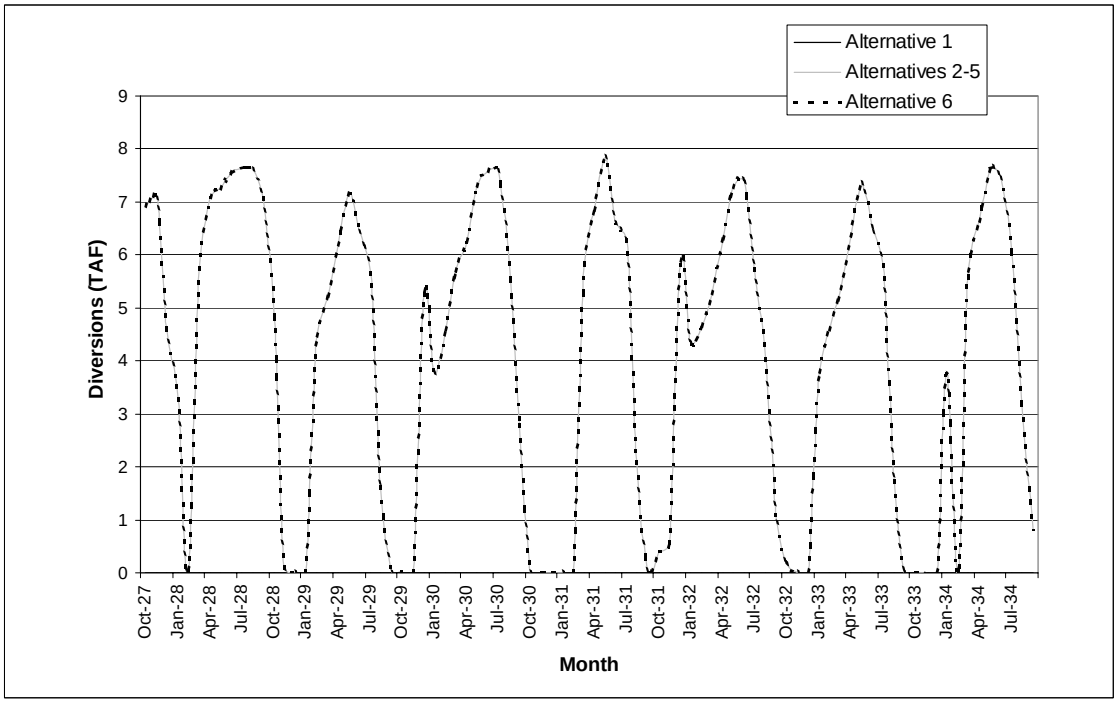


Figure 3.5.2-25 Simulated Monthly Deliveries to SCWA at Freeport, 2020 LOD (Dry Period WY 1928-1934)

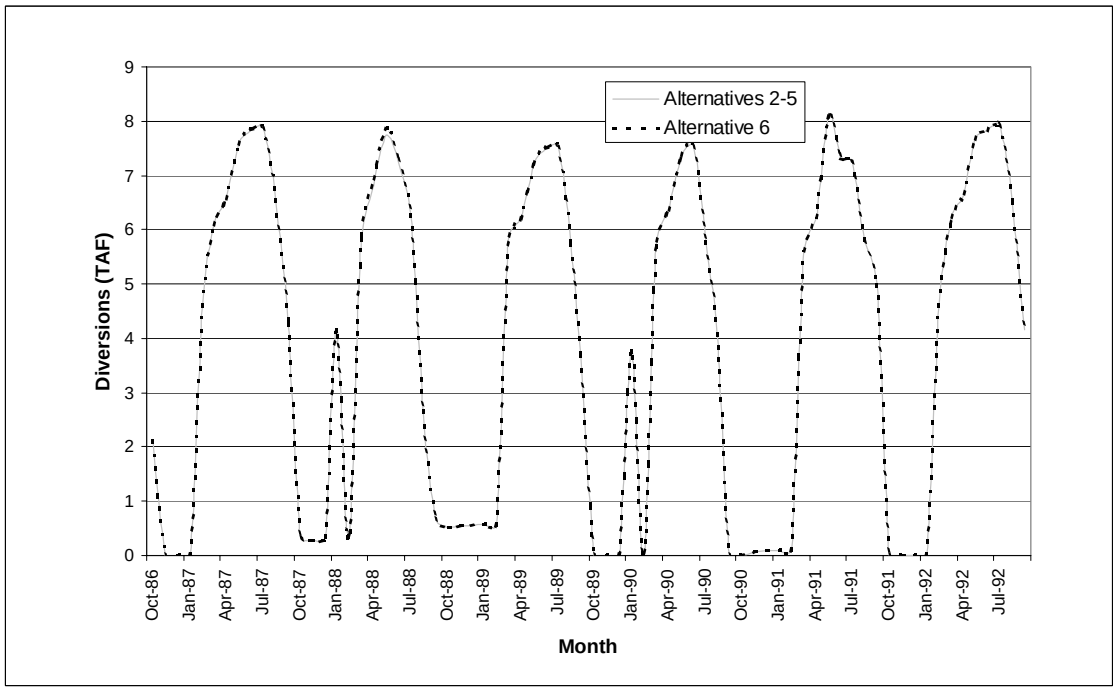


Figure 3.5.2-26 Simulated Monthly Deliveries to SCWA at Freeport, 2020 LOD (Dry Period WY 1987-1992)

Table 3.5.2-10. Simulated SCWA Total Diversions at Freeport (TAF), Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6.9	5.6	4.6	3.3	4.1	5.6	6.1	8.1	7.8	7.6	7.5	7.3	74.6
1923	6.9	5.6	4.6	3.3	0.0	5.1	6.1	7.1	7.4	7.6	7.5	5.8	67.1
1924	1.8	1.8	0.3	0.0	4.1	6.1	7.1	4.9	7.0	6.5	2.4	0.0	41.9
1925	0.6	0.7	0.8	0.8	5.4	5.1	6.2	7.2	7.5	6.9	5.7	0.6	47.6
1926	0.0	0.1	0.0	0.0	4.6	5.2	6.2	7.2	7.5	5.7	3.7	0.0	40.2
1927	0.0	7.8	5.3	3.8	4.6	5.6	7.1	7.1	7.8	7.6	7.5	7.3	71.6
1928	6.9	7.1	4.6	3.3	0.0	5.7	7.1	7.2	7.5	7.6	7.5	7.0	71.4
1929	4.8	0.0	0.0	0.0	4.6	5.3	6.2	7.2	6.5	5.7	1.6	0.0	41.9
1930	0.0	0.0	5.3	3.8	0.0	5.6	6.2	7.2	7.4	7.3	5.6	2.7	51.1
1931	0.4	0.0	0.0	0.0	0.0	5.8	6.8	7.8	6.6	6.3	1.9	0.0	35.7
1932	0.3	0.5	5.9	4.3	5.2	5.2	6.2	7.2	7.5	5.7	3.8	0.0	51.8
1933	0.0	0.0	0.0	3.8	4.6	5.3	6.3	7.2	6.3	5.7	1.6	0.0	40.7
1934	0.0	0.0	0.0	3.8	0.0	5.6	6.6	7.6	7.6	6.1	3.2	0.3	40.8
1935	0.2	0.3	0.3	4.2	0.3	5.9	7.3	7.2	7.5	7.5	7.1	5.6	53.4
1936	0.7	0.0	0.0	3.8	4.6	5.6	6.2	7.2	7.5	7.5	6.3	4.2	53.6
1937	0.0	0.1	0.0	0.0	4.6	5.7	7.1	7.2	7.5	7.5	7.3	5.7	52.7
1938	2.1	7.8	5.3	3.8	4.6	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.2
1939	8.1	5.5	4.6	3.3	4.1	5.9	6.3	7.4	7.6	7.7	7.2	5.6	73.3
1940	0.1	0.0	0.0	3.8	4.7	5.7	7.1	7.1	7.4	7.6	7.5	7.3	58.4
1941	6.4	3.1	4.6	3.3	4.1	5.6	7.1	8.1	7.4	7.6	7.5	7.8	72.7
1942	6.9	5.5	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.9
1943	8.1	7.1	4.6	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.3	76.9
1944	6.6	3.2	0.3	0.0	4.1	5.1	6.2	7.2	7.5	6.9	5.7	0.6	53.5
1945	0.0	7.8	5.3	0.9	4.6	5.2	6.1	7.1	7.4	7.6	7.5	5.8	65.2
1946	1.8	1.8	4.6	3.3	0.0	5.1	6.1	7.1	7.4	7.6	7.5	5.8	58.2
1947	1.8	1.8	0.3	0.0	4.1	5.1	6.2	7.2	7.5	6.9	5.7	0.6	47.3
1948	0.0	0.1	0.0	0.0	0.0	5.3	6.3	8.1	7.4	7.6	7.5	6.1	48.3
1949	3.2	1.8	0.3	0.0	4.1	5.8	6.2	7.2	7.5	7.6	7.5	6.0	57.1
1950	2.1	0.0	0.0	3.8	4.6	5.2	6.2	7.2	7.5	6.8	5.7	0.4	49.5
1951	0.0	7.8	5.3	3.8	4.6	5.6	6.1	7.1	7.4	7.6	7.5	7.2	70.0
1952	4.6	1.8	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	70.0
1953	8.1	5.5	4.6	3.3	0.2	4.8	6.1	7.1	7.4	7.6	7.5	7.8	70.1
1954	5.6	7.1	0.3	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.3	70.1
1955	6.6	3.3	4.6	3.3	0.0	5.6	6.2	7.2	7.5	7.5	6.3	4.2	62.3
1956	0.0	0.1	5.3	3.8	4.6	5.6	6.1	8.1	7.8	7.6	7.5	7.8	64.3
1957	8.1	5.5	4.1	2.9	4.1	5.6	6.1	8.1	7.4	7.6	7.5	7.3	74.4
1958	8.1	5.6	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	77.3
1959	8.1	5.5	4.1	3.3	4.1	5.2	6.2	7.2	7.5	7.7	7.7	5.9	72.6
1960	1.8	1.8	0.3	0.0	4.2	5.3	6.2	7.2	7.3	5.7	3.3	0.0	43.2
1961	0.0	0.0	0.0	0.0	4.6	5.9	6.4	7.3	7.6	7.7	7.7	6.0	53.2
1962	1.8	0.1	0.0	1.1	4.7	5.2	6.1	7.1	7.4	7.6	7.3	5.8	54.2
1963	8.1	7.1	4.6	3.3	4.1	4.8	7.1	8.1	7.4	7.6	7.5	7.3	77.1
1964	6.4	7.1	4.1	3.3	0.0	5.1	6.2	8.1	7.5	7.5	6.2	4.9	66.5
1965	0.0	0.1	5.3	3.8	4.6	4.9	7.3	7.1	7.4	7.6	7.5	6.7	62.2
1966	3.9	7.1	4.6	3.3	4.1	5.1	6.1	7.1	7.4	7.6	7.5	5.8	69.7
1967	1.8	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	7.5	7.8	73.0
1968	8.1	5.5	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.2	74.2
1969	4.6	1.8	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.3	69.5
1970	8.1	5.5	4.6	3.3	4.1	5.7	6.1	7.1	7.4	7.6	7.5	7.1	74.1
1971	4.4	7.1	4.6	3.3	3.6	5.6	6.1	8.1	7.4	7.6	7.5	7.8	73.2
1972	6.9	5.4	4.6	3.3	4.1	5.6	6.1	7.2	7.5	7.6	7.5	6.1	71.8
1973	2.1	7.1	5.0	3.6	4.6	5.6	6.1	7.1	7.4	7.6	7.5	7.2	70.9
1974	4.6	7.1	4.6	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.8	73.9
1975	8.1	5.5	4.6	3.1	4.1	5.6	6.1	8.1	7.4	7.6	7.5	7.8	75.5
1976	8.1	5.5	4.1	0.0	4.1	6.3	6.9	7.9	7.8	7.4	6.3	1.7	66.1
1977	0.4	0.6	0.6	0.6	0.6	6.0	7.0	7.9	7.5	6.5	2.9	0.9	41.4
1978	0.7	0.7	0.8	4.6	5.4	5.6	7.1	7.1	7.4	7.6	7.5	7.3	62.0
1979	6.6	3.3	0.3	3.3	4.1	5.7	6.1	7.1	7.4	7.6	7.5	7.0	66.1
1980	4.1	1.8	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.2	66.5
1981	4.6	1.8	0.3	3.3	4.1	5.7	6.2	7.2	7.5	7.7	7.6	7.3	63.4
1982	4.7	7.2	4.7	3.4	4.2	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.8
1983	8.1	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	79.8
1984	8.1	7.1	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.3	75.9
1985	4.9	7.1	4.6	0.4	4.1	5.2	6.1	7.1	7.4	7.6	7.5	5.8	67.7
1986	1.8	1.8	4.6	3.3	4.1	5.8	6.2	7.2	7.5	7.6	7.5	6.0	63.4
1987	2.1	0.0	0.0	0.0	4.6	6.1	6.5	7.6	7.8	7.9	6.6	4.3	53.5
1988	0.3	0.3	0.3	4.1	0.3	5.8	6.8	7.8	7.2	6.3	2.7	0.7	42.6
1989	0.5	0.5	0.6	0.6	0.6	5.9	6.2	7.2	7.5	7.5	5.8	3.0	45.8
1990	0.0	0.0	0.0	3.8	0.0	5.8	6.4	7.3	7.5	5.8	4.1	0.0	40.6
1991	0.0	0.1	0.1	0.1	0.1	5.6	6.2	8.1	7.3	7.3	5.8	5.0	45.6
1992	0.0	0.0	0.0	0.0	4.6	6.2	6.7	7.7	7.8	7.9	6.5	4.2	51.5
1993	0.4	0.3	5.8	4.3	5.1	5.7	7.1	8.1	7.8	7.6	7.5	7.3	66.9
AVG:	3.5	3.3	2.9	2.5	3.4	5.6	6.5	7.4	7.5	7.3	6.5	5.2	61.6
MIN:	0.0	0.0	0.0	0.0	0.0	4.8	6.1	4.9	6.3	5.7	1.6	0.0	35.7
MAX:	8.1	7.8	5.9	4.6	5.4	6.3	7.3	8.1	7.8	8.1	8.1	7.8	79.8

Table 3.5.2-11. Simulated SCWA Total Diversions at Freeport (TAF), Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6.9	5.6	4.6	3.3	4.1	5.6	6.1	8.1	7.8	7.6	7.5	7.3	74.6
1923	6.9	5.6	4.6	3.3	0.0	5.1	6.1	7.1	7.4	7.6	7.5	5.8	67.1
1924	1.8	1.8	0.3	0.0	4.1	6.1	7.1	4.9	7.0	6.5	2.4	0.0	42.0
1925	0.6	0.7	0.8	0.8	5.4	5.1	6.2	7.2	7.5	6.9	5.7	0.6	47.6
1926	0.0	0.1	0.0	0.0	4.6	5.2	6.2	7.2	7.5	5.7	3.7	0.0	40.2
1927	0.0	7.8	5.3	3.8	4.6	5.6	7.1	7.1	7.8	7.6	7.5	7.3	71.6
1928	6.9	7.1	4.6	3.3	0.0	5.7	7.1	7.2	7.5	7.6	7.5	7.0	71.5
1929	4.8	0.0	0.0	0.0	4.6	5.3	6.3	7.2	6.5	5.7	1.6	0.0	41.9
1930	0.0	0.0	5.3	3.8	0.0	5.6	6.3	7.2	7.5	7.3	5.6	2.7	51.3
1931	0.4	0.0	0.0	0.0	0.0	5.8	6.8	7.8	6.6	6.3	1.9	0.0	35.8
1932	0.3	0.5	5.9	4.3	5.2	5.2	6.3	7.3	7.6	5.8	3.8	0.0	52.1
1933	0.0	0.0	0.0	3.8	4.6	5.3	6.3	7.2	6.3	5.7	1.6	0.0	40.7
1934	0.0	0.0	0.0	3.8	0.0	5.7	6.7	7.7	7.7	6.2	3.2	0.3	41.3
1935	0.2	0.3	0.3	4.2	0.3	5.9	7.2	7.2	7.5	7.5	7.1	5.6	53.4
1936	0.7	0.0	0.0	3.8	4.6	5.6	6.2	7.2	7.5	7.5	6.3	4.2	53.6
1937	0.0	0.1	0.0	0.0	4.6	5.7	7.1	7.2	7.5	7.5	7.3	5.7	52.7
1938	2.1	7.8	5.3	3.8	4.6	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.2
1939	8.1	5.5	4.6	3.3	4.1	5.9	6.3	7.4	7.7	7.7	7.2	5.6	73.4
1940	0.1	0.0	0.0	3.8	4.7	5.7	7.1	7.1	7.4	7.6	7.5	7.3	58.4
1941	6.4	3.1	4.6	3.3	4.1	5.6	7.1	8.1	7.4	7.6	7.5	7.8	72.7
1942	6.9	5.5	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.9
1943	8.1	7.1	4.6	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.3	76.9
1944	6.6	3.2	0.3	0.0	4.1	5.1	6.2	7.2	7.5	6.9	5.7	0.6	53.5
1945	0.0	7.8	5.3	0.9	4.6	5.2	6.1	7.1	7.4	7.6	7.5	5.8	65.2
1946	1.8	1.8	4.6	3.3	0.0	5.1	6.1	7.1	7.4	7.6	7.5	5.8	58.2
1947	1.8	1.8	0.3	0.0	4.1	5.1	6.2	7.2	7.5	6.9	5.7	0.6	47.3
1948	0.0	0.1	0.0	0.0	0.0	5.3	6.3	8.1	7.4	7.6	7.5	6.1	48.3
1949	3.2	1.8	0.3	0.0	4.1	5.8	6.2	7.2	7.5	7.6	7.6	6.0	57.3
1950	2.1	0.0	0.0	3.8	4.6	5.2	6.2	7.2	7.5	6.8	5.7	0.4	49.5
1951	0.0	7.8	5.3	3.8	4.6	5.6	6.1	7.1	7.4	7.6	7.5	7.2	70.0
1952	4.6	1.8	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	70.0
1953	8.1	5.5	4.6	3.3	0.2	4.8	6.1	7.1	7.4	7.6	7.5	7.8	70.1
1954	5.6	7.1	0.3	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.3	70.1
1955	6.6	3.3	4.6	3.3	0.0	5.6	6.2	7.2	7.5	7.5	6.3	4.2	62.3
1956	0.0	0.1	5.3	3.8	4.6	5.6	6.1	8.1	7.8	7.6	7.5	7.8	64.3
1957	8.1	5.5	4.1	2.9	4.1	5.6	6.1	8.1	7.4	7.6	7.5	7.3	74.4
1958	8.1	5.6	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.8	77.3
1959	8.1	5.5	4.1	3.3	4.1	5.2	6.2	7.2	7.5	7.7	7.7	5.9	72.6
1960	1.8	1.8	0.3	0.0	4.2	5.4	6.3	7.3	7.4	5.8	3.3	0.0	43.6
1961	0.0	0.0	0.0	0.0	4.6	5.9	6.5	7.5	7.7	7.8	7.8	6.0	53.7
1962	1.8	0.1	0.0	1.1	4.7	5.2	6.1	7.1	7.4	7.6	7.3	5.8	54.2
1963	8.1	7.1	4.6	3.3	4.1	4.8	7.1	8.1	7.4	7.6	7.5	7.3	77.1
1964	6.4	7.1	4.1	3.3	0.0	5.1	6.2	8.1	7.5	7.5	6.2	4.9	66.5
1965	0.0	0.1	5.3	3.8	4.6	4.9	7.3	7.1	7.4	7.6	7.5	6.7	62.2
1966	3.9	7.1	4.6	3.3	4.1	5.1	6.1	7.1	7.4	7.6	7.5	5.8	69.7
1967	1.8	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	7.5	7.8	73.0
1968	8.1	5.5	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.2	74.2
1969	4.6	1.8	4.6	3.3	4.1	5.6	7.1	8.1	7.8	7.6	7.5	7.3	69.5
1970	8.1	5.5	4.6	3.3	4.1	5.7	6.1	7.1	7.4	7.6	7.5	7.1	74.1
1971	4.4	7.1	4.6	3.3	3.6	5.6	6.1	8.1	7.4	7.6	7.5	7.8	73.2
1972	6.9	5.4	4.6	3.3	4.1	5.6	6.1	7.2	7.5	7.6	7.5	6.1	71.8
1973	2.1	7.1	5.0	3.6	4.6	5.6	6.1	7.1	7.4	7.6	7.5	7.2	70.9
1974	4.6	7.1	4.6	3.3	4.1	5.6	7.1	7.1	7.4	7.6	7.5	7.8	73.9
1975	8.1	5.5	0.3	3.1	4.1	5.6	6.1	8.1	7.4	7.6	7.5	7.8	71.2
1976	8.1	5.5	4.1	0.0	4.1	6.3	6.9	7.9	7.8	7.4	6.3	1.7	66.2
1977	0.4	0.6	0.6	0.6	0.6	6.0	7.0	7.9	7.5	6.5	2.9	0.9	41.4
1978	0.7	0.7	0.8	4.6	5.4	5.6	7.1	7.1	7.4	7.6	7.5	7.3	62.0
1979	6.6	3.3	0.3	3.3	4.1	5.7	6.1	7.1	7.4	7.6	7.5	7.0	66.1
1980	4.1	1.8	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.2	66.5
1981	4.6	1.8	0.3	3.3	4.1	5.7	6.2	7.2	7.5	7.7	7.6	7.3	63.4
1982	4.7	7.2	4.7	3.4	4.2	5.6	7.1	8.1	7.8	7.6	7.5	7.8	75.8
1983	8.1	7.1	4.6	3.3	4.1	5.6	7.1	8.1	7.8	8.1	8.1	7.8	79.8
1984	8.1	7.1	4.6	3.3	4.1	5.6	6.1	7.1	7.4	7.6	7.5	7.3	75.9
1985	4.9	7.1	4.6	0.4	4.1	5.2	6.1	7.1	7.4	7.6	7.5	5.8	67.7
1986	1.8	1.8	4.6	3.3	4.1	5.8	6.2	7.2	7.5	7.6	7.5	6.0	63.4
1987	2.1	0.0	0.0	0.0	4.6	6.1	6.5	7.6	7.8	7.9	6.6	4.3	53.4
1988	0.3	0.3	0.3	4.1	0.3	5.9	6.9	7.9	7.3	6.3	2.7	0.7	43.0
1989	0.5	0.5	0.6	0.6	0.6	5.9	6.2	7.2	7.5	7.5	5.8	3.0	45.8
1990	0.0	0.0	0.0	3.8	0.0	5.8	6.4	7.3	7.5	5.8	4.1	0.0	40.6
1991	0.0	0.1	0.1	0.1	0.1	5.6	6.2	8.1	7.3	7.3	5.8	5.0	45.6
1992	0.0	0.0	0.0	0.0	4.6	6.2	6.7	7.7	7.8	7.9	6.5	4.2	51.5
1993	0.4	0.3	0.4	4.3	5.1	5.7	7.1	8.1	7.8	7.6	7.5	7.3	61.6
AVG:	3.5	3.3	2.7	2.5	3.4	5.6	6.5	7.4	7.5	7.3	6.5	5.2	61.5
MIN:	0.0	0.0	0.0	0.0	0.0	4.8	6.1	4.9	6.3	5.7	1.6	0.0	35.8
MAX:	8.1	7.8	5.9	4.6	5.4	6.3	7.3	8.1	7.8	8.1	8.1	7.8	79.8

Table 3.5.2-12. Simulated SCWA CVP Diversions @ Freeport (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1923	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1924	1.8	1.8	0.3	0.0	0.0	4.0	5.2	4.9	3.0	0.8	0.2	0.0	22.0
1925	0.0	0.0	0.0	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	26.3
1926	0.0	0.0	0.0	0.0	0.0	3.4	5.6	5.9	5.7	1.8	0.1	0.0	22.5
1927	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1928	1.8	1.8	0.3	0.0	0.0	0.3	4.0	5.9	6.0	6.1	5.6	2.3	34.2
1929	0.0	0.0	0.0	0.0	0.0	4.2	5.5	5.2	3.1	0.8	0.2	0.0	19.1
1930	0.0	0.0	0.0	0.0	0.0	3.5	6.1	6.4	6.3	1.9	0.1	0.0	24.3
1931	0.0	0.0	0.0	0.0	0.0	4.0	5.2	4.8	2.9	0.8	0.2	0.0	17.8
1932	0.0	0.0	0.0	0.0	0.0	3.4	5.6	5.8	5.7	1.7	0.1	0.0	22.2
1933	0.0	0.0	0.0	0.0	0.0	4.2	5.5	5.1	3.1	0.8	0.2	0.0	18.9
1934	0.0	0.0	0.0	0.0	0.0	3.3	5.4	5.6	5.5	1.7	0.1	0.0	21.4
1935	0.0	0.0	0.0	0.0	0.0	1.5	3.9	5.6	6.1	5.4	2.0	0.1	24.5
1936	0.0	0.0	0.0	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	26.3
1937	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.0
1938	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1939	1.8	1.8	0.3	0.0	0.0	0.3	3.8	5.6	5.7	5.7	5.3	2.2	32.5
1940	0.0	0.0	0.0	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	31.0
1941	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1942	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1943	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1944	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1945	0.0	0.0	0.0	0.0	0.0	1.4	3.7	4.4	5.1	6.3	6.4	3.6	30.8
1946	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1947	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1948	0.0	0.0	0.0	0.0	0.0	1.0	2.8	4.4	5.1	6.3	6.4	3.6	29.5
1949	1.8	1.8	0.3	0.0	0.0	0.2	5.9	6.1	6.3	6.3	6.3	1.7	36.7
1950	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.0
1951	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1952	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1953	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1954	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1955	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1956	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1957	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1958	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1959	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1960	1.8	1.8	0.3	0.0	0.0	2.7	5.7	6.0	5.8	1.8	0.1	0.0	26.0
1961	0.0	0.0	0.0	0.0	0.0	0.2	5.8	6.0	6.1	6.2	6.2	1.7	32.2
1962	0.0	0.0	0.0	0.0	0.0	1.3	3.7	4.4	5.1	6.3	6.4	3.6	30.7
1963	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1964	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1965	0.0	0.0	0.0	0.0	0.0	1.3	2.9	4.4	5.1	6.3	6.4	3.6	29.9
1966	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1967	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1968	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1969	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1970	1.8	1.8	0.3	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	34.9
1971	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1972	1.8	1.8	0.3	0.0	0.0	0.4	4.2	6.1	6.3	6.3	5.8	2.4	35.4
1973	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1974	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1975	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1976	1.8	1.8	0.3	0.0	0.0	3.3	5.4	5.7	5.5	1.7	0.1	0.0	25.6
1977	0.0	0.0	0.0	0.0	0.0	4.5	5.8	5.4	3.3	0.9	0.2	0.0	20.1
1978	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1979	1.8	1.8	0.3	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	34.9
1980	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1981	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1982	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1983	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1984	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1985	1.8	1.8	0.3	0.0	0.0	1.4	3.7	4.4	5.1	6.3	6.4	3.6	34.8
1986	1.8	1.8	0.3	0.0	0.0	0.2	5.8	6.0	6.2	6.2	6.2	1.7	36.2
1987	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.1
1988	0.0	0.0	0.0	0.0	0.0	4.4	5.8	5.4	3.3	0.9	0.2	0.0	19.9
1989	0.0	0.0	0.0	0.0	0.0	1.5	4.9	5.6	6.1	5.4	2.0	0.1	25.5
1990	0.0	0.0	0.0	0.0	0.0	0.4	5.6	5.8	5.7	0.0	0.0	0.0	17.5
1991	0.0	0.0	0.0	0.0	0.0	4.6	6.0	5.6	3.4	0.9	0.2	0.0	20.6
1992	0.0	0.0	0.0	0.0	0.0	2.0	4.9	5.6	6.1	5.4	2.0	0.1	25.9
1993	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.0
AVG:	1.0	1.0	0.2	0.0	0.0	1.9	4.3	4.9	5.2	5.1	4.4	2.2	30.3
MIN:	0.0	0.0	0.0	0.0	0.0	0.2	2.8	4.4	2.9	0.0	0.0	0.0	17.5
MAX:	1.8	1.8	0.3	0.0	0.0	4.6	6.1	6.4	6.3	6.3	6.4	3.6	36.7

Table 3.5.2-13. Simulated SCWA CVP Diversions @ Freeport (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1923	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1924	1.8	1.8	0.3	0.0	0.0	4.0	5.2	4.9	3.0	0.8	0.2	0.0	22.0
1925	0.0	0.0	0.0	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	26.3
1926	0.0	0.0	0.0	0.0	0.0	3.4	5.6	5.9	5.7	1.8	0.1	0.0	22.5
1927	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1928	1.8	1.8	0.3	0.0	0.0	0.3	4.0	5.9	6.0	6.1	5.6	2.3	34.2
1929	0.0	0.0	0.0	0.0	0.0	4.3	5.6	5.2	3.2	0.9	0.2	0.0	19.2
1930	0.0	0.0	0.0	0.0	0.0	3.6	6.2	6.5	6.3	1.9	0.1	0.0	24.6
1931	0.0	0.0	0.0	0.0	0.0	4.0	5.2	4.8	2.9	0.8	0.2	0.0	17.9
1932	0.0	0.0	0.0	0.0	0.0	3.4	5.6	5.9	5.7	1.8	0.1	0.0	22.5
1933	0.0	0.0	0.0	0.0	0.0	4.2	5.5	5.1	3.1	0.8	0.2	0.0	18.9
1934	0.0	0.0	0.0	0.0	0.0	3.3	5.5	5.7	5.6	1.7	0.1	0.0	21.9
1935	0.0	0.0	0.0	0.0	0.0	1.5	4.1	5.6	6.1	5.4	2.0	0.1	24.7
1936	0.0	0.0	0.0	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	26.3
1937	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.1
1938	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1939	1.8	1.8	0.3	0.0	0.0	0.3	3.8	5.6	5.7	5.8	5.3	2.2	32.6
1940	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.0
1941	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1942	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1943	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1944	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1945	0.0	0.0	0.0	0.0	0.0	1.4	3.7	4.4	5.1	6.3	6.4	3.6	30.8
1946	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1947	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1948	0.0	0.0	0.0	0.0	0.0	1.0	2.8	4.4	5.1	6.3	6.4	3.6	29.5
1949	1.8	1.8	0.3	0.0	0.0	0.2	5.9	6.2	6.3	6.3	6.3	1.7	36.9
1950	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.0
1951	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1952	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1953	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1954	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1955	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1956	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1957	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1958	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1959	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1960	1.8	1.8	0.3	0.0	0.0	2.8	5.8	6.0	5.9	1.8	0.1	0.0	26.4
1961	0.0	0.0	0.0	0.0	0.0	0.2	5.9	6.1	6.3	6.3	6.3	1.7	32.7
1962	0.0	0.0	0.0	0.0	0.0	1.3	3.7	4.4	5.1	6.3	6.4	3.6	30.7
1963	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1964	1.8	1.8	0.3	0.0	0.0	2.3	4.9	5.6	6.1	5.4	2.0	0.1	30.2
1965	0.0	0.0	0.0	0.0	0.0	1.3	2.9	4.4	5.1	6.3	6.4	3.6	29.9
1966	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1967	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1968	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1969	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1970	1.8	1.8	0.3	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	34.9
1971	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1972	1.8	1.8	0.3	0.0	0.0	0.4	4.2	6.1	6.3	6.3	5.8	2.4	35.4
1973	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1974	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1975	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1976	1.8	1.8	0.3	0.0	0.0	3.3	5.4	5.7	5.5	1.7	0.1	0.0	25.6
1977	0.0	0.0	0.0	0.0	0.0	4.5	5.8	5.4	3.3	0.9	0.2	0.0	20.1
1978	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.1
1979	1.8	1.8	0.3	0.0	0.0	1.5	3.7	4.4	5.1	6.3	6.4	3.6	34.9
1980	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1981	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1982	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1983	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1984	1.8	1.8	0.3	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	35.0
1985	1.8	1.8	0.3	0.0	0.0	1.4	3.7	4.4	5.1	6.3	6.4	3.6	34.8
1986	1.8	1.8	0.3	0.0	0.0	0.2	5.8	6.0	6.2	6.2	6.2	1.7	36.2
1987	0.0	0.0	0.0	0.0	0.0	2.1	4.9	5.6	6.1	5.4	2.0	0.1	26.1
1988	0.0	0.0	0.0	0.0	0.0	4.5	5.9	5.5	3.3	0.9	0.2	0.0	20.3
1989	0.0	0.0	0.0	0.0	0.0	1.5	4.9	5.6	6.1	5.4	2.0	0.1	25.5
1990	0.0	0.0	0.0	0.0	0.0	0.4	5.6	5.8	5.7	0.0	0.0	0.0	17.5
1991	0.0	0.0	0.0	0.0	0.0	4.6	6.0	5.6	3.4	0.9	0.2	0.0	20.6
1992	0.0	0.0	0.0	0.0	0.0	2.0	4.9	5.6	6.1	5.4	2.0	0.1	26.0
1993	0.0	0.0	0.0	0.0	0.0	1.6	3.7	4.4	5.1	6.3	6.4	3.6	31.0
AVG:	1.0	1.0	0.2	0.0	0.0	1.9	4.3	4.9	5.2	5.1	4.4	2.2	30.3
MIN:	0.0	0.0	0.0	0.0	0.0	0.2	2.8	4.4	2.9	0.0	0.0	0.0	17.5
MAX:	1.8	1.8	0.3	0.0	0.0	4.6	6.2	6.5	6.3	6.3	6.4	3.6	36.9

Table 3.5.2-14. Simulated SCWA Appropriated Excess Water @ Freeport (TAF) Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	0.0	0.0	4.3	3.3	4.1	4.0	0.0	3.7	2.7	0.0	0.0	0.0	22.2
1923	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1924	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1925	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
1926	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1927	0.0	7.8	5.3	3.8	4.6	4.0	3.4	0.0	2.7	0.0	0.0	0.0	31.6
1928	0.0	5.3	4.3	3.3	0.0	5.4	3.1	0.0	0.0	0.0	0.0	0.0	21.5
1929	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1930	0.0	0.0	5.3	3.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	11.2
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	5.9	4.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
1933	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1934	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1935	0.0	0.0	0.0	4.2	0.0	4.3	3.4	0.0	0.0	0.0	0.0	0.0	11.9
1936	0.0	0.0	0.0	3.8	4.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	11.7
1937	0.0	0.0	0.0	0.0	4.6	3.7	2.2	0.0	0.0	0.0	0.0	0.0	10.5
1938	0.0	7.8	5.3	3.8	4.6	4.0	3.4	3.7	2.7	0.0	0.0	4.2	39.5
1939	6.2	0.0	4.3	3.3	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	23.5
1940	0.0	0.0	0.0	3.8	4.7	4.1	3.4	0.0	0.0	0.0	0.0	0.0	16.0
1941	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	0.0	0.0	0.0	4.2	27.1
1942	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	29.8
1943	6.2	5.3	4.3	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	0.0	30.7
1944	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1945	0.0	7.8	5.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
1946	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1947	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.7
1949	0.0	0.0	0.0	0.0	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	9.6
1950	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1951	0.0	7.8	5.3	3.8	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5
1952	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	29.8
1953	6.2	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	18.1
1954	0.0	5.3	0.0	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	0.0	20.1
1955	0.0	0.0	4.3	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	10.9
1956	0.0	0.0	5.3	3.8	4.6	4.0	0.0	3.7	2.7	0.0	0.0	4.2	28.3
1957	6.2	0.0	0.0	0.0	4.1	4.0	0.0	3.7	0.0	0.0	0.0	0.0	18.1
1958	6.2	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	36.0
1959	6.2	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1960	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
1961	0.0	0.0	0.0	0.0	4.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0	10.3
1962	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
1963	6.2	5.3	4.3	3.3	4.1	0.0	3.4	3.7	0.0	0.0	0.0	0.0	30.4
1964	0.0	5.3	0.0	3.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	11.2
1965	0.0	0.0	5.3	3.8	4.6	0.0	4.4	0.0	0.0	0.0	0.0	0.0	18.0
1966	0.0	5.3	4.3	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1967	0.0	5.3	4.3	3.3	4.1	4.0	3.4	3.7	2.7	1.8	0.0	4.2	36.9
1968	6.2	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	21.9
1969	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	0.0	25.6
1970	6.2	0.0	4.3	3.3	4.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	22.1
1971	0.0	5.3	4.3	3.3	0.0	4.0	0.0	3.7	0.0	0.0	0.0	4.2	24.9
1972	0.0	0.0	4.3	3.3	4.1	5.3	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1973	0.0	7.1	5.0	3.6	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2
1974	0.0	5.3	4.3	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	4.2	28.7
1975	6.2	0.0	4.3	0.0	4.1	4.0	0.0	3.7	0.0	0.0	0.0	4.2	26.6
1976	6.2	0.0	0.0	0.0	4.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	4.6	5.4	4.0	3.4	0.0	0.0	0.0	0.0	0.0	17.4
1979	0.0	0.0	0.0	3.3	4.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	11.6
1980	0.0	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
1981	0.0	0.0	0.0	3.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	11.5
1982	0.0	5.4	4.4	3.4	4.2	4.0	3.4	3.7	2.7	0.0	0.0	4.2	35.5
1983	6.2	5.3	4.3	3.3	4.1	4.0	3.4	3.7	2.7	1.8	1.7	4.2	44.8
1984	6.2	5.3	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3
1985	0.0	5.3	4.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1986	0.0	0.0	4.3	3.3	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	17.2
1987	0.0	0.0	0.0	0.0	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
1988	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1989	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	4.3
1990	0.0	0.0	0.0	3.8	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	9.2
1991	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.5	0.0	0.0	0.0	0.0	3.6
1992	0.0	0.0	0.0	0.0	4.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	8.8
1993	0.0	0.0	5.3	4.3	5.1	4.1	3.4	3.7	2.7	0.0	0.0	0.0	28.6
AVG:	1.1	1.5	2.4	2.4	3.3	2.6	1.0	1.0	0.5	0.0	0.0	0.8	16.6
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	6.2	7.8	5.9	4.6	5.4	5.7	4.4	3.7	2.7	1.8	1.7	4.2	44.8

Table 3.5.2-15. Simulated SCWA Appropriated Excess Water @ Freeport (TAF)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	0.0	0.0	4.3	3.3	4.1	4.0	0.0	3.7	2.7	0.0	0.0	0.0	22.2
1923	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1924	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1925	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
1926	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1927	0.0	7.8	5.3	3.8	4.6	4.0	3.4	0.0	2.7	0.0	0.0	0.0	31.6
1928	0.0	5.3	4.3	3.3	0.0	5.4	3.1	0.0	0.0	0.0	0.0	0.0	21.4
1929	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
1930	0.0	0.0	5.3	3.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	11.1
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	5.9	4.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
1933	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1934	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1935	0.0	0.0	0.0	4.2	0.0	4.3	3.1	0.0	0.0	0.0	0.0	0.0	11.6
1936	0.0	0.0	0.0	3.8	4.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	11.7
1937	0.0	0.0	0.0	0.0	4.6	3.6	2.2	0.0	0.0	0.0	0.0	0.0	10.4
1938	0.0	7.8	5.3	3.8	4.6	4.0	3.4	3.7	2.7	0.0	0.0	4.2	39.5
1939	6.2	0.0	4.3	3.3	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	23.5
1940	0.0	0.0	0.0	3.8	4.7	4.1	3.4	0.0	0.0	0.0	0.0	0.0	16.0
1941	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	0.0	0.0	0.0	4.2	27.1
1942	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	29.8
1943	6.2	5.3	4.3	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	0.0	30.7
1944	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1945	0.0	7.8	5.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
1946	0.0	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
1947	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.7
1949	0.0	0.0	0.0	0.0	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	9.6
1950	0.0	0.0	0.0	3.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
1951	0.0	7.8	5.3	3.8	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5
1952	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	29.8
1953	6.2	0.0	4.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	18.1
1954	0.0	5.3	0.0	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	0.0	20.1
1955	0.0	0.0	4.3	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	10.9
1956	0.0	0.0	5.3	3.8	4.6	4.0	0.0	3.7	2.7	0.0	0.0	4.2	28.3
1957	6.2	0.0	0.0	0.0	4.1	4.0	0.0	3.7	0.0	0.0	0.0	0.0	18.1
1958	6.2	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	4.2	36.0
1959	6.2	0.0	0.0	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1960	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
1961	0.0	0.0	0.0	0.0	4.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0	10.3
1962	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
1963	6.2	5.3	4.3	3.3	4.1	0.0	3.4	3.7	0.0	0.0	0.0	0.0	30.4
1964	0.0	5.3	0.0	3.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	11.2
1965	0.0	0.0	5.3	3.8	4.6	0.0	4.4	0.0	0.0	0.0	0.0	0.0	18.0
1966	0.0	5.3	4.3	3.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1967	0.0	5.3	4.3	3.3	4.1	4.0	3.4	3.7	2.7	1.8	0.0	4.2	36.9
1968	6.2	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	21.9
1969	0.0	0.0	4.3	3.3	4.1	4.0	3.4	3.7	2.7	0.0	0.0	0.0	25.6
1970	6.2	0.0	4.3	3.3	4.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	22.1
1971	0.0	5.3	4.3	3.3	0.0	4.0	0.0	3.7	0.0	0.0	0.0	4.2	24.9
1972	0.0	0.0	4.3	3.3	4.1	5.3	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1973	0.0	7.1	5.0	3.6	4.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2
1974	0.0	5.3	4.3	3.3	4.1	4.0	3.4	0.0	0.0	0.0	0.0	4.2	28.7
1975	6.2	0.0	0.0	0.0	4.1	4.0	0.0	3.7	0.0	0.0	0.0	4.2	22.3
1976	6.2	0.0	0.0	0.0	4.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	4.6	5.4	4.0	3.4	0.0	0.0	0.0	0.0	0.0	17.4
1979	0.0	0.0	0.0	3.3	4.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	11.6
1980	0.0	0.0	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
1981	0.0	0.0	0.0	3.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	11.5
1982	0.0	5.4	4.4	3.4	4.2	4.0	3.4	3.7	2.7	0.0	0.0	4.2	35.5
1983	6.2	5.3	4.3	3.3	4.1	4.0	3.4	3.7	2.7	1.8	1.7	4.2	44.8
1984	6.2	5.3	4.3	3.3	4.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3
1985	0.0	5.3	4.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1986	0.0	0.0	4.3	3.3	4.1	5.5	0.0	0.0	0.0	0.0	0.0	0.0	17.2
1987	0.0	0.0	0.0	0.0	4.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	8.5
1988	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
1989	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	4.3
1990	0.0	0.0	0.0	3.8	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	9.2
1991	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.5	0.0	0.0	0.0	0.0	3.6
1992	0.0	0.0	0.0	0.0	4.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	8.8
1993	0.0	0.0	0.0	4.3	5.1	4.1	3.4	3.7	2.7	0.0	0.0	0.0	23.3
AVG:	1.1	1.5	2.3	2.4	3.3	2.6	1.0	1.0	0.5	0.0	0.0	0.8	16.5
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	6.2	7.8	5.9	4.6	5.4	5.7	4.4	3.7	2.7	1.8	1.7	4.2	44.8

Table 3.5.2-16. Simulated "Other" Water Diversions @ Freeport (TAF)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	5.0	3.8	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.3	1.1	3.7	17.4
1923	5.0	3.8	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	24.5
1924	0.0	0.0	0.0	0.0	0.0	2.1	1.8	0.0	4.0	5.7	2.2	0.0	15.8
1925	0.6	0.7	0.8	0.8	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	15.9
1926	0.0	0.1	0.0	0.0	0.0	1.8	0.6	1.3	1.7	4.0	3.7	0.0	13.1
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	1.3	1.1	3.7	8.9
1928	5.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.5	1.9	4.7	15.8
1929	4.8	0.0	0.0	0.0	0.0	1.0	0.7	2.0	3.3	4.9	1.5	0.0	18.2
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.2	5.4	5.5	2.7	15.6
1931	0.4	0.0	0.0	0.0	0.0	1.9	1.7	3.0	3.7	5.5	1.7	0.0	17.9
1932	0.3	0.5	0.0	0.0	0.0	1.8	0.7	1.4	1.8	4.0	3.7	0.0	14.2
1933	0.0	0.0	0.0	0.0	0.0	1.1	0.8	2.1	3.2	4.9	1.4	0.0	13.5
1934	0.0	0.0	0.0	0.0	0.0	2.3	1.3	2.0	2.1	4.5	3.1	0.3	15.6
1935	0.2	0.3	0.3	0.0	0.3	0.0	0.0	1.6	1.4	2.2	5.1	5.5	17.1
1936	0.7	0.0	0.0	0.0	0.0	0.0	1.3	1.6	1.4	2.2	4.3	4.1	15.6
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.6	1.4	2.2	5.4	5.6	16.2
1938	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	4.5
1939	0.0	3.7	0.0	0.0	0.0	0.0	2.5	1.8	1.9	2.0	2.0	3.4	17.3
1940	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	11.4
1941	4.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	1.1	0.0	10.6
1942	5.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	11.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	11.2
1944	4.7	1.5	0.0	0.0	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	19.2
1945	0.0	0.0	0.0	0.9	0.0	3.8	2.4	2.8	2.3	1.3	1.1	2.2	16.7
1946	0.0	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	15.6
1947	0.0	0.0	0.0	0.0	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	13.1
1948	0.0	0.1	0.0	0.0	0.0	4.3	3.5	0.0	2.3	1.3	1.1	2.5	15.1
1949	1.3	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.2	1.3	1.2	4.3	10.8
1950	2.1	0.0	0.0	0.0	0.0	3.1	1.3	1.6	1.4	1.4	3.8	0.3	15.1
1951	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	13.5
1952	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	5.2
1953	0.0	3.7	0.0	0.0	0.2	3.2	2.4	2.8	2.3	1.3	1.1	0.0	17.0
1954	3.7	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	15.0
1955	4.7	1.5	0.0	0.0	0.0	0.0	1.3	1.6	1.4	2.2	4.3	4.1	21.2
1956	0.0	0.1	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.3	1.1	0.0	4.9
1957	0.0	3.7	3.8	2.9	0.0	0.0	2.4	0.0	2.3	1.3	1.1	3.7	21.3
1958	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	6.2
1959	0.0	3.7	3.8	0.0	0.0	3.6	2.5	2.9	2.4	1.4	1.3	2.3	23.9
1960	0.0	0.0	0.0	0.0	0.0	2.6	0.5	1.3	1.5	3.9	3.2	0.0	13.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.5	1.5	1.5	4.3	10.7
1962	1.8	0.1	0.0	1.0	0.0	3.9	2.4	2.8	2.3	1.3	0.9	2.2	18.7
1963	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	2.3	1.3	1.1	3.7	11.7
1964	4.6	0.0	3.8	0.0	0.0	2.8	1.3	0.0	1.4	2.2	4.2	4.8	25.1
1965	0.0	0.1	0.0	0.0	0.0	3.7	0.0	2.8	2.3	1.3	1.1	3.1	14.3
1966	2.1	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	17.7
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1
1968	0.0	3.7	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	17.2
1969	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	3.7	8.9
1970	0.0	3.7	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.5	17.1
1971	2.5	0.0	0.0	0.0	3.6	0.0	2.4	0.0	2.3	1.3	1.1	0.0	13.3
1972	5.0	3.6	0.0	0.0	0.0	0.0	2.0	1.1	1.2	1.2	1.7	3.7	19.5
1973	2.1	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	15.6
1974	2.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	0.0	10.3
1975	0.0	3.7	0.0	3.1	0.0	0.0	2.4	0.0	2.3	1.3	1.1	0.0	13.9
1976	0.0	3.7	3.8	0.0	0.0	0.0	1.5	2.2	2.3	5.7	6.2	1.7	27.2
1977	0.4	0.6	0.6	0.6	0.6	1.6	1.2	2.5	4.1	5.6	2.7	0.9	21.3
1978	0.7	0.7	0.8	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	13.5
1979	4.7	1.5	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.4	19.6
1980	2.3	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	15.8
1981	2.8	0.0	0.0	0.0	0.0	0.0	2.5	2.9	2.4	1.4	1.2	3.7	16.9
1982	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	5.3
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.7	13.6
1985	3.0	0.0	0.0	0.4	0.0	3.8	2.4	2.8	2.3	1.3	1.1	2.2	19.2
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.3	1.4	1.3	4.3	10.0
1987	2.1	0.0	0.0	0.0	0.0	0.0	1.7	2.0	1.8	2.5	4.6	4.2	18.9
1988	0.3	0.3	0.3	0.0	0.3	1.4	1.0	2.4	4.0	5.4	2.5	0.7	18.6
1989	0.5	0.5	0.6	0.6	0.6	0.0	1.3	1.6	1.4	2.2	3.8	2.9	16.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	1.8	5.8	4.1	0.0	14.0
1991	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.0	3.9	6.3	5.6	5.0	21.5
1992	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1	1.8	2.5	4.6	4.1	16.8
1993	0.4	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	3.7	7.3
AVG:	1.3	0.8	0.3	0.1	0.1	1.0	1.2	1.6	1.8	2.1	2.1	2.2	14.7
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	5.0	3.8	3.8	3.1	3.6	4.3	3.5	3.0	4.1	6.3	6.2	5.6	27.2

Table 3.5.2-17. Simulated "Other" Water Diversions @ Freeport (TAF)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1922	5.0	3.8	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.3	1.1	3.7	17.4
1923	5.0	3.8	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	24.5
1924	0.0	0.0	0.0	0.0	0.0	2.1	1.8	0.0	4.0	5.7	2.2	0.0	15.8
1925	0.6	0.7	0.8	0.8	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	15.9
1926	0.0	0.1	0.0	0.0	0.0	1.8	0.6	1.3	1.7	4.0	3.7	0.0	13.1
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	1.3	1.1	3.7	8.9
1928	5.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	1.5	1.9	4.7	15.8
1929	4.8	0.0	0.0	0.0	0.0	1.0	0.7	2.0	3.3	4.9	1.5	0.0	18.2
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.2	5.4	5.5	2.7	15.6
1931	0.4	0.0	0.0	0.0	0.0	1.9	1.7	3.0	3.7	5.5	1.7	0.0	17.9
1932	0.3	0.5	0.0	0.0	0.0	1.8	0.7	1.4	1.8	4.0	3.7	0.0	14.2
1933	0.0	0.0	0.0	0.0	0.0	1.1	0.8	2.1	3.2	4.9	1.4	0.0	13.5
1934	0.0	0.0	0.0	0.0	0.0	2.3	1.3	2.0	2.1	4.5	3.1	0.3	15.6
1935	0.2	0.3	0.3	0.0	0.3	0.0	0.0	1.6	1.4	2.2	5.1	5.5	17.1
1936	0.7	0.0	0.0	0.0	0.0	0.0	1.3	1.6	1.4	2.2	4.3	4.1	15.6
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.6	1.4	2.2	5.4	5.6	16.2
1938	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	4.5
1939	0.0	3.7	0.0	0.0	0.0	0.0	2.5	1.8	1.9	2.0	2.0	3.4	17.3
1940	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	11.4
1941	4.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	1.1	0.0	10.6
1942	5.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	11.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	11.2
1944	4.7	1.5	0.0	0.0	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	19.2
1945	0.0	0.0	0.0	0.9	0.0	3.8	2.4	2.8	2.3	1.3	1.1	2.2	16.7
1946	0.0	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	15.6
1947	0.0	0.0	0.0	0.0	0.0	2.8	1.3	1.6	1.4	1.6	3.8	0.5	13.1
1948	0.0	0.1	0.0	0.0	0.0	4.3	3.5	0.0	2.3	1.3	1.1	2.5	15.1
1949	1.3	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.2	1.3	1.2	4.3	10.8
1950	2.1	0.0	0.0	0.0	0.0	3.1	1.3	1.6	1.4	1.4	3.8	0.3	15.1
1951	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	13.5
1952	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	5.2
1953	0.0	3.7	0.0	0.0	0.2	3.2	2.4	2.8	2.3	1.3	1.1	0.0	17.0
1954	3.7	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	15.0
1955	4.7	1.5	0.0	0.0	0.0	0.0	1.3	1.6	1.4	2.2	4.3	4.1	21.2
1956	0.0	0.1	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.3	1.1	0.0	4.9
1957	0.0	3.7	3.8	2.9	0.0	0.0	2.4	0.0	2.3	1.3	1.1	3.7	21.3
1958	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	6.2
1959	0.0	3.7	3.8	0.0	0.0	3.6	2.5	2.9	2.4	1.4	1.3	2.3	23.9
1960	0.0	0.0	0.0	0.0	0.0	2.6	0.5	1.3	1.5	3.9	3.2	0.0	13.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.5	1.5	1.5	4.3	10.7
1962	1.8	0.1	0.0	1.0	0.0	3.9	2.4	2.8	2.3	1.3	0.9	2.2	18.7
1963	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	2.3	1.3	1.1	3.7	11.7
1964	4.6	0.0	3.8	0.0	0.0	2.8	1.3	0.0	1.4	2.2	4.2	4.8	25.1
1965	0.0	0.1	0.0	0.0	0.0	3.7	0.0	2.8	2.3	1.3	1.1	3.1	14.3
1966	2.1	0.0	0.0	0.0	0.0	3.5	2.4	2.8	2.3	1.3	1.1	2.2	17.7
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1
1968	0.0	3.7	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	17.2
1969	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	3.7	8.9
1970	0.0	3.7	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.5	17.1
1971	2.5	0.0	0.0	0.0	3.6	0.0	2.4	0.0	2.3	1.3	1.1	0.0	13.3
1972	5.0	3.6	0.0	0.0	0.0	0.0	2.0	1.1	1.2	1.2	1.7	3.7	19.5
1973	2.1	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	15.6
1974	2.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	0.0	10.3
1975	0.0	3.7	0.0	3.1	0.0	0.0	2.4	0.0	2.3	1.3	1.1	0.0	13.9
1976	0.0	3.7	3.8	0.0	0.0	0.0	1.5	2.2	2.3	5.7	6.2	1.7	27.2
1977	0.4	0.6	0.6	0.6	0.6	1.6	1.2	2.5	4.1	5.6	2.7	0.9	21.3
1978	0.7	0.7	0.8	0.0	0.0	0.0	0.0	2.8	2.3	1.3	1.1	3.7	13.5
1979	4.7	1.5	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.4	19.6
1980	2.3	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.6	15.8
1981	2.8	0.0	0.0	0.0	0.0	0.0	2.5	2.9	2.4	1.4	1.2	3.7	16.9
1982	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	5.3
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	2.3	1.3	1.1	3.7	13.6
1985	3.0	0.0	0.0	0.4	0.0	3.8	2.4	2.8	2.3	1.3	1.1	2.2	19.2
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.3	1.4	1.3	4.3	10.0
1987	2.1	0.0	0.0	0.0	0.0	0.0	1.7	2.0	1.8	2.5	4.6	4.2	18.9
1988	0.3	0.3	0.3	0.0	0.3	1.4	1.0	2.4	4.0	5.4	2.5	0.7	18.6
1989	0.5	0.5	0.6	0.6	0.6	0.0	1.3	1.6	1.4	2.2	3.8	2.9	16.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	1.8	5.8	4.1	0.0	14.0
1991	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.0	3.9	6.3	5.6	5.0	21.5
1992	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1	1.8	2.5	4.6	4.1	16.8
1993	0.4	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	3.7	7.3
AVG:	1.3	0.8	0.3	0.1	0.1	1.0	1.2	1.6	1.8	2.1	2.1	2.2	14.7
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	5.0	3.8	3.8	3.1	3.6	4.3	3.5	3.0	4.1	6.3	6.2	5.6	27.2

3.5.3. Reservoir Storage

This section provides reservoir storage results for the FRWP alternatives for a number of key storage facilities in the CVP/SWP system. Data for end-of-September storage exceedences and time series, along with dry period storages, are given in both figures and tables.

Figures 3.5.3-1 through Figures 3.5.3-4 show results for Pardee Reservoir on the EBMUD Mokelumne River system. Alternative 6 Pardee storage results reflect the increased storage capacity after the reservoir is enlarged.

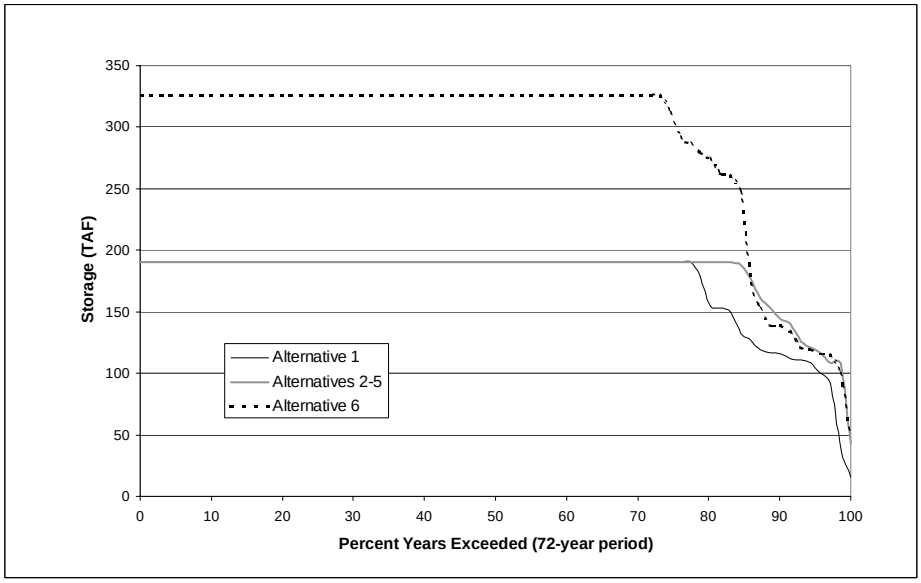


Figure 3.5.3-1 Exceedence for Simulated Pardee Reservoir End-of-September Storage, 2020 LOD

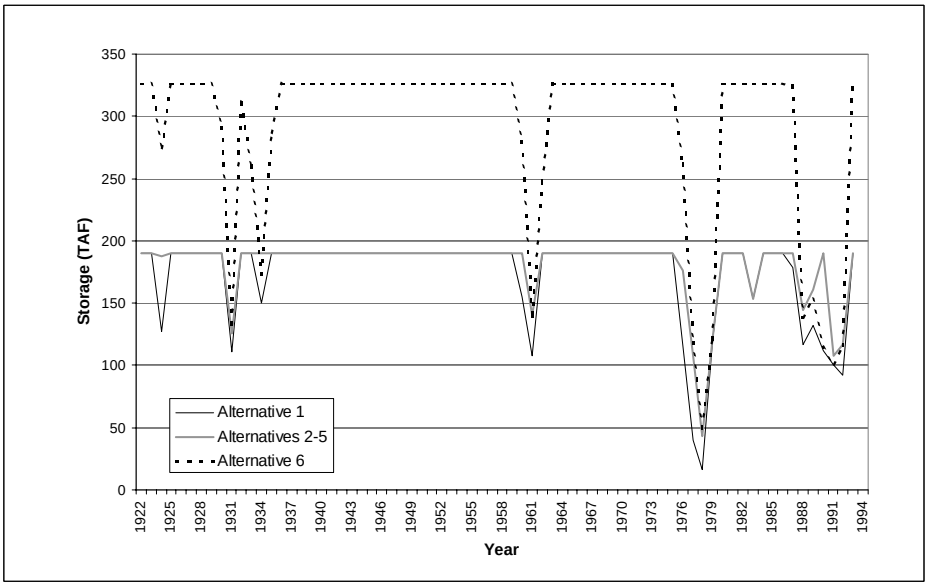


Figure 3.5.3-2. Simulated Pardee Reservoir End-of-September Storage, 2020 LOD

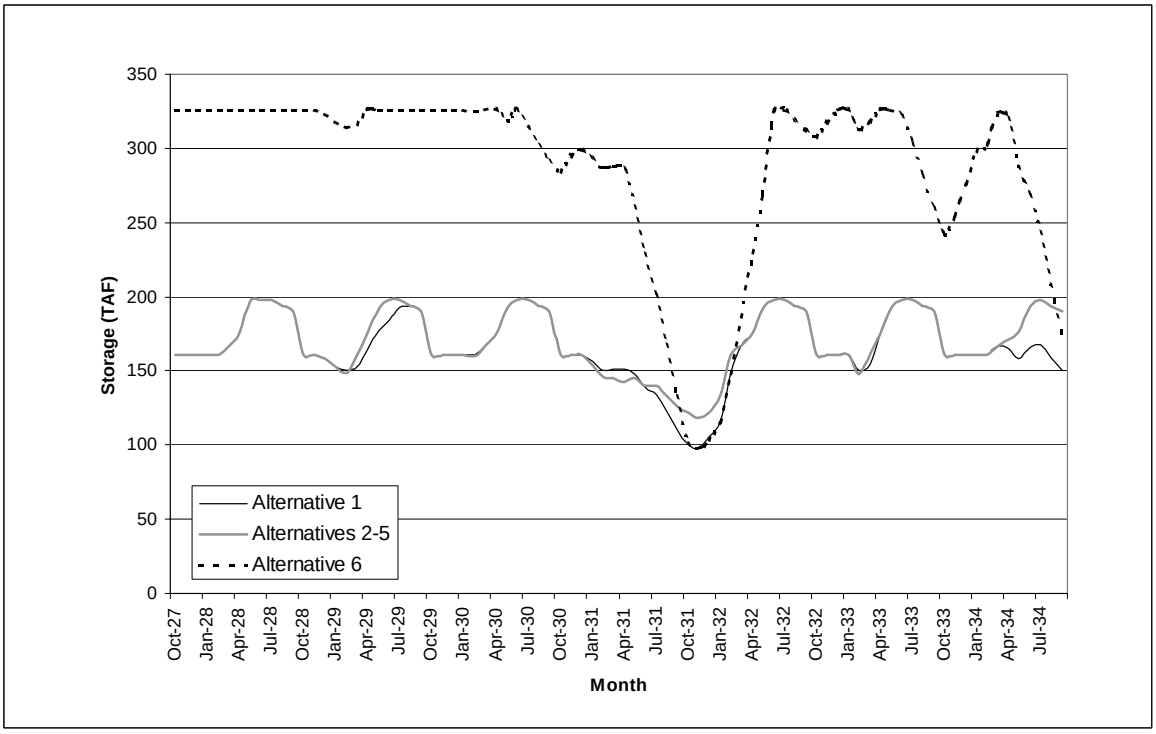


Figure 3.5.3-3. Simulated Pardee Reservoir Drought Period Storage, 2020 LOD (WY 1928-1934)

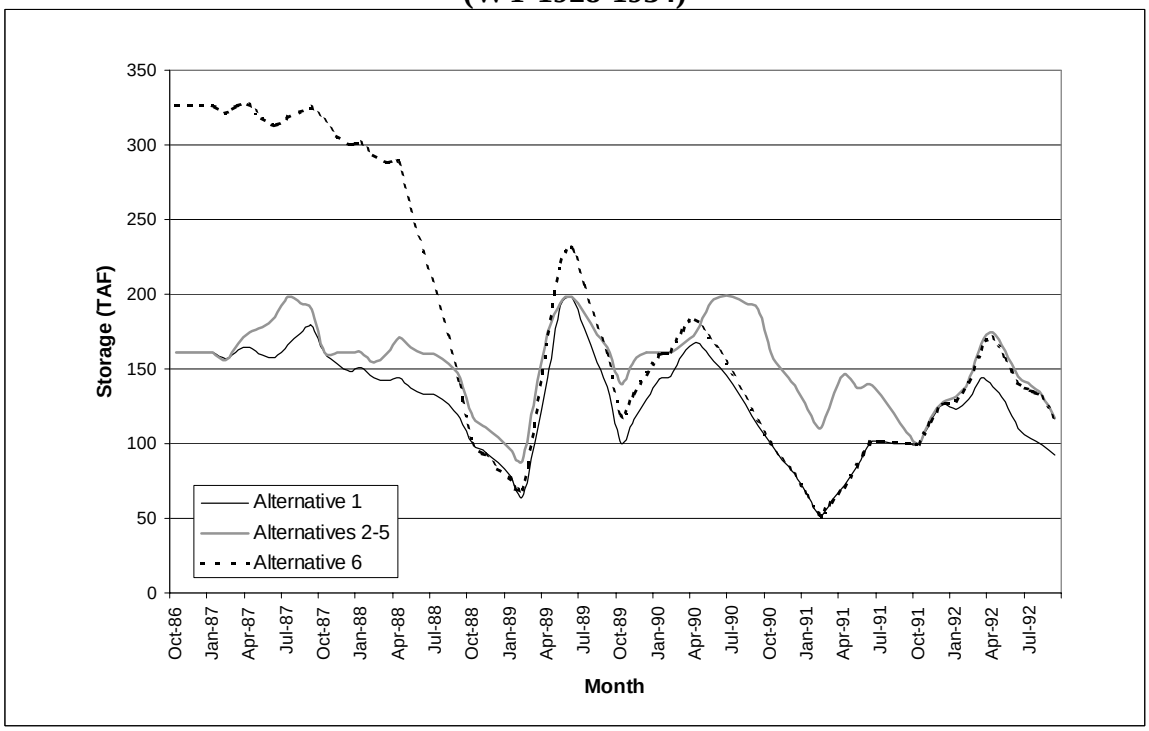


Figure 3.5.3-4. Simulated Pardee Reservoir Drought Period Storage, 2020 LOD (WY 1987-1992)

Table 3.5.3-1. Simulated Pardee Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1923	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1924	161.0	161.0	161.0	161.0	154.0	147.0	150.0	149.0	143.0	137.0	132.0	127.0
1925	128.0	126.0	125.0	132.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1926	161.0	161.0	161.0	161.0	161.0	162.0	175.0	192.0	198.0	198.0	194.0	190.0
1927	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1928	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1929	161.0	161.0	158.0	153.0	150.0	153.0	164.0	177.0	184.0	193.0	194.0	190.0
1930	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1931	161.0	161.0	161.0	156.0	150.0	151.0	151.0	148.0	139.0	134.0	123.0	111.0
1932	100.0	98.0	105.0	116.0	149.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1933	161.0	161.0	161.0	161.0	150.0	155.0	175.0	192.0	198.0	198.0	194.0	190.0
1934	161.0	161.0	161.0	161.0	161.0	167.0	165.0	158.0	166.0	168.0	159.0	150.0
1935	142.0	144.0	146.0	152.0	161.0	167.0	191.0	198.0	198.0	198.0	194.0	190.0
1936	161.0	161.0	161.0	161.0	198.0	189.0	187.0	198.0	198.0	198.0	194.0	190.0
1937	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1938	161.0	161.0	161.0	161.0	171.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1939	161.0	161.0	161.0	161.0	156.0	163.0	172.0	174.0	186.0	194.0	194.0	190.0
1940	161.0	161.0	157.0	161.0	164.0	187.0	190.0	198.0	198.0	198.0	194.0	190.0
1941	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1942	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1943	161.0	161.0	161.0	168.0	161.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1944	161.0	161.0	161.0	161.0	160.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1945	161.0	161.0	161.0	161.0	168.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1946	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1947	161.0	161.0	161.0	161.0	161.0	167.0	175.0	187.0	197.0	198.0	194.0	190.0
1948	161.0	161.0	156.0	161.0	153.0	156.0	175.0	192.0	198.0	198.0	194.0	190.0
1949	161.0	161.0	161.0	161.0	153.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1950	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1951	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1952	161.0	161.0	161.0	172.0	182.0	197.0	198.0	198.0	198.0	198.0	194.0	190.0
1953	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1954	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1955	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1956	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1957	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1958	161.0	161.0	161.0	161.0	163.0	175.0	198.0	198.0	198.0	198.0	194.0	190.0
1959	161.0	161.0	161.0	161.0	161.0	167.0	170.0	173.0	180.0	187.0	194.0	190.0
1960	161.0	161.0	161.0	160.0	161.0	167.0	175.0	188.0	198.0	183.0	169.0	155.0
1961	142.0	151.0	161.0	161.0	155.0	154.0	155.0	139.0	132.0	124.0	116.0	108.0
1962	100.0	99.0	97.0	95.0	132.0	164.0	175.0	192.0	198.0	198.0	194.0	190.0
1963	161.0	161.0	161.0	161.0	161.0	167.0	189.0	198.0	198.0	198.0	194.0	190.0
1964	161.0	161.0	161.0	161.0	161.0	167.0	175.0	183.0	192.0	198.0	194.0	190.0
1965	161.0	161.0	198.0	198.0	198.0	184.0	198.0	198.0	198.0	198.0	194.0	190.0
1966	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	194.0	198.0	194.0	190.0
1967	161.0	161.0	161.0	161.0	161.0	173.0	198.0	198.0	198.0	198.0	194.0	190.0
1968	161.0	161.0	161.0	161.0	161.0	167.0	175.0	180.0	192.0	196.0	194.0	190.0
1969	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1970	161.0	161.0	161.0	198.0	198.0	198.0	179.0	198.0	198.0	198.0	194.0	190.0
1971	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1972	161.0	161.0	161.0	161.0	161.0	167.0	175.0	190.0	198.0	198.0	194.0	190.0
1973	161.0	161.0	161.0	161.0	163.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1974	161.0	161.0	161.0	165.0	161.0	193.0	198.0	198.0	198.0	198.0	194.0	190.0
1975	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1976	161.0	161.0	161.0	161.0	152.0	146.0	143.0	139.0	134.0	127.0	121.0	116.0
1977	107.0	97.0	83.0	73.0	58.0	46.0	43.0	43.0	42.0	41.0	40.0	40.0
1978	29.0	14.0	12.0	12.0	13.0	20.0	20.0	22.0	19.0	17.0	12.0	16.0
1979	16.0	12.0	12.0	21.0	37.0	88.0	133.0	174.0	198.0	180.0	150.0	119.0
1980	100.0	119.0	147.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1981	161.0	161.0	161.0	161.0	161.0	167.0	175.0	184.0	189.0	197.0	194.0	190.0
1982	161.0	161.0	161.0	191.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1983	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	181.0	153.0
1984	126.0	161.0	198.0	198.0	198.0	198.0	191.0	198.0	198.0	198.0	194.0	190.0
1985	161.0	161.0	161.0	161.0	161.0	167.0	175.0	184.0	189.0	193.0	194.0	190.0
1986	161.0	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1987	161.0	161.0	161.0	161.0	157.0	163.0	164.0	159.0	158.0	166.0	174.0	179.0
1988	161.0	153.0	148.0	151.0	144.0	142.0	144.0	137.0	133.0	132.0	126.0	117.0
1989	100.0	94.0	87.0	78.0	64.0	101.0	144.0	192.0	198.0	177.0	154.0	132.0
1990	100.0	116.0	130.0	143.0	145.0	160.0	168.0	159.0	151.0	140.0	126.0	112.0
1991	100.0	89.0	80.0	65.0	52.0	62.0	72.0	85.0	100.0	102.0	100.0	100.0
1992	100.0	115.0	126.0	123.0	130.0	144.0	138.0	128.0	110.0	103.0	99.0	92.0
1993	85.0	73.0	70.0	130.0	161.0	191.0	198.0	198.0	198.0	198.0	194.0	190.0
AVG:	147.9	148.8	151.1	154.5	156.6	164.2	171.4	181.8	183.7	183.2	178.4	173.2
MIN:	16.0	12.0	12.0	12.0	13.0	20.0	20.0	22.0	19.0	17.0	12.0	16.0
MAX:	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0

Table 3.5.3-2. Simulated Pardee Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1923	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1924	161.0	161.0	161.0	161.0	154.0	156.0	168.0	176.0	178.0	181.0	184.0	188.0
1925	161.0	158.0	158.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1926	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1927	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1928	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1929	161.0	161.0	158.0	153.0	149.0	161.0	175.0	192.0	198.0	198.0	194.0	190.0
1930	161.0	161.0	161.0	161.0	160.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1931	161.0	161.0	161.0	154.0	146.0	145.0	143.0	145.0	140.0	140.0	133.0	126.0
1932	122.0	118.0	122.0	134.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1933	161.0	161.0	161.0	161.0	148.0	162.0	175.0	192.0	198.0	198.0	194.0	190.0
1934	161.0	161.0	161.0	161.0	161.0	167.0	171.0	176.0	194.0	198.0	194.0	190.0
1935	161.0	161.0	161.0	161.0	161.0	167.0	191.0	198.0	198.0	198.0	194.0	190.0
1936	161.0	161.0	161.0	161.0	198.0	189.0	187.0	198.0	198.0	198.0	194.0	190.0
1937	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1938	161.0	161.0	161.0	161.0	171.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1939	161.0	161.0	161.0	161.0	156.0	167.0	175.0	186.0	198.0	198.0	194.0	190.0
1940	161.0	161.0	161.0	161.0	170.0	193.0	196.0	198.0	198.0	198.0	194.0	190.0
1941	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1942	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1943	161.0	161.0	161.0	168.0	161.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1944	161.0	161.0	161.0	161.0	160.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1945	161.0	161.0	161.0	161.0	168.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1946	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1947	161.0	161.0	161.0	161.0	161.0	167.0	175.0	187.0	197.0	198.0	194.0	190.0
1948	161.0	161.0	156.0	161.0	153.0	156.0	175.0	192.0	198.0	198.0	194.0	190.0
1949	161.0	161.0	161.0	161.0	153.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1950	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1951	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1952	161.0	161.0	161.0	172.0	182.0	197.0	198.0	198.0	198.0	198.0	194.0	190.0
1953	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1954	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1955	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1956	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1957	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1958	161.0	161.0	161.0	161.0	163.0	175.0	198.0	198.0	198.0	198.0	194.0	190.0
1959	161.0	161.0	161.0	161.0	161.0	167.0	175.0	186.0	198.0	198.0	194.0	190.0
1960	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1961	161.0	161.0	161.0	161.0	153.0	150.0	148.0	141.0	141.0	141.0	140.0	140.0
1962	141.0	139.0	135.0	131.0	161.0	167.0	177.0	192.0	198.0	198.0	194.0	190.0
1963	161.0	161.0	161.0	161.0	170.0	167.0	189.0	198.0	198.0	198.0	194.0	190.0
1964	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1965	161.0	161.0	198.0	198.0	198.0	184.0	198.0	198.0	198.0	198.0	194.0	190.0
1966	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	194.0	198.0	194.0	190.0
1967	161.0	161.0	161.0	161.0	161.0	173.0	198.0	198.0	198.0	198.0	194.0	190.0
1968	161.0	161.0	161.0	161.0	161.0	167.0	175.0	189.0	198.0	198.0	194.0	190.0
1969	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1970	161.0	161.0	161.0	198.0	198.0	198.0	179.0	198.0	198.0	198.0	194.0	190.0
1971	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1972	161.0	161.0	161.0	161.0	161.0	167.0	175.0	190.0	198.0	198.0	194.0	190.0
1973	161.0	161.0	161.0	161.0	163.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1974	161.0	161.0	161.0	165.0	161.0	193.0	198.0	198.0	198.0	198.0	194.0	190.0
1975	161.0	161.0	161.0	161.0	161.0	167.0	175.0	198.0	198.0	198.0	194.0	190.0
1976	161.0	161.0	161.0	161.0	151.0	155.0	161.0	166.0	168.0	170.0	173.0	176.0
1977	161.0	158.0	144.0	134.0	118.0	116.0	122.0	121.0	117.0	114.0	110.0	108.0
1978	100.0	95.0	81.0	71.0	60.0	66.0	60.0	61.0	54.0	52.0	43.0	43.0
1979	42.0	35.0	32.0	38.0	52.0	111.0	160.0	192.0	198.0	181.0	151.0	121.0
1980	100.0	126.0	153.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1981	161.0	161.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1982	161.0	161.0	161.0	191.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1983	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	181.0	153.0
1984	126.0	161.0	198.0	198.0	198.0	198.0	191.0	198.0	198.0	198.0	194.0	190.0
1985	161.0	161.0	161.0	161.0	161.0	167.0	175.0	184.0	189.0	193.0	194.0	190.0
1986	161.0	161.0	161.0	161.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0
1987	161.0	161.0	161.0	161.0	156.0	167.0	175.0	178.0	185.0	198.0	194.0	190.0
1988	161.0	161.0	161.0	161.0	154.0	160.0	171.0	164.0	160.0	159.0	153.0	144.0
1989	118.0	111.0	104.0	96.0	88.0	131.0	175.0	194.0	198.0	187.0	173.0	161.0
1990	140.0	155.0	161.0	161.0	161.0	167.0	175.0	192.0	198.0	198.0	194.0	190.0
1991	161.0	149.0	139.0	123.0	110.0	129.0	147.0	137.0	140.0	132.0	120.0	108.0
1992	100.0	117.0	128.0	131.0	142.0	167.0	175.0	162.0	145.0	139.0	132.0	117.0
1993	100.0	96.0	100.0	161.0	161.0	191.0	198.0	198.0	198.0	198.0	194.0	190.0
AVG:	153.8	154.9	156.9	159.7	160.6	168.8	176.8	188.0	190.1	189.8	185.2	180.3
MIN:	42.0	35.0	32.0	38.0	52.0	66.0	60.0	61.0	54.0	52.0	43.0	43.0
MAX:	161.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.0	190.0

Table 3.5.3-3. Simulated Pardee Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1923	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1924	326.0	326.0	326.0	326.0	318.0	310.0	311.0	308.0	299.0	290.0	281.0	274.0
1925	273.0	269.0	269.0	276.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1926	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1927	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1928	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1929	326.0	326.0	323.0	318.0	314.0	316.0	326.0	326.0	326.0	326.0	326.0	326.0
1930	326.0	326.0	326.0	326.0	325.0	326.0	326.0	319.0	326.0	314.0	302.0	291.0
1931	284.0	295.0	299.0	293.0	287.0	288.0	287.0	261.0	229.0	201.0	168.0	133.0
1932	100.0	98.0	104.0	115.0	148.0	186.0	229.0	269.0	326.0	326.0	319.0	312.0
1933	308.0	317.0	326.0	326.0	313.0	318.0	326.0	326.0	322.0	303.0	282.0	260.0
1934	242.0	254.0	276.0	298.0	302.0	324.0	321.0	288.0	269.0	244.0	208.0	173.0
1935	138.0	141.0	142.0	147.0	165.0	185.0	274.0	314.0	326.0	314.0	299.0	286.0
1936	277.0	288.0	301.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1937	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1938	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1939	326.0	326.0	326.0	326.0	321.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1940	326.0	326.0	321.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1941	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1942	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1943	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1944	326.0	326.0	326.0	326.0	325.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1945	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1946	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1947	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1948	326.0	326.0	320.0	326.0	317.0	321.0	326.0	326.0	326.0	326.0	326.0	326.0
1949	326.0	326.0	326.0	326.0	318.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1950	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1951	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1952	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1953	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1954	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1955	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1956	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1957	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1958	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1959	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1960	326.0	326.0	326.0	323.0	326.0	326.0	326.0	326.0	326.0	310.0	294.0	280.0
1961	267.0	275.0	282.0	285.0	278.0	276.0	276.0	242.0	217.0	191.0	165.0	139.0
1962	114.0	112.0	110.0	107.0	143.0	174.0	241.0	250.0	321.0	298.0	274.0	247.0
1963	230.0	245.0	260.0	283.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1964	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1965	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1966	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1967	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1968	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1969	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1970	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1971	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1972	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1973	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1974	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1975	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1976	326.0	326.0	326.0	326.0	315.0	309.0	305.0	298.0	289.0	279.0	270.0	262.0
1977	251.0	240.0	224.0	215.0	199.0	188.0	184.0	172.0	158.0	145.0	131.0	119.0
1978	100.0	93.0	80.0	70.0	60.0	70.0	66.0	68.0	60.0	58.0	49.0	49.0
1979	48.0	41.0	38.0	44.0	59.0	110.0	151.0	189.0	213.0	191.0	156.0	121.0
1980	96.0	115.0	143.0	290.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1981	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1982	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1983	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1984	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1985	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1986	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0
1987	326.0	326.0	326.0	326.0	321.0	326.0	326.0	318.0	313.0	318.0	322.0	325.0
1988	316.0	306.0	300.0	301.0	293.0	288.0	288.0	257.0	229.0	202.0	172.0	139.0
1989	100.0	92.0	83.0	76.0	69.0	112.0	173.0	221.0	231.0	206.0	179.0	153.0
1990	118.0	134.0	147.0	159.0	161.0	176.0	183.0	171.0	161.0	147.0	131.0	114.0
1991	100.0	89.0	80.0	64.0	52.0	61.0	71.0	85.0	100.0	102.0	101.0	100.0
1992	100.0	115.0	126.0	129.0	141.0	163.0	170.0	157.0	141.0	136.0	131.0	116.0
1993	100.0	96.0	101.0	162.0	212.0	309.0	326.0	326.0	326.0	326.0	326.0	326.0
AVG:	284.9	285.7	286.5	290.4	292.8	297.7	302.6	302.7	302.9	299.0	294.3	289.5
MIN:	48.0	41.0	38.0	44.0	52.0	61.0	66.0	68.0	60.0	58.0	49.0	49.0
MAX:	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0	326.0

Table 3.5.3-4. Simulated Camanche Storage (TAF), Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	310.0	299.0	297.0	298.0	315.0	327.0	333.0	320.0	417.0	370.0	319.0	279.0
1923	299.0	295.0	316.0	324.0	324.0	320.0	341.0	363.0	384.0	347.0	308.0	283.0
1924	303.0	293.0	285.0	277.0	258.0	238.0	223.0	205.0	184.0	164.0	146.0	133.0
1925	124.0	116.0	110.0	104.0	134.0	162.0	194.0	289.0	348.0	320.0	298.0	289.0
1926	307.0	297.0	289.0	283.0	277.0	256.0	239.0	221.0	199.0	178.0	163.0	158.0
1927	185.0	195.0	199.0	212.0	266.0	286.0	317.0	346.0	417.0	367.0	319.0	283.0
1928	302.0	290.0	286.0	282.0	270.0	290.0	313.0	400.0	370.0	345.0	327.0	320.0
1929	337.0	324.0	305.0	286.0	269.0	250.0	230.0	205.0	185.0	162.0	150.0	149.0
1930	174.0	169.0	162.0	160.0	150.0	154.0	145.0	124.0	152.0	136.0	128.0	129.0
1931	157.0	157.0	148.0	135.0	124.0	110.0	96.0	88.0	78.0	68.0	61.0	59.0
1932	59.0	52.0	47.0	40.0	38.0	50.0	67.0	95.0	217.0	211.0	198.0	194.0
1933	217.0	213.0	212.0	203.0	191.0	177.0	167.0	159.0	160.0	149.0	141.0	142.0
1934	172.0	171.0	185.0	195.0	190.0	193.0	173.0	155.0	141.0	125.0	112.0	106.0
1935	104.0	96.0	88.0	82.0	83.0	90.0	140.0	182.0	270.0	251.0	235.0	230.0
1936	254.0	250.0	247.0	268.0	287.0	322.0	349.0	395.0	417.0	367.0	321.0	287.0
1937	306.0	297.0	293.0	280.0	309.0	344.0	369.0	388.0	403.0	360.0	322.0	296.0
1938	315.0	308.0	259.0	264.0	272.0	270.0	217.0	321.0	417.0	376.0	321.0	276.0
1939	297.0	292.0	287.0	284.0	267.0	247.0	228.0	203.0	182.0	159.0	148.0	147.0
1940	174.0	163.0	149.0	169.0	228.0	286.0	319.0	417.0	406.0	362.0	327.0	303.0
1941	323.0	316.0	324.0	324.0	324.0	344.0	370.0	379.0	417.0	368.0	319.0	282.0
1942	301.0	294.0	291.0	280.0	277.0	290.0	325.0	335.0	417.0	377.0	324.0	281.0
1943	300.0	293.0	293.0	272.0	273.0	259.0	337.0	400.0	403.0	357.0	317.0	287.0
1944	309.0	301.0	296.0	287.0	273.0	270.0	254.0	241.0	236.0	217.0	203.0	197.0
1945	222.0	234.0	242.0	247.0	303.0	336.0	340.0	354.0	408.0	359.0	316.0	283.0
1946	304.0	291.0	277.0	281.0	288.0	306.0	318.0	404.0	394.0	355.0	322.0	301.0
1947	321.0	320.0	318.0	312.0	305.0	290.0	290.0	262.0	237.0	215.0	199.0	193.0
1948	224.0	211.0	197.0	192.0	180.0	168.0	170.0	175.0	279.0	260.0	248.0	244.0
1949	267.0	262.0	262.0	258.0	244.0	236.0	257.0	279.0	286.0	269.0	254.0	250.0
1950	272.0	268.0	263.0	273.0	304.0	330.0	362.0	363.0	410.0	357.0	309.0	275.0
1951	298.0	217.0	217.0	217.0	218.0	259.0	327.0	396.0	366.0	337.0	314.0	302.0
1952	319.0	316.0	324.0	313.0	303.0	306.0	226.0	292.0	409.0	382.0	317.0	262.0
1953	284.0	281.0	286.0	317.0	270.0	278.0	309.0	289.0	337.0	317.0	288.0	272.0
1954	298.0	294.0	288.0	283.0	280.0	291.0	316.0	332.0	308.0	284.0	269.0	268.0
1955	294.0	296.0	296.0	299.0	289.0	281.0	264.0	243.0	240.0	218.0	204.0	199.0
1956	222.0	219.0	230.0	217.0	233.0	286.0	330.0	364.0	417.0	365.0	309.0	264.0
1957	288.0	287.0	288.0	281.0	281.0	289.0	283.0	291.0	351.0	318.0	293.0	280.0
1958	304.0	304.0	304.0	313.0	322.0	337.0	340.0	349.0	417.0	370.0	316.0	267.0
1959	290.0	284.0	273.0	272.0	283.0	275.0	256.0	228.0	204.0	175.0	151.0	146.0
1960	170.0	163.0	158.0	145.0	145.0	139.0	125.0	123.0	124.0	121.0	121.0	129.0
1961	139.0	126.0	112.0	102.0	90.0	76.0	62.0	66.0	66.0	65.0	67.0	75.0
1962	86.0	78.0	70.0	62.0	60.0	54.0	91.0	91.0	160.0	147.0	140.0	139.0
1963	174.0	176.0	178.0	188.0	241.0	249.0	300.0	393.0	417.0	363.0	316.0	280.0
1964	303.0	284.0	283.0	291.0	284.0	269.0	253.0	226.0	201.0	178.0	165.0	163.0
1965	192.0	199.0	226.0	231.0	244.0	298.0	347.0	362.0	399.0	350.0	301.0	275.0
1966	315.0	316.0	324.0	324.0	307.0	300.0	303.0	279.0	254.0	228.0	212.0	211.0
1967	234.0	239.0	278.0	324.0	324.0	337.0	341.0	275.0	387.0	395.0	325.0	268.0
1968	292.0	291.0	289.0	290.0	296.0	297.0	285.0	258.0	233.0	204.0	186.0	181.0
1969	205.0	209.0	219.0	280.0	287.0	312.0	300.0	338.0	417.0	373.0	318.0	274.0
1970	307.0	303.0	314.0	217.0	217.0	266.0	299.0	321.0	361.0	335.0	308.0	293.0
1971	313.0	312.0	324.0	324.0	324.0	343.0	355.0	316.0	361.0	341.0	324.0	308.0
1972	335.0	324.0	324.0	318.0	305.0	312.0	310.0	279.0	281.0	263.0	249.0	245.0
1973	271.0	274.0	282.0	324.0	322.0	343.0	360.0	389.0	400.0	364.0	326.0	301.0
1974	325.0	280.0	286.0	272.0	298.0	311.0	358.0	383.0	405.0	368.0	334.0	303.0
1975	323.0	310.0	298.0	282.0	285.0	322.0	341.0	325.0	396.0	358.0	319.0	290.0
1976	321.0	317.0	311.0	296.0	277.0	256.0	242.0	224.0	203.0	182.0	164.0	152.0
1977	142.0	134.0	125.0	117.0	110.0	102.0	87.0	71.0	52.0	33.0	18.0	7.0
1978	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	19.0	33.0	39.0	47.0	64.0
1980	84.0	77.0	70.0	162.0	235.0	295.0	328.0	347.0	396.0	372.0	315.0	270.0
1981	289.0	279.0	275.0	280.0	272.0	265.0	260.0	233.0	206.0	178.0	160.0	154.0
1982	180.0	192.0	247.0	239.0	217.0	255.0	273.0	360.0	403.0	355.0	293.0	234.0
1983	274.0	260.0	229.0	256.0	267.0	304.0	318.0	233.0	356.0	400.0	334.0	282.0
1984	325.0	254.0	217.0	217.0	226.0	276.0	309.0	358.0	373.0	348.0	327.0	302.0
1985	326.0	320.0	322.0	303.0	296.0	299.0	310.0	283.0	258.0	229.0	211.0	208.0
1986	235.0	238.0	241.0	260.0	222.0	259.0	332.0	394.0	409.0	360.0	313.0	278.0
1987	298.0	291.0	279.0	262.0	246.0	228.0	213.0	195.0	174.0	150.0	131.0	118.0
1988	113.0	100.0	86.0	74.0	62.0	47.0	34.0	31.0	24.0	19.0	17.0	19.0
1989	24.0	16.0	9.0	4.0	4.0	4.0	4.0	16.0	27.0	37.0	51.0	71.0
1990	97.0	88.0	80.0	72.0	66.0	59.0	41.0	43.0	49.0	54.0	62.0	75.0
1991	91.0	83.0	74.0	67.0	60.0	57.0	43.0	28.0	21.0	15.0	12.0	14.0
1992	21.0	13.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1993	4.0	4.0	4.0	4.0	16.0	76.0	126.0	229.0	328.0	303.0	302.0	295.0
AVG:	231.3	223.9	222.0	222.0	223.9	233.7	243.0	254.8	278.7	253.5	227.7	211.1
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	337.0	324.0	324.0	324.0	324.0	344.0	370.0	417.0	417.0	400.0	334.0	320.0

Table 3.5.3-5. Simulated Camanche Storage (TAF), Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	310.0	299.0	297.0	298.0	315.0	327.0	333.0	320.0	417.0	370.0	319.0	279.0
1923	299.0	295.0	316.0	324.0	324.0	320.0	341.0	363.0	384.0	347.0	308.0	283.0
1924	303.0	293.0	285.0	277.0	258.0	238.0	223.0	205.0	184.0	163.0	145.0	133.0
1925	149.0	135.0	124.0	116.0	170.0	193.0	225.0	313.0	367.0	332.0	303.0	289.0
1926	307.0	297.0	289.0	283.0	276.0	260.0	256.0	247.0	233.0	220.0	214.0	217.0
1927	250.0	267.0	270.0	282.0	324.0	342.0	360.0	371.0	417.0	367.0	319.0	283.0
1928	302.0	290.0	286.0	282.0	270.0	290.0	313.0	400.0	370.0	345.0	327.0	320.0
1929	337.0	324.0	305.0	286.0	269.0	250.0	236.0	215.0	203.0	198.0	198.0	205.0
1930	236.0	230.0	223.0	219.0	208.0	219.0	216.0	200.0	232.0	220.0	215.0	220.0
1931	253.0	257.0	252.0	238.0	225.0	209.0	194.0	177.0	156.0	136.0	119.0	106.0
1932	97.0	90.0	85.0	79.0	82.0	106.0	122.0	150.0	272.0	264.0	251.0	246.0
1933	268.0	262.0	258.0	246.0	232.0	217.0	221.0	218.0	224.0	217.0	215.0	221.0
1934	253.0	248.0	259.0	265.0	257.0	264.0	244.0	219.0	198.0	183.0	168.0	161.0
1935	180.0	176.0	163.0	156.0	161.0	163.0	213.0	253.0	340.0	318.0	300.0	294.0
1936	313.0	304.0	297.0	314.0	287.0	322.0	349.0	395.0	417.0	367.0	321.0	287.0
1937	306.0	297.0	293.0	280.0	309.0	344.0	369.0	388.0	403.0	360.0	322.0	296.0
1938	315.0	308.0	259.0	264.0	272.0	270.0	217.0	321.0	417.0	376.0	321.0	276.0
1939	297.0	292.0	287.0	284.0	266.0	251.0	241.0	216.0	203.0	196.0	196.0	203.0
1940	239.0	236.0	226.0	261.0	314.0	289.0	322.0	417.0	406.0	362.0	327.0	303.0
1941	323.0	316.0	324.0	324.0	324.0	344.0	370.0	379.0	417.0	368.0	319.0	282.0
1942	301.0	294.0	291.0	280.0	277.0	290.0	325.0	335.0	417.0	377.0	324.0	281.0
1943	300.0	293.0	293.0	272.0	273.0	259.0	337.0	400.0	403.0	357.0	317.0	287.0
1944	309.0	301.0	296.0	287.0	273.0	270.0	254.0	241.0	236.0	217.0	203.0	197.0
1945	222.0	234.0	242.0	247.0	303.0	336.0	340.0	354.0	408.0	359.0	316.0	283.0
1946	304.0	291.0	277.0	281.0	288.0	306.0	318.0	404.0	394.0	355.0	322.0	301.0
1947	321.0	320.0	318.0	312.0	305.0	290.0	290.0	262.0	237.0	215.0	199.0	193.0
1948	224.0	211.0	197.0	192.0	180.0	168.0	170.0	175.0	279.0	260.0	248.0	244.0
1949	267.0	262.0	262.0	258.0	244.0	236.0	257.0	279.0	286.0	269.0	254.0	250.0
1950	272.0	268.0	263.0	273.0	304.0	330.0	362.0	363.0	410.0	357.0	309.0	275.0
1951	298.0	217.0	217.0	217.0	218.0	259.0	327.0	396.0	366.0	337.0	314.0	302.0
1952	319.0	316.0	324.0	313.0	303.0	306.0	226.0	292.0	409.0	382.0	317.0	262.0
1953	284.0	281.0	286.0	317.0	270.0	278.0	309.0	289.0	337.0	317.0	288.0	272.0
1954	298.0	294.0	288.0	283.0	280.0	291.0	316.0	332.0	308.0	284.0	269.0	268.0
1955	294.0	296.0	296.0	299.0	289.0	281.0	264.0	243.0	240.0	218.0	204.0	199.0
1956	222.0	219.0	230.0	217.0	233.0	286.0	330.0	364.0	417.0	365.0	309.0	264.0
1957	288.0	287.0	288.0	281.0	281.0	289.0	283.0	291.0	351.0	318.0	293.0	280.0
1958	304.0	304.0	304.0	313.0	322.0	337.0	340.0	349.0	417.0	370.0	316.0	267.0
1959	290.0	284.0	273.0	271.0	282.0	283.0	268.0	240.0	218.0	204.0	198.0	202.0
1960	234.0	236.0	239.0	233.0	241.0	242.0	234.0	232.0	239.0	224.0	213.0	205.0
1961	227.0	221.0	214.0	202.0	190.0	176.0	162.0	153.0	140.0	125.0	113.0	108.0
1962	106.0	98.0	90.0	82.0	87.0	114.0	161.0	169.0	243.0	236.0	234.0	239.0
1963	280.0	288.0	297.0	315.0	247.0	262.0	306.0	393.0	417.0	363.0	316.0	280.0
1964	303.0	284.0	283.0	291.0	283.0	278.0	270.0	243.0	230.0	221.0	213.0	210.0
1965	238.0	245.0	226.0	231.0	244.0	298.0	347.0	362.0	399.0	350.0	301.0	275.0
1966	315.0	316.0	324.0	324.0	307.0	300.0	303.0	279.0	254.0	228.0	212.0	211.0
1967	234.0	239.0	278.0	324.0	324.0	337.0	341.0	275.0	387.0	395.0	325.0	268.0
1968	292.0	291.0	289.0	290.0	296.0	306.0	304.0	276.0	264.0	249.0	241.0	245.0
1969	276.0	288.0	305.0	280.0	287.0	312.0	300.0	338.0	417.0	373.0	317.0	274.0
1970	307.0	303.0	314.0	217.0	217.0	266.0	299.0	321.0	361.0	335.0	308.0	293.0
1971	313.0	312.0	324.0	324.0	324.0	343.0	355.0	316.0	361.0	341.0	324.0	308.0
1972	335.0	324.0	324.0	318.0	305.0	312.0	310.0	279.0	281.0	263.0	249.0	245.0
1973	271.0	274.0	282.0	324.0	322.0	343.0	360.0	389.0	400.0	364.0	326.0	301.0
1974	325.0	280.0	286.0	272.0	298.0	311.0	358.0	383.0	405.0	368.0	334.0	303.0
1975	323.0	310.0	298.0	282.0	285.0	322.0	341.0	325.0	396.0	358.0	319.0	290.0
1976	321.0	317.0	311.0	295.0	277.0	256.0	241.0	224.0	203.0	182.0	164.0	151.0
1977	151.0	137.0	123.0	109.0	97.0	83.0	69.0	64.0	56.0	48.0	44.0	43.0
1978	46.0	38.0	30.0	22.0	15.0	7.0	4.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	26.0	57.0	71.0	87.0	112.0
1980	141.0	134.0	127.0	226.0	235.0	295.0	328.0	347.0	396.0	371.0	315.0	270.0
1981	289.0	279.0	275.0	279.0	272.0	273.0	276.0	250.0	230.0	219.0	209.0	211.0
1982	245.0	261.0	254.0	239.0	217.0	255.0	273.0	360.0	403.0	355.0	293.0	234.0
1983	274.0	260.0	229.0	256.0	267.0	304.0	318.0	233.0	356.0	400.0	334.0	282.0
1984	325.0	254.0	217.0	217.0	226.0	276.0	309.0	358.0	373.0	348.0	327.0	302.0
1985	326.0	320.0	322.0	303.0	296.0	299.0	310.0	283.0	258.0	229.0	211.0	208.0
1986	235.0	238.0	241.0	260.0	222.0	259.0	332.0	394.0	409.0	360.0	313.0	278.0
1987	298.0	291.0	279.0	262.0	245.0	232.0	218.0	200.0	179.0	158.0	158.0	162.0
1988	177.0	164.0	154.0	150.0	137.0	123.0	109.0	112.0	112.0	113.0	117.0	125.0
1989	136.0	128.0	121.0	113.0	106.0	100.0	97.0	136.0	144.0	140.0	140.0	148.0
1990	158.0	144.0	137.0	136.0	126.0	131.0	120.0	103.0	101.0	101.0	104.0	114.0
1991	140.0	126.0	112.0	99.0	87.0	79.0	61.0	69.0	82.0	92.0	106.0	125.0
1992	148.0	140.0	133.0	125.0	121.0	119.0	109.0	103.0	100.0	96.0	95.0	100.0
1993	109.0	101.0	94.0	94.0	139.0	199.0	248.0	328.0	400.0	351.0	326.0	295.0
AVG:	254.9	247.7	244.2	242.9	241.9	251.8	261.9	273.7	297.9	273.6	248.6	232.6
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	337.0	324.0	324.0	324.0	324.0	344.0	370.0	417.0	417.0	400.0	334.0	320.0

Table 3.5.3-6. Simulated Camanche Storage (TAF), Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	324.0	313.0	311.0	312.0	330.0	348.0	361.0	371.0	417.0	387.0	350.0	322.0
1923	313.0	309.0	330.0	338.0	338.0	339.0	368.0	414.0	417.0	385.0	349.0	326.0
1924	317.0	306.0	298.0	289.0	270.0	250.0	235.0	217.0	196.0	175.0	157.0	145.0
1925	130.0	117.0	105.0	94.0	97.0	126.0	166.0	289.0	354.0	332.0	311.0	301.0
1926	291.0	281.0	272.0	266.0	260.0	240.0	236.0	233.0	216.0	192.0	173.0	162.0
1927	159.0	169.0	172.0	186.0	240.0	266.0	305.0	364.0	417.0	385.0	350.0	326.0
1928	316.0	304.0	300.0	295.0	284.0	310.0	340.0	417.0	394.0	367.0	343.0	331.0
1929	319.0	311.0	292.0	273.0	256.0	237.0	219.0	205.0	190.0	174.0	161.0	154.0
1930	149.0	143.0	136.0	133.0	122.0	129.0	126.0	123.0	146.0	137.0	132.0	134.0
1931	138.0	125.0	111.0	98.0	86.0	72.0	58.0	73.0	83.0	95.0	108.0	126.0
1932	147.0	140.0	136.0	129.0	127.0	119.0	100.0	105.0	176.0	169.0	159.0	157.0
1933	157.0	143.0	132.0	122.0	110.0	97.0	97.0	103.0	111.0	115.0	123.0	138.0
1934	156.0	142.0	132.0	119.0	111.0	97.0	78.0	86.0	99.0	109.0	123.0	142.0
1935	159.0	147.0	133.0	122.0	109.0	97.0	81.0	91.0	168.0	161.0	157.0	161.0
1936	167.0	153.0	140.0	138.0	268.0	313.0	356.0	417.0	417.0	384.0	351.0	329.0
1937	320.0	310.0	307.0	294.0	324.0	364.0	396.0	417.0	417.0	386.0	358.0	339.0
1938	329.0	321.0	273.0	278.0	295.0	321.0	268.0	372.0	417.0	393.0	351.0	319.0
1939	311.0	305.0	300.0	297.0	279.0	261.0	249.0	226.0	215.0	198.0	184.0	177.0
1940	174.0	162.0	148.0	168.0	231.0	311.0	354.0	417.0	417.0	387.0	361.0	346.0
1941	337.0	329.0	338.0	338.0	338.0	364.0	398.0	417.0	417.0	385.0	350.0	324.0
1942	315.0	308.0	305.0	294.0	291.0	310.0	353.0	386.0	417.0	394.0	354.0	324.0
1943	314.0	307.0	307.0	292.0	287.0	310.0	388.0	417.0	417.0	384.0	353.0	330.0
1944	323.0	314.0	310.0	301.0	287.0	290.0	282.0	285.0	285.0	265.0	246.0	235.0
1945	230.0	240.0	246.0	250.0	312.0	341.0	360.0	401.0	417.0	382.0	349.0	326.0
1946	318.0	305.0	291.0	295.0	301.0	325.0	345.0	417.0	417.0	387.0	360.0	344.0
1947	335.0	334.0	331.0	326.0	319.0	310.0	317.0	300.0	285.0	262.0	242.0	231.0
1948	230.0	216.0	200.0	193.0	180.0	165.0	182.0	204.0	313.0	293.0	276.0	268.0
1949	261.0	256.0	256.0	252.0	239.0	237.0	266.0	304.0	316.0	298.0	279.0	269.0
1950	262.0	259.0	253.0	263.0	295.0	327.0	374.0	403.0	417.0	378.0	342.0	318.0
1951	312.0	268.0	268.0	268.0	268.0	310.0	377.0	417.0	402.0	378.0	356.0	344.0
1952	333.0	330.0	338.0	338.0	338.0	356.0	277.0	343.0	417.0	405.0	350.0	305.0
1953	298.0	294.0	299.0	331.0	283.0	297.0	336.0	340.0	388.0	367.0	335.0	315.0
1954	312.0	308.0	301.0	297.0	293.0	311.0	344.0	376.0	357.0	332.0	313.0	306.0
1955	298.0	297.0	292.0	291.0	276.0	270.0	261.0	257.0	259.0	236.0	217.0	207.0
1956	200.0	195.0	281.0	268.0	284.0	337.0	380.0	415.0	417.0	382.0	339.0	307.0
1957	302.0	300.0	301.0	295.0	294.0	308.0	310.0	342.0	402.0	369.0	340.0	323.0
1958	318.0	317.0	318.0	327.0	338.0	364.0	391.0	400.0	417.0	387.0	346.0	310.0
1959	304.0	298.0	286.0	285.0	296.0	293.0	276.0	250.0	230.0	206.0	186.0	176.0
1960	170.0	162.0	156.0	143.0	140.0	138.0	129.0	135.0	139.0	132.0	127.0	131.0
1961	136.0	123.0	109.0	96.0	84.0	71.0	57.0	77.0	93.0	107.0	124.0	147.0
1962	168.0	154.0	141.0	127.0	122.0	109.0	91.0	98.0	100.0	110.0	122.0	142.0
1963	165.0	151.0	138.0	125.0	136.0	149.0	222.0	362.0	417.0	380.0	346.0	323.0
1964	317.0	298.0	296.0	304.0	297.0	288.0	279.0	259.0	242.0	222.0	204.0	197.0
1965	194.0	199.0	277.0	281.0	294.0	332.0	396.0	410.0	417.0	380.0	337.0	318.0
1966	328.0	330.0	337.0	338.0	321.0	320.0	330.0	323.0	299.0	276.0	256.0	249.0
1967	241.0	244.0	282.0	331.0	338.0	363.0	391.0	325.0	417.0	417.0	358.0	311.0
1968	306.0	304.0	303.0	304.0	310.0	317.0	313.0	290.0	276.0	251.0	229.0	219.0
1969	212.0	215.0	223.0	330.0	338.0	363.0	351.0	389.0	417.0	390.0	348.0	316.0
1970	320.0	317.0	328.0	268.0	268.0	317.0	331.0	372.0	412.0	386.0	355.0	336.0
1971	327.0	325.0	338.0	338.0	338.0	363.0	383.0	366.0	412.0	391.0	371.0	351.0
1972	349.0	338.0	338.0	331.0	318.0	331.0	337.0	320.0	330.0	311.0	292.0	283.0
1973	275.0	274.0	277.0	327.0	338.0	363.0	387.0	417.0	417.0	393.0	362.0	343.0
1974	339.0	293.0	300.0	289.0	311.0	356.0	408.0	417.0	417.0	394.0	369.0	345.0
1975	336.0	323.0	312.0	296.0	299.0	342.0	369.0	376.0	417.0	389.0	356.0	333.0
1976	335.0	331.0	324.0	308.0	289.0	269.0	254.0	236.0	215.0	194.0	176.0	163.0
1977	148.0	134.0	120.0	107.0	94.0	81.0	66.0	62.0	55.0	48.0	44.0	45.0
1978	49.0	41.0	32.0	24.0	17.0	9.0	4.0	4.0	4.0	4.0	4.0	4.0
1979	4.0	4.0	4.0	4.0	4.0	4.0	4.0	12.0	16.0	27.0	41.0	62.0
1980	88.0	80.0	73.0	68.0	169.0	257.0	302.0	342.0	411.0	399.0	351.0	313.0
1981	303.0	292.0	288.0	293.0	285.0	283.0	286.0	266.0	242.0	221.0	197.0	185.0
1982	180.0	190.0	243.0	282.0	268.0	306.0	324.0	410.0	417.0	381.0	327.0	276.0
1983	288.0	273.0	280.0	307.0	318.0	354.0	368.0	284.0	406.0	417.0	351.0	287.0
1984	303.0	268.0	268.0	268.0	276.0	327.0	352.0	409.0	417.0	395.0	371.0	344.0
1985	340.0	334.0	335.0	316.0	309.0	319.0	337.0	318.0	298.0	272.0	254.0	246.0
1986	242.0	244.0	245.0	262.0	273.0	309.0	383.0	417.0	417.0	383.0	346.0	321.0
1987	312.0	304.0	292.0	274.0	258.0	241.0	225.0	207.0	186.0	162.0	143.0	129.0
1988	114.0	101.0	87.0	75.0	62.0	48.0	35.0	51.0	63.0	77.0	93.0	113.0
1989	137.0	129.0	122.0	114.0	107.0	101.0	81.0	91.0	95.0	107.0	122.0	145.0
1990	169.0	155.0	141.0	128.0	117.0	104.0	86.0	90.0	97.0	103.0	111.0	125.0
1991	143.0	134.0	126.0	118.0	112.0	110.0	96.0	80.0	72.0	65.0	61.0	62.0
1992	69.0	61.0	54.0	46.0	42.0	34.0	20.0	23.0	21.0	18.0	19.0	25.0
1993	35.0	27.0	20.0	18.0	12.0	4.0	45.0	155.0	260.0	244.0	245.0	238.0
AVG:	241.9	233.7	232.8	231.9	235.0	247.3	259.1	277.9	294.0	275.9	254.8	242.0
MIN:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MAX:	349.0	338.0	338.0	338.0	338.0	364.0	408.0	417.0	417.0	417.0	371.0	351.0

Table 3.5.3-7. Simulated EBMUD Total System Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	586.0	578.0	581.0	587.0	612.0	632.0	645.0	653.0	745.0	692.0	632.0	584.0
1923	575.0	574.0	600.0	613.0	621.0	625.0	653.0	696.0	712.0	668.0	621.0	588.0
1924	579.0	572.0	568.0	566.0	548.0	523.0	510.0	489.0	457.0	425.0	395.0	375.0
1925	367.0	360.0	358.0	364.0	430.0	467.0	507.0	622.0	676.0	642.0	610.0	594.0
1926	583.0	576.0	572.0	572.0	573.0	556.0	552.0	548.0	527.0	500.0	476.0	463.0
1927	460.0	473.0	482.0	501.0	562.0	591.0	630.0	678.0	745.0	689.0	632.0	588.0
1928	578.0	569.0	570.0	570.0	567.0	595.0	625.0	733.0	697.0	667.0	639.0	625.0
1929	613.0	603.0	585.0	567.0	554.0	540.0	532.0	517.0	498.0	479.0	462.0	454.0
1930	449.0	447.0	446.0	449.0	447.0	459.0	457.0	450.0	479.0	458.0	440.0	434.0
1931	432.0	435.0	432.0	419.0	409.0	399.0	384.0	371.0	346.0	326.0	302.0	285.0
1932	274.0	268.0	274.0	284.0	322.0	355.0	379.0	421.0	545.0	532.0	510.0	499.0
1933	493.0	492.0	495.0	492.0	475.0	470.0	480.0	485.0	487.0	470.0	454.0	447.0
1934	448.0	450.0	469.0	484.0	486.0	498.0	475.0	448.0	437.0	417.0	389.0	371.0
1935	360.0	358.0	357.0	361.0	379.0	395.0	468.0	515.0	598.0	573.0	548.0	535.0
1936	530.0	529.0	531.0	557.0	621.0	649.0	672.0	728.0	745.0	688.0	633.0	592.0
1937	582.0	576.0	577.0	569.0	606.0	649.0	681.0	720.0	731.0	681.0	635.0	601.0
1938	591.0	587.0	543.0	553.0	578.0	606.0	553.0	654.0	745.0	698.0	633.0	581.0
1939	573.0	570.0	571.0	573.0	558.0	548.0	536.0	512.0	498.0	478.0	460.0	452.0
1940	450.0	442.0	428.0	458.0	527.0	610.0	646.0	750.0	733.0	684.0	639.0	608.0
1941	599.0	595.0	608.0	613.0	621.0	649.0	683.0	711.0	745.0	690.0	631.0	587.0
1942	577.0	573.0	575.0	569.0	574.0	595.0	637.0	668.0	745.0	699.0	636.0	586.0
1943	576.0	572.0	577.0	567.0	570.0	595.0	672.0	733.0	731.0	679.0	630.0	592.0
1944	585.0	580.0	580.0	576.0	569.0	575.0	567.0	568.0	563.0	538.0	515.0	502.0
1945	498.0	512.0	525.0	536.0	607.0	640.0	653.0	687.0	735.0	681.0	628.0	588.0
1946	580.0	570.0	561.0	570.0	584.0	611.0	630.0	737.0	722.0	676.0	634.0	606.0
1947	597.0	599.0	601.0	601.0	602.0	595.0	602.0	583.0	564.0	536.0	511.0	498.0
1948	499.0	490.0	475.0	481.0	468.0	462.0	482.0	502.0	607.0	582.0	560.0	549.0
1949	543.0	541.0	545.0	546.0	533.0	541.0	570.0	606.0	614.0	591.0	567.0	555.0
1950	547.0	547.0	546.0	561.0	601.0	635.0	675.0	695.0	738.0	678.0	622.0	580.0
1951	574.0	533.0	538.0	543.0	551.0	595.0	662.0	728.0	694.0	659.0	626.0	607.0
1952	595.0	595.0	608.0	613.0	621.0	641.0	562.0	625.0	737.0	704.0	629.0	567.0
1953	560.0	559.0	569.0	605.0	566.0	582.0	621.0	622.0	665.0	638.0	600.0	577.0
1954	574.0	573.0	572.0	572.0	576.0	596.0	629.0	659.0	635.0	605.0	582.0	573.0
1955	569.0	575.0	580.0	588.0	585.0	586.0	576.0	570.0	568.0	540.0	516.0	504.0
1956	498.0	498.0	551.0	543.0	567.0	622.0	665.0	697.0	745.0	687.0	621.0	569.0
1957	564.0	566.0	571.0	570.0	577.0	594.0	595.0	624.0	679.0	640.0	605.0	586.0
1958	580.0	583.0	588.0	602.0	621.0	649.0	675.0	682.0	745.0	691.0	628.0	572.0
1959	566.0	563.0	557.0	561.0	579.0	580.0	563.0	536.0	513.0	486.0	463.0	451.0
1960	446.0	442.0	441.0	433.0	442.0	444.0	438.0	446.0	451.0	428.0	409.0	400.0
1961	395.0	395.0	396.0	390.0	380.0	368.0	354.0	340.0	328.0	313.0	301.0	298.0
1962	300.0	295.0	290.0	285.0	328.0	355.0	403.0	418.0	488.0	469.0	452.0	444.0
1963	450.0	455.0	462.0	477.0	538.0	554.0	626.0	726.0	745.0	685.0	628.0	585.0
1964	579.0	563.0	566.0	580.0	580.0	574.0	565.0	544.0	523.0	499.0	478.0	468.0
1965	468.0	478.0	547.0	557.0	577.0	619.0	682.0	695.0	727.0	672.0	613.0	580.0
1966	591.0	595.0	607.0	613.0	604.0	605.0	615.0	606.0	578.0	549.0	525.0	516.0
1967	510.0	518.0	562.0	613.0	621.0	648.0	676.0	607.0	715.0	717.0	638.0	573.0
1968	568.0	570.0	573.0	579.0	592.0	602.0	597.0	572.0	555.0	524.0	499.0	486.0
1969	480.0	488.0	503.0	606.0	621.0	648.0	636.0	671.0	745.0	695.0	630.0	579.0
1970	582.0	582.0	598.0	543.0	551.0	602.0	616.0	654.0	689.0	657.0	621.0	598.0
1971	589.0	591.0	608.0	613.0	621.0	648.0	668.0	648.0	689.0	663.0	637.0	613.0
1972	611.0	603.0	608.0	606.0	601.0	617.0	622.0	603.0	609.0	585.0	561.0	550.0
1973	546.0	553.0	565.0	613.0	621.0	648.0	672.0	721.0	728.0	686.0	638.0	606.0
1974	601.0	559.0	570.0	565.0	594.0	641.0	693.0	715.0	732.0	690.0	647.0	608.0
1975	598.0	589.0	582.0	571.0	582.0	627.0	654.0	657.0	723.0	680.0	632.0	595.0
1976	597.0	596.0	594.0	584.0	564.0	541.0	522.0	498.0	466.0	433.0	404.0	383.0
1977	364.0	349.0	331.0	318.0	303.0	286.0	267.0	249.0	224.0	198.0	176.0	162.0
1978	147.0	136.0	120.0	112.0	106.0	104.0	95.0	91.0	83.0	75.0	65.0	63.0
1979	54.0	42.0	33.0	48.0	72.0	133.0	191.0	259.0	309.0	308.0	297.0	294.0
1980	299.0	314.0	340.0	488.0	568.0	631.0	663.0	680.0	724.0	693.0	627.0	575.0
1981	565.0	558.0	559.0	568.0	569.0	570.0	572.0	551.0	524.0	499.0	472.0	459.0
1982	456.0	471.0	530.0	558.0	551.0	591.0	608.0	693.0	731.0	677.0	605.0	539.0
1983	550.0	539.0	550.0	582.0	600.0	639.0	653.0	566.0	683.0	722.0	633.0	550.0
1984	566.0	533.0	538.0	543.0	559.0	612.0	637.0	691.0	701.0	670.0	639.0	607.0
1985	602.0	599.0	605.0	592.0	592.0	604.0	622.0	601.0	577.0	546.0	523.0	513.0
1986	511.0	517.0	525.0	549.0	556.0	595.0	668.0	726.0	736.0	682.0	625.0	584.0
1987	574.0	570.0	563.0	551.0	538.0	529.0	514.0	489.0	461.0	440.0	423.0	412.0
1988	389.0	370.0	356.0	352.0	341.0	327.0	315.0	302.0	287.0	275.0	262.0	251.0
1989	238.0	228.0	219.0	209.0	203.0	243.0	285.0	343.0	354.0	338.0	322.0	318.0
1990	311.0	323.0	333.0	343.0	346.0	357.0	345.0	336.0	330.0	318.0	306.0	302.0
1991	305.0	289.0	277.0	259.0	248.0	257.0	252.0	248.0	251.0	241.0	231.0	229.0
1992	235.0	246.0	254.0	255.0	270.0	286.0	279.0	266.0	244.0	231.0	221.0	211.0
1993	203.0	195.0	197.0	261.0	313.0	404.0	461.0	562.0	656.0	625.0	615.0	600.0
AVG:	492.8	489.4	494.0	502.4	513.9	533.6	549.6	569.4	590.4	559.0	523.2	498.3
MIN:	54.0	42.0	33.0	48.0	72.0	104.0	95.0	91.0	83.0	75.0	65.0	63.0
MAX:	613.0	603.0	608.0	613.0	621.0	649.0	693.0	750.0	745.0	722.0	647.0	625.0

Table 3.5.3-8. Simulated EBMUD Total System Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	586.0	578.0	581.0	587.0	612.0	632.0	645.0	653.0	745.0	692.0	632.0	584.0
1923	575.0	574.0	600.0	613.0	621.0	625.0	653.0	696.0	712.0	668.0	621.0	588.0
1924	579.0	572.0	568.0	565.0	547.0	532.0	528.0	515.0	492.0	468.0	448.0	436.0
1925	425.0	411.0	404.0	405.0	466.0	498.0	537.0	646.0	694.0	654.0	616.0	594.0
1926	583.0	576.0	572.0	571.0	573.0	564.0	569.0	574.0	561.0	542.0	526.0	522.0
1927	526.0	546.0	554.0	571.0	621.0	647.0	672.0	704.0	745.0	689.0	631.0	588.0
1928	578.0	569.0	570.0	570.0	567.0	595.0	625.0	733.0	697.0	667.0	639.0	625.0
1929	613.0	603.0	585.0	567.0	553.0	548.0	548.0	541.0	531.0	520.0	511.0	510.0
1930	512.0	509.0	507.0	508.0	504.0	523.0	529.0	527.0	559.0	541.0	527.0	525.0
1931	528.0	536.0	536.0	519.0	506.0	492.0	474.0	456.0	426.0	400.0	370.0	348.0
1932	334.0	325.0	330.0	340.0	379.0	411.0	435.0	476.0	600.0	586.0	563.0	551.0
1933	544.0	541.0	542.0	535.0	516.0	516.0	533.0	544.0	552.0	539.0	528.0	526.0
1934	529.0	527.0	543.0	554.0	553.0	569.0	553.0	530.0	522.0	505.0	481.0	466.0
1935	456.0	455.0	446.0	445.0	458.0	468.0	541.0	586.0	667.0	640.0	613.0	599.0
1936	589.0	583.0	580.0	602.0	621.0	649.0	672.0	728.0	745.0	688.0	633.0	592.0
1937	582.0	576.0	577.0	569.0	606.0	649.0	681.0	720.0	731.0	681.0	635.0	601.0
1938	591.0	587.0	543.0	553.0	578.0	606.0	553.0	654.0	745.0	698.0	633.0	581.0
1939	573.0	570.0	571.0	572.0	557.0	556.0	553.0	537.0	530.0	518.0	508.0	508.0
1940	514.0	515.0	510.0	550.0	620.0	619.0	655.0	750.0	733.0	684.0	639.0	608.0
1941	599.0	595.0	608.0	613.0	621.0	649.0	683.0	711.0	745.0	690.0	631.0	587.0
1942	577.0	573.0	575.0	569.0	574.0	595.0	637.0	668.0	745.0	699.0	636.0	586.0
1943	576.0	572.0	577.0	567.0	570.0	595.0	672.0	733.0	731.0	679.0	630.0	592.0
1944	585.0	580.0	580.0	576.0	569.0	575.0	567.0	568.0	563.0	538.0	515.0	502.0
1945	498.0	512.0	525.0	536.0	607.0	640.0	653.0	687.0	735.0	681.0	628.0	588.0
1946	580.0	570.0	561.0	570.0	584.0	611.0	630.0	737.0	722.0	676.0	634.0	606.0
1947	597.0	599.0	601.0	601.0	602.0	595.0	602.0	583.0	564.0	536.0	511.0	498.0
1948	499.0	490.0	475.0	481.0	468.0	462.0	482.0	502.0	607.0	582.0	560.0	549.0
1949	543.0	541.0	545.0	546.0	533.0	541.0	570.0	606.0	614.0	591.0	567.0	555.0
1950	547.0	547.0	546.0	561.0	601.0	635.0	675.0	695.0	738.0	678.0	622.0	580.0
1951	574.0	533.0	538.0	543.0	551.0	595.0	662.0	728.0	694.0	659.0	626.0	607.0
1952	595.0	595.0	608.0	613.0	621.0	641.0	562.0	625.0	737.0	704.0	629.0	567.0
1953	560.0	559.0	569.0	605.0	566.0	582.0	621.0	622.0	665.0	638.0	600.0	577.0
1954	574.0	573.0	572.0	572.0	576.0	596.0	629.0	659.0	635.0	605.0	582.0	573.0
1955	569.0	575.0	580.0	588.0	585.0	586.0	576.0	570.0	568.0	540.0	516.0	504.0
1956	498.0	498.0	551.0	543.0	567.0	622.0	665.0	697.0	745.0	687.0	621.0	569.0
1957	564.0	566.0	571.0	570.0	577.0	594.0	595.0	624.0	679.0	640.0	605.0	586.0
1958	580.0	583.0	588.0	602.0	621.0	649.0	675.0	682.0	745.0	691.0	628.0	572.0
1959	566.0	563.0	557.0	560.0	578.0	588.0	580.0	561.0	546.0	526.0	511.0	507.0
1960	510.0	515.0	523.0	522.0	537.0	547.0	546.0	558.0	566.0	545.0	525.0	510.0
1961	502.0	500.0	498.0	491.0	478.0	464.0	448.0	428.0	410.0	389.0	371.0	363.0
1962	362.0	355.0	347.0	341.0	383.0	419.0	475.0	496.0	571.0	558.0	547.0	544.0
1963	556.0	567.0	581.0	603.0	553.0	567.0	633.0	726.0	745.0	685.0	628.0	585.0
1964	579.0	563.0	566.0	580.0	580.0	583.0	582.0	570.0	558.0	542.0	526.0	515.0
1965	514.0	524.0	547.0	557.0	577.0	619.0	682.0	695.0	727.0	672.0	613.0	580.0
1966	591.0	595.0	607.0	613.0	604.0	605.0	615.0	606.0	578.0	549.0	525.0	516.0
1967	510.0	518.0	562.0	613.0	621.0	648.0	676.0	607.0	715.0	717.0	638.0	573.0
1968	568.0	570.0	573.0	579.0	592.0	611.0	616.0	600.0	592.0	570.0	554.0	550.0
1969	551.0	567.0	589.0	606.0	621.0	648.0	636.0	671.0	745.0	695.0	630.0	579.0
1970	582.0	582.0	598.0	543.0	551.0	602.0	616.0	654.0	689.0	657.0	621.0	598.0
1971	589.0	591.0	608.0	613.0	621.0	648.0	668.0	648.0	689.0	663.0	637.0	613.0
1972	611.0	603.0	608.0	606.0	601.0	617.0	622.0	603.0	609.0	585.0	561.0	550.0
1973	546.0	553.0	565.0	613.0	621.0	648.0	672.0	721.0	728.0	686.0	638.0	606.0
1974	601.0	559.0	570.0	565.0	594.0	641.0	693.0	715.0	732.0	690.0	647.0	608.0
1975	598.0	589.0	582.0	571.0	582.0	627.0	654.0	657.0	723.0	680.0	632.0	595.0
1976	597.0	596.0	594.0	584.0	563.0	549.0	540.0	524.0	501.0	476.0	455.0	442.0
1977	426.0	413.0	389.0	371.0	351.0	337.0	328.0	319.0	303.0	286.0	272.0	267.0
1978	261.0	251.0	234.0	221.0	210.0	209.0	194.0	180.0	160.0	139.0	114.0	102.0
1979	86.0	68.0	54.0	68.0	91.0	161.0	223.0	289.0	336.0	342.0	339.0	343.0
1980	356.0	377.0	403.0	552.0	568.0	631.0	663.0	680.0	724.0	693.0	627.0	575.0
1981	565.0	558.0	559.0	568.0	568.0	578.0	589.0	576.0	558.0	541.0	522.0	516.0
1982	520.0	540.0	538.0	558.0	551.0	591.0	608.0	693.0	731.0	677.0	605.0	539.0
1983	550.0	539.0	550.0	582.0	600.0	639.0	653.0	566.0	683.0	722.0	633.0	550.0
1984	566.0	533.0	538.0	543.0	559.0	612.0	637.0	691.0	701.0	670.0	639.0	607.0
1985	602.0	599.0	605.0	592.0	592.0	604.0	622.0	601.0	577.0	546.0	523.0	513.0
1986	511.0	517.0	525.0	549.0	556.0	595.0	668.0	726.0	736.0	682.0	625.0	584.0
1987	574.0	570.0	563.0	550.0	537.0	537.0	530.0	513.0	494.0	480.0	470.0	467.0
1988	453.0	443.0	437.0	439.0	426.0	421.0	417.0	411.0	402.0	396.0	388.0	383.0
1989	368.0	357.0	347.0	337.0	330.0	369.0	410.0	464.0	472.0	451.0	431.0	425.0
1990	412.0	417.0	421.0	424.0	422.0	435.0	432.0	430.0	429.0	423.0	416.0	419.0
1991	415.0	393.0	374.0	350.0	333.0	346.0	345.0	341.0	351.0	348.0	344.0	348.0
1992	363.0	375.0	383.0	383.0	399.0	424.0	421.0	400.0	375.0	359.0	346.0	332.0
1993	323.0	314.0	316.0	383.0	436.0	528.0	584.0	660.0	727.0	672.0	638.0	600.0
AVG:	514.4	510.9	513.4	521.4	529.4	550.8	568.1	586.6	608.5	579.6	544.6	520.8
MIN:	86.0	68.0	54.0	68.0	91.0	161.0	194.0	180.0	160.0	139.0	114.0	102.0
MAX:	613.0	603.0	608.0	613.0	621.0	649.0	693.0	750.0	745.0	729.0	647.0	625.0

Table 3.5.3-9. Simulated EBMUD Total System Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	764.0	756.0	759.0	765.0	791.0	812.0	824.0	831.0	873.0	837.0	794.0	763.0
1923	753.0	752.0	778.0	791.0	799.0	803.0	831.0	874.0	873.0	835.0	793.0	767.0
1924	757.0	750.0	746.0	743.0	724.0	698.0	684.0	660.0	625.0	589.0	556.0	533.0
1925	518.0	504.0	496.0	497.0	558.0	590.0	629.0	750.0	810.0	782.0	755.0	742.0
1926	731.0	724.0	721.0	720.0	721.0	703.0	699.0	694.0	671.0	642.0	617.0	603.0
1927	599.0	612.0	621.0	639.0	701.0	730.0	768.0	825.0	873.0	834.0	794.0	767.0
1928	756.0	747.0	748.0	749.0	745.0	773.0	803.0	878.0	849.0	817.0	787.0	772.0
1929	759.0	755.0	737.0	719.0	706.0	691.0	682.0	665.0	645.0	624.0	605.0	595.0
1930	589.0	587.0	585.0	586.0	582.0	592.0	589.0	578.0	601.0	575.0	552.0	541.0
1931	537.0	538.0	532.0	519.0	508.0	498.0	482.0	468.0	442.0	420.0	394.0	374.0
1932	362.0	355.0	362.0	371.0	410.0	443.0	466.0	508.0	632.0	619.0	596.0	584.0
1933	579.0	578.0	581.0	576.0	559.0	552.0	560.0	563.0	563.0	543.0	523.0	513.0
1934	512.0	513.0	531.0	545.0	548.0	559.0	536.0	509.0	497.0	477.0	449.0	430.0
1935	412.0	405.0	398.0	397.0	410.0	420.0	493.0	540.0	624.0	599.0	574.0	562.0
1936	559.0	560.0	563.0	591.0	729.0	777.0	819.0	878.0	873.0	834.0	795.0	770.0
1937	760.0	754.0	755.0	747.0	785.0	827.0	859.0	878.0	873.0	836.0	802.0	780.0
1938	769.0	765.0	721.0	731.0	756.0	784.0	731.0	832.0	873.0	843.0	795.0	760.0
1939	751.0	748.0	749.0	750.0	735.0	725.0	712.0	686.0	670.0	647.0	628.0	618.0
1940	614.0	606.0	591.0	622.0	692.0	775.0	817.0	878.0	873.0	837.0	805.0	787.0
1941	777.0	773.0	786.0	791.0	799.0	827.0	861.0	878.0	873.0	835.0	794.0	765.0
1942	755.0	751.0	753.0	747.0	752.0	773.0	816.0	846.0	873.0	844.0	798.0	765.0
1943	754.0	750.0	755.0	745.0	748.0	773.0	851.0	878.0	873.0	834.0	797.0	771.0
1944	763.0	758.0	758.0	754.0	747.0	754.0	745.0	746.0	741.0	714.0	690.0	676.0
1945	670.0	683.0	694.0	703.0	773.0	805.0	823.0	861.0	873.0	832.0	793.0	767.0
1946	758.0	748.0	739.0	748.0	762.0	789.0	808.0	878.0	873.0	837.0	804.0	785.0
1947	775.0	777.0	780.0	779.0	780.0	774.0	780.0	761.0	740.0	712.0	686.0	672.0
1948	671.0	659.0	643.0	647.0	632.0	625.0	645.0	665.0	769.0	743.0	720.0	709.0
1949	702.0	700.0	704.0	705.0	692.0	701.0	729.0	764.0	772.0	748.0	723.0	710.0
1950	703.0	702.0	701.0	717.0	756.0	791.0	837.0	863.0	873.0	828.0	786.0	759.0
1951	752.0	711.0	716.0	721.0	729.0	773.0	840.0	878.0	857.0	827.0	800.0	785.0
1952	773.0	773.0	786.0	791.0	799.0	819.0	740.0	803.0	873.0	854.0	794.0	746.0
1953	738.0	737.0	748.0	784.0	745.0	761.0	799.0	800.0	843.0	817.0	779.0	756.0
1954	752.0	751.0	750.0	750.0	755.0	774.0	807.0	837.0	813.0	782.0	757.0	747.0
1955	739.0	740.0	741.0	744.0	738.0	734.0	724.0	717.0	714.0	686.0	661.0	648.0
1956	640.0	638.0	729.0	721.0	745.0	800.0	843.0	875.0	873.0	832.0	783.0	748.0
1957	742.0	744.0	749.0	748.0	756.0	772.0	773.0	803.0	857.0	819.0	784.0	764.0
1958	758.0	761.0	766.0	781.0	799.0	827.0	854.0	860.0	873.0	836.0	790.0	751.0
1959	744.0	741.0	735.0	738.0	757.0	757.0	739.0	710.0	685.0	656.0	630.0	617.0
1960	610.0	606.0	604.0	594.0	601.0	601.0	592.0	595.0	595.0	565.0	540.0	526.0
1961	518.0	516.0	514.0	508.0	497.0	484.0	470.0	454.0	440.0	422.0	407.0	401.0
1962	396.0	385.0	373.0	362.0	400.0	422.0	469.0	483.0	551.0	532.0	514.0	505.0
1963	510.0	514.0	521.0	536.0	597.0	613.0	685.0	822.0	873.0	830.0	790.0	764.0
1964	757.0	741.0	745.0	758.0	758.0	752.0	742.0	719.0	698.0	672.0	648.0	637.0
1965	635.0	642.0	725.0	735.0	755.0	796.0	859.0	871.0	873.0	829.0	781.0	759.0
1966	769.0	773.0	786.0	791.0	783.0	784.0	793.0	784.0	755.0	725.0	700.0	690.0
1967	681.0	688.0	730.0	784.0	799.0	826.0	854.0	786.0	873.0	867.0	802.0	752.0
1968	746.0	748.0	751.0	758.0	771.0	781.0	776.0	750.0	732.0	700.0	673.0	660.0
1969	652.0	658.0	671.0	784.0	799.0	826.0	814.0	849.0	873.0	840.0	792.0	757.0
1970	760.0	760.0	776.0	721.0	729.0	780.0	794.0	832.0	867.0	835.0	799.0	777.0
1971	767.0	769.0	786.0	791.0	799.0	826.0	846.0	827.0	868.0	841.0	815.0	792.0
1972	789.0	781.0	786.0	784.0	779.0	795.0	800.0	780.0	786.0	761.0	736.0	724.0
1973	715.0	717.0	725.0	780.0	799.0	826.0	850.0	878.0	873.0	842.0	806.0	784.0
1974	779.0	737.0	748.0	743.0	772.0	819.0	871.0	878.0	873.0	843.0	813.0	786.0
1975	777.0	767.0	760.0	749.0	760.0	806.0	832.0	836.0	873.0	839.0	801.0	774.0
1976	775.0	774.0	773.0	761.0	740.0	715.0	695.0	668.0	634.0	596.0	564.0	540.0
1977	513.0	492.0	467.0	449.0	429.0	406.0	387.0	369.0	343.0	317.0	293.0	278.0
1978	263.0	252.0	235.0	222.0	212.0	206.0	191.0	178.0	160.0	140.0	117.0	106.0
1979	91.0	73.0	60.0	74.0	98.0	159.0	212.0	270.0	309.0	308.0	297.0	293.0
1980	298.0	313.0	338.0	486.0	631.0	720.0	765.0	803.0	867.0	849.0	795.0	754.0
1981	743.0	736.0	737.0	746.0	747.0	747.0	749.0	726.0	698.0	671.0	642.0	626.0
1982	621.0	634.0	691.0	736.0	729.0	769.0	787.0	871.0	873.0	831.0	771.0	717.0
1983	728.0	717.0	728.0	760.0	779.0	818.0	831.0	744.0	862.0	867.0	795.0	728.0
1984	744.0	711.0	716.0	721.0	738.0	791.0	815.0	869.0	873.0	844.0	815.0	785.0
1985	780.0	777.0	783.0	770.0	770.0	783.0	800.0	778.0	754.0	722.0	698.0	687.0
1986	683.0	688.0	693.0	716.0	734.0	773.0	846.0	878.0	873.0	832.0	790.0	762.0
1987	752.0	748.0	741.0	728.0	714.0	704.0	688.0	659.0	629.0	604.0	583.0	569.0
1988	545.0	525.0	510.0	504.0	491.0	474.0	460.0	442.0	421.0	403.0	383.0	368.0
1989	351.0	339.0	327.0	318.0	311.0	351.0	392.0	447.0	456.0	437.0	419.0	413.0
1990	401.0	407.0	410.0	415.0	413.0	418.0	406.0	396.0	388.0	374.0	360.0	355.0
1991	358.0	341.0	328.0	310.0	299.0	309.0	304.0	299.0	301.0	291.0	280.0	277.0
1992	283.0	294.0	302.0	303.0	318.0	334.0	328.0	314.0	292.0	278.0	268.0	257.0
1993	249.0	241.0	243.0	308.0	360.0	451.0	508.0	615.0	716.0	693.0	689.0	679.0
AVG:	640.1	635.7	640.1	648.3	661.6	681.2	697.3	713.7	725.6	697.6	666.1	645.6
MIN:	91.0	73.0	60.0	74.0	98.0	159.0	191.0	178.0	160.0	140.0	117.0	106.0
MAX:	789.0	781.0	786.0	791.0	799.0	827.0	871.0	878.0	873.0	867.0	815.0	792.0

Figures 3.5.3-5 and 3.5.3-6 display data for total storage in the EBMUD system, calculated as the sum of storages in Pardee and Camanche Reservoirs. EBMUD may divert CVP water at Freeport in Alternatives 2-5 only when EBMUD total system storage falls below 500 TAF on October 5. End-of-September storage values give indications when this condition is met.

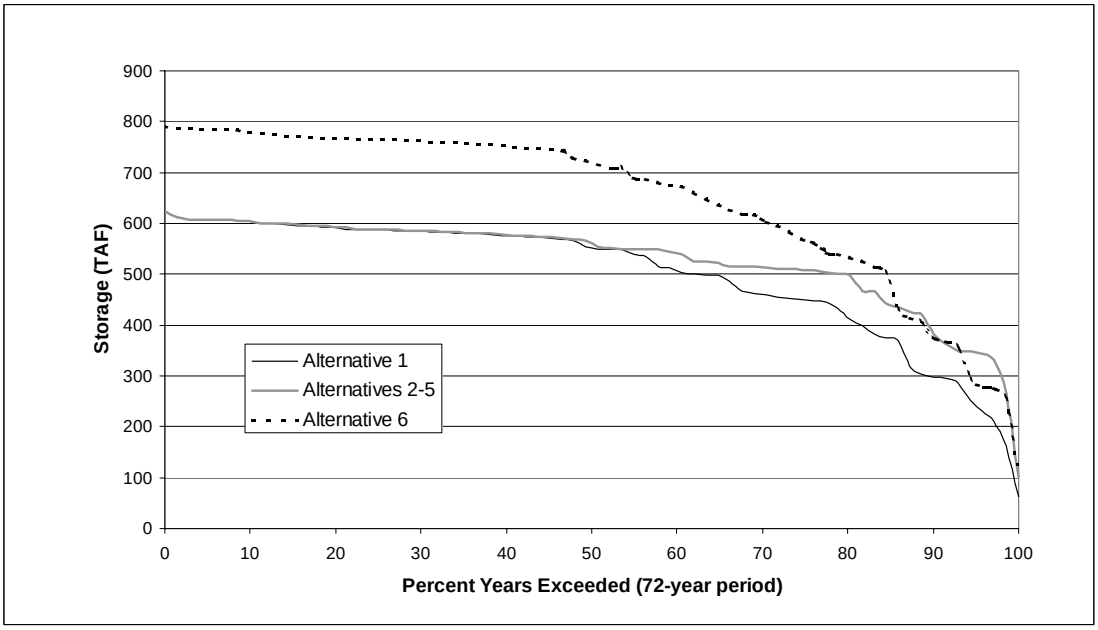


Figure 3.5.3-5. Exceedence for Simulated EBMUD Total System Storage: End-of-September Storage, 2020 LOD

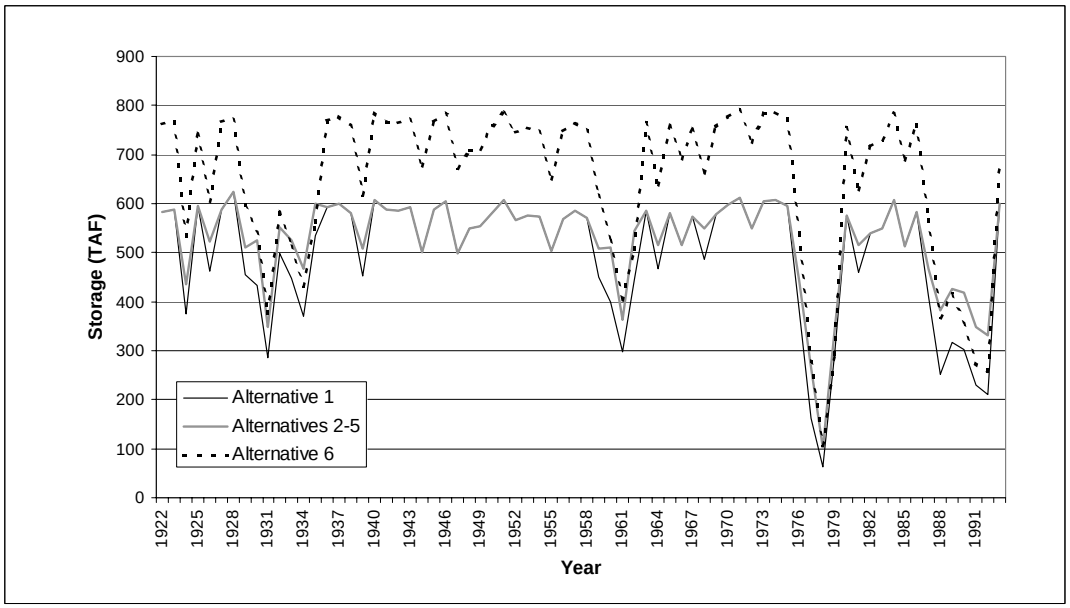


Figure 3.5.3-6. Simulated EBMUD Total System Storage: End-of-September Storage, 2020LOD

The following figures and tables illustrate results for Trinity Reservoir on the CVP system. Tables are provided for Whiskeytown Reservoir following the Trinity Reservoir results.

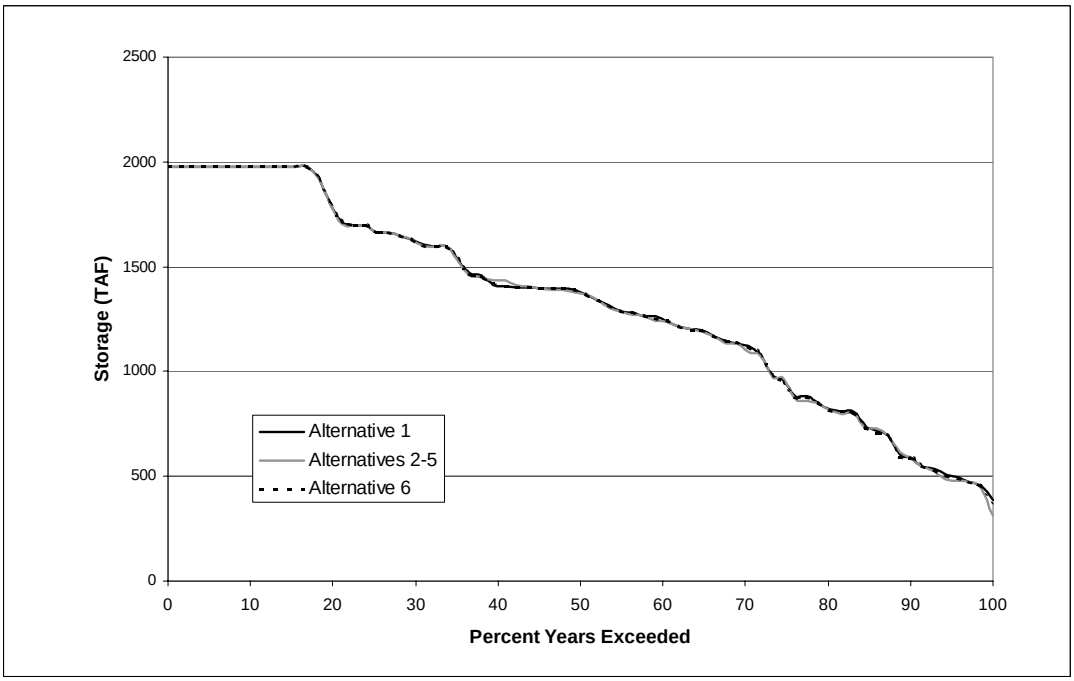


Figure 3.5.3-7. Exceedence for Simulated Trinity Reservoir End-of-September Storage, 2020 LOD

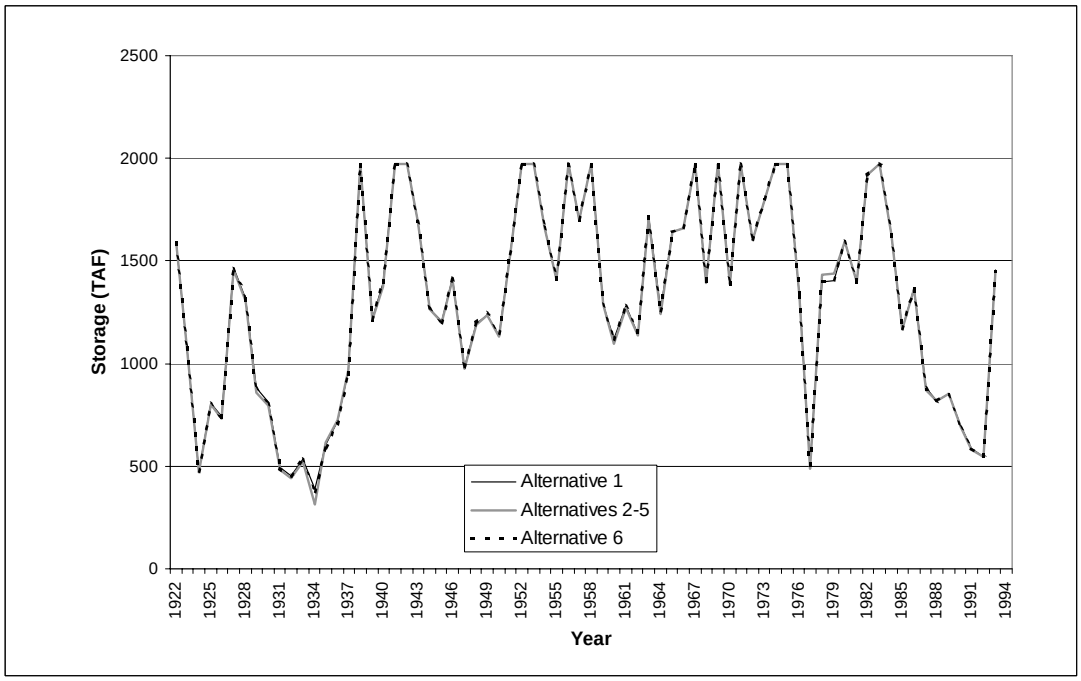


Figure 3.5.3-8. Simulated Trinity Reservoir End-of-September Storage, 2020 LOD

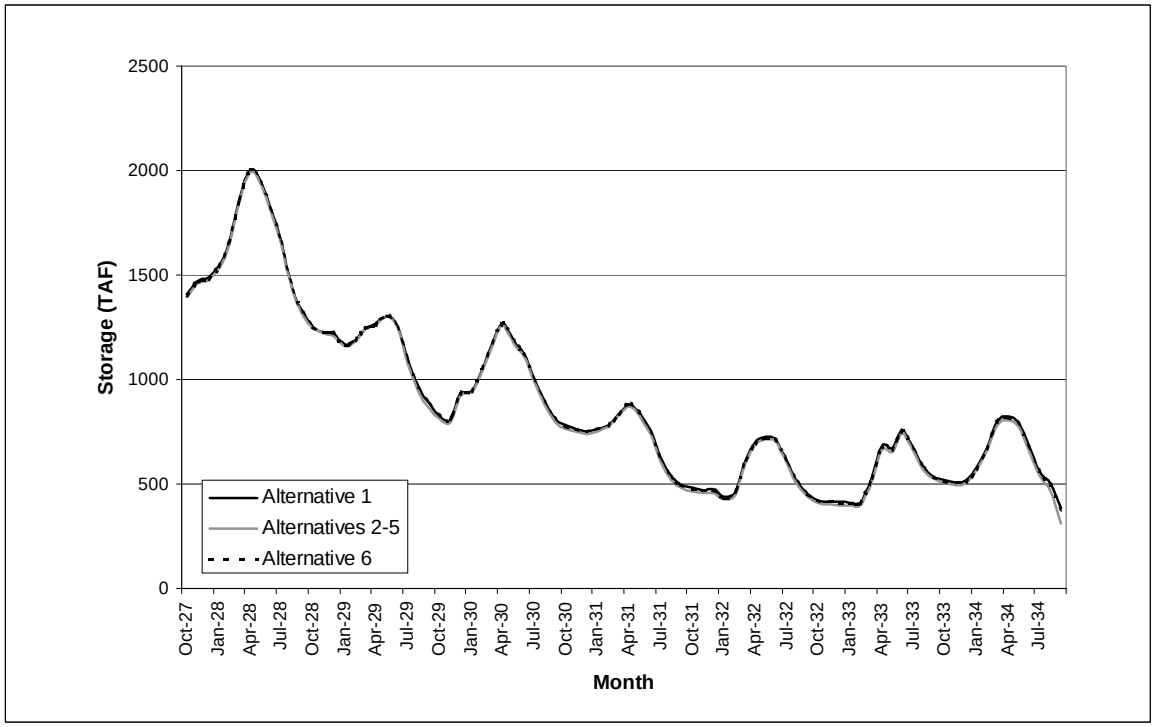


Figure 3.5.3-9. Simulated Trinity Reservoir Drought Period Storage, 2020 LOD (WY 1928-1934)

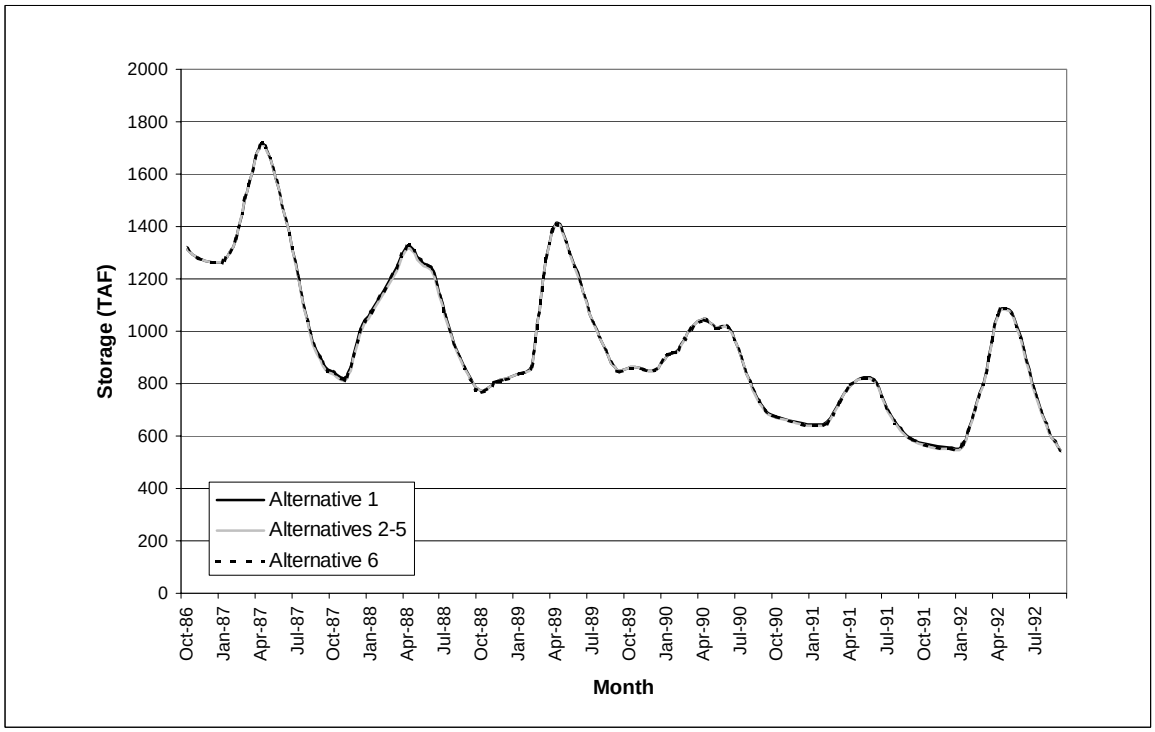


Figure 3.5.3-10. Simulated Trinity Reservoir Drought Period Storage, 2020 LOD (WY 1987-1992)

Table 3.5.3-10. Simulated Trinity Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1723.5	1725.4	1722.0	1744.5	1794.5	1892.9	1965.7	1975.8	1863.6	1740.6	1591.8
1923	1506.6	1477.9	1487.5	1514.0	1537.3	1594.5	1709.0	1637.6	1598.9	1379.9	1161.2	1078.0
1924	1053.8	1043.4	1036.8	931.1	974.2	978.0	920.8	839.5	711.1	588.8	517.7	475.2
1925	467.7	541.2	571.5	497.2	767.8	902.9	1199.9	1185.3	1133.7	1016.3	890.7	807.8
1926	782.1	776.4	794.9	795.9	940.1	1042.4	1261.0	1165.1	1109.0	967.5	826.1	741.3
1927	714.7	870.5	1065.4	1183.2	1420.9	1598.8	1826.7	1817.2	1846.1	1724.9	1611.6	1470.2
1928	1410.5	1468.4	1486.6	1543.3	1652.9	1859.4	2005.3	1943.0	1812.3	1659.0	1429.8	1315.2
1929	1252.7	1228.0	1219.6	1164.4	1188.9	1246.8	1265.7	1307.1	1253.2	1094.3	968.3	881.8
1930	823.6	802.3	930.0	946.3	1045.1	1170.3	1270.5	1182.5	1121.2	998.8	894.1	810.2
1931	778.3	764.1	752.4	761.2	780.1	837.7	879.6	841.7	755.5	622.9	536.5	495.3
1932	479.3	472.4	475.4	436.7	458.3	610.5	699.8	723.0	709.3	601.5	506.6	452.9
1933	423.5	417.4	412.7	410.5	411.1	528.0	681.2	669.1	759.0	666.6	576.2	533.0
1934	515.6	507.6	516.8	578.3	668.1	799.2	823.0	794.5	680.5	563.0	500.0	386.1
1935	333.8	398.3	435.5	476.7	560.9	621.5	835.1	865.9	870.1	762.4	644.4	605.7
1936	591.6	586.8	589.9	703.5	843.9	955.1	1118.9	1049.2	1004.2	898.6	798.3	716.5
1937	683.5	672.4	663.0	654.8	658.5	763.9	989.5	1132.1	1230.1	1126.6	1042.6	960.0
1938	936.2	1077.6	1296.7	1393.7	1550.6	1811.3	2119.4	2294.0	2238.6	2206.5	2090.3	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1880.0	1952.4	1892.0	1760.0	1578.2	1347.0	1215.5
1940	995.6	918.2	981.7	1156.4	1482.3	1784.6	2011.5	1948.6	1833.1	1653.5	1504.0	1394.5
1941	1338.2	1319.2	1458.1	1678.6	1928.5	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2193.9	2253.5	2325.6	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2281.1	2171.8	2104.3	1960.0	1841.4	1695.7
1944	1638.9	1619.2	1613.4	1616.8	1659.9	1727.8	1765.3	1819.9	1771.2	1560.8	1380.8	1266.0
1945	1203.4	1205.9	1271.0	1324.7	1490.3	1544.1	1678.0	1642.3	1595.1	1451.7	1318.4	1203.9
1946	1161.2	1216.4	1407.3	1537.9	1593.2	1722.3	1944.8	1939.4	1845.2	1714.6	1555.1	1412.4
1947	1352.1	1345.9	1358.1	1349.7	1401.8	1511.8	1595.6	1504.2	1490.0	1302.7	1113.5	977.7
1948	991.2	1002.0	1003.1	1195.7	1217.7	1252.2	1433.8	1428.3	1463.9	1338.0	1226.9	1193.6
1949	1185.7	1193.0	1196.8	1189.5	1227.2	1443.0	1702.8	1709.9	1626.3	1482.1	1351.0	1237.5
1950	1176.3	1168.2	1158.6	1185.4	1241.8	1363.4	1518.1	1522.4	1504.5	1382.0	1247.5	1135.4
1951	1228.6	1343.9	1601.6	1691.9	1912.5	2016.3	2194.6	2126.3	1964.4	1816.9	1668.9	1524.8
1952	1471.4	1477.0	1623.8	1683.1	1873.2	2039.4	2300.0	2411.5	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2277.6	2237.1	2330.1	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2271.7	2124.9	1988.9	1802.2	1665.3
1955	1608.4	1629.0	1685.4	1703.6	1732.1	1767.0	1819.0	1816.9	1802.9	1664.3	1518.4	1408.4
1956	1345.8	1329.7	1638.1	1900.0	2000.0	2099.5	2289.9	2392.0	2311.1	2193.7	2081.4	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2180.3	2196.9	2176.7	2032.1	1837.4	1699.1
1958	1790.3	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2430.8	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	2012.1	2145.4	2044.8	1945.4	1713.9	1506.0	1289.3
1960	1227.4	1189.3	1177.5	1185.6	1328.2	1507.0	1623.6	1568.9	1543.1	1385.8	1234.2	1120.3
1961	1092.0	1095.6	1184.7	1222.0	1445.0	1572.9	1716.9	1687.2	1721.1	1582.5	1395.0	1281.8
1962	1219.1	1198.1	1229.8	1233.9	1368.3	1444.7	1660.6	1582.6	1521.4	1380.6	1257.3	1145.4
1963	1235.6	1287.3	1461.2	1502.0	1796.9	1875.4	2143.1	2183.0	2127.5	1983.8	1860.8	1714.1
1964	1686.2	1804.3	1830.3	1900.0	1888.0	1918.6	1913.6	1810.6	1754.2	1551.2	1372.9	1266.5
1965	1198.6	1228.9	1765.4	1900.0	1970.7	1961.0	2195.6	2110.3	2050.2	1916.0	1780.8	1644.0
1966	1583.5	1671.5	1712.0	1794.4	1862.8	2069.4	2300.0	2312.2	2255.9	2045.1	1825.2	1660.3
1967	1552.7	1634.6	1777.6	1892.7	2000.0	2100.0	2211.2	2333.2	2434.1	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.3	1844.2	2000.0	2100.0	2179.6	2071.5	1914.6	1716.4	1570.2	1400.5
1969	1344.6	1340.5	1400.0	1543.8	1668.9	1830.4	2166.4	2420.0	2348.8	2225.4	2108.7	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2143.6	2051.0	1912.4	1688.3	1504.9	1387.2
1971	1328.5	1434.1	1565.0	1799.7	1915.2	2100.0	2282.1	2331.9	2344.6	2270.0	2150.0	1975.0
1972	1850.0	1850.0	1842.1	1900.0	2000.0	2100.0	2247.3	2185.4	2059.4	1912.3	1751.0	1603.8
1973	1523.7	1533.5	1642.8	1803.3	1957.5	2083.0	2262.4	2327.5	2277.9	2140.6	1940.2	1799.5
1974	1741.3	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2400.1	2393.9	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1839.6	1826.7	1924.1	2100.0	2230.8	2344.1	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1783.8	1870.2	1852.6	1804.2	1586.4	1447.2	1335.5
1977	1270.7	1235.6	1218.8	1199.4	1193.9	1189.1	1070.9	1020.4	883.6	653.0	529.8	504.0
1978	496.4	500.0	630.0	1030.6	1215.9	1502.2	1702.8	1719.7	1674.9	1591.0	1481.4	1397.7
1979	1336.5	1333.1	1328.9	1351.8	1405.2	1554.4	1676.5	1763.4	1775.3	1667.9	1514.3	1402.1
1980	1370.0	1405.4	1469.2	1697.9	2000.0	2083.4	2230.7	2143.7	2011.7	1889.6	1738.9	1595.2
1981	1531.0	1508.4	1548.5	1655.1	1794.6	1920.5	2036.7	1967.5	1907.7	1756.8	1518.8	1397.7
1982	1318.4	1561.9	1850.0	1900.0	2000.0	2100.0	2300.0	2311.0	2178.6	2062.8	1948.0	1921.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2214.8	2178.0	2049.6	1916.3	1772.2	1630.5
1985	1573.6	1702.0	1756.2	1747.4	1778.2	1834.5	1979.6	1899.7	1806.1	1578.7	1348.0	1168.0
1986	1112.5	1101.1	1111.3	1239.4	1723.6	2065.7	2096.0	1990.2	1877.4	1667.3	1474.6	1366.1
1987	1312.2	1276.7	1263.5	1273.6	1350.6	1563.0	1715.3	1623.7	1429.0	1204.9	1001.4	880.4
1988	843.7	829.4	998.5	1077.1	1157.3	1241.6	1329.2	1269.1	1228.1	1065.1	917.3	819.2
1989	770.3	806.0	819.2	840.6	866.0	1209.9	1413.1	1306.0	1187.9	1035.7	928.5	850.7
1990	863.5	860.1	850.6	909.7	930.1	1013.8	1048.6	1014.5	1012.9	904.6	781.5	695.4
1991	673.6	660.2	648.7	644.0	653.7	731.6	796.4	824.1	804.3	696.7	626.4	587.3
1992	569.5	559.2	555.5	562.9	702.2	844.2	1079.3	1071.8	940.5	759.8	621.9	547.1
1993	530.7	526.6	550.0	611.8	755.9	1127.5	1338.0	1519.7	1614.8	1592.6	1482.3	1455.5
AVG:	1267.1	1284.3	1337.3	1393.0	1501.2	1621.4	1770.2	1766.6	1720.1	1575.4	1434.3	1317.9
MIN:	333.8	398.3	412.7	410.5	411.1	528.0	681.2	669.1	680.5	563.0	500.0	386.1
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.5.3-11. Simulated Trinity Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1723.5	1725.4	1722.0	1744.5	1794.5	1892.9	1965.7	1975.8	1863.6	1740.6	1591.8
1923	1506.6	1477.9	1487.5	1514.0	1537.3	1594.5	1709.0	1637.6	1598.9	1379.9	1160.9	1077.8
1924	1053.6	1043.2	1036.6	930.6	973.7	976.1	918.9	837.4	706.8	584.5	514.4	472.0
1925	464.5	534.2	564.6	487.9	758.6	893.6	1190.7	1176.1	1124.5	1007.2	880.4	799.2
1926	773.6	767.9	786.4	787.4	931.5	1033.9	1252.5	1156.6	1099.7	954.2	812.7	728.0
1927	701.5	857.2	1052.1	1169.9	1407.6	1585.6	1813.4	1804.0	1833.0	1711.8	1598.5	1457.1
1928	1397.5	1455.4	1473.6	1530.3	1639.9	1846.5	1992.3	1930.1	1799.4	1646.2	1418.9	1304.3
1929	1241.9	1217.2	1208.7	1159.7	1184.2	1242.1	1261.0	1302.5	1248.6	1074.3	944.5	858.1
1930	810.6	793.4	921.1	937.5	1036.2	1161.4	1261.7	1173.7	1112.6	985.4	880.8	797.0
1931	765.1	750.9	739.2	748.0	772.5	830.1	872.0	829.3	737.8	604.1	520.1	478.9
1932	462.9	456.0	459.0	424.0	445.5	597.8	687.1	710.4	702.3	594.4	495.0	441.6
1933	409.1	403.0	398.3	396.1	396.8	513.6	666.9	654.9	743.4	651.0	561.7	521.4
1934	504.0	496.1	505.2	566.8	656.6	780.4	804.4	773.8	658.6	542.7	463.5	312.5
1935	260.6	325.1	362.3	403.6	487.8	548.5	762.2	799.4	803.9	696.6	655.6	616.9
1936	602.8	598.0	601.0	714.6	855.0	966.2	1129.9	1060.2	1015.2	909.6	809.1	727.3
1937	694.3	683.2	673.8	665.6	669.3	774.7	1000.2	1142.8	1240.8	1137.2	1053.2	970.6
1938	946.7	1088.1	1307.2	1404.2	1561.1	1821.8	2129.8	2304.4	2249.0	2216.9	2100.7	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1880.0	1952.4	1892.1	1755.0	1573.3	1342.0	1210.6
1940	990.6	899.0	962.5	1137.2	1463.1	1765.4	1992.4	1929.6	1814.1	1634.5	1485.1	1375.7
1941	1319.4	1300.4	1439.3	1659.8	1909.7	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2193.9	2253.5	2325.6	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2281.1	2171.8	2104.3	1960.0	1841.4	1695.7
1944	1638.9	1619.2	1613.4	1616.8	1659.9	1727.8	1765.3	1819.9	1771.2	1559.6	1379.6	1264.8
1945	1202.3	1204.7	1269.9	1323.5	1489.2	1543.0	1676.9	1641.2	1594.0	1450.6	1317.3	1202.8
1946	1160.1	1215.3	1406.2	1536.8	1592.1	1721.2	1943.7	1938.3	1844.1	1713.5	1553.3	1410.6
1947	1350.3	1344.1	1356.3	1347.9	1400.0	1510.0	1593.9	1502.4	1488.2	1300.7	1111.5	975.6
1948	989.1	999.9	1000.9	1193.5	1215.6	1250.1	1431.7	1426.2	1461.8	1335.9	1224.8	1189.1
1949	1181.2	1188.5	1192.4	1185.0	1222.7	1438.5	1698.3	1705.5	1621.9	1477.7	1346.6	1233.2
1950	1171.9	1163.8	1154.3	1181.0	1237.5	1359.1	1513.8	1518.1	1500.2	1377.8	1243.3	1131.2
1951	1224.3	1339.7	1597.3	1687.7	1908.2	2012.1	2190.4	2122.1	1960.2	1812.7	1664.8	1520.6
1952	1467.3	1472.9	1619.6	1678.9	1869.1	2035.3	2300.0	2411.5	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2277.6	2237.1	2330.1	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2271.7	2124.9	1988.9	1802.2	1665.3
1955	1608.4	1629.0	1685.4	1703.6	1732.1	1766.9	1819.0	1816.8	1802.9	1664.2	1518.4	1408.4
1956	1345.7	1329.6	1638.1	1900.0	2000.0	2099.5	2289.9	2392.0	2311.1	2193.7	2080.5	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2180.1	2196.6	2176.4	2031.8	1837.1	1698.8
1958	1790.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2430.8	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	2010.7	2143.7	2043.1	1943.7	1712.2	1505.1	1288.5
1960	1211.2	1173.1	1161.3	1169.4	1312.0	1490.8	1607.5	1552.9	1527.1	1369.9	1209.4	1095.5
1961	1067.3	1070.9	1160.0	1197.3	1420.3	1548.2	1692.3	1662.6	1696.6	1558.1	1383.5	1270.4
1962	1207.7	1186.7	1218.4	1222.5	1357.0	1433.4	1649.3	1571.3	1510.2	1369.4	1246.1	1134.3
1963	1224.5	1276.2	1450.1	1490.9	1785.8	1864.4	2132.0	2172.0	2116.4	1972.8	1849.9	1703.2
1964	1671.4	1789.4	1827.0	1898.5	1886.9	1922.9	1902.2	1799.2	1742.9	1533.3	1346.3	1240.0
1965	1172.1	1202.4	1738.9	1900.0	1970.7	1960.5	2195.0	2109.8	2049.6	1915.4	1780.3	1643.4
1966	1582.9	1670.9	1711.4	1793.8	1862.2	2068.8	2300.0	2312.2	2255.9	2045.1	1825.2	1660.3
1967	1550.1	1632.0	1775.0	1890.1	2000.0	2100.0	2211.2	2333.2	2434.1	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.0	1843.9	2000.0	2100.0	2177.7	2069.6	1912.7	1706.2	1560.1	1390.4
1969	1334.6	1330.4	1389.9	1533.7	1658.8	1820.3	2156.3	2416.2	2345.0	2221.7	2104.9	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2143.2	2050.7	1912.0	1687.9	1504.6	1386.8
1971	1328.1	1433.7	1564.7	1799.3	1914.6	2100.0	2282.1	2331.9	2344.6	2270.0	2150.0	1975.0
1972	1850.0	1850.0	1842.1	1900.0	2000.0	2100.0	2247.3	2185.4	2059.4	1912.3	1748.5	1601.3
1973	1521.2	1531.0	1640.3	1800.8	1955.1	2080.5	2261.7	2326.9	2277.3	2139.9	1939.6	1798.9
1974	1740.7	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2400.1	2393.9	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1839.4	1826.5	1923.9	2100.0	2230.8	2344.1	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1783.8	1870.2	1852.6	1804.2	1586.4	1447.2	1335.5
1977	1270.7	1235.6	1209.6	1190.2	1184.6	1179.9	1048.1	997.7	859.0	628.5	511.7	485.9
1978	435.8	466.1	665.8	1066.4	1251.6	1537.9	1738.5	1755.3	1710.4	1626.3	1516.6	1432.8
1979	1371.5	1368.2	1364.0	1386.8	1440.2	1589.3	1711.5	1798.3	1810.0	1702.5	1548.8	1436.5
1980	1404.3	1439.7	1503.5	1732.1	2000.0	2083.4	2230.7	2143.7	2011.7	1889.6	1738.9	1595.2
1981	1531.0	1508.4	1548.5	1655.1	1794.6	1920.5	2036.7	1967.5	1907.7	1756.8	1518.8	1397.7
1982	1300.0	1543.5	1850.0	1900.0	2000.0	2100.0	2300.0	2311.0	2178.6	2062.8	1948.0	1921.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2214.8	2178.0	2049.6	1916.3	1772.2	1630.5
1985	1573.6	1702.0	1756.2	1747.4	1778.2	1834.5	1979.6	1899.7	1804.7	1577.3	1346.6	1165.9
1986	1109.1	1097.7	1107.9	1236.1	1720.2	2062.3	2095.2	1989.3	1876.5	1666.5	1473.9	1365.4
1987	1311.4	1275.9	1262.8	1272.9	1349.8	1562.3	1714.6	1622.9	1428.3	1204.2	991.6	869.3
1988	832.7	818.3	987.5	1066.0	1146.2	1230.6	1318.2	1258.2	1214.4	1051.5	913.3	815.2
1989	768.6	804.2	817.4	838.8	864.2	1208.1	1411.3	1304.2	1186.2	1034.5	927.6	849.8
1990	862.6	859.2	849.7	908.8	929.3	1012.9	1047.7	1013.6	1010.4	901.2	778.0	692.0
1991	670.1	656.8	645.3	640.6	650.3	728.2	793.0	820.7	798.7	691.1	620.4	581.3
1992	563.5	553.2	549.6	557.0	696.3	838.2	1073.4	1065.9	930.3	748.9	613.0	544.1
1993	527.7	520.4	543.8	605.7	749.7	1127.6	1332.1	1513.8	1608.9	1586.7	1476.5	1449.7
AVG:	1262.0	1279.4	1333.6	1389.7	1497.6	1618.2	1766.6	1763.0	1716.2	1571.0	1430.6	1313.8
MIN:	260.6	325.1	362.3	396.1	396.8	513.6	666.9	654.9	658.6	542.7	463.5	312.5
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.5.3-12. Simulated Trinity Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1781.7	1723.5	1725.4	1722.0	1744.5	1794.5	1892.9	1965.7	1975.8	1863.6	1740.6	1591.8
1923	1506.6	1477.9	1487.5	1514.0	1537.3	1594.5	1709.0	1637.6	1598.9	1379.9	1160.5	1077.3
1924	1053.1	1042.7	1036.2	929.5	972.7	972.5	915.2	833.2	704.2	581.9	512.6	470.2
1925	462.7	533.5	563.8	486.9	757.6	892.6	1189.7	1175.2	1123.6	1006.2	882.6	801.8
1926	776.1	770.4	788.9	790.0	934.1	1036.5	1255.0	1159.2	1102.9	960.9	820.0	735.2
1927	708.7	864.4	1059.3	1177.1	1414.8	1592.8	1820.6	1811.2	1840.1	1718.9	1605.6	1464.2
1928	1404.6	1462.5	1480.7	1537.4	1652.3	1858.8	2004.6	1942.4	1811.7	1658.4	1429.4	1314.8
1929	1252.3	1227.6	1219.2	1161.8	1186.2	1244.1	1263.0	1304.5	1250.6	1091.7	964.7	878.3
1930	821.2	803.1	930.8	947.1	1045.9	1171.1	1271.3	1183.3	1122.1	997.1	892.3	808.5
1931	776.6	762.4	750.7	759.5	778.4	836.0	877.9	840.0	751.6	618.3	532.4	491.1
1932	475.2	468.3	471.3	434.1	455.7	607.9	697.2	720.5	707.8	600.0	504.2	450.6
1933	421.2	415.1	410.4	408.2	408.9	525.7	679.0	666.9	756.2	663.7	573.5	530.9
1934	513.5	505.5	514.7	576.2	666.0	796.2	820.1	791.2	676.7	559.3	500.0	373.0
1935	320.8	385.3	422.5	463.8	548.0	608.6	822.2	853.1	857.3	749.7	631.8	593.1
1936	579.1	574.2	577.3	690.9	831.3	942.6	1106.3	1036.7	991.8	886.3	786.0	704.3
1937	671.3	660.2	650.8	642.6	646.3	751.7	977.3	1120.0	1218.0	1114.6	1030.7	948.1
1938	924.3	1065.7	1284.8	1381.8	1538.7	1799.5	2107.5	2282.2	2226.8	2194.8	2078.6	1975.0
1939	1850.0	1850.0	1847.5	1777.7	1774.1	1880.0	1952.4	1892.1	1759.6	1577.8	1346.6	1215.1
1940	995.2	916.1	979.6	1154.3	1480.3	1782.5	2009.5	1946.6	1831.1	1651.4	1501.9	1392.5
1941	1336.2	1317.1	1456.1	1676.6	1926.4	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1942	1850.0	1850.0	1850.0	1900.0	2000.0	1986.6	2193.9	2253.5	2325.6	2270.0	2150.0	1975.0
1943	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2281.1	2171.8	2104.3	1960.0	1841.4	1695.7
1944	1638.9	1619.2	1613.4	1616.8	1659.9	1727.8	1765.3	1819.9	1771.2	1559.9	1379.9	1265.1
1945	1202.5	1205.0	1270.1	1314.5	1480.2	1534.0	1667.9	1632.2	1585.1	1441.7	1308.4	1194.0
1946	1182.0	1231.2	1422.1	1552.8	1608.0	1737.2	1959.6	1954.2	1860.0	1729.3	1558.5	1415.8
1947	1355.4	1349.3	1361.4	1353.1	1405.1	1515.2	1599.0	1507.5	1493.3	1304.5	1114.8	979.5
1948	993.0	1003.8	1004.8	1197.4	1219.5	1254.0	1435.5	1430.0	1465.7	1339.7	1228.7	1198.3
1949	1190.4	1197.7	1201.6	1194.2	1231.9	1447.7	1707.5	1714.7	1631.0	1486.8	1355.7	1242.2
1950	1180.9	1172.8	1163.3	1190.0	1246.5	1368.1	1522.7	1527.0	1509.1	1386.6	1252.1	1140.0
1951	1233.1	1348.4	1606.1	1696.4	1917.0	2020.9	2199.2	2130.8	1968.9	1821.4	1673.4	1529.2
1952	1475.9	1481.5	1628.2	1687.5	1877.6	2043.9	2300.0	2411.5	2447.0	2270.0	2150.0	1975.0
1953	1850.0	1844.7	1850.0	1900.0	1943.4	2071.3	2277.6	2237.1	2330.1	2270.0	2150.0	1975.0
1954	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2271.7	2124.9	1988.9	1802.2	1665.3
1955	1608.4	1629.0	1685.4	1703.6	1732.1	1767.0	1819.0	1816.9	1802.9	1664.3	1518.4	1408.4
1956	1345.8	1329.7	1638.1	1900.0	2000.0	2099.5	2289.9	2392.0	2311.1	2193.7	2080.5	1975.0
1957	1850.0	1850.0	1812.8	1795.8	1957.0	2100.0	2180.1	2196.6	2176.4	2031.8	1837.1	1698.8
1958	1790.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2430.8	2270.0	2150.0	1975.0
1959	1850.0	1849.6	1817.9	1900.0	2000.0	2012.0	2145.2	2044.7	1945.3	1713.8	1505.9	1289.2
1960	1227.3	1189.2	1177.4	1185.6	1328.1	1506.9	1623.5	1568.9	1543.1	1385.7	1230.2	1116.3
1961	1088.1	1091.6	1180.7	1218.0	1441.0	1569.0	1713.0	1683.2	1717.2	1578.6	1395.7	1282.5
1962	1219.8	1198.8	1230.5	1234.7	1369.1	1445.5	1661.4	1583.3	1522.2	1381.4	1258.0	1146.2
1963	1236.3	1288.0	1461.9	1502.8	1797.6	1876.2	2143.8	2183.8	2128.2	1984.6	1861.5	1714.8
1964	1672.3	1790.3	1827.2	1898.8	1887.1	1917.7	1903.0	1800.0	1743.6	1542.7	1360.3	1254.0
1965	1186.1	1216.3	1752.8	1900.0	1970.7	1961.1	2195.6	2110.4	2050.2	1916.1	1780.9	1644.0
1966	1583.6	1671.5	1712.0	1794.5	1862.8	2069.4	2300.0	2312.2	2255.9	2045.1	1825.2	1660.3
1967	1550.8	1632.6	1775.7	1890.8	2000.0	2100.0	2211.2	2333.2	2434.1	2270.0	2150.0	1975.0
1968	1850.0	1850.0	1834.0	1843.9	2000.0	2100.0	2179.3	2071.1	1914.3	1714.0	1567.8	1398.1
1969	1342.2	1338.0	1397.5	1541.4	1666.5	1828.0	2164.0	2420.0	2348.8	2225.4	2108.7	1975.0
1970	1850.0	1850.0	1850.0	1900.0	2000.0	2079.7	2143.2	2050.7	1912.1	1687.9	1504.6	1386.8
1971	1328.1	1433.7	1564.7	1799.3	1914.6	2100.0	2282.1	2331.9	2344.6	2270.0	2150.0	1975.0
1972	1850.0	1850.0	1842.1	1900.0	2000.0	2100.0	2247.3	2185.4	2059.4	1912.3	1748.5	1601.3
1973	1521.2	1531.0	1640.3	1800.8	1955.1	2080.5	2261.7	2326.9	2277.3	2139.9	1939.6	1798.9
1974	1740.7	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2400.1	2393.9	2270.0	2150.0	1975.0
1975	1850.0	1849.3	1838.8	1826.0	1923.4	2100.0	2230.8	2344.1	2447.0	2270.0	2150.0	1975.0
1976	1850.0	1850.0	1837.5	1703.4	1737.0	1783.8	1870.2	1852.6	1804.2	1586.4	1447.2	1335.5
1977	1270.7	1235.6	1218.8	1199.4	1193.9	1189.1	1064.8	1014.3	876.6	646.7	527.6	501.7
1978	494.2	500.0	628.8	1029.4	1214.6	1501.0	1701.6	1718.5	1673.8	1589.8	1480.3	1396.5
1979	1335.3	1332.0	1327.8	1350.6	1404.1	1553.2	1675.4	1762.3	1774.1	1666.7	1513.1	1401.0
1980	1368.9	1404.2	1468.0	1696.7	1999.2	2083.2	2230.5	2143.5	2011.5	1889.5	1738.7	1595.1
1981	1530.8	1508.2	1548.3	1654.9	1794.4	1920.3	2036.5	1967.3	1907.5	1756.6	1518.6	1397.5
1982	1312.8	1556.3	1850.0	1900.0	2000.0	2100.0	2300.0	2311.0	2178.6	2062.8	1948.0	1921.0
1983	1850.0	1850.0	1850.0	1900.0	2000.0	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0
1984	1850.0	1850.0	1850.0	1900.0	1997.8	2100.0	2214.8	2178.0	2049.6	1916.3	1772.2	1630.5
1985	1573.6	1702.0	1756.2	1747.4	1778.2	1834.5	1979.6	1899.7	1804.7	1577.3	1346.6	1166.0
1986	1109.6	1098.2	1108.4	1236.6	1720.7	2062.8	2095.3	1989.4	1876.6	1666.7	1474.1	1365.6
1987	1311.6	1276.1	1263.0	1273.0	1350.0	1562.4	1714.8	1623.1	1428.4	1204.3	998.5	877.6
1988	840.9	826.6	995.8	1074.3	1154.5	1238.8	1326.4	1266.4	1225.0	1062.0	913.7	816.1
1989	768.1	803.8	816.9	838.3	863.8	1207.7	1410.8	1303.7	1185.7	1033.1	925.3	847.5
1990	860.2	856.9	847.4	906.5	926.9	1010.5	1045.4	1011.3	1010.2	901.9	778.7	692.6
1991	670.8	657.5	645.9	641.3	651.0	728.8	793.6	821.4	801.1	693.5	623.1	584.0
1992	566.2	555.8	552.2	559.6	698.9	840.8	1076.0	1068.5	935.7	754.7	618.7	544.8
1993	528.3	522.0	545.4	607.3	751.4	1123.0	1333.5	1515.2	1610.3	1588.1	1477.9	1451.1
AVG:	1265.5	1282.7	1335.8	1391.5	1499.8	1620.1	1768.7	1765.1	1718.5	1573.7	1432.4	1316.2
MIN:	320.8	385.3	410.4	408.2	408.9	525.7	679.0	666.9	676.7	559.3	500.0	373.0
MAX:	1850.0	1850.0	1850.0	1900.0	2058.9	2100.0	2300.0	2420.0	2447.0	2270.0	2150.0	1975.0

Table 3.5.3-13. Simulated Trinity Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2
1924	-0.2	-0.2	-0.2	-0.5	-0.5	-1.9	-1.9	-2.1	-4.3	-4.3	-3.2	-3.2
1925	-3.2	-6.9	-6.9	-9.3	-9.3	-9.2	-9.2	-9.2	-9.2	-9.1	-10.3	-8.6
1926	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-9.3	-13.3	-13.3	-13.3
1927	-13.3	-13.3	-13.3	-13.3	-13.3	-13.2	-13.2	-13.2	-13.2	-13.1	-13.1	-13.0
1928	-13.0	-13.0	-13.0	-13.0	-13.0	-13.0	-13.0	-12.9	-12.9	-12.8	-10.9	-10.9
1929	-10.9	-10.9	-10.9	-4.7	-4.7	-4.7	-4.7	-4.7	-4.7	-20.0	-23.7	-23.7
1930	-13.0	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.8	-8.6	-13.3	-13.3	-13.2
1931	-13.2	-13.2	-13.2	-13.2	-7.6	-7.6	-7.6	-12.4	-17.7	-18.8	-16.5	-16.4
1932	-16.4	-16.4	-16.3	-12.7	-12.7	-12.7	-12.7	-12.6	-7.1	-7.0	-11.5	-11.4
1933	-14.4	-14.4	-14.4	-14.4	-14.4	-14.3	-14.3	-14.3	-15.6	-15.6	-14.5	-11.6
1934	-11.5	-11.5	-11.5	-11.5	-11.5	-18.8	-18.5	-20.6	-21.8	-20.3	-36.5	-73.6
1935	-73.2	-73.2	-73.1	-73.1	-73.1	-73.0	-72.9	-66.5	-66.2	-65.8	11.2	11.2
1936	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.0	11.0	10.9	10.9	10.8
1937	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.7	10.7	10.6	10.6	10.5
1938	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.4	10.4	10.4	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-5.0	-5.0	-4.9	-4.9
1940	-4.9	-19.2	-19.2	-19.2	-19.2	-19.2	-19.1	-19.1	-19.0	-19.0	-18.9	-18.8
1941	-18.8	-18.8	-18.8	-18.8	-18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.1	-1.1
1945	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
1946	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.8	-1.8
1947	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-2.0	-2.0	-2.1
1948	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-4.5
1949	-4.5	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4
1950	-4.4	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.2
1951	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2
1952	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1958	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-1.4	-1.7	-1.7	-1.7	-1.7	-0.8	-0.8
1960	-16.2	-16.2	-16.2	-16.2	-16.2	-16.2	-16.1	-16.1	-16.0	-15.9	-24.9	-24.8
1961	-24.7	-24.7	-24.7	-24.7	-24.7	-24.7	-24.7	-24.6	-24.5	-24.4	-11.4	-11.4
1962	-11.4	-11.4	-11.4	-11.4	-11.4	-11.4	-11.3	-11.3	-11.3	-11.2	-11.2	-11.1
1963	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.0	-11.0	-11.0	-10.9	-10.9
1964	-14.8	-14.8	-3.3	-1.5	-1.2	4.3	-11.4	-11.4	-11.4	-17.9	-26.6	-26.5
1965	-26.5	-26.5	-26.5	0.0	0.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
1966	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	0.0	0.0	0.0	0.0	0.0	0.0
1967	-2.6	-2.6	-2.6	-2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-0.2	-0.2	0.0	0.0	-1.9	-1.9	-1.9	-10.2	-10.1	-10.1
1969	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1	-10.1	-3.8	-3.8	-3.8	-3.8	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1971	-0.3	-0.3	-0.3	-0.3	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.5
1973	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
1974	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.2	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	-9.2	-9.2	-9.2	-9.2	-22.8	-22.7	-24.6	-24.4	-18.2	-18.1
1978	-60.6	-33.9	35.8	35.8	35.8	35.7	35.7	35.6	35.5	35.3	35.2	35.1
1979	35.0	35.0	35.0	35.0	35.0	35.0	34.9	34.8	34.7	34.6	34.5	34.4
1980	34.3	34.3	34.3	34.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	-18.4	-18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.5	-1.5	-1.4	-2.1
1986	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7
1987	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-9.8	-11.1
1988	-11.1	-11.1	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	-13.7	-13.6	-3.9	-4.0
1989	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.2	-0.9	-0.9
1990	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-2.5	-3.4	-3.4	-3.4
1991	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-5.6	-5.5	-6.0	-6.0
1992	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-5.9	-5.9	-10.2	-10.9	-8.9	-3.0
1993	-3.0	-6.1	-6.1	-6.1	-6.1	0.0	-5.9	-5.9	-5.9	-5.9	-5.8	-5.8
AVG:	-5.1	-4.9	-3.7	-3.2	-3.6	-3.3	-3.7	-3.6	-3.9	-4.5	-3.7	-4.2
MIN:	-73.2	-73.2	-73.1	-73.1	-73.1	-73.0	-72.9	-66.5	-66.2	-65.8	-36.5	-73.6
MAX:	35.0	35.0	35.8	35.8	35.8	35.7	35.7	35.6	35.5	35.3	35.2	35.1

Table 3.5.3-14. Simulated Trinity Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6
1924	-0.6	-0.6	-0.6	-1.6	-1.6	-5.5	-5.7	-6.2	-6.9	-6.8	-5.0	-5.0
1925	-5.0	-7.7	-7.6	-10.3	-10.3	-10.2	-10.2	-10.2	-10.1	-10.1	-8.1	-6.0
1926	-6.0	-6.0	-6.0	-6.0	-6.0	-5.9	-5.9	-5.9	-6.0	-6.6	-6.1	-6.1
1927	-6.1	-6.1	-6.1	-6.1	-6.1	-6.1	-6.1	-6.0	-6.0	-6.0	-6.0	-6.0
1928	-6.0	-6.0	-6.0	-6.0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.4	-0.4
1929	-0.4	-0.4	-0.4	-2.7	-2.7	-2.7	-2.6	-2.6	-2.6	-2.6	-3.5	-3.5
1930	-2.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-1.7	-1.7	-1.7
1931	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-3.9	-4.6	-4.2	-4.1
1932	-4.1	-4.1	-4.1	-2.6	-2.6	-2.6	-2.6	-2.5	-1.5	-1.5	-2.3	-2.3
1933	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.8	-2.9	-2.7	-2.1
1934	-2.1	-2.1	-2.1	-2.1	-2.1	-3.0	-2.9	-3.2	-3.7	-3.6	0.0	-13.0
1935	-12.9	-12.9	-12.9	-12.9	-12.9	-12.9	-12.9	-12.8	-12.8	-12.7	-12.6	-12.6
1936	-12.6	-12.6	-12.6	-12.6	-12.6	-12.5	-12.5	-12.5	-12.4	-12.3	-12.3	-12.2
1937	-12.2	-12.2	-12.2	-12.2	-12.2	-12.2	-12.2	-12.1	-12.1	-12.0	-11.9	-11.9
1938	-11.9	-11.9	-11.9	-11.9	-11.9	-11.9	-11.8	-11.8	-11.8	-11.7	-11.7	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	-0.4
1940	-0.4	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0
1941	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-0.9	-0.9
1945	-0.9	-0.9	-0.9	-10.1	-10.1	-10.1	-10.1	-10.1	-10.0	-10.0	-9.9	-9.9
1946	20.8	14.9	14.9	14.9	14.9	14.9	14.8	14.8	14.7	14.7	3.4	3.3
1947	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	1.8	1.2	1.8
1948	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	4.8
1949	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6
1950	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5
1951	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4
1952	4.4	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1958	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1
1960	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-4.0	-4.0
1961	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-3.9	0.8	0.8
1962	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
1963	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1964	-13.9	-13.9	-3.1	-1.2	-0.9	-0.9	-10.7	-10.6	-10.6	-8.5	-12.6	-12.6
1965	-12.5	-12.5	-12.5	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1966	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1967	-1.9	-1.9	-1.9	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-0.2	-0.2	0.0	0.0	-0.3	-0.3	-0.3	-2.4	-2.4	-2.4
1969	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
1971	-0.3	-0.3	-0.3	-0.3	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.5
1973	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
1974	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.8	-0.7	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	-6.1	-6.1	-7.0	-6.3	-2.3	-2.3
1978	-2.3	0.0	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1979	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1980	-1.2	-1.2	-1.2	-1.2	-0.8	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
1981	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
1982	-5.6	-5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-1.4	-1.4	-2.1
1986	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6
1987	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-2.9	-2.8
1988	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-3.1	-3.1	-3.6	-3.2
1989	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.6	-3.3	-3.2
1990	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-2.8	-2.8	-2.7	-2.7
1991	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-3.2	-3.1	-3.4	-3.4
1992	-3.3	-3.3	-3.3	-3.3	-3.3	-3.3	-3.3	-3.3	-4.8	-5.1	-3.2	-2.4
1993	-2.4	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5	-4.4	-4.4
AVG:	-1.6	-1.7	-1.5	-1.4	-1.3	-1.3	-1.6	-1.6	-1.7	-1.7	-1.9	-1.8
MIN:	-13.9	-13.9	-12.9	-12.9	-12.9	-12.9	-12.9	-12.8	-12.8	-12.7	-12.6	-13.0
MAX:	20.8	14.9	14.9	14.9	14.9	14.9	14.8	14.8	14.7	14.7	4.7	4.8

Table 3.5.3-15. Simulated Whiskeytown Storage (TAF)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	204.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	237.9	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	206.0	211.5	224.3	226.3	240.0	240.0	240.0	235.0
1932	217.0	195.0	192.5	180.0	186.1	185.5	184.6	193.4	234.1	234.0	180.0	180.0
1933	180.0	180.0	180.0	180.0	182.2	201.8	218.0	219.1	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	240.0	240.0	240.0	240.0	229.5	180.0
1935	180.0	190.5	194.1	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1936	217.0	206.0	201.7	206.0	206.0	211.5	240.0	240.0	240.0	240.0	240.0	235.0
1937	217.0	206.0	200.7	198.4	199.4	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.1	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	236.8	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	237.9	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	235.8	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.8	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	202.2	206.0	206.0	206.0	206.0	217.0	240.0	240.0	237.8	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	238.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	235.7	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.5	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.4	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	238.3	240.0	235.0
1991	217.0	206.0	200.8	200.3	202.3	217.0	230.7	232.8	240.0	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	215.8	205.3	205.1	204.7	205.7	216.2	238.6	238.4	239.7	239.9	239.0	233.5
MIN:	180.0	180.0	180.0	180.0	182.2	185.5	184.6	193.4	234.1	234.0	180.0	180.0
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.5.3-16 Simulated Whiskeytown Storage (TAF)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	204.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	237.9	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	205.6	211.1	223.9	230.7	240.0	240.0	240.0	235.0
1932	212.8	183.3	180.8	180.0	186.1	185.5	184.6	193.4	228.6	217.2	180.0	180.0
1933	180.0	180.0	180.0	180.0	182.2	201.8	218.0	223.9	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	240.0	240.0	240.0	240.0	180.0	180.0
1935	180.0	190.5	194.1	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1936	217.0	206.0	201.7	206.0	206.0	211.5	240.0	240.0	240.0	240.0	240.0	235.0
1937	217.0	206.0	200.7	198.4	199.4	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.1	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	236.8	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	237.9	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.4	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	235.8	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.8	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	180.0	180.6	206.0	206.0	206.0	217.0	240.0	240.0	237.8	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	238.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	235.7	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.5	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.4	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1991	217.0	206.0	200.8	200.3	202.3	217.0	230.7	232.8	240.0	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	215.4	204.8	204.9	204.7	205.7	216.2	238.6	238.5	239.7	239.7	238.3	233.5
MIN:	180.0	180.0	180.0	180.0	182.2	185.5	184.6	193.4	228.6	217.2	180.0	180.0
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.5.3-17 Simulated Whiskeytown Storage (TAF)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1923	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1924	217.0	206.0	204.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1925	217.0	206.0	206.0	180.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1926	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1927	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	237.9	240.0	240.0	235.0
1928	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1929	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1930	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1931	217.0	206.0	206.0	206.0	206.0	211.5	224.3	226.3	240.0	240.0	240.0	235.0
1932	217.0	195.0	192.5	180.0	186.1	185.5	184.6	193.4	233.1	230.9	180.0	180.0
1933	180.0	180.0	180.0	180.0	182.2	201.8	218.0	219.0	240.0	240.0	240.0	235.0
1934	217.0	206.0	206.0	206.0	205.6	217.0	240.0	240.0	240.0	240.0	214.9	180.0
1935	180.0	190.5	194.1	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1936	217.0	206.0	201.7	206.0	206.0	211.5	240.0	240.0	240.0	240.0	240.0	235.0
1937	217.0	206.0	200.7	198.4	199.4	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1938	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1939	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1940	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.1	240.0	240.0	240.0	235.0
1941	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1942	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1943	217.0	206.0	206.0	206.0	206.0	217.0	240.0	236.8	240.0	240.0	240.0	235.0
1944	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1945	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	234.9	240.0	240.0	235.0
1946	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1947	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1948	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1949	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1950	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1951	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1952	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1953	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1954	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1955	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1956	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	235.8	240.0	240.0	235.0
1957	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1958	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1959	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1960	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1961	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1962	217.0	206.0	206.0	206.0	206.0	217.0	240.0	237.2	240.0	240.0	240.0	235.0
1963	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1964	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1965	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1966	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1967	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1968	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.3	240.0	240.0	240.0	235.0
1969	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1970	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.8	240.0	240.0	240.0	235.0
1971	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1972	217.0	206.0	206.0	206.0	206.0	217.0	240.0	238.2	240.0	240.0	240.0	235.0
1973	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1974	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1975	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1976	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1977	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1978	198.9	206.0	206.0	206.0	206.0	217.0	240.0	240.0	237.8	240.0	240.0	235.0
1979	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1980	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1981	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1982	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	238.0	240.0	240.0	235.0
1983	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1984	217.0	206.0	206.0	206.0	206.0	217.0	240.0	235.7	240.0	240.0	240.0	235.0
1985	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1986	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.5	240.0	240.0	240.0	235.0
1987	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1988	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1989	217.0	206.0	206.0	206.0	206.0	217.0	240.0	239.4	240.0	240.0	240.0	235.0
1990	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1991	217.0	206.0	200.8	200.3	202.3	217.0	230.7	232.8	240.0	240.0	240.0	235.0
1992	217.0	206.0	205.8	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
1993	217.0	206.0	206.0	206.0	206.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0
AVG:	215.7	205.3	205.1	204.7	205.7	216.2	238.6	238.4	239.7	239.9	238.8	233.5
MIN:	180.0	180.0	180.0	180.0	182.2	185.5	184.6	193.4	233.1	230.9	180.0	180.0
MAX:	217.0	206.0	206.0	206.0	240.0	217.0	240.0	240.0	240.0	240.0	240.0	235.0

Table 3.5.3-18 Simulated Whiskeytown Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	4.4	0.0	0.0	0.0	0.0
1932	-4.2	-11.7	-11.7	0.0	0.0	0.0	0.0	0.0	-5.5	-16.8	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-49.5	0.0
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	-22.2	-25.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	-0.4	-0.5	-0.2	0.0	0.0	0.0	0.0	0.1	-0.1	-0.2	-0.7	0.0
MIN:	-22.2	-25.4	-11.7	0.0	-0.4	-0.4	-0.4	-1.6	-5.5	-16.8	-49.5	0.0
MAX:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	1.7	0.0	0.0

Table 3.5.3-19 Simulated Whiskeytown Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-3.1	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-14.5	0.0
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	0.0
MIN:	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-3.0	-3.1	-14.5	0.0
MAX:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	1.7	0.0	0.0

The following figures and tables illustrate results for Shasta Reservoir on the CVP system.

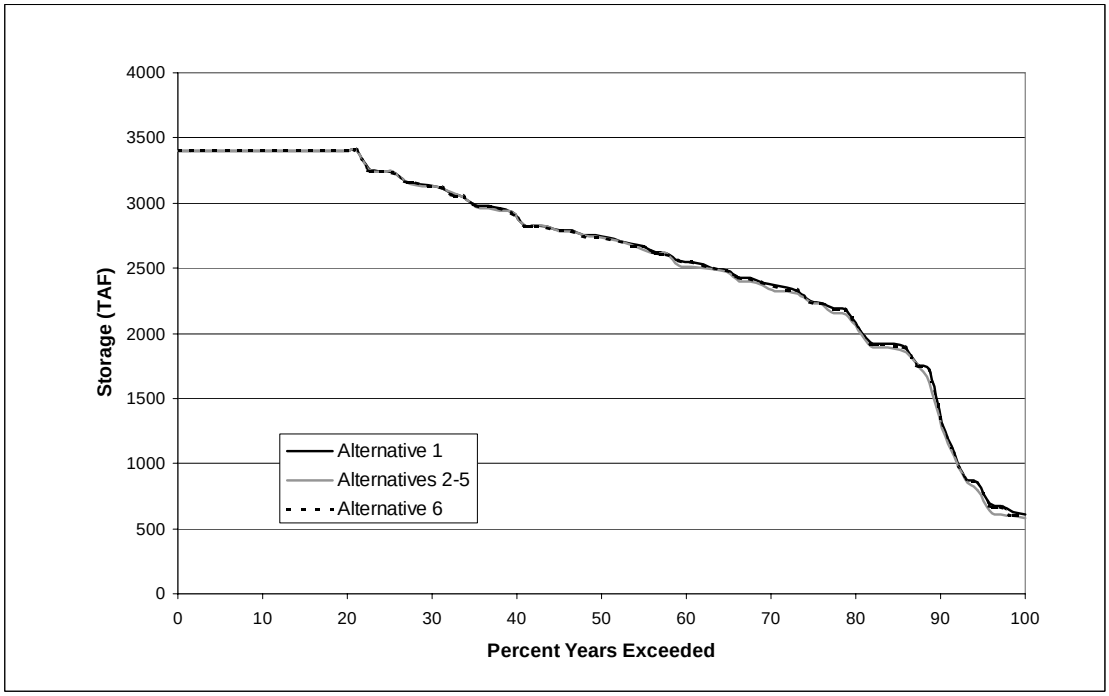


Figure 3.5.3-11. Exceedence for Simulated Shasta Reservoir End-of-September Storage, 2020 LOD

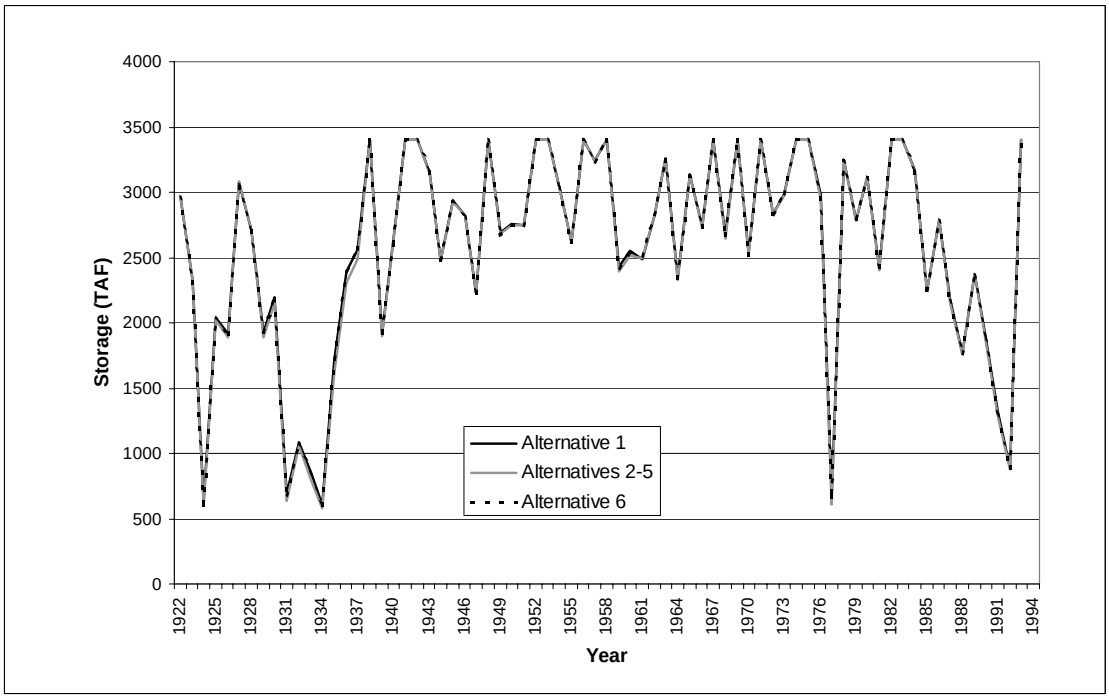


Figure 3.5.3-12. Simulated Shasta Reservoir End-of-September Storage, 2020 LOD

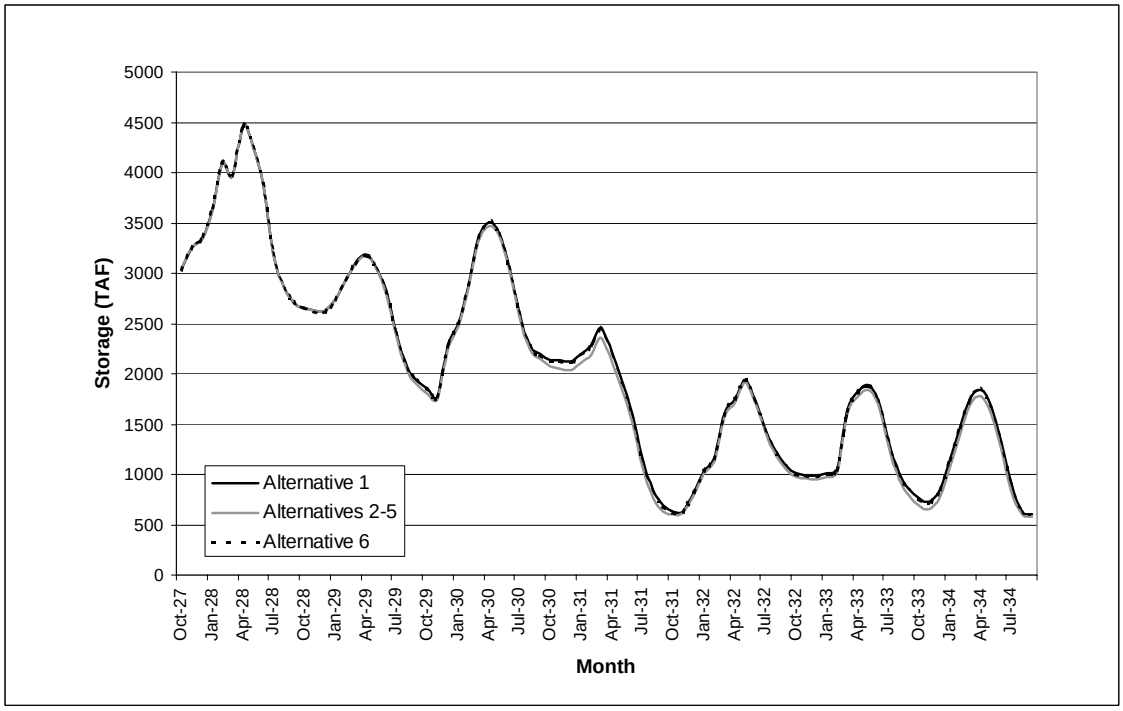


Figure 3.5.3-13. Simulated Shasta Reservoir Drought Period Storage, 2020 LOD (WY 1928-1934)

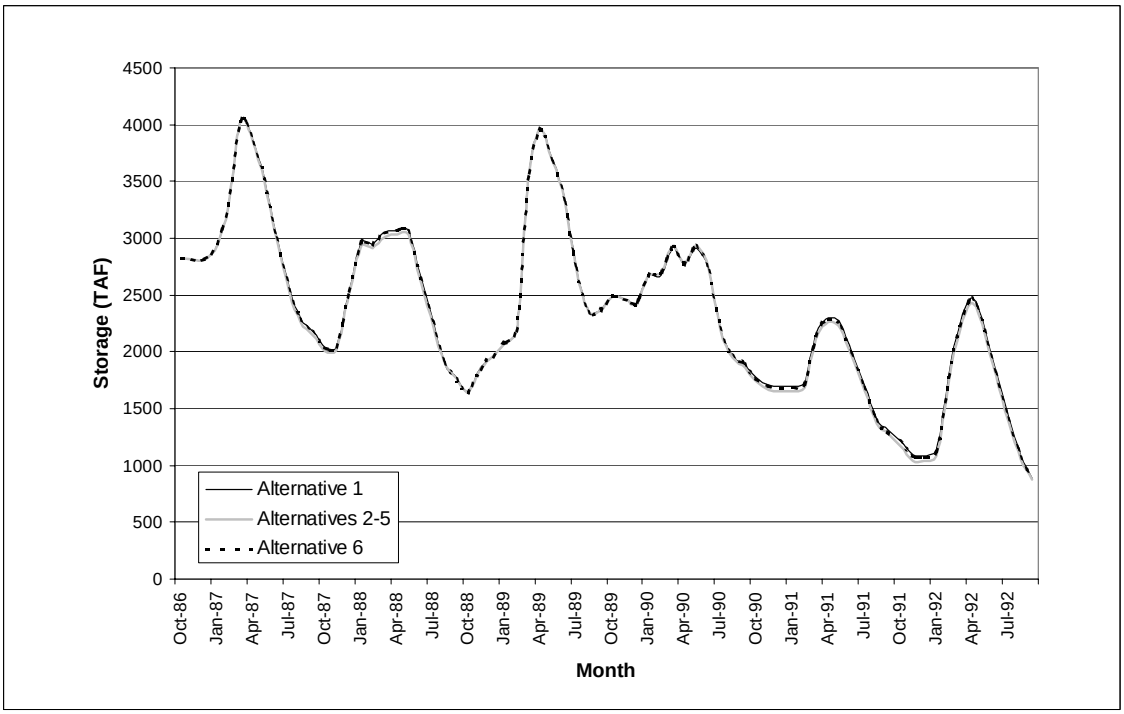


Figure 3.5.3-14. Simulated Shasta Reservoir Drought Period Storage, 2020 LOD (WY 1987-1992)

Table 3.5.3-20. Simulated Shasta Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2806.0	2845.9	2935.3	3040.0	3399.8	3781.4	4258.4	4391.7	4084.8	3600.3	3146.5	2961.3
1923	2990.1	3077.1	3208.0	3406.8	3534.6	3657.6	3962.2	3669.0	3256.8	2806.8	2443.6	2325.6
1924	2261.9	2186.1	2134.0	2245.2	2404.7	2418.6	2207.1	1884.3	1494.5	1069.0	762.3	631.1
1925	650.4	802.3	914.5	1193.0	2431.2	2584.1	3243.2	3305.3	2985.0	2540.2	2174.0	2040.8
1926	1981.7	1983.7	2034.5	2080.4	2806.8	3012.3	3307.3	3164.0	2790.9	2340.4	2033.7	1916.3
1927	1936.9	2420.6	2926.8	3465.6	3462.0	4093.8	4552.0	4552.0	4243.5	3669.6	3233.5	3074.2
1928	3040.0	3252.0	3349.2	3624.9	4090.5	3965.0	4463.1	4242.5	3874.0	3200.0	2853.0	2707.3
1929	2650.2	2626.8	2626.6	2742.6	2929.4	3097.1	3179.3	3054.0	2822.4	2410.5	2060.5	1928.4
1930	1847.4	1768.5	2291.9	2496.4	2868.8	3344.0	3503.7	3397.8	3063.0	2616.9	2272.1	2192.2
1931	2135.2	2133.9	2119.7	2193.3	2283.2	2453.6	2207.8	1926.1	1607.9	1169.4	844.5	693.9
1932	627.0	632.3	823.9	1041.7	1157.6	1590.8	1751.9	1939.2	1740.4	1453.6	1216.4	1082.4
1933	1008.7	993.4	981.7	1006.2	1043.3	1628.0	1822.4	1889.8	1746.5	1362.8	1010.7	854.7
1934	768.6	727.9	851.3	1146.0	1471.3	1757.0	1844.9	1675.8	1329.1	929.8	625.0	606.2
1935	586.1	671.1	708.0	993.0	1321.7	1710.4	2705.9	2927.5	2623.7	2260.7	1903.6	1720.1
1936	1698.5	1667.4	1675.5	2298.8	3180.4	3540.4	3767.7	3656.6	3443.1	2995.3	2567.4	2392.8
1937	2281.8	2191.0	2112.4	2089.6	2181.6	2826.1	3483.6	3633.7	3469.0	3127.3	2727.2	2561.5
1938	2515.6	3074.5	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4056.2	3689.7	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4085.6	3896.5	3607.4	3100.9	2492.4	2031.4	1915.8
1940	2009.5	1990.9	2141.4	3021.5	3252.0	3435.0	4161.3	4101.8	3720.3	3190.9	2774.9	2618.9
1941	2608.5	2632.5	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4494.0	4150.0	3700.0	3400.0
1942	3250.0	3200.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4459.4	4057.2	3686.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4248.0	3707.9	3288.8	3145.6
1944	3120.6	3139.7	3130.2	3207.6	3514.1	3824.8	3824.5	3722.0	3452.8	2965.0	2615.4	2478.6
1945	2468.3	2691.1	3006.1	3197.1	3948.0	4257.8	4426.4	4421.8	4123.0	3550.4	3116.2	2932.5
1946	2988.8	3252.0	3265.0	3622.0	3700.7	4096.6	4294.9	4214.4	3842.1	3331.5	2948.6	2826.5
1947	2747.9	2806.1	2901.8	2916.1	3184.4	3716.9	3880.2	3520.7	3249.2	2692.9	2309.4	2228.0
1948	2305.3	2355.7	2388.1	2952.2	2752.7	3059.1	3960.9	4311.5	4334.8	3956.3	3554.8	3400.0
1949	3250.0	3200.0	3201.3	3206.3	3396.4	4071.0	4391.7	4340.6	3946.5	3278.7	2851.3	2687.9
1950	2567.7	2486.4	2425.2	2695.1	3103.1	3552.1	3895.7	3849.8	3564.1	3187.1	2844.6	2756.0
1951	3058.8	3252.0	3322.0	3624.0	3794.0	4236.5	4325.4	4347.7	3980.2	3311.7	2897.2	2750.7
1952	2770.3	2886.7	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4403.6	4106.9	3700.0	3400.0
1953	3250.0	3200.5	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	3999.7	3681.9	3400.0
1954	3250.0	3252.0	3364.0	3552.0	3661.0	4106.0	4546.0	4260.2	4050.0	3320.1	3094.6	3045.4
1955	3052.8	3219.7	3360.0	3482.3	3570.8	3739.4	3883.2	3962.0	3532.7	3045.7	2694.1	2617.8
1956	2587.2	2627.4	3252.0	3252.0	3288.0	4012.4	4522.3	4552.0	4376.5	4031.3	3700.0	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4201.2	4458.6	4170.9	3546.8	3196.4	3241.4
1958	3250.0	3244.8	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4145.8	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4102.8	4155.4	3927.7	3255.5	2680.5	2264.4	2429.3
1960	2305.7	2205.4	2184.9	2377.9	3095.1	3792.2	3986.0	3973.8	3695.2	3075.2	2603.4	2550.2
1961	2489.8	2624.7	3086.8	3290.6	3914.0	4280.0	4426.5	4400.9	4004.2	3163.4	2634.9	2489.1
1962	2350.9	2401.0	2680.3	2802.3	3675.0	4174.9	4456.4	4349.1	4000.7	3346.6	2936.1	2820.5
1963	3246.8	3252.0	3349.0	3514.4	3944.0	4148.0	4137.0	4421.9	4196.9	3614.0	3277.2	3265.4
1964	3250.0	3252.0	3297.9	3705.0	3923.1	4086.6	3759.2	3536.1	3301.7	2831.1	2447.9	2349.5
1965	2345.3	2493.6	3252.0	3368.0	3809.4	3978.1	4500.0	4416.5	4086.3	3484.6	3208.6	3133.5
1966	3119.2	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4405.7	3728.9	3178.4	2793.8	2737.3
1967	2605.5	2967.5	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3212.2	3315.2	3611.7	3654.0	4248.0	4243.1	4103.1	3643.4	3032.5	2739.7	2674.2
1969	2667.6	2702.4	3024.5	3358.0	3480.0	4030.0	4434.0	4552.0	4383.4	3873.0	3484.2	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4093.4	3952.9	3678.6	2953.3	2636.0	2528.1
1971	2603.4	3125.8	3319.0	3515.0	3655.0	3873.0	4359.2	4552.0	4493.1	3968.2	3628.8	3400.0
1972	3250.0	3200.0	3337.6	3714.0	3979.0	4249.0	4494.1	4392.6	3888.1	3200.0	2841.2	2832.5
1973	2941.8	3248.4	3346.0	3552.0	3636.0	4162.0	4441.7	4419.9	4000.7	3321.6	3036.6	2976.9
1974	3100.3	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4480.5	4329.8	4067.0	3700.0	3400.0
1975	3250.0	3208.2	3335.7	3508.7	3936.0	3756.0	4343.3	4552.0	4415.9	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3727.9	3962.1	4053.6	3885.9	3442.1	3092.7	2980.5	2980.3
1977	2962.7	3033.2	2932.6	2948.5	2941.2	2938.1	2611.9	2477.0	1928.6	1200.6	730.3	670.0
1978	550.0	599.1	1130.9	3047.3	3567.0	4000.0	4552.0	4552.0	4208.4	3609.0	3245.3	3242.1
1979	3200.0	3199.4	3192.0	3350.9	3701.8	4208.2	4374.4	4406.4	3822.3	3177.7	2888.8	2787.3
1980	2850.6	3030.2	3185.8	3528.0	3292.0	4047.0	4348.7	4280.3	3956.5	3514.6	3172.6	3115.5
1981	3088.3	3064.3	3161.9	3470.1	3886.0	4256.0	4399.6	4153.6	3527.0	2892.1	2518.4	2423.0
1982	2500.0	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4304.4	4143.0	3853.0	3583.2	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4344.0	4294.3	4039.4	3427.3	3189.3	3167.4
1985	3203.0	3252.0	3360.0	3494.0	3683.2	3894.6	4006.6	3635.4	3131.5	2609.4	2238.3	2247.6
1986	2249.9	2277.4	2434.3	3002.6	3252.0	3534.0	3954.1	3887.9	3469.0	3105.2	2780.5	2787.8
1987	2829.5	2812.4	2813.3	2941.1	3289.8	4025.7	3851.9	3528.5	3005.7	2563.0	2298.1	2179.1
1988	2037.5	2041.0	2532.2	2969.6	2945.9	3052.7	3070.1	3064.9	2660.1	2270.6	1909.8	1762.3
1989	1650.3	1861.7	1963.4	2074.4	2188.9	3576.5	3965.5	3692.1	3327.6	2745.6	2357.5	2371.6
1990	2490.7	2468.6	2425.3	2672.2	2673.2	2917.9	2766.0	2915.6	2715.7	2216.2	1957.8	1883.2
1991	1772.2	1708.7	1694.2	1697.4	1725.7	2152.3	2301.0	2240.5	1990.8	1703.3	1403.9	1314.2
1992	1218.9	1093.7	1089.2	1135.4	1792.7	2239.5	2474.4	2202.3	1833.8	1429.6	1085.7	887.0
1993	781.9	748.3	979.1	1627.7	2358.9	3823.3	4451.8	4552.0	4500.0	3864.6	3592.1	3400.0
AVG:	2534.5	2600.6	2742.7	2986.3	3243.9	3607.8	3888.1	3867.0	3568.0	3072.1	2711.3	2582.5
MIN:	550.0	599.1	708.0	993.0	1043.3	1590.8	1751.9	1675.8	1329.1	929.8	625.0	606.2
MAX:	3250.0	3252.0	3364.0	3725.0	4090.5	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.5.3-21. Simulated Shasta Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2806.0	2845.9	2935.3	3040.0	3399.8	3781.4	4258.4	4391.7	4084.8	3600.3	3146.5	2961.3
1923	2990.1	3077.1	3208.0	3406.8	3534.6	3657.6	3962.2	3669.1	3256.8	2804.3	2441.2	2323.3
1924	2259.6	2183.9	2131.8	2243.3	2402.8	2411.6	2199.9	1877.6	1479.2	1050.7	737.9	601.7
1925	621.1	776.7	889.0	1169.9	2408.0	2559.3	3220.7	3284.9	2963.4	2519.4	2155.4	2020.6
1926	1961.6	1963.7	2014.5	2060.4	2786.9	2992.4	3287.9	3144.9	2773.0	2315.0	2008.1	1891.2
1927	1911.9	2395.6	2901.8	3440.7	3462.0	4093.8	4552.0	4552.0	4243.4	3676.0	3240.2	3080.8
1928	3046.0	3252.0	3343.3	3618.9	4084.6	3965.0	4463.1	4241.6	3873.8	3200.0	2853.0	2707.7
1929	2650.6	2626.0	2625.8	2735.7	2922.4	3090.2	3172.5	3047.4	2793.8	2385.5	2025.5	1885.5
1930	1799.1	1735.6	2259.0	2463.5	2836.0	3311.2	3471.9	3368.7	3034.7	2575.1	2230.2	2151.1
1931	2072.8	2053.5	2031.8	2105.4	2190.3	2360.8	2116.3	1835.6	1524.4	1086.1	760.1	633.2
1932	610.4	615.8	807.4	1009.9	1125.9	1559.1	1720.7	1908.6	1710.6	1436.1	1187.5	1053.9
1933	972.7	957.5	945.8	970.4	1007.5	1592.3	1780.4	1842.8	1698.6	1307.5	949.2	792.7
1934	696.4	650.7	774.2	1069.0	1394.4	1687.5	1776.4	1610.9	1253.6	845.1	607.7	577.9
1935	557.9	643.0	679.9	964.9	1293.7	1682.4	2678.0	2897.1	2593.2	2231.7	1799.5	1616.9
1936	1595.5	1564.5	1572.7	2196.1	3077.8	3437.9	3668.5	3562.1	3350.8	2905.3	2479.5	2306.1
1937	2195.5	2104.8	2026.3	2003.6	2095.7	2740.3	3399.7	3556.7	3393.6	3053.1	2654.2	2489.1
1938	2448.3	3007.3	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4056.2	3689.6	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4085.6	3896.7	3607.7	3094.2	2485.8	2016.9	1897.6
1940	1978.8	1965.3	2115.8	2995.9	3252.0	3435.0	4161.3	4101.8	3720.3	3183.5	2767.2	2611.4
1941	2601.1	2625.2	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4494.0	4150.0	3700.0	3400.0
1942	3250.0	3200.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4459.4	4057.2	3686.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4247.9	3704.5	3285.2	3142.1
1944	3117.1	3136.2	3126.7	3204.2	3510.6	3821.4	3821.2	3718.8	3447.1	2960.0	2610.6	2473.9
1945	2464.4	2687.2	3002.3	3193.2	3948.0	4257.8	4426.4	4421.8	4123.0	3547.1	3112.7	2929.0
1946	2985.7	3252.0	3265.0	3622.0	3700.4	4096.3	4294.7	4214.4	3842.2	3329.1	2947.0	2824.9
1947	2742.6	2799.8	2891.0	2905.1	3173.4	3705.9	3869.5	3510.5	3236.6	2684.7	2305.7	2224.0
1948	2301.2	2351.5	2384.0	2948.1	2749.8	3056.2	3958.0	4308.9	4332.4	3953.9	3552.4	3400.0
1949	3250.0	3200.0	3201.3	3206.3	3396.4	4071.0	4391.7	4340.6	3946.7	3274.4	2846.4	2683.1
1950	2561.8	2479.1	2417.8	2687.7	3095.7	3544.8	3888.6	3843.0	3557.7	3181.0	2838.8	2750.3
1951	3053.5	3252.0	3322.0	3624.0	3794.0	4236.5	4325.3	4347.7	3980.1	3308.7	2894.0	2747.6
1952	2767.5	2883.9	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4403.6	4105.2	3700.0	3400.0
1953	3250.0	3200.0	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	3996.0	3678.0	3400.0
1954	3250.0	3252.0	3364.0	3552.0	3661.0	4106.0	4546.0	4257.9	4047.6	3318.1	3090.7	3041.5
1955	3049.2	3213.6	3360.0	3482.3	3570.4	3739.0	3877.9	3956.9	3523.6	3036.5	2689.9	2613.9
1956	2581.4	2621.1	3252.0	3252.0	3288.0	4012.4	4522.3	4552.0	4376.5	4029.3	3698.8	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4200.5	4457.8	4170.2	3546.4	3192.8	3241.7
1958	3250.0	3242.6	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4144.5	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4098.4	4151.0	3923.4	3242.3	2658.1	2231.3	2396.1
1960	2252.8	2178.9	2158.5	2351.4	3068.7	3765.9	3960.7	3950.7	3656.4	3036.6	2556.7	2512.5
1961	2453.5	2588.4	3050.5	3254.3	3914.0	4280.0	4425.8	4401.2	4001.3	3183.5	2641.3	2496.6
1962	2360.0	2405.6	2685.0	2807.0	3675.0	4174.9	4456.6	4349.4	4001.3	3347.2	2936.8	2821.2
1963	3247.4	3252.0	3349.0	3514.4	3944.0	4154.7	4137.0	4421.9	4196.9	3613.9	3277.2	3261.4
1964	3250.0	3252.0	3286.4	3701.9	3920.2	4078.2	3735.7	3511.4	3277.8	2802.5	2422.5	2324.4
1965	2323.8	2472.1	3252.0	3368.0	3809.4	3975.8	4500.0	4414.8	4084.7	3482.9	3207.2	3132.2
1966	3118.0	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4405.7	3725.9	3175.4	2789.1	2730.3
1967	2600.3	2962.4	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3211.2	3314.5	3610.9	3654.0	4248.0	4238.3	4097.9	3625.2	3017.3	2714.9	2642.4
1969	2634.2	2669.7	2989.2	3358.0	3480.0	4030.0	4434.0	4552.0	4383.6	3869.9	3480.9	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4092.4	3951.8	3674.0	2946.9	2627.3	2519.5
1971	2595.4	3117.8	3319.0	3515.0	3653.1	3873.0	4357.6	4552.0	4493.2	3964.9	3625.4	3400.0
1972	3250.0	3199.9	3337.6	3714.0	3979.0	4249.0	4490.8	4389.4	3882.5	3200.0	2838.0	2827.6
1973	2937.2	3243.8	3346.0	3552.0	3636.0	4162.0	4439.9	4418.1	3998.8	3314.0	3028.8	2971.3
1974	3095.2	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4480.5	4329.8	4067.3	3700.0	3400.0
1975	3250.0	3207.2	3335.0	3508.0	3936.0	3756.0	4343.2	4552.0	4415.9	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3727.9	3962.1	4047.3	3880.2	3421.8	3062.1	2940.4	2941.1
1977	2914.3	2979.1	2891.3	2907.2	2902.9	2897.1	2576.0	2431.4	1875.0	1135.2	651.3	607.0
1978	550.0	573.7	1010.5	2927.0	3567.0	4000.0	4552.0	4552.0	4208.1	3608.7	3245.0	3241.8
1979	3200.0	3199.4	3191.9	3350.7	3701.7	4208.0	4374.2	4406.2	3820.2	3175.6	2886.7	2785.0
1980	2848.5	3026.9	3182.5	3528.0	3292.0	4047.0	4348.7	4280.3	3956.5	3514.6	3172.6	3115.5
1981	3088.3	3064.3	3161.9	3470.1	3886.0	4256.0	4399.6	4153.6	3515.0	2880.2	2497.4	2400.7
1982	2497.1	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4304.4	4143.0	3853.0	3583.2	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4343.3	4293.6	4038.7	3423.1	3185.2	3162.7
1985	3198.6	3252.0	3360.0	3494.0	3683.2	3894.6	4006.6	3635.4	3129.7	2605.2	2231.9	2241.8
1986	2245.4	2273.0	2429.9	2998.2	3252.0	3534.0	3951.6	3885.6	3467.0	3103.4	2778.8	2786.2
1987	2828.0	2810.8	2811.7	2939.5	3288.2	4024.1	3838.1	3507.0	2984.2	2532.7	2271.1	2147.5
1988	2006.6	2010.5	2502.2	2939.6	2913.5	3014.4	3032.4	3030.0	2618.9	2221.4	1910.2	1759.0
1989	1643.7	1855.2	1956.8	2067.8	2182.3	3570.0	3959.2	3682.8	3318.2	2739.7	2354.1	2369.7
1990	2489.1	2467.6	2424.9	2671.9	2689.7	2934.4	2781.9	2930.4	2717.9	2204.7	1947.7	1856.4
1991	1740.1	1667.3	1652.8	1656.0	1684.4	2111.1	2263.5	2203.5	1956.1	1668.9	1367.1	1277.5
1992	1173.1	1045.4	1041.0	1087.2	1744.6	2191.5	2430.7	2161.4	1795.8	1393.0	1054.9	877.4
1993	793.0	725.6	956.4	1605.1	2336.3	3794.5	4430.2	4552.0	4500.0	3877.7	3604.0	3400.0
AVG:	2520.6	2586.0	2728.4	2972.5	3233.1	3596.9	3876.8	3856.0	3554.9	3058.0	2696.4	2567.8
MIN:	550.0	573.7	679.9	964.9	1007.5	1559.1	1720.7	1610.9	1253.6	845.1	607.7	577.9
MAX:	3250.0	3252.0	3364.0	3725.0	4084.6	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.5.3-22. Simulated Shasta Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2806.0	2845.9	2935.3	3040.0	3399.8	3781.4	4258.4	4391.7	4084.8	3600.3	3146.5	2961.3
1923	2990.1	3077.1	3208.0	3406.8	3534.6	3657.6	3962.2	3669.1	3256.8	2799.3	2436.4	2318.6
1924	2255.0	2179.3	2127.2	2239.3	2398.8	2398.3	2186.1	1864.5	1473.1	1041.1	732.7	602.3
1925	619.4	774.0	886.2	1167.4	2405.5	2565.6	3225.2	3288.0	2978.1	2534.3	2166.5	2031.1
1926	1972.0	1974.0	2024.8	2070.7	2797.1	3002.6	3297.9	3154.8	2782.2	2330.1	2023.0	1905.9
1927	1926.6	2410.2	2916.4	3455.3	3462.0	4093.8	4552.0	4552.0	4243.5	3654.3	3217.7	3058.7
1928	3025.6	3252.0	3363.0	3638.7	4099.0	3965.0	4463.1	4255.0	3886.2	3200.0	2853.0	2707.5
1929	2648.6	2620.6	2620.4	2738.7	2925.5	3093.2	3175.5	3050.2	2815.6	2405.1	2053.9	1921.1
1930	1838.3	1771.4	2294.8	2499.3	2871.7	3346.9	3506.5	3400.4	3065.7	2611.7	2266.6	2187.0
1931	2124.7	2120.7	2106.6	2180.1	2270.1	2440.5	2187.8	1906.1	1587.4	1148.0	823.3	674.3
1932	622.1	627.5	819.0	1035.3	1151.2	1584.4	1745.6	1933.0	1734.4	1449.9	1210.6	1076.6
1933	1002.9	987.7	976.0	1000.6	1037.7	1622.4	1814.3	1881.7	1737.2	1352.0	999.1	844.1
1934	757.3	716.0	839.5	1134.2	1459.5	1746.1	1834.2	1665.6	1316.2	914.8	621.2	601.2
1935	581.1	666.1	703.0	988.0	1316.7	1705.4	2701.0	2923.0	2619.4	2256.7	1900.0	1716.7
1936	1695.0	1663.9	1672.0	2295.3	3176.9	3536.9	3764.4	3653.5	3440.4	2992.9	2565.3	2390.9
1937	2279.9	2189.1	2110.5	2087.7	2179.7	2824.2	3481.8	3632.0	3467.5	3126.1	2726.3	2560.6
1938	2514.9	3073.7	3310.0	3668.0	3560.0	3416.0	4058.0	4552.0	4467.4	4056.2	3689.7	3400.0
1939	3250.0	3252.0	3361.3	3557.2	3689.2	4085.6	3896.5	3607.4	3100.3	2491.9	2028.3	1912.8
1940	2005.2	1988.2	2138.6	3018.8	3252.0	3435.0	4161.3	4101.8	3720.3	3177.7	2761.1	2605.3
1941	2595.1	2619.3	3293.0	3317.0	3423.0	3940.0	4456.0	4552.0	4494.0	4150.0	3700.0	3400.0
1942	3250.0	3200.0	3316.0	3389.0	3516.0	3938.1	4552.0	4552.0	4459.4	4057.2	3686.0	3400.0
1943	3250.0	3252.0	3356.0	3541.0	3848.0	4118.0	4552.0	4521.2	4247.9	3718.5	3300.0	3156.5
1944	3131.3	3150.4	3140.7	3218.1	3524.6	3835.3	3834.8	3731.9	3459.8	2967.7	2617.6	2480.7
1945	2445.6	2668.4	2983.5	3183.7	3948.0	4257.8	4426.4	4421.8	4126.1	3539.0	3104.2	2920.8
1946	2947.4	3249.6	3265.0	3622.0	3690.8	4086.7	4284.7	4202.2	3830.9	3309.5	2936.8	2814.9
1947	2720.8	2782.8	2869.8	2883.7	3152.0	3684.5	3848.7	3490.3	3220.5	2678.7	2304.7	2226.7
1948	2306.5	2356.8	2389.3	2953.4	2756.4	3062.9	3964.5	4314.8	4337.8	3959.3	3557.8	3400.0
1949	3250.0	3200.0	3201.3	3206.3	3396.4	4071.0	4391.7	4340.6	3946.3	3273.4	2836.9	2673.1
1950	2552.0	2472.2	2410.9	2680.9	3088.8	3537.9	3882.0	3836.4	3551.1	3174.4	2832.3	2743.9
1951	3047.6	3252.0	3322.0	3624.0	3794.0	4236.5	4325.3	4347.7	3980.1	3300.9	2885.9	2736.6
1952	2757.1	2869.1	3306.0	3604.0	3739.0	4022.0	4290.0	4552.0	4403.6	4097.7	3700.0	3400.0
1953	3250.0	3200.0	3345.0	3366.0	3753.4	4225.6	4552.0	4552.0	4500.0	3995.1	3677.1	3400.0
1954	3250.0	3252.0	3364.0	3552.0	3661.0	4106.0	4546.0	4257.9	4047.7	3317.2	3089.9	3040.6
1955	3048.4	3213.4	3360.0	3482.3	3571.8	3740.5	3882.0	3960.6	3529.1	3041.1	2692.2	2616.1
1956	2584.7	2625.4	3252.0	3252.0	3288.0	4012.4	4522.3	4552.0	4376.5	4015.9	3684.8	3400.0
1957	3250.0	3200.0	3240.6	3366.7	3675.0	4129.0	4200.4	4457.8	4170.2	3543.1	3187.7	3232.5
1958	3250.0	3243.0	3338.0	3531.0	3252.0	3416.0	4173.0	4552.0	4500.0	4137.9	3700.0	3400.0
1959	3250.0	3200.0	3258.4	3648.0	3777.0	4102.4	4155.0	3927.3	3257.7	2676.4	2257.3	2422.2
1960	2300.0	2198.9	2178.4	2371.4	3088.6	3785.8	3979.8	3968.1	3685.8	3065.8	2592.9	2545.0
1961	2485.2	2620.1	3082.2	3286.0	3914.0	4280.0	4425.5	4400.1	3999.7	3181.4	2645.5	2501.8
1962	2363.3	2403.7	2683.0	2805.1	3675.0	4174.9	4456.3	4348.9	4000.4	3346.3	2935.6	2820.0
1963	3246.3	3252.0	3349.0	3514.4	3944.0	4145.1	4137.0	4421.9	4196.9	3614.0	3277.2	3250.3
1964	3250.0	3252.0	3287.1	3702.6	3920.9	4084.3	3737.3	3512.8	3279.1	2815.0	2435.0	2336.5
1965	2335.0	2483.4	3252.0	3368.0	3809.4	3978.3	4500.0	4414.8	4084.6	3482.8	3207.1	3131.1
1966	3117.0	3252.0	3340.1	3725.0	4037.0	4229.0	4552.0	4405.7	3726.2	3175.7	2789.5	2730.6
1967	2601.6	2963.7	3335.0	3551.0	3920.0	4033.0	4479.0	4552.0	4500.0	4150.0	3700.0	3400.0
1968	3250.0	3211.2	3314.5	3610.9	3654.0	4248.0	4242.3	4102.2	3639.2	3028.7	2733.3	2666.0
1969	2660.4	2697.2	3020.9	3358.0	3480.0	4030.0	4434.0	4552.0	4383.5	3857.2	3467.7	3400.0
1970	3250.0	3252.0	3317.0	3252.0	3431.0	4104.0	4092.4	3951.9	3673.0	2945.4	2625.2	2517.4
1971	2593.5	3115.8	3319.0	3515.0	3653.0	3873.0	4357.6	4552.0	4493.2	3964.0	3624.5	3400.0
1972	3250.0	3199.9	3337.6	3714.0	3979.0	4249.0	4490.7	4389.4	3882.4	3200.0	2838.0	2827.6
1973	2937.2	3243.8	3346.0	3552.0	3636.0	4162.0	4439.9	4418.1	3998.8	3315.6	3030.4	2979.6
1974	3103.2	3252.0	3267.0	3252.0	3694.0	3416.0	4289.0	4480.5	4329.8	4065.0	3700.0	3400.0
1975	3250.0	3204.4	3332.8	3505.7	3936.0	3756.0	4343.2	4552.0	4415.9	4150.0	3700.0	3400.0
1976	3250.0	3252.0	3328.3	3543.4	3727.9	3962.1	4052.4	3884.9	3437.1	3084.8	2968.3	2967.2
1977	2945.4	3013.5	2912.7	2928.6	2924.3	2923.8	2602.2	2465.3	1913.4	1199.4	724.9	666.2
1978	550.0	593.4	1126.4	3042.9	3567.0	4000.0	4552.0	4552.0	4208.4	3608.9	3245.3	3242.1
1979	3200.0	3199.4	3192.1	3350.9	3701.9	4208.2	4374.4	4406.4	3828.5	3183.9	2894.8	2793.2
1980	2856.1	3035.6	3191.2	3528.0	3292.0	4046.4	4348.1	4279.8	3956.0	3514.1	3172.2	3115.0
1981	3087.8	3063.9	3161.5	3469.7	3885.5	4256.0	4399.6	4153.6	3523.8	2889.0	2512.9	2417.4
1982	2500.0	3252.0	3276.0	3616.0	3530.0	3953.0	4094.0	4304.4	4143.0	3853.0	3583.3	3400.0
1983	3250.0	3252.0	3328.0	3371.0	3252.0	3417.0	4074.0	4552.0	4500.0	4150.0	3700.0	3400.0
1984	3250.0	3252.0	3285.0	3650.0	4005.0	4246.0	4343.4	4293.6	4038.7	3422.3	3184.3	3162.8
1985	3198.8	3252.0	3360.0	3494.0	3683.2	3894.6	4006.6	3635.5	3129.7	2605.2	2232.0	2241.9
1986	2246.1	2273.7	2430.7	2999.0	3252.0	3534.0	3951.9	3886.0	3467.4	3103.8	2779.3	2786.7
1987	2828.4	2811.3	2812.2	2939.9	3288.7	4024.6	3846.0	3520.8	2998.0	2553.4	2289.6	2170.4
1988	2033.5	2037.4	2528.8	2966.2	2941.8	3047.9	3065.5	3060.6	2653.8	2262.3	1902.8	1755.4
1989	1642.0	1853.4	1955.1	2066.1	2180.6	3568.3	3957.5	3682.3	3317.9	2736.1	2347.4	2363.2
1990	2483.1	2467.0	2429.6	2676.6	2679.9	2924.7	2772.6	2921.7	2717.5	2213.6	1956.9	1878.4
1991	1764.5	1694.7	1680.2	1683.4	1711.7	2138.4	2288.3	2228.0	1978.9	1691.5	1388.0	1298.2
1992	1203.3	1078.5	1074.0	1120.2	1777.6	2224.4	2460.6	2189.5	1820.3	1414.8	1076.1	877.3
1993	778.0	731.5	962.4	1611.1	2342.2	3806.6	4435.9	4552.0	4500.0	3859.5	3587.5	3400.0
AVG:	2529.3	2596.0	2739.2	2983.1	3241.1	3604.8	3884.6	3863.8	3564.4	3066.6	2705.8	2577.5
MIN:	550.0	593.4	703.0	988.0	1037.7	1584.4	1745.6	1665.6	1316.2	914.8	621.2	601.2
MAX:	3250.0	3252.0	3364.0	3725.0	4099.0	4280.0	4552.0	4552.0	4500.0	4150.0	3700.0	3400.0

Table 3.5.3-23. Simulated Shasta Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.4	-2.3
1924	-2.3	-2.3	-2.3	-2.0	-1.9	-7.0	-7.2	-6.7	-15.3	-18.2	-24.4	-29.4
1925	-29.3	-25.6	-25.5	-23.2	-23.2	-24.9	-22.4	-20.3	-21.6	-20.8	-18.6	-20.1
1926	-20.0	-20.0	-20.0	-20.0	-19.9	-19.9	-19.5	-19.1	-17.9	-25.4	-25.6	-25.1
1927	-25.0	-25.0	-25.0	-24.9	0.0	0.0	0.0	0.0	0.0	6.4	6.7	6.5
1928	6.0	0.0	-5.9	-5.9	-5.9	0.0	0.0	-0.9	-0.2	0.0	0.0	0.3
1929	0.4	-0.8	-0.8	-6.9	-6.9	-6.9	-6.8	-6.6	-28.6	-25.0	-35.0	-43.0
1930	-48.3	-32.9	-32.9	-32.8	-32.8	-32.8	-31.7	-29.1	-28.2	-41.8	-42.0	-41.1
1931	-62.4	-80.3	-88.0	-87.9	-92.9	-92.8	-91.5	-90.5	-83.5	-83.3	-84.4	-60.7
1932	-16.5	-16.5	-16.5	-31.8	-31.8	-31.7	-31.2	-30.6	-29.8	-17.5	-28.9	-28.5
1933	-36.0	-35.9	-35.9	-35.9	-35.8	-35.8	-42.0	-47.0	-47.9	-55.3	-61.5	-62.0
1934	-72.3	-77.2	-77.1	-77.0	-76.9	-69.5	-68.5	-64.9	-75.5	-84.7	-17.4	-28.3
1935	-28.2	-28.1	-28.1	-28.1	-28.0	-28.0	-27.9	-30.4	-30.5	-28.9	-104.2	-103.2
1936	-103.0	-102.9	-102.8	-102.7	-102.6	-102.5	-99.2	-94.5	-92.4	-90.0	-87.9	-86.8
1937	-86.3	-86.2	-86.1	-86.0	-85.9	-85.8	-83.9	-76.9	-75.4	-74.2	-73.0	-72.3
1938	-67.3	-67.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	-6.7	-6.6	-14.4	-18.1
1940	-30.8	-25.6	-25.6	-25.6	0.0	0.0	0.0	0.0	0.1	-7.4	-7.7	-7.5
1941	-7.4	-7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.6	-3.5
1944	-3.5	-3.5	-3.5	-3.4	-3.4	-3.4	-3.3	-3.2	-5.8	-5.0	-4.8	-4.6
1945	-3.9	-3.9	-3.9	-3.9	0.0	0.0	0.0	0.0	0.0	-3.3	-3.5	-3.4
1946	-3.2	0.0	0.0	0.0	-0.3	-0.3	-0.2	-0.1	0.1	-2.4	-1.7	-1.6
1947	-5.2	-6.3	-10.9	-11.1	-11.1	-11.0	-10.7	-10.2	-12.6	-8.2	-3.7	-3.9
1948	-4.2	-4.2	-4.1	-4.1	-2.9	-2.9	-2.8	-2.6	-2.4	-2.4	-2.4	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-4.2	-4.9	-4.8
1950	-5.9	-7.4	-7.4	-7.4	-7.4	-7.3	-7.1	-6.8	-6.5	-6.1	-5.8	-5.7
1951	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.1	-3.2	-3.1
1952	-2.8	-2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	0.0	0.0
1953	0.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-3.9	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.3	-2.4	-2.0	-3.8	-3.9
1955	-3.6	-6.1	0.0	0.0	-0.4	-0.4	-5.3	-5.2	-9.1	-9.2	-4.2	-3.8
1956	-5.8	-6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	-1.2	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.7	-0.7	-0.4	-3.6	0.3
1958	0.0	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-4.5	-4.4	-4.3	-13.2	-22.4	-33.0	-33.2
1960	-52.9	-26.5	-26.5	-26.4	-26.4	-26.4	-25.3	-23.2	-38.8	-38.6	-46.7	-37.7
1961	-36.4	-36.3	-36.3	-36.3	0.0	0.0	-0.7	0.3	-2.8	20.1	6.4	7.5
1962	9.1	4.7	4.7	4.7	0.0	0.0	0.2	0.3	0.5	0.5	0.7	0.7
1963	0.7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	-4.1
1964	0.0	0.0	-11.5	-3.1	-2.9	-8.4	-23.5	-24.7	-23.9	-28.7	-25.3	-25.1
1965	-21.5	-21.5	0.0	0.0	0.0	-2.3	0.0	-1.7	-1.7	-1.6	-1.4	-1.3
1966	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.0	-3.0	-4.7	-7.0
1967	-5.2	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-1.0	-0.8	-0.7	0.0	0.0	-4.8	-5.2	-18.2	-15.3	-24.8	-31.7
1969	-33.5	-32.7	-35.3	0.0	0.0	0.0	0.0	0.0	0.2	-3.1	-3.3	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.1	-4.6	-6.4	-8.6	-8.7
1971	-8.0	-8.0	0.0	0.0	-1.9	0.0	-1.6	0.0	0.1	-3.3	-3.5	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.2	-5.7	0.0	-3.2	-4.9
1973	-4.6	-4.6	0.0	0.0	0.0	0.0	-1.9	-1.9	-1.9	-7.6	-7.8	-5.6
1974	-5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
1975	0.0	-1.0	-0.7	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	-6.3	-5.8	-20.4	-30.6	-40.1	-39.2
1977	-48.5	-54.1	-41.3	-41.3	-38.3	-41.0	-36.0	-45.6	-53.5	-65.4	-79.0	-63.0
1978	0.0	-25.4	-120.4	-120.4	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3
1979	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-2.1	-2.1	-2.2	-2.2
1980	-2.1	-3.3	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12.0	-11.9	-21.1	-22.3
1982	-2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-0.7	-0.7	-4.3	-4.1	-4.8
1985	-4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-1.9	-4.2	-6.4	-5.8
1986	-4.5	-4.4	-4.4	-4.4	0.0	0.0	-2.5	-2.3	-2.0	-1.8	-1.6	-1.6
1987	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-13.8	-21.5	-21.4	-30.4	-26.9	-31.6
1988	-31.0	-30.6	-30.0	-30.0	-32.4	-38.2	-37.7	-35.0	-41.2	-49.2	0.4	-3.3
1989	-6.6	-6.6	-6.5	-6.5	-6.5	-6.5	-6.3	-9.3	-9.4	-5.9	-3.4	-1.9
1990	-1.6	-1.0	-0.5	-0.3	16.5	16.5	15.9	14.8	2.2	-11.5	-10.1	-26.8
1991	-32.0	-41.4	-41.4	-41.3	-41.3	-41.2	-37.5	-37.0	-34.7	-34.4	-36.7	-36.7
1992	-45.8	-48.3	-48.2	-48.2	-48.1	-48.1	-43.6	-40.8	-38.0	-36.6	-30.8	-9.6
1993	11.1	-22.7	-22.7	-22.6	-22.6	-28.7	-21.7	0.0	0.0	13.1	11.8	0.0
AVG:	-13.9	-14.6	-14.3	-13.9	-10.8	-10.9	-11.4	-11.1	-13.1	-14.1	-15.0	-14.7
MIN:	-103.0	-102.9	-120.4	-120.4	-102.6	-102.5	-99.2	-94.5	-92.4	-90.0	-104.2	-103.2
MAX:	11.1	4.7	4.7	4.7	16.5	16.5	15.9	14.8	2.2	20.1	11.8	7.5

Table 3.5.3-24. Simulated Shasta Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.5	-7.2	-7.0
1924	-6.9	-6.9	-6.8	-5.9	-5.9	-20.2	-20.9	-19.8	-21.4	-27.9	-29.7	-28.7
1925	-31.0	-28.3	-28.3	-25.7	-25.7	-18.6	-18.0	-17.2	-6.9	-5.8	-7.5	-9.7
1926	-9.7	-9.7	-9.7	-9.7	-9.7	-9.7	-9.4	-9.2	-8.7	-10.3	-10.6	-10.4
1927	-10.4	-10.3	-10.3	-10.3	0.0	0.0	0.0	0.0	0.0	-15.2	-15.8	-15.5
1928	-14.4	0.0	13.8	13.8	8.5	0.0	0.0	12.5	12.2	0.0	0.0	0.2
1929	-1.6	-6.2	-6.2	-3.9	-3.9	-3.9	-3.8	-3.7	-6.8	-5.4	-6.6	-7.3
1930	-9.1	2.9	2.9	2.9	2.9	2.9	2.8	2.6	2.7	-5.2	-5.5	-5.2
1931	-10.5	-13.2	-13.2	-13.1	-13.1	-13.1	-20.0	-20.0	-20.5	-21.4	-21.2	-19.6
1932	-4.9	-4.8	-4.8	-6.4	-6.4	-6.4	-6.3	-6.2	-6.0	-3.7	-5.8	-5.7
1933	-5.7	-5.7	-5.7	-5.7	-5.7	-5.7	-8.1	-8.1	-9.3	-10.8	-11.6	-10.6
1934	-11.3	-11.9	-11.9	-11.9	-11.9	-10.9	-10.8	-10.1	-12.9	-15.0	-3.8	-5.0
1935	-5.0	-5.0	-5.0	-5.0	-5.0	-4.9	-4.9	-4.6	-4.3	-3.9	-3.6	-3.5
1936	-3.5	-3.5	-3.5	-3.5	-3.5	-3.4	-3.3	-3.1	-2.8	-2.4	-2.1	-1.9
1937	-1.9	-1.9	-1.9	-1.8	-1.8	-1.8	-1.8	-1.7	-1.4	-1.2	-1.0	-0.8
1938	-0.8	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.5	-3.1	-3.0
1940	-4.4	-2.8	-2.8	-2.8	0.0	0.0	0.0	0.0	0.0	-13.2	-13.9	-13.5
1941	-13.3	-13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	11.2	10.9
1944	10.7	10.7	10.6	10.5	10.5	10.5	10.3	9.9	7.0	2.7	2.2	2.1
1945	-22.7	-22.7	-22.7	-13.4	0.0	0.0	0.0	0.0	3.1	-11.5	-12.0	-11.6
1946	-41.5	-2.4	0.0	0.0	-9.9	-9.9	-10.2	-12.3	-11.2	-22.1	-11.8	-11.6
1947	-27.0	-23.3	-32.0	-32.5	-32.4	-32.4	-31.6	-30.5	-28.7	-14.2	-4.8	-1.3
1948	1.2	1.2	1.2	1.2	3.7	3.7	3.7	3.3	3.1	3.0	3.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-5.3	-14.4	-14.8
1950	-15.7	-14.3	-14.3	-14.2	-14.2	-14.2	-13.8	-13.4	-13.1	-12.7	-12.3	-12.1
1951	-11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.9	-11.3	-14.1
1952	-13.2	-17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.3	0.0	0.0
1953	0.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.6	-4.8	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.3	-2.4	-2.9	-4.7	-4.8
1955	-4.4	-6.3	0.0	0.0	1.1	1.1	-1.2	-1.4	-3.5	-4.6	-1.9	-1.7
1956	-2.5	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.4	-15.2	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.7	-0.7	-3.7	-8.8	-8.9
1958	0.0	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.9	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	2.2	-4.1	-7.1	-7.1
1960	-5.6	-6.5	-6.5	-6.5	-6.5	-6.5	-6.2	-5.7	-9.4	-9.3	-10.6	-5.2
1961	-4.6	-4.6	-4.6	-4.6	0.0	0.0	-1.0	-0.8	-4.5	18.0	10.6	12.7
1962	12.4	2.7	2.7	2.7	0.0	0.0	-0.1	-0.2	-0.4	-0.4	-0.5	-0.5
1963	-0.5	0.0	0.0	0.0	0.0	-2.9	0.0	0.0	0.0	0.0	0.0	-15.1
1964	0.0	0.0	-10.8	-2.4	-2.2	-2.3	-21.9	-23.3	-22.7	-16.1	-12.9	-13.0
1965	-10.3	-10.3	0.0	0.0	0.0	0.2	0.0	-1.7	-1.8	-1.7	-1.5	-2.4
1966	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.7	-2.6	-4.3	-6.7
1967	-3.9	-3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-0.9	-0.7	-0.7	0.0	0.0	-0.8	-0.9	-4.2	-3.8	-6.3	-8.2
1969	-7.2	-5.2	-3.6	0.0	0.0	0.0	0.0	0.0	0.1	-15.8	-16.5	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-5.6	-7.9	-10.7	-10.8
1971	-10.0	-10.0	0.0	0.0	-2.0	0.0	-1.6	0.0	0.1	-4.2	-4.4	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.2	-5.7	0.0	-3.2	-4.9
1973	-4.6	-4.6	0.0	0.0	0.0	0.0	-1.9	-1.9	-1.8	-6.1	-6.2	2.7
1974	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9	0.0	0.0
1975	0.0	-3.8	-2.9	-3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-1.1	-5.0	-7.9	-12.1	-13.1
1977	-17.3	-19.8	-19.9	-19.9	-16.8	-14.3	-9.7	-11.8	-15.2	-1.2	-5.4	-3.9
1978	0.0	-5.7	-4.5	-4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2	6.0	5.9
1980	5.5	5.4	5.4	0.0	0.0	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5
1981	-0.4	-0.4	-0.4	-0.4	-0.4	0.0	0.0	0.0	-3.1	-3.1	-5.5	-5.6
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-0.7	-0.7	-5.1	-5.0	-4.6
1985	-4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-1.8	-4.1	-6.3	-5.8
1986	-3.8	-3.7	-3.6	-3.6	0.0	0.0	-2.1	-1.9	-1.6	-1.4	-1.2	-1.2
1987	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-5.9	-7.7	-7.6	-9.7	-8.5	-8.7
1988	-4.0	-3.7	-3.4	-3.4	-4.0	-4.8	-4.6	-4.3	-6.3	-8.3	-7.0	-6.9
1989	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.0	-9.8	-9.7	-9.5	-10.1	-8.4
1990	-7.6	-1.6	4.3	4.4	6.8	6.7	6.6	6.1	1.8	-2.5	-0.9	-4.8
1991	-7.7	-14.0	-14.0	-14.0	-14.0	-14.0	-12.7	-12.5	-11.9	-11.8	-15.8	-16.0
1992	-15.6	-15.2	-15.2	-15.2	-15.2	-15.1	-13.7	-12.8	-13.5	-14.8	-9.7	-9.7
1993	-3.9	-16.7	-16.7	-16.7	-16.7	-16.6	-16.0	0.0	0.0	-5.1	-4.6	0.0
AVG:	-5.2	-4.6	-3.5	-3.3	-2.8	-3.0	-3.5	-3.2	-3.6	-5.5	-5.5	-5.0
MIN:	-41.5	-28.3	-32.0	-32.5	-32.4	-32.4	-31.6	-30.5	-28.7	-27.9	-29.7	-28.7
MAX:	12.4	10.7	13.8	13.8	10.5	10.5	10.3	12.5	12.2	18.0	11.2	12.7

The following figures and tables provide storage results for Folsom Reservoir, another major reservoir on the CVP system.

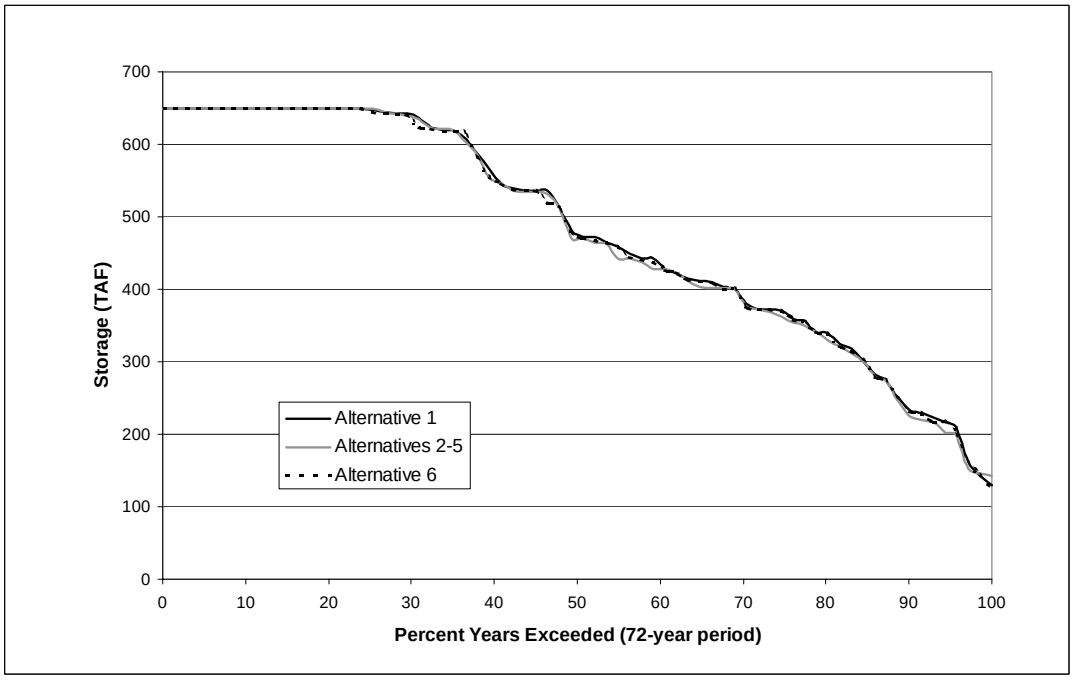


Figure 3.5.3-15. Exceedence for Simulated Folsom Reservoir End-of-September Storage, 2020 LOD

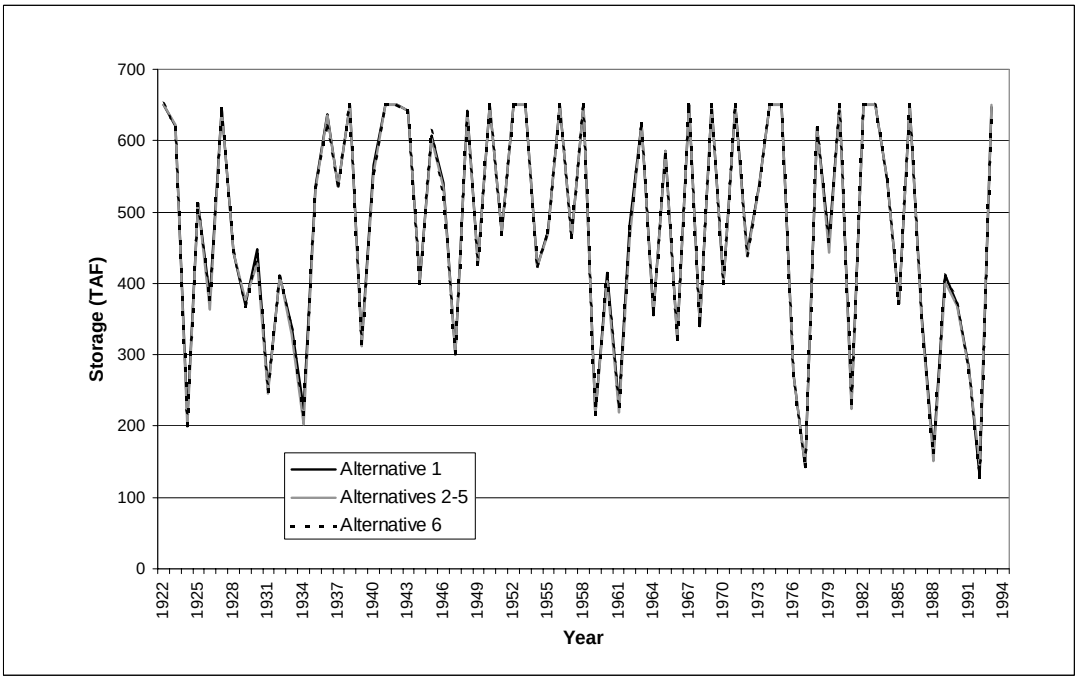


Figure 3.5.3-16. Simulated Folsom Reservoir End-of-September Storage, 2020 LOD

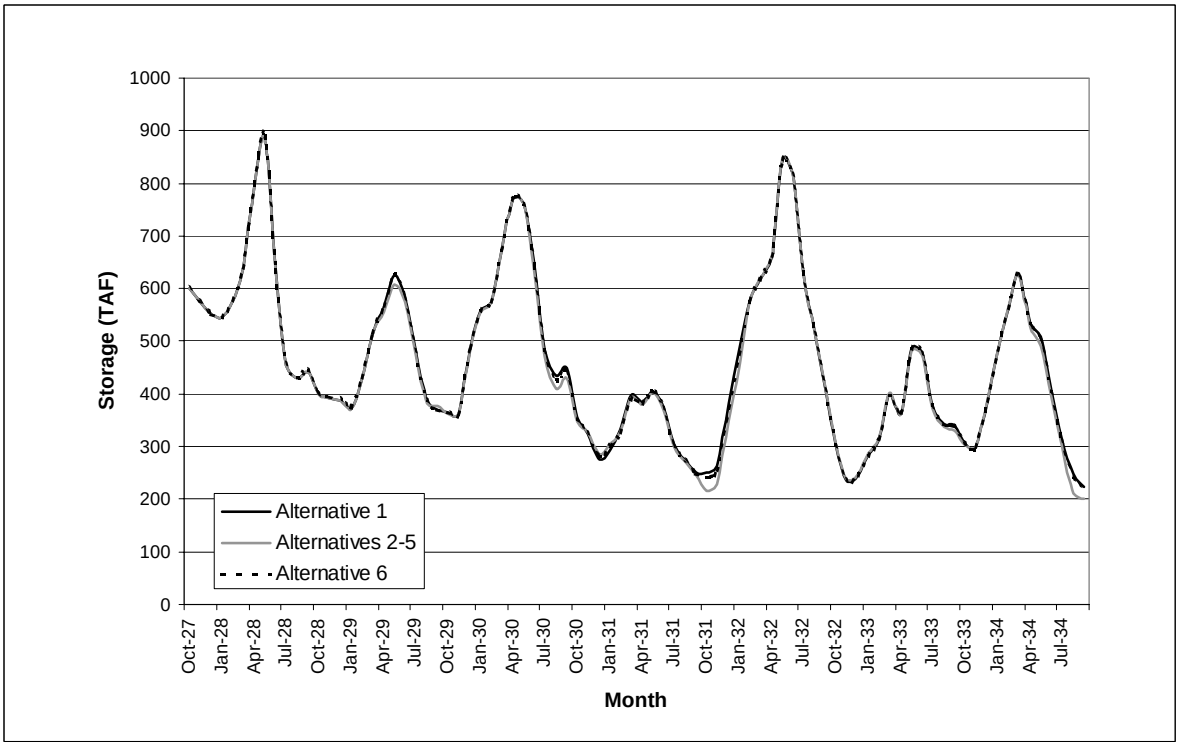


Figure 3.5.3-17. Simulated Folsom Reservoir Drought Period Storage, 2020 LOD (WY 1928-1934)

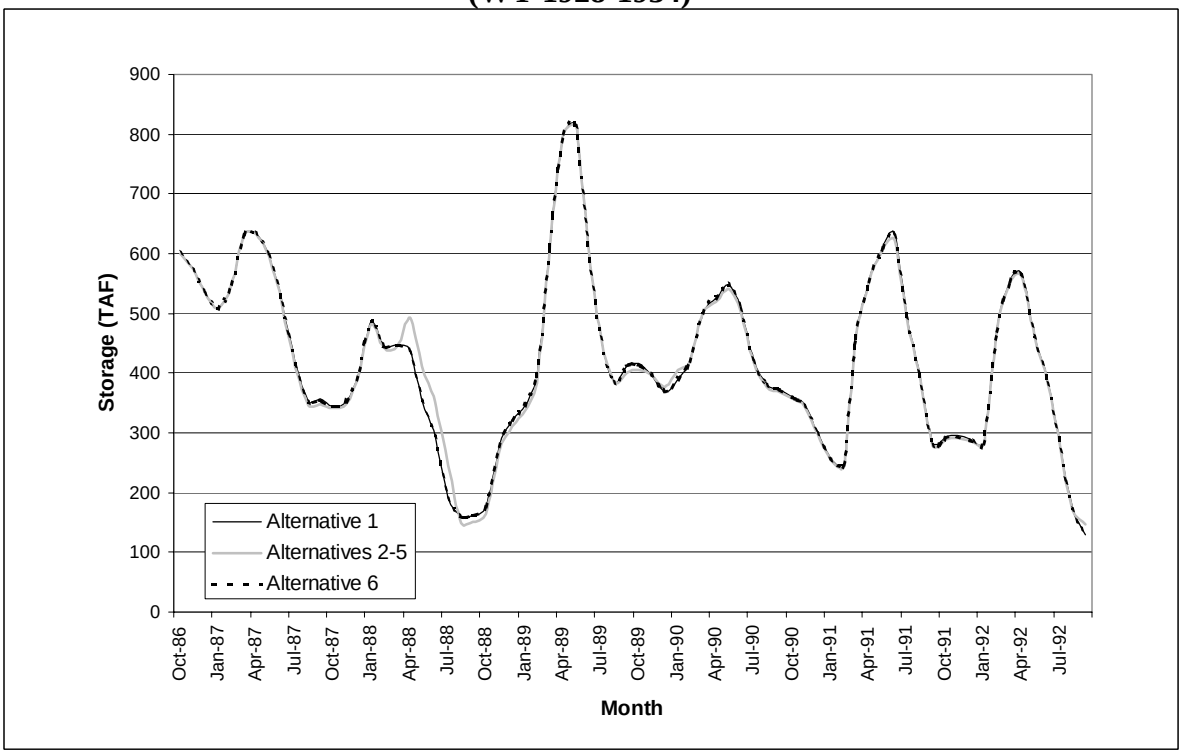


Figure 3.5.3-18. Simulated Folsom Reservoir Drought Period Storage, 2020 LOD (WY 1987-1992)

Table 3.5.3-25. Simulated Folsom Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	497.8	499.9	575.0	575.0	575.0	674.0	800.0	975.0	975.0	826.6	750.6	650.0
1923	600.0	575.0	575.0	575.0	575.0	559.5	800.0	975.0	954.1	768.5	697.2	620.0
1924	584.6	551.2	524.1	478.2	503.1	395.6	406.0	398.4	345.3	269.0	239.0	210.4
1925	223.7	255.8	300.7	304.7	561.0	479.5	712.8	941.8	794.6	600.0	578.5	513.0
1926	468.1	458.9	458.1	448.7	575.0	597.7	800.0	743.2	561.1	424.7	385.4	379.9
1927	381.9	562.0	575.0	575.0	562.0	661.0	800.0	975.0	975.0	772.8	705.3	644.6
1928	600.0	575.0	550.7	545.2	575.0	638.0	800.0	886.7	638.6	452.9	429.4	442.1
1929	400.0	391.9	386.4	372.5	426.3	510.2	565.9	625.2	582.9	485.5	386.5	370.7
1930	364.7	360.5	487.1	559.0	572.0	672.0	771.0	761.3	647.5	484.3	434.2	448.5
1931	354.4	325.4	274.7	293.2	331.7	396.4	384.2	405.7	374.7	304.4	274.2	250.1
1932	251.7	262.9	383.3	484.9	575.0	618.2	661.2	847.2	818.7	632.0	516.4	410.3
1933	303.7	236.0	246.3	284.4	312.4	398.6	363.4	486.3	479.6	378.3	343.7	339.4
1934	306.4	296.6	385.6	481.6	561.5	626.8	533.3	507.9	406.6	316.1	247.6	223.5
1935	195.1	274.9	306.8	414.1	496.4	607.2	800.0	941.6	975.0	764.2	599.4	535.9
1936	531.2	545.0	541.5	575.0	570.0	667.0	800.0	975.0	975.0	792.1	695.6	636.3
1937	599.8	575.0	562.0	539.1	575.0	675.0	800.0	975.0	911.9	698.7	600.0	536.0
1938	522.4	552.3	575.0	575.0	575.0	674.0	800.0	975.0	975.0	933.7	800.0	650.0
1939	626.5	575.0	528.1	504.2	498.9	583.6	620.5	628.9	559.5	378.2	323.0	317.5
1940	338.7	336.4	335.2	572.0	559.0	618.0	800.0	971.2	883.2	654.7	628.0	565.8
1941	545.3	517.4	575.0	575.0	574.0	672.0	800.0	975.0	971.9	896.8	800.0	650.0
1942	622.6	575.0	575.0	572.0	563.0	626.2	800.0	975.0	975.0	884.2	800.0	650.0
1943	615.2	575.0	575.0	565.0	537.0	618.0	800.0	933.9	921.0	728.0	702.8	642.0
1944	600.0	575.0	553.8	539.5	575.0	675.0	643.5	696.3	600.0	497.5	484.5	403.2
1945	380.0	467.9	545.2	558.3	565.0	653.4	730.7	964.2	912.4	704.6	673.3	606.5
1946	600.0	575.0	575.0	571.0	525.9	621.9	788.0	975.0	862.3	637.9	600.9	540.0
1947	470.8	476.5	479.5	452.4	530.1	674.0	657.5	620.9	579.6	453.1	386.9	299.8
1948	353.3	382.0	373.0	461.0	423.8	477.1	800.0	975.0	975.0	780.0	708.7	642.1
1949	605.5	575.0	568.5	540.0	553.1	675.0	800.0	931.2	811.2	600.0	493.3	427.8
1950	394.2	387.3	370.1	575.0	572.0	672.0	800.0	975.0	975.0	781.5	715.9	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	783.7	975.0	885.7	600.0	536.7	471.6
1952	459.1	496.7	575.0	575.0	574.0	674.0	800.0	975.0	975.0	895.9	751.0	650.0
1953	634.0	575.0	575.0	574.0	567.9	645.0	772.2	923.0	975.0	845.5	795.6	650.0
1954	616.9	575.0	532.8	562.0	575.0	672.0	800.0	825.8	704.0	564.3	492.1	423.2
1955	387.4	384.9	458.9	538.3	508.1	526.9	581.4	626.6	550.1	469.1	462.1	472.5
1956	424.9	416.0	531.0	393.0	391.0	522.6	684.6	975.0	975.0	817.5	764.1	650.0
1957	641.0	575.0	528.2	509.2	571.0	667.0	662.2	928.2	872.9	600.0	530.0	464.7
1958	455.3	458.4	521.4	575.0	565.0	671.0	800.0	975.0	975.0	813.5	763.9	650.0
1959	611.5	575.0	528.8	575.0	575.0	585.2	616.9	565.5	519.8	254.8	206.9	215.8
1960	219.9	217.0	211.9	269.0	564.6	669.0	714.6	722.7	600.0	473.6	412.5	414.3
1961	373.7	385.4	393.4	375.0	431.2	459.0	471.9	469.5	439.9	337.9	241.3	229.0
1962	229.4	235.8	265.2	284.8	575.0	620.3	783.8	837.1	789.6	600.0	551.0	482.6
1963	720.0	575.0	575.0	554.0	475.0	582.6	869.5	975.0	972.1	737.9	665.3	623.0
1964	605.6	575.0	529.8	571.0	547.0	553.4	601.9	658.7	671.6	522.0	435.2	358.5
1965	369.4	427.8	364.0	360.0	377.0	508.3	800.0	949.4	973.8	721.9	674.0	586.3
1966	574.0	575.0	568.8	575.0	575.0	562.7	688.0	659.7	582.3	342.9	329.9	324.2
1967	326.6	400.0	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	630.4	575.0	529.6	543.8	633.3	650.0	692.4	661.7	600.0	314.2	329.9	340.4
1969	352.4	430.2	523.1	550.0	535.0	645.0	800.0	975.0	975.0	802.8	741.2	650.0
1970	636.7	575.0	575.0	387.0	380.0	594.0	593.2	678.9	600.0	377.7	376.1	400.0
1971	371.0	507.4	575.0	575.0	530.8	663.0	762.4	960.4	975.0	803.4	740.2	650.0
1972	617.4	575.0	575.0	572.0	575.0	660.0	752.6	832.1	604.1	435.6	415.0	442.1
1973	417.2	483.9	575.0	567.0	563.0	669.0	758.2	975.0	790.7	600.0	588.3	536.2
1974	534.8	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	831.3	779.4	650.0
1975	622.2	575.0	567.7	575.0	575.0	674.0	741.2	975.0	975.0	829.9	772.5	650.0
1976	673.3	575.0	498.9	423.8	395.4	408.5	434.4	456.4	406.8	331.8	303.8	274.2
1977	265.4	245.1	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	142.7
1978	90.0	105.9	236.5	569.0	557.0	623.0	800.0	975.0	975.0	776.5	684.0	618.3
1979	565.1	575.0	575.0	575.0	575.0	672.0	728.4	964.9	744.7	574.9	521.6	458.9
1980	457.2	493.2	550.6	433.0	390.0	602.0	763.3	921.3	921.0	804.7	748.3	650.0
1981	600.0	575.0	541.2	558.0	575.0	674.0	643.2	593.9	525.6	281.1	244.1	233.0
1982	272.7	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	937.6	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	708.2	377.0	329.0	338.0	360.0	589.0	759.5	975.0	927.9	600.0	600.5	545.8
1985	554.4	575.0	563.3	526.7	559.7	633.4	711.1	694.0	586.3	446.5	382.3	371.6
1986	368.7	437.5	533.9	559.0	357.0	570.0	800.0	975.0	975.0	761.0	696.8	650.0
1987	600.0	574.4	533.4	507.2	546.8	632.2	632.7	597.7	517.7	416.2	352.8	356.1
1988	344.7	352.4	403.5	485.9	445.5	446.7	437.0	355.1	296.1	191.5	159.8	162.5
1989	174.5	277.0	321.3	346.8	394.6	611.0	800.0	814.6	621.5	461.8	385.3	411.2
1990	415.2	396.1	367.7	390.5	417.3	498.9	525.5	547.6	508.2	421.6	380.0	372.0
1991	359.5	347.3	300.7	255.1	245.4	457.3	552.2	605.7	633.8	499.0	401.5	281.4
1992	293.0	295.5	289.8	282.5	471.6	555.0	566.8	464.4	385.3	274.4	174.7	130.1
1993	123.3	114.9	201.0	571.0	555.0	621.0	800.0	975.0	975.0	840.2	720.3	646.8
AVG:	463.2	456.7	467.7	485.8	505.0	593.2	701.5	807.3	756.6	599.5	536.8	479.1
MIN:	90.0	105.9	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	130.1
MAX:	720.0	575.0	575.0	575.0	633.3	675.0	869.5	975.0	975.0	950.0	800.0	650.0

Table 3.5.3-26. Simulated Folsom Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	497.8	499.9	575.0	575.0	575.0	674.0	800.0	975.0	975.0	824.0	748.0	650.0
1923	600.0	575.0	575.0	575.0	575.0	559.5	800.0	975.0	954.1	768.5	697.2	621.7
1924	586.2	552.8	525.7	479.8	504.7	395.2	405.6	398.0	345.0	268.6	238.6	198.5
1925	232.5	264.6	309.5	313.4	561.0	479.5	712.8	941.8	794.7	600.0	578.5	513.1
1926	470.0	460.9	460.2	450.7	575.0	596.0	800.0	743.3	550.3	416.7	368.3	363.0
1927	356.8	530.5	575.0	575.0	562.0	661.0	800.0	975.0	975.0	772.8	705.3	644.6
1928	600.0	575.0	550.7	545.2	575.0	638.0	800.0	886.4	635.7	452.9	429.3	442.1
1929	400.0	392.0	386.5	372.6	426.5	510.3	555.7	608.6	575.0	480.1	382.6	376.6
1930	362.1	358.7	484.5	556.4	572.0	672.0	771.0	761.5	632.7	471.3	409.4	428.2
1931	346.6	327.2	285.5	304.0	328.6	392.5	379.3	400.8	369.9	299.7	269.6	245.5
1932	216.9	228.3	348.7	450.4	575.0	618.3	661.4	847.4	819.1	632.6	516.7	411.0
1933	305.2	238.5	248.8	286.9	315.0	401.1	361.1	482.3	473.8	373.0	337.8	329.2
1934	302.5	297.6	386.6	482.6	562.5	626.1	526.0	490.9	393.4	303.1	211.1	202.2
1935	162.0	241.8	276.1	396.5	498.1	608.8	800.0	941.6	975.0	764.3	594.2	530.8
1936	526.2	540.0	536.5	575.0	570.0	667.0	800.0	975.0	975.0	792.2	693.9	634.7
1937	598.1	575.0	562.0	539.1	575.0	675.0	800.0	975.0	908.0	694.8	600.0	536.0
1938	522.5	552.4	575.0	575.0	575.0	674.0	800.0	975.0	975.0	931.2	800.0	650.0
1939	626.5	575.0	528.1	504.2	498.9	583.6	620.6	629.0	558.3	372.4	317.3	311.8
1940	334.8	333.2	332.1	572.0	559.0	618.0	800.0	971.2	874.5	646.1	616.9	554.8
1941	534.3	516.4	575.0	575.0	574.0	672.0	800.0	975.0	969.7	894.6	800.0	650.0
1942	622.6	575.0	575.0	572.0	563.0	626.2	800.0	975.0	975.0	881.6	800.0	650.0
1943	615.2	575.0	575.0	565.0	537.0	618.0	800.0	933.9	921.0	728.0	702.8	642.0
1944	600.0	575.0	553.8	539.5	575.0	675.0	643.5	696.3	600.0	497.2	483.6	402.3
1945	379.1	467.0	544.3	557.4	565.0	653.4	730.7	964.2	909.9	702.1	668.4	601.6
1946	595.2	575.0	575.0	571.0	525.9	621.9	788.0	975.0	859.8	635.4	595.9	535.0
1947	469.3	474.9	479.1	453.4	534.5	674.0	657.5	621.0	579.7	452.8	386.7	300.5
1948	354.1	382.4	373.8	460.5	423.5	476.7	800.0	975.0	975.0	777.2	705.9	639.3
1949	602.7	575.0	571.0	542.6	555.6	675.0	800.0	931.2	808.7	600.0	492.8	427.3
1950	393.7	386.9	369.7	575.0	572.0	672.0	800.0	975.0	975.0	781.5	715.9	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	783.7	975.0	885.7	600.0	536.7	470.7
1952	458.2	496.0	575.0	575.0	574.0	674.0	800.0	975.0	975.0	895.9	748.3	650.0
1953	634.0	575.0	575.0	574.0	567.9	645.0	772.2	923.0	975.0	845.5	795.6	650.0
1954	616.9	575.0	532.8	562.0	575.0	672.0	800.0	825.3	703.9	564.3	491.8	422.8
1955	387.1	384.6	458.6	538.0	508.0	527.1	581.6	626.8	550.4	468.7	459.8	470.1
1956	423.3	414.8	531.0	393.0	391.0	522.6	684.6	975.0	975.0	817.0	763.5	650.0
1957	641.0	575.0	528.2	509.2	571.0	667.0	662.2	928.2	870.0	600.0	530.0	464.7
1958	455.3	458.4	521.4	575.0	565.0	671.0	800.0	975.0	975.0	813.5	763.9	650.0
1959	611.5	575.0	528.8	575.0	575.0	585.2	616.9	565.5	519.8	254.8	206.9	215.8
1960	219.9	217.0	211.9	269.0	564.6	669.0	707.8	717.3	600.0	460.3	403.3	403.6
1961	363.0	374.9	382.8	364.5	420.8	448.7	461.6	459.3	429.8	327.8	231.3	219.1
1962	219.6	226.0	255.4	275.0	575.0	620.3	783.8	837.2	789.6	600.0	530.7	462.4
1963	720.0	575.0	575.0	554.0	475.0	582.6	869.5	975.0	972.1	733.8	661.2	623.0
1964	605.6	575.0	529.8	571.0	546.7	552.9	601.4	658.2	671.1	518.7	431.3	354.6
1965	365.6	424.0	364.0	360.0	377.0	508.3	800.0	949.0	973.5	719.8	671.9	585.3
1966	573.0	575.0	569.7	575.0	575.0	562.7	688.0	659.7	582.3	339.3	326.4	321.4
1967	323.9	400.0	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	630.4	575.0	529.6	543.8	633.3	650.0	692.4	661.7	600.0	314.2	329.9	340.4
1969	352.4	430.2	523.1	550.0	535.0	645.0	800.0	975.0	975.0	802.8	741.2	650.0
1970	636.7	575.0	575.0	387.0	380.0	594.0	593.2	678.9	600.0	377.7	376.1	400.0
1971	371.0	507.4	575.0	575.0	530.6	663.0	762.1	960.4	975.0	803.4	740.2	650.0
1972	617.4	575.0	575.0	572.0	575.0	660.0	752.6	832.1	604.1	427.9	411.0	438.1
1973	413.2	479.9	575.0	567.0	563.0	669.0	758.2	975.0	787.8	600.0	586.5	534.7
1974	533.2	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	831.3	779.4	650.0
1975	622.2	575.0	567.6	575.0	575.0	674.0	741.2	975.0	975.0	827.3	769.9	650.0
1976	673.3	575.0	498.9	423.8	395.4	408.5	434.4	456.4	406.8	331.8	303.8	274.2
1977	265.4	245.1	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	142.7
1978	90.0	101.2	231.7	569.0	557.0	623.0	800.0	975.0	975.0	776.5	684.0	618.3
1979	565.1	575.0	575.0	575.0	575.0	672.0	728.3	964.9	744.6	566.7	505.2	442.8
1980	441.1	477.2	536.8	433.0	390.0	602.0	763.3	921.3	921.0	801.7	742.1	650.0
1981	600.0	575.0	541.2	558.0	575.0	674.0	643.2	593.9	525.6	272.4	235.4	224.4
1982	264.2	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	935.5	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	708.2	377.0	329.0	338.0	360.0	589.0	759.3	975.0	927.9	600.0	600.5	545.7
1985	554.4	575.0	563.3	526.7	559.7	633.4	711.1	694.0	585.9	445.8	381.3	371.4
1986	368.2	436.9	533.4	559.0	357.0	570.0	800.0	975.0	975.0	761.1	696.9	650.0
1987	600.0	574.5	533.4	507.3	546.9	632.2	632.7	595.8	512.3	409.2	345.9	349.2
1988	341.2	349.0	400.0	482.5	442.2	443.4	493.2	411.0	351.5	246.3	149.7	151.7
1989	163.7	266.2	310.6	338.1	384.0	611.0	800.0	813.4	622.2	462.0	385.2	401.3
1990	405.3	395.9	376.6	406.2	418.9	500.5	518.8	540.9	502.9	417.9	376.3	368.5
1991	356.1	343.8	297.2	253.2	243.5	455.4	550.3	603.8	622.4	495.2	398.2	278.1
1992	289.8	292.3	286.6	279.3	468.4	551.8	563.7	461.3	382.1	271.3	171.7	146.5
1993	140.0	131.5	217.6	571.0	555.0	621.0	800.0	975.0	975.0	840.2	736.7	650.0
AVG:	460.5	454.6	466.6	485.2	504.8	593.0	701.5	807.1	755.7	597.8	533.4	476.2
MIN:	90.0	101.2	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	142.7
MAX:	720.0	575.0	575.0	575.0	633.3	675.0	869.5	975.0	975.0	950.0	800.0	650.0

Table 3.5.3-27. Simulated Folsom Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	497.8	499.9	575.0	575.0	575.0	674.0	800.0	975.0	975.0	810.7	734.7	650.0
1923	600.0	575.0	575.0	575.0	575.0	559.5	800.0	975.0	954.1	768.5	697.2	618.4
1924	575.5	536.4	506.5	460.6	485.5	394.5	404.9	397.3	344.3	267.9	237.9	199.9
1925	233.9	266.0	311.0	314.9	561.0	479.5	712.8	941.8	794.6	600.0	578.5	513.0
1926	466.5	457.3	456.7	447.2	575.0	598.9	800.0	743.3	557.9	422.0	381.5	376.1
1927	379.2	560.2	575.0	575.0	562.0	661.0	800.0	975.0	975.0	772.8	705.3	644.6
1928	600.0	575.0	550.7	545.2	575.0	638.0	800.0	890.2	635.0	459.0	432.4	444.8
1929	400.0	394.7	389.2	375.3	429.2	513.0	566.8	624.5	582.3	485.0	386.0	368.9
1930	364.2	360.6	486.6	558.5	572.0	672.0	771.0	761.3	643.8	481.1	428.0	441.7
1931	353.1	328.3	281.6	300.1	324.7	389.4	383.1	404.6	373.7	303.4	273.2	249.2
1932	241.5	252.8	373.1	474.8	575.0	618.2	661.2	847.2	818.8	632.1	516.4	410.1
1933	303.6	235.1	245.3	283.4	311.5	397.6	362.9	485.9	478.6	377.4	342.6	337.8
1934	305.8	296.8	385.8	481.8	561.8	627.0	532.3	504.5	404.0	313.5	239.6	215.6
1935	186.0	265.9	300.1	405.2	487.5	598.2	800.0	941.6	975.0	764.2	597.2	533.7
1936	529.1	542.9	539.4	575.0	570.0	667.0	800.0	975.0	975.0	792.2	680.3	621.1
1937	584.6	562.3	549.2	526.4	575.0	675.0	800.0	975.0	917.9	704.6	600.0	536.0
1938	522.4	552.4	575.0	575.0	575.0	674.0	800.0	975.0	975.0	917.8	800.0	650.0
1939	626.5	575.0	528.1	504.2	498.9	583.6	620.5	629.0	559.4	376.0	320.8	315.3
1940	338.1	336.0	334.9	572.0	559.0	618.0	800.0	971.2	883.9	655.5	616.0	554.0
1941	533.5	516.3	575.0	575.0	574.0	672.0	800.0	975.0	975.0	899.9	800.0	650.0
1942	622.6	575.0	575.0	572.0	563.0	626.2	800.0	975.0	975.0	856.8	800.0	650.0
1943	615.2	575.0	575.0	565.0	537.0	618.0	800.0	933.9	921.0	728.0	702.8	642.0
1944	600.0	575.0	553.8	539.5	575.0	675.0	643.5	696.3	600.0	497.3	480.5	399.2
1945	393.2	507.0	575.0	575.0	565.0	653.4	730.7	964.3	932.6	724.7	680.0	613.1
1946	600.0	575.0	575.0	571.0	524.9	620.8	787.0	975.0	852.4	628.0	581.3	520.5
1947	463.1	470.7	482.9	459.6	544.3	674.0	657.5	621.0	579.7	453.2	386.9	301.6
1948	355.1	383.4	374.9	461.2	424.1	477.6	800.0	975.0	975.0	777.1	705.8	639.2
1949	602.6	575.0	571.1	542.7	555.7	675.0	800.0	931.2	808.7	600.0	491.3	425.8
1950	392.2	385.3	368.1	575.0	572.0	672.0	800.0	975.0	975.0	781.5	711.2	650.0
1951	600.0	382.0	305.0	320.0	341.0	587.0	783.7	975.0	885.7	600.0	536.7	467.6
1952	455.1	492.3	575.0	575.0	574.0	674.0	800.0	975.0	975.0	895.9	736.9	650.0
1953	634.0	575.0	575.0	574.0	567.9	645.0	772.2	923.0	975.0	845.5	795.6	650.0
1954	616.9	575.0	532.8	562.0	575.0	672.0	800.0	825.3	703.9	564.3	491.8	422.8
1955	387.1	384.6	458.6	538.0	508.2	527.4	581.9	627.1	550.6	469.1	460.7	471.1
1956	424.2	415.8	531.0	393.0	391.0	522.6	684.6	975.0	975.0	817.0	763.5	650.0
1957	641.0	575.0	528.2	509.2	571.0	667.0	662.2	928.2	869.4	600.0	530.0	464.7
1958	455.3	458.4	521.4	575.0	565.0	671.0	800.0	975.0	975.0	813.5	763.9	650.0
1959	611.5	575.0	528.8	575.0	575.0	585.2	616.9	565.5	519.8	254.8	206.9	215.8
1960	219.9	217.0	211.9	269.0	564.6	669.0	713.4	721.7	600.0	471.9	411.0	412.8
1961	372.2	384.0	391.9	373.6	429.8	457.6	470.5	468.1	438.5	336.5	239.9	227.6
1962	228.1	234.5	263.9	283.4	575.0	620.3	783.8	837.1	789.6	600.0	545.1	476.7
1963	720.0	575.0	575.0	554.0	475.0	582.6	869.5	975.0	972.1	718.4	645.9	623.1
1964	605.6	575.0	529.8	571.0	546.8	553.0	601.5	658.3	671.2	521.1	433.6	356.9
1965	367.9	426.3	364.0	360.0	377.0	508.3	800.0	949.0	973.5	715.8	668.0	580.3
1966	568.0	575.0	574.4	575.0	575.0	562.7	688.0	659.7	582.3	339.3	326.3	321.5
1967	324.0	400.0	575.0	571.0	560.0	642.0	800.0	975.0	975.0	950.0	800.0	650.0
1968	630.4	575.0	529.6	543.8	633.3	650.0	692.4	661.7	600.0	314.2	329.9	340.4
1969	352.4	430.2	523.1	550.0	535.0	645.0	800.0	975.0	975.0	802.8	741.2	650.0
1970	636.7	575.0	575.0	387.0	380.0	594.0	593.2	678.9	600.0	377.7	376.1	400.0
1971	371.0	507.4	575.0	575.0	530.6	663.0	762.1	960.4	975.0	803.4	740.2	650.0
1972	617.4	575.0	575.0	572.0	575.0	660.0	752.6	832.1	604.1	427.9	410.9	438.1
1973	413.2	479.9	575.0	567.0	563.0	669.0	758.2	975.0	798.9	600.0	581.3	537.0
1974	535.6	575.0	575.0	495.0	480.0	606.0	800.0	975.0	975.0	831.3	779.4	650.0
1975	622.2	575.0	567.1	575.0	575.0	674.0	741.2	975.0	975.0	819.5	762.1	650.0
1976	673.3	575.0	498.9	423.8	395.4	408.5	434.4	456.4	406.8	331.8	303.8	274.2
1977	265.4	245.1	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	142.7
1978	90.0	105.9	236.5	569.0	557.0	623.0	800.0	975.0	975.0	776.5	684.0	618.3
1979	565.1	575.0	575.0	575.0	575.0	672.0	728.4	964.9	744.7	575.1	521.1	457.3
1980	455.5	491.6	549.0	433.0	390.0	602.0	763.3	921.3	921.0	792.1	722.2	650.0
1981	600.0	575.0	541.2	558.0	575.0	674.0	643.2	593.9	525.6	279.8	242.7	231.6
1982	271.4	549.0	370.0	392.0	338.0	581.0	800.0	975.0	975.0	925.5	800.0	650.0
1983	720.0	573.0	573.0	564.0	551.0	622.0	800.0	975.0	975.0	950.0	800.0	650.0
1984	708.2	377.0	329.0	338.0	360.0	589.0	759.3	975.0	927.9	600.0	600.6	545.8
1985	554.5	575.0	563.3	526.7	559.7	633.4	711.1	694.0	585.9	445.8	381.3	371.4
1986	368.3	437.0	533.5	559.0	357.0	570.0	800.0	975.0	975.0	761.1	696.9	650.0
1987	600.0	574.5	533.4	507.3	546.9	632.2	632.7	597.1	516.1	414.6	351.2	354.5
1988	343.9	351.7	402.7	485.1	445.1	446.3	436.6	354.8	295.8	191.2	159.4	162.2
1989	174.2	276.6	321.0	345.8	394.3	611.0	800.0	813.6	618.1	459.3	383.5	410.7
1990	414.7	395.9	367.8	390.8	418.0	499.6	524.7	546.8	507.4	420.9	379.3	371.3
1991	358.9	346.6	300.0	254.4	244.8	456.6	551.5	605.0	630.5	494.2	398.9	278.8
1992	290.5	292.9	287.3	279.9	469.1	552.4	564.3	461.9	382.8	271.9	172.3	127.7
1993	120.9	112.5	198.6	571.0	555.0	621.0	800.0	975.0	975.0	840.2	715.0	641.5
AVG:	462.1	456.3	467.7	485.6	504.8	593.0	701.4	807.2	756.5	597.5	533.9	477.3
MIN:	90.0	105.9	190.3	189.9	184.9	191.1	186.7	195.0	179.2	151.1	140.7	127.7
MAX:	720.0	575.0	575.0	575.0	633.3	675.0	869.5	975.0	975.0	950.0	800.0	650.0

Table 3.5.3-28. Simulated Folsom Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-2.5	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
1924	1.6	1.6	1.6	1.6	1.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-11.9
1925	8.8	8.8	8.8	8.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
1926	1.9	2.0	2.0	2.0	0.0	-1.7	0.0	0.0	-10.8	-8.0	-17.0	-16.9
1927	-25.1	-31.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-2.9	0.0	0.0	-0.1
1929	0.0	0.0	0.1	0.1	0.1	0.1	-10.2	-16.6	-7.9	-5.4	-3.9	5.9
1930	-2.6	-1.8	-2.6	-2.6	0.0	0.0	0.1	0.2	-14.8	-13.0	-24.7	-20.2
1931	-7.8	1.8	10.7	10.8	-3.1	-3.9	-4.9	-4.9	-4.8	-4.7	-4.6	-4.5
1932	-34.7	-34.7	-34.6	-34.6	0.0	0.1	0.2	0.3	0.4	0.6	0.3	0.7
1933	1.5	2.4	2.5	2.5	2.6	2.6	-2.3	-4.0	-5.8	-5.3	-5.9	-10.2
1934	-3.9	1.0	1.0	1.0	1.0	-0.7	-7.3	-16.9	-13.2	-12.9	-36.5	-21.3
1935	-33.1	-33.1	-30.7	-17.6	1.6	1.6	0.0	0.0	0.0	0.0	-5.1	-5.1
1936	-5.0	-5.0	-5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-1.7	-1.7
1937	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.9	-3.9	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-5.9	-5.8	-5.7
1940	-3.8	-3.2	-3.2	0.0	0.0	0.0	0.0	0.0	-8.7	-8.7	-11.1	-11.0
1941	-11.0	-0.9	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	-2.2	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.9	-0.9
1945	-0.9	-0.9	-0.9	-0.9	0.0	0.0	0.0	0.0	-2.4	-2.4	-4.9	-4.9
1946	-4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-2.5	-5.0	-5.0
1947	-1.5	-1.6	-0.4	1.0	4.4	0.0	0.0	0.1	0.2	-0.2	-0.2	0.8
1948	0.8	0.4	0.8	-0.6	-0.3	-0.4	0.0	0.0	0.0	-2.8	-2.8	-2.8
1949	-2.8	0.0	2.6	2.6	2.6	0.0	0.0	0.0	-2.5	0.0	-0.5	-0.5
1950	-0.5	-0.4	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9
1952	-0.9	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.7	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	-0.4	-0.4
1955	-0.3	-0.3	-0.3	-0.3	0.0	0.2	0.2	0.2	0.2	-0.3	-2.4	-2.4
1956	-1.6	-1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.9	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	-6.8	-5.4	0.0	-13.2	-9.2	-10.8
1961	-10.6	-10.6	-10.5	-10.4	-10.4	-10.4	-10.3	-10.3	-10.2	-10.1	-10.0	-9.9
1962	-9.8	-9.8	-9.8	-9.8	0.0	0.0	0.0	0.0	0.0	0.0	-20.3	-20.2
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.1	-4.1	0.0
1964	0.0	0.0	0.0	0.0	-0.3	-0.5	-0.5	-0.5	-0.5	-3.3	-3.9	-3.9
1965	-3.8	-3.8	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-2.1	-2.0	-1.0
1966	-1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-3.6	-3.5	-2.8
1967	-2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	-0.2	0.0	-0.3	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.7	-4.0	-4.0
1973	-4.0	-4.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.0	0.0	-1.8	-1.6
1974	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-2.6	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	-4.8	-4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-8.3	-16.3	-16.1
1980	-16.1	-16.1	-13.8	0.0	0.0	0.0	0.0	0.0	0.0	-3.0	-6.2	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.8	-8.7	-8.6
1982	-8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.1	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.7	-1.0	-0.2
1986	-0.6	-0.6	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	-5.4	-7.0	-6.9	-6.9
1988	-3.4	-3.4	-3.4	-3.4	-3.3	-3.3	56.2	55.9	55.4	54.8	-10.0	-10.9
1989	-10.8	-10.7	-10.7	-8.7	-10.7	0.0	0.0	-1.2	0.6	0.2	-0.1	-9.8
1990	-9.8	-0.1	8.9	15.6	1.6	1.6	-6.7	-6.7	-5.3	-3.7	-3.7	-3.5
1991	-3.5	-3.5	-3.5	-1.9	-1.9	-1.9	-1.9	-1.9	-11.4	-3.8	-3.3	-3.3
1992	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.1	-3.1	-3.1	-3.0	16.4
1993	16.7	16.6	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.4	3.2
AVG:	-2.8	-2.1	-1.1	-0.7	-0.2	-0.3	0.0	-0.2	-1.0	-1.6	-3.4	-2.9
MIN:	-34.7	-34.7	-34.6	-34.6	-10.7	-10.4	-10.3	-16.9	-14.8	-13.2	-36.5	-21.3
MAX:	16.7	16.6	16.6	15.6	4.4	2.6	56.2	55.9	55.4	54.8	16.4	16.4

Table 3.5.3-29. Simulated Folsom Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.9	-15.8	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7
1924	-9.1	-14.8	-17.6	-17.6	-17.6	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-10.4
1925	10.2	10.2	10.2	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	-1.6	-1.6	-1.5	-1.5	0.0	1.2	0.0	0.0	-3.2	-2.6	-3.8	-3.8
1927	-2.7	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	-3.6	6.1	3.0	2.7
1929	0.0	2.7	2.8	2.8	2.8	2.8	0.9	-0.7	-0.5	-0.5	-0.5	-1.8
1930	-0.5	0.2	-0.5	-0.5	0.0	0.0	0.0	0.1	-3.8	-3.2	-6.2	-6.8
1931	-1.3	2.9	6.8	6.9	-7.0	-7.0	-1.1	-1.0	-1.0	-1.0	-0.9	-0.9
1932	-10.2	-10.2	-10.1	-10.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	-0.2
1933	-0.1	-1.0	-1.0	-1.0	-1.0	-0.9	-0.4	-0.4	-1.0	-1.0	-1.0	-1.6
1934	-0.6	0.2	0.2	0.2	0.2	0.2	-1.0	-3.4	-2.6	-2.5	-8.0	-7.9
1935	-9.0	-9.0	-6.7	-9.0	-9.0	-8.9	0.0	0.0	0.0	0.0	-2.2	-2.2
1936	-2.2	-2.2	-2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.3	-15.2
1937	-15.2	-12.7	-12.7	-12.7	0.0	0.0	0.0	0.0	5.9	5.9	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.9	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-2.3	-2.2	-2.2
1940	-0.5	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.7	-12.0	-11.9
1941	-11.8	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-27.4	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-4.0	-4.0
1945	13.2	39.1	29.8	16.7	0.0	0.0	0.0	0.0	20.2	20.1	6.7	6.6
1946	0.0	0.0	0.0	0.0	-1.0	-1.1	-1.1	0.0	-10.0	-9.9	-19.6	-19.5
1947	-7.7	-5.8	3.4	7.2	14.2	0.0	0.0	0.1	0.2	0.1	0.0	1.9
1948	1.9	1.5	1.9	0.2	0.4	0.5	0.0	0.0	0.0	-2.9	-2.9	-2.9
1949	-2.9	0.0	2.7	2.7	2.6	0.0	0.0	0.0	-2.5	0.0	-2.0	-2.0
1950	-2.0	-2.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.6	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.0
1952	-4.0	-4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-14.1	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	-0.4	-0.3
1955	-0.3	-0.3	-0.3	-0.3	0.1	0.5	0.5	0.5	0.5	0.0	-1.4	-1.4
1956	-0.7	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-1.0	0.0	-1.6	-1.5	-1.5
1961	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
1962	-1.4	-1.4	-1.4	-1.3	0.0	0.0	0.0	0.0	0.0	0.0	-5.9	-5.9
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19.5	-19.4	0.1
1964	0.1	0.0	0.0	0.0	-0.2	-0.4	-0.4	-0.4	-0.4	-0.9	-1.6	-1.6
1965	-1.5	-1.5	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-6.0	-6.0	-6.0
1966	-6.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	-3.6	-3.6	-2.7
1967	-2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	-0.2	0.0	-0.3	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.7	-4.0	-4.0
1973	-4.0	-4.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	-7.1	0.8
1974	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	-10.5	-10.4	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-0.5	-1.6
1980	-1.6	-1.6	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	-12.6	-26.1	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-1.4	-1.3
1982	-1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12.1	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.1
1985	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.7	-1.0	-0.2
1986	-0.5	-0.5	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-1.6	-1.6	-1.6	-1.6
1988	-0.8	-0.8	-0.8	-0.8	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3
1989	-0.3	-0.3	-0.3	-1.0	-0.3	0.0	0.0	-1.0	-3.4	-2.5	-1.8	-0.5
1990	-0.5	-0.2	0.1	0.3	0.7	0.7	-0.8	-0.8	-0.8	-0.7	-0.7	-0.7
1991	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-3.3	-4.8	-2.6	-2.6
1992	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.4
1993	-2.4	-2.4	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-5.3
AVG:	-1.2	-0.4	-0.1	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-2.0	-3.0	-1.8
MIN:	-15.2	-14.8	-17.6	-17.6	-17.6	-8.9	-2.5	-3.4	-10.0	-27.4	-26.1	-19.5
MAX:	13.2	39.1	29.8	16.7	14.2	2.8	0.9	3.6	20.2	20.1	6.7	6.6

The following figures and tables provide storage results for Oroville Reservoir, the major north-of-Delta storage facility for the SWP.

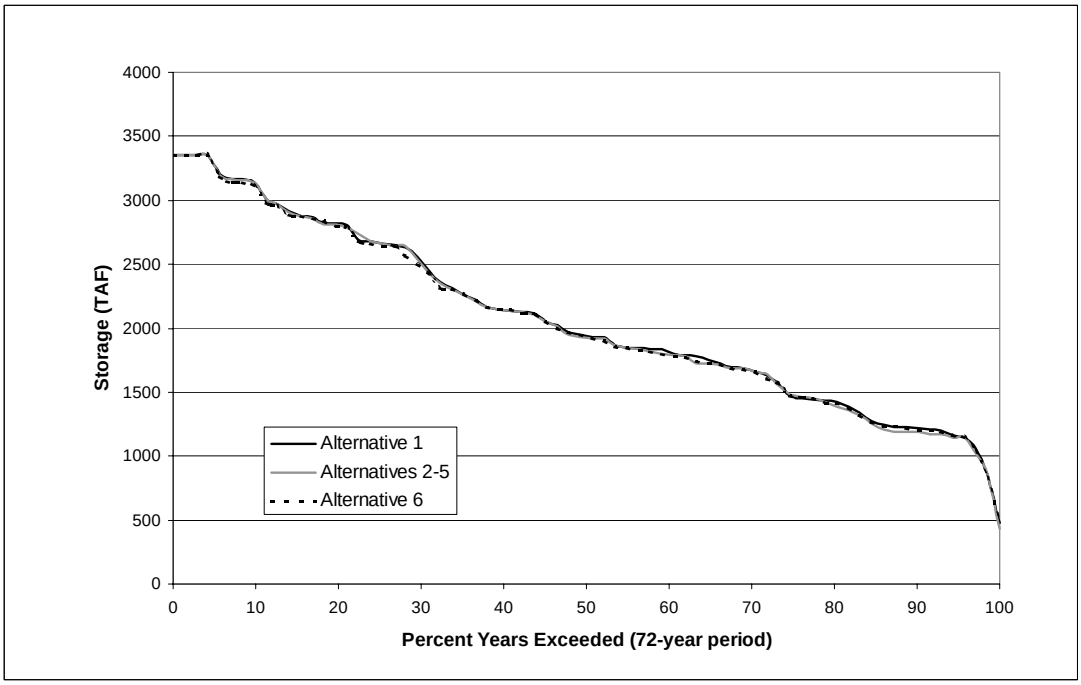


Figure 3.5.3-19. Exceedence for Simulated Oroville Reservoir End-of-September Storage, 2020 LOD

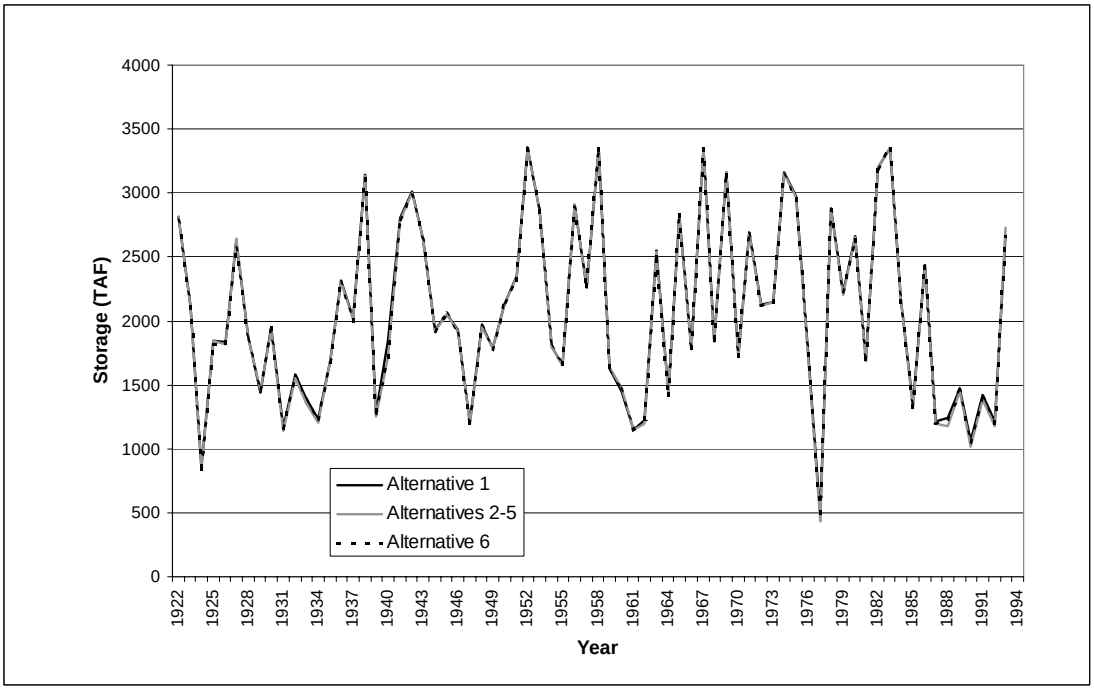


Figure 3.5.3-20. Simulated Oroville Reservoir End of September Storage, 2020 LOD

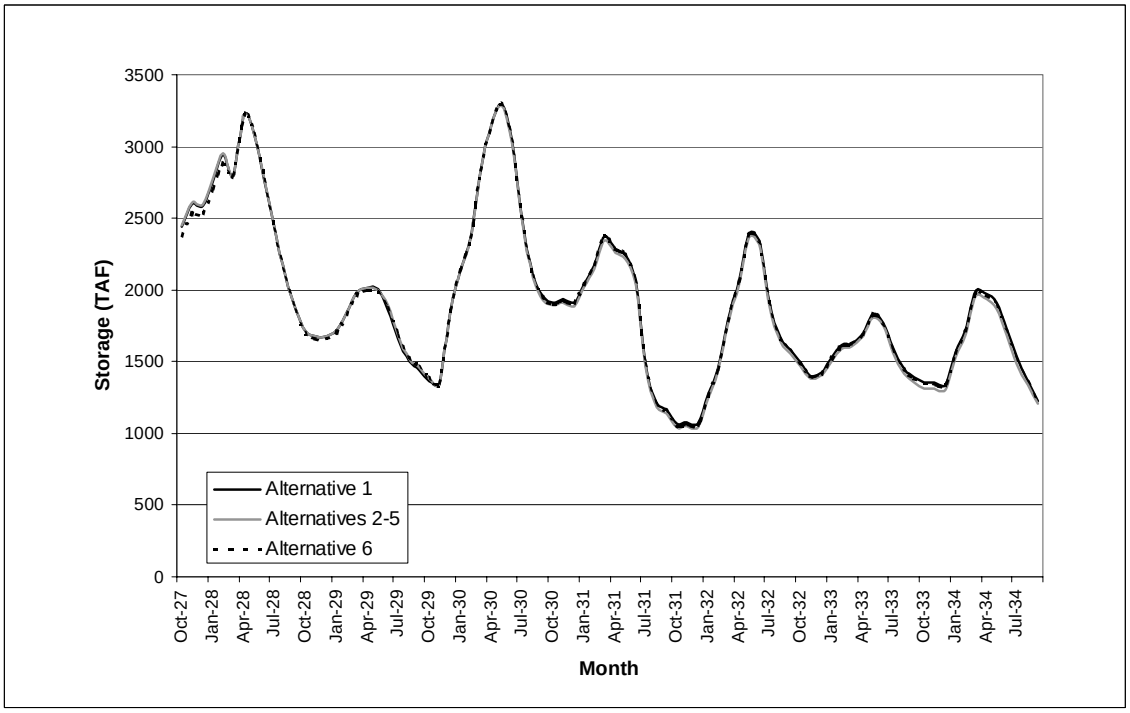


Figure 3.5.3-21. Simulated Oroville Reservoir Drought Period Storage, 2020 LOD (WY 1928-1934)

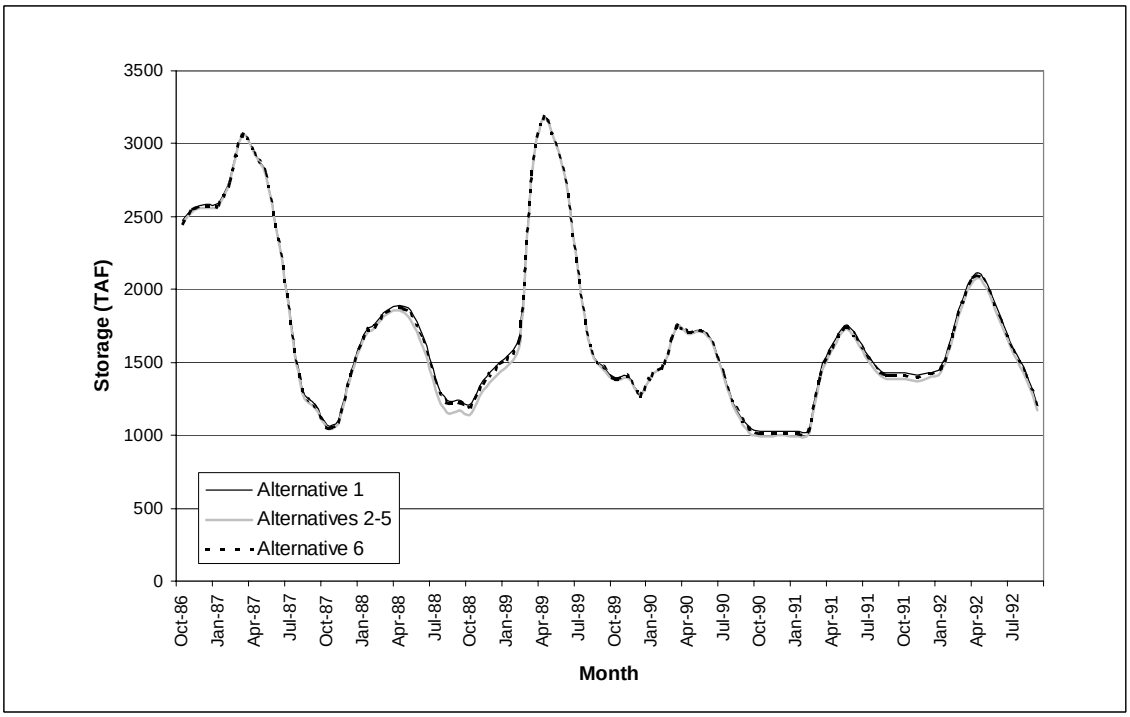


Figure 3.5.3-22. Simulated Oroville Reservoir Drought Period Storage, 2020 LOD (1987-1992)

Table 3.5.3-30. Simulated Oroville Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2539.5	2545.2	2567.1	2700.6	2813.0	2922.0	3446.0	3538.0	3538.0	3030.2	2663.6	2815.5
1923	2856.5	2857.6	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3346.6	2793.6	2292.0	2118.0
1924	1931.4	1820.8	1569.6	1621.6	1805.6	1778.4	1711.7	1577.4	1381.2	1114.5	893.6	852.0
1925	859.8	904.4	971.6	1109.2	1724.0	1861.6	2151.5	2281.0	2007.7	1844.2	1739.8	1840.6
1926	1795.4	1823.2	1830.5	1969.8	2470.0	2761.8	3348.0	3192.6	2877.4	2381.5	1993.5	1837.9
1927	1735.4	2050.3	2039.2	2341.0	2788.0	2999.0	3396.0	3538.0	3463.6	3120.7	2719.8	2628.0
1928	2437.9	2594.8	2591.0	2765.4	2944.6	2797.0	3223.9	3084.3	2765.8	2436.6	2093.2	1868.7
1929	1712.2	1679.3	1673.4	1723.7	1839.3	1976.3	2016.4	2002.0	1860.5	1662.4	1499.6	1438.4
1930	1365.8	1341.7	1858.3	2138.5	2359.0	2825.1	3160.2	3287.8	3044.5	2514.0	2102.7	1950.9
1931	1910.0	1934.8	1908.7	2042.8	2168.7	2369.4	2282.5	2242.0	2069.8	1488.5	1203.9	1163.9
1932	1064.2	1078.3	1065.1	1268.8	1453.8	1786.7	2067.9	2397.1	2345.6	1918.3	1664.8	1578.2
1933	1493.5	1402.6	1425.7	1526.7	1614.5	1628.2	1694.8	1831.5	1775.6	1594.2	1448.6	1388.6
1934	1352.0	1351.5	1340.8	1567.1	1718.7	1992.2	1974.0	1906.7	1727.7	1536.7	1360.0	1228.5
1935	1132.6	1180.9	1245.3	1478.3	1674.0	1949.3	2959.1	3292.2	2907.3	2333.3	1855.9	1683.0
1936	1463.3	1371.9	1294.5	1805.5	2582.9	2954.0	3345.9	3526.8	3506.2	2940.1	2450.7	2317.8
1937	2116.4	2013.1	1921.3	1962.1	2133.6	2485.1	2867.4	3206.2	3071.3	2557.1	2058.2	2019.4
1938	1924.1	2103.2	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3109.6	2856.5	3139.9
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3102.4	2921.5	2512.5	1949.1	1419.8	1276.9
1940	1070.1	967.8	992.5	1497.5	2488.2	2788.0	3238.0	3311.2	2943.1	2361.4	1888.8	1845.1
1941	1740.5	1712.0	2223.5	2788.0	2788.0	2918.0	3334.0	3538.0	3361.1	2914.4	2713.2	2801.5
1942	2855.9	2946.0	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3145.4	2820.9	3009.6
1943	3029.9	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3518.1	3325.4	3094.3	2695.5	2648.9
1944	2662.6	2695.6	2637.7	2739.7	2908.2	3069.0	3241.2	3494.2	3160.2	2597.3	2114.6	1925.5
1945	1733.1	1806.5	1974.8	2084.0	2687.9	2981.4	3217.1	3473.3	3148.9	2586.9	2101.0	2055.6
1946	2019.1	2106.6	2754.0	3007.0	2905.6	3063.0	3373.5	3538.0	3178.2	2631.9	2148.5	1926.3
1947	1734.0	1775.1	1864.5	1929.8	2206.2	2535.2	2689.0	2612.3	2380.0	1806.0	1298.5	1202.1
1948	1192.2	1198.7	1171.6	1484.3	1566.1	1762.8	2420.1	2881.1	3032.6	2531.0	2061.3	1965.3
1949	1845.0	1778.1	1792.6	1845.2	1926.9	2214.0	2522.5	2722.0	2316.8	1979.5	1887.6	1792.7
1950	1742.3	1751.4	1772.9	2055.3	2516.3	2940.0	3373.0	3538.0	3178.3	2630.8	2207.0	2138.9
1951	2188.2	2755.4	2866.0	2846.0	2925.0	3105.0	3354.7	3538.0	3392.5	2830.4	2435.5	2356.2
1952	2296.2	2353.5	2788.0	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.5	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3253.6	2901.3	2865.0
1954	2893.6	3026.0	3155.6	2918.0	2903.0	2943.0	3292.0	3050.8	2774.9	2311.4	1892.3	1801.4
1955	1659.5	1642.9	1735.5	1863.5	1951.4	2078.0	2186.0	2366.5	2125.1	1883.6	1740.6	1658.7
1956	1583.5	1564.1	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3076.4	2725.2	2910.7
1957	2985.0	3069.4	2961.2	3071.4	2847.0	2990.0	3004.6	3289.4	2999.6	2642.9	2269.4	2260.9
1958	2278.5	2323.3	2543.5	2845.1	2788.0	2788.0	3235.0	3538.0	3538.0	3498.0	3375.8	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3182.6	3165.1	2730.2	2121.1	1637.1	1628.4
1960	1416.9	1315.1	1244.1	1369.6	1968.8	2533.9	2758.5	2857.9	2521.8	2085.7	1618.4	1452.7
1961	1401.1	1437.1	1534.4	1647.9	1946.9	2211.8	2356.3	2430.7	2230.3	1767.6	1291.4	1143.8
1962	945.2	905.5	993.0	1115.5	1686.4	2034.6	2538.1	2692.9	2353.3	1853.8	1362.0	1228.1
1963	1899.2	2026.1	2391.9	2693.3	3057.0	2927.0	3180.0	3538.0	3318.7	2979.5	2588.0	2553.9
1964	2558.5	2734.1	2781.3	2934.1	3066.5	3163.0	2972.8	3068.3	2797.7	2223.3	1718.7	1436.7
1965	1324.8	1339.4	2788.0	2788.0	2997.0	3096.0	3354.0	3420.0	3464.7	3143.8	2849.9	2819.6
1966	2872.5	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3314.9	2906.3	2424.7	2019.2	1783.9
1967	1543.8	1654.2	2023.3	2659.5	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.2	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3037.1	3127.0	2839.6	2445.7	2044.3	1844.8
1969	1753.8	1813.2	2035.6	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3449.4	3167.1	3162.0
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3131.4	3176.8	2853.4	2392.3	1942.3	1723.5
1971	1598.3	1863.3	2279.1	2652.6	2929.8	3162.0	3433.0	3538.0	3538.0	2998.0	2682.7	2689.6
1972	2744.8	2787.6	2910.5	3088.0	3058.0	3163.0	3322.3	3400.7	3061.0	2630.9	2237.9	2127.7
1973	2082.1	2243.4	2521.3	2788.0	2788.0	2951.0	3287.2	3538.0	3076.6	2572.4	2158.4	2146.6
1974	2174.9	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3378.8	3353.7	3201.8	3163.6
1975	3163.0	3163.0	3163.0	3163.0	2884.0	2833.0	3270.7	3538.0	3538.0	3076.4	3006.9	2972.7
1976	3016.0	3163.0	3163.0	3163.0	3162.0	3163.0	3077.5	2948.8	2709.5	2227.6	1905.4	1750.4
1977	1649.1	1579.1	1516.1	1497.9	1476.7	1462.4	1306.3	1241.7	965.4	663.1	467.9	476.4
1978	431.9	456.3	661.4	1568.6	2083.3	2944.0	3218.0	3519.0	3425.0	3258.0	2859.2	2879.7
1979	2909.9	2934.4	2615.2	2821.2	2843.0	3001.0	3225.0	3508.7	3061.1	2687.3	2305.1	2223.1
1980	2260.3	2318.4	2441.5	2813.0	2788.0	3028.0	3283.9	3467.6	3428.2	2941.1	2496.1	2662.3
1981	2637.7	2662.3	2791.2	2938.1	3075.0	3024.0	3187.6	3170.6	2815.3	2282.0	1802.6	1692.2
1982	1625.0	2555.1	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3120.6	2920.4	3202.1
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3314.5	3458.8	3223.6	2784.5	2386.1	2168.2
1985	2183.1	2390.5	2552.2	2623.7	2815.0	3050.7	3200.1	3047.4	2665.6	2099.7	1604.1	1342.9
1986	1175.8	1104.3	1172.4	1497.2	2788.0	2788.0	3135.7	3215.3	2976.9	2424.6	2019.8	2441.7
1987	2472.8	2562.8	2581.0	2596.8	2757.4	3053.0	2927.5	2791.6	2349.0	1784.3	1314.1	1216.3
1988	1073.9	1103.1	1438.2	1687.6	1761.1	1856.6	1888.3	1854.1	1674.7	1385.4	1241.0	1243.0
1989	1214.7	1377.3	1472.7	1539.0	1679.1	2788.0	3171.5	3005.3	2658.6	2067.6	1577.4	1467.1
1990	1392.0	1406.4	1279.6	1413.6	1490.6	1749.9	1707.1	1721.9	1637.5	1415.9	1174.5	1062.0
1991	1030.6	1024.2	1025.4	1023.0	1037.6	1425.9	1623.4	1753.2	1684.2	1538.8	1441.0	1424.9
1992	1427.6	1409.4	1433.4	1472.0	1733.3	1976.8	2113.9	1996.4	1803.7	1592.8	1425.7	1209.9
1993	1241.2	1207.9	1372.2	1953.3	2464.1	2964.0	3456.0	3538.0	3538.0	3006.9	2586.3	2675.2
AVG:	2007.6	2064.2	2173.5	2329.8	2507.5	2690.0	2949.8	3058.3	2862.8	2465.4	2128.1	2065.6
MIN:	431.9	456.3	661.4	1023.0	1037.6	1425.9	1306.3	1241.7	965.4	663.1	467.9	476.4
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.5.3-31. Simulated Oroville Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2536.6	2542.4	2564.3	2697.8	2813.0	2922.0	3446.0	3538.0	3538.0	3029.3	2659.3	2810.9
1923	2851.9	2853.0	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3342.9	2789.1	2284.2	2104.1
1924	1915.1	1804.5	1545.1	1597.0	1781.0	1751.4	1680.1	1535.6	1331.7	1064.8	852.0	848.0
1925	855.7	900.4	967.6	1105.2	1719.9	1859.5	2149.5	2278.9	2007.7	1845.0	1741.3	1840.9
1926	1793.3	1821.2	1828.5	1967.8	2468.0	2759.8	3348.0	3189.9	2870.8	2374.4	1985.6	1817.3
1927	1713.9	2028.7	2017.7	2319.4	2788.0	2999.0	3396.0	3538.0	3476.1	3140.0	2735.5	2643.7
1928	2448.0	2604.9	2601.1	2775.5	2954.7	2797.0	3223.9	3083.2	2766.9	2436.4	2092.5	1867.7
1929	1712.2	1679.3	1673.4	1723.8	1839.4	1976.4	2016.5	1996.9	1890.6	1688.9	1523.0	1459.5
1930	1383.4	1340.6	1857.1	2137.3	2357.9	2823.9	3159.0	3281.2	3034.4	2497.2	2082.1	1930.9
1931	1890.0	1914.8	1885.5	2019.6	2145.5	2346.2	2259.0	2217.9	2049.9	1464.6	1180.0	1139.6
1932	1039.5	1053.6	1040.3	1244.0	1429.0	1762.0	2043.2	2372.5	2320.4	1894.9	1643.2	1556.8
1933	1471.6	1380.3	1403.5	1504.5	1592.2	1605.9	1672.5	1809.3	1750.4	1565.9	1417.7	1353.7
1934	1315.5	1315.0	1304.3	1530.5	1682.1	1955.7	1933.2	1863.2	1681.4	1487.0	1338.6	1205.6
1935	1113.1	1161.4	1225.8	1458.8	1654.5	1929.8	2939.6	3272.8	2887.3	2314.3	1841.2	1687.5
1936	1467.7	1376.3	1304.1	1815.1	2592.5	2954.0	3345.9	3526.8	3501.4	2933.6	2442.7	2307.1
1937	2108.2	2004.9	1911.8	1952.5	2124.0	2475.6	2857.8	3196.6	3062.0	2547.9	2049.7	2015.7
1938	1923.7	2102.8	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3108.6	2849.7	3135.4
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3099.7	2914.8	2499.8	1933.4	1402.2	1253.4
1940	1041.1	938.7	963.4	1468.3	2459.0	2788.0	3238.0	3313.6	2940.9	2358.4	1884.9	1715.0
1941	1570.8	1542.2	2053.5	2624.3	2788.0	2918.0	3334.0	3538.0	3359.1	2908.9	2689.3	2784.3
1942	2838.7	2928.8	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3148.3	2817.9	3005.4
1943	3025.7	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3518.1	3322.3	3088.8	2686.6	2640.0
1944	2653.7	2684.9	2629.5	2731.5	2900.0	3069.0	3241.2	3494.2	3159.3	2595.5	2112.1	1923.2
1945	1731.1	1804.5	1972.8	2082.1	2686.0	2979.5	3215.2	3471.4	3146.2	2584.7	2097.2	2051.9
1946	2013.8	2101.2	2748.7	3007.0	2897.9	3063.0	3373.5	3538.0	3177.4	2630.2	2145.9	1920.9
1947	1728.4	1768.6	1858.0	1923.3	2199.6	2528.7	2682.5	2605.0	2373.9	1798.8	1291.1	1193.7
1948	1183.3	1187.6	1160.0	1472.7	1554.6	1751.3	2408.6	2869.6	3021.1	2518.8	2045.8	1949.8
1949	1844.2	1777.3	1791.8	1844.4	1926.1	2213.2	2521.7	2721.3	2315.2	1978.6	1885.4	1790.6
1950	1740.2	1749.3	1770.8	2053.2	2514.2	2940.0	3373.0	3538.0	3178.3	2629.9	2203.3	2135.3
1951	2184.5	2751.8	2866.0	2846.0	2925.0	3105.0	3354.7	3538.0	3389.1	2826.8	2428.5	2347.3
1952	2284.9	2342.3	2788.0	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.5	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3251.6	2895.9	2859.5
1954	2888.1	3020.6	3150.2	2918.0	2903.0	2943.0	3292.0	3050.0	2774.1	2305.0	1885.1	1794.0
1955	1652.2	1637.1	1729.6	1857.6	1945.5	2072.1	2180.1	2360.7	2119.8	1878.8	1735.9	1653.9
1956	1578.8	1559.4	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3075.6	2720.9	2905.9
1957	2980.2	3064.6	2941.5	3051.7	2847.0	2990.0	3003.8	3288.5	2997.7	2642.8	2270.0	2260.5
1958	2278.1	2322.8	2543.1	2844.6	2788.0	2788.0	3235.0	3538.0	3538.0	3497.2	3370.3	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3182.6	3145.4	2707.9	2095.8	1608.6	1636.6
1960	1392.7	1290.9	1220.3	1345.8	1944.9	2510.0	2730.2	2829.6	2490.4	2058.6	1579.8	1475.5
1961	1424.1	1460.3	1557.6	1671.2	1970.1	2235.0	2379.5	2451.7	2261.7	1772.1	1294.7	1146.8
1962	947.0	904.2	991.7	1114.2	1685.1	2033.3	2536.9	2686.2	2346.9	1847.1	1338.8	1194.2
1963	1865.4	1992.2	2358.0	2659.4	3057.0	2927.0	3180.0	3538.0	3317.6	2971.8	2576.7	2542.6
1964	2547.2	2722.8	2769.9	2922.7	3055.1	3163.0	2960.8	3056.3	2766.9	2189.2	1682.5	1422.7
1965	1307.2	1321.8	2788.0	2788.0	2997.0	3096.0	3354.0	3418.8	3460.2	3137.6	2840.5	2810.1
1966	2863.0	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3313.8	2903.8	2423.4	2017.5	1780.9
1967	1540.8	1651.2	2020.3	2656.5	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.2	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3031.6	3121.5	2829.9	2443.3	2038.7	1833.5
1969	1739.3	1798.6	2021.1	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3448.3	3161.7	3162.0
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3130.6	3176.0	2851.0	2391.1	1940.0	1722.8
1971	1597.6	1862.7	2278.4	2651.9	2925.0	3162.0	3433.0	3538.0	3538.0	2996.8	2678.0	2681.4
1972	2733.8	2776.5	2899.4	3088.0	3058.0	3163.0	3322.3	3397.6	3056.8	2626.8	2233.7	2122.0
1973	2076.4	2237.8	2515.6	2788.0	2788.0	2951.0	3287.2	3538.0	3075.4	2570.6	2157.0	2145.2
1974	2173.5	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3378.4	3349.0	3194.1	3155.9
1975	3163.0	3163.0	3163.0	3163.0	2884.0	2833.0	3270.7	3538.0	3538.0	3075.5	3002.6	2968.4
1976	3011.7	3163.0	3163.0	3163.0	3162.0	3163.0	3077.5	2948.9	2700.5	2212.6	1882.6	1724.6
1977	1623.7	1555.5	1497.7	1479.4	1461.7	1445.3	1288.2	1220.5	940.8	643.9	446.4	430.6
1978	384.6	409.0	614.0	1521.1	2035.8	2928.6	3218.0	3519.0	3423.9	3253.6	2851.4	2871.9
1979	2900.3	2917.6	2599.3	2805.4	2843.0	3001.0	3225.0	3508.7	3057.3	2683.5	2295.6	2206.2
1980	2216.3	2274.3	2397.4	2813.0	2788.0	3028.0	3283.9	3467.6	3428.2	2940.1	2494.0	2658.2
1981	2633.5	2658.1	2787.1	2934.0	3075.0	3024.0	3187.6	3170.6	2810.9	2271.3	1788.9	1685.9
1982	1592.7	2522.7	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3119.3	2911.2	3197.2
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3313.9	3458.1	3222.4	2781.5	2379.4	2163.5
1985	2171.2	2378.5	2540.2	2611.7	2803.0	3038.6	3186.4	3031.0	2649.8	2083.1	1586.7	1321.9
1986	1154.8	1083.4	1151.5	1476.3	2788.0	2788.0	3135.7	3215.3	2973.6	2420.3	2012.7	2423.5
1987	2454.6	2544.6	2562.7	2578.5	2739.1	3053.0	2923.1	2783.9	2339.0	1764.1	1290.6	1191.8
1988	1049.3	1078.5	1413.7	1663.0	1736.4	1828.3	1860.1	1792.8	1600.8	1306.8	1156.3	1173.7
1989	1145.0	1307.6	1402.9	1469.1	1609.2	2788.0	3171.5	3003.6	2650.3	2058.4	1568.0	1450.3
1990	1380.2	1394.6	1274.0	1408.0	1485.0	1744.3	1698.5	1713.3	1625.7	1394.4	1159.1	1020.5
1991	992.8	996.3	997.6	995.1	1009.7	1398.0	1595.5	1725.4	1653.3	1504.6	1404.2	1387.6
1992	1390.3	1371.3	1395.1	1433.7	1694.9	1938.4	2075.6	1959.5	1766.6	1555.9	1389.0	1173.5
1993	1185.1	1189.2	1353.6	1934.6	2445.3	2964.0	3456.0	3538.0	3538.0	3013.6	2597.3	2732.2
AVG:	1993.6	2050.7	2161.2	2318.8	2500.3	2685.2	2944.7	3051.7	2855.1	2456.3	2117.0	2054.5
MIN:	384.6	409.0	614.0	995.1	1009.7	1398.0	1288.2	1220.5	940.8	643.9	446.4	430.6
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.5.3-32. Simulated Oroville Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	2537.0	2542.8	2564.6	2698.1	2813.0	2922.0	3446.0	3538.0	3538.0	3024.9	2636.9	2788.7
1923	2829.8	2830.8	2922.0	2976.0	3089.0	3163.0	3459.0	3538.0	3359.8	2804.4	2294.9	2114.8
1924	1917.8	1807.3	1532.7	1584.7	1768.6	1741.9	1673.6	1537.2	1340.1	1077.7	858.2	833.9
1925	841.7	886.4	953.5	1091.1	1705.8	1845.4	2135.4	2264.9	1992.6	1828.1	1723.2	1820.9
1926	1777.0	1804.8	1812.1	1951.4	2451.6	2743.4	3348.0	3191.4	2875.0	2377.5	1988.4	1830.3
1927	1726.8	2041.6	2030.5	2332.3	2788.0	2999.0	3396.0	3538.0	3465.3	3081.5	2659.3	2567.6
1928	2372.0	2528.8	2525.0	2699.3	2878.5	2797.0	3223.9	3095.0	2766.3	2424.4	2081.1	1856.4
1929	1695.0	1662.1	1656.2	1706.5	1822.1	1959.1	1999.2	1983.5	1879.6	1680.8	1517.0	1455.8
1930	1382.9	1343.7	1860.2	2140.4	2361.0	2827.0	3162.1	3288.4	3044.7	2509.8	2099.1	1946.8
1931	1906.0	1930.7	1907.0	2041.2	2167.0	2367.7	2280.5	2239.2	2066.9	1483.2	1198.5	1158.6
1932	1053.7	1067.8	1054.5	1258.2	1443.2	1776.2	2057.4	2386.6	2334.3	1908.1	1655.4	1568.9
1933	1484.3	1394.5	1417.7	1518.7	1606.4	1620.2	1686.7	1823.5	1766.8	1584.7	1438.9	1379.0
1934	1342.4	1341.9	1331.3	1557.5	1709.1	1982.7	1963.7	1895.6	1715.8	1524.0	1361.7	1219.4
1935	1124.9	1173.2	1237.6	1470.5	1666.2	1941.6	2951.4	3283.8	2898.3	2324.8	1846.3	1675.1
1936	1455.4	1364.0	1284.7	1795.6	2573.0	2954.0	3345.9	3526.8	3522.1	2950.4	2455.7	2303.5
1937	2106.6	2003.3	1911.2	1951.9	2123.4	2474.9	2857.1	3195.9	3064.7	2548.3	2046.8	1995.7
1938	1910.8	2089.9	2867.0	2924.0	2788.0	2788.0	3277.0	3538.0	3538.0	3104.3	2814.1	3113.4
1939	3163.0	3163.0	3163.0	3134.0	3163.0	3133.0	3094.3	2912.4	2503.7	1947.5	1419.1	1266.2
1940	1060.5	958.1	982.9	1487.8	2478.5	2788.0	3238.0	3326.2	2961.9	2375.6	1898.5	1715.2
1941	1571.0	1542.4	2053.7	2624.5	2788.0	2918.0	3334.0	3538.0	3372.9	2904.7	2669.4	2785.9
1942	2840.3	2930.4	2788.0	2788.0	2806.0	3058.0	3281.0	3538.0	3538.0	3074.5	2701.0	2982.0
1943	3002.3	3085.0	2966.0	2788.0	2890.0	2937.0	3350.0	3518.1	3324.8	3106.3	2691.4	2644.8
1944	2658.5	2692.3	2634.9	2736.9	2905.4	3069.0	3241.2	3494.2	3159.2	2595.6	2112.4	1921.2
1945	1734.6	1808.0	1976.3	2093.1	2697.0	2990.5	3226.2	3482.5	3170.0	2600.2	2111.3	2054.0
1946	1997.8	2085.2	2732.6	3007.0	2875.6	3063.0	3373.5	3538.0	3175.0	2625.0	2137.9	1903.3
1947	1712.5	1758.4	1847.8	1913.1	2189.4	2518.5	2672.3	2595.3	2381.5	1806.3	1298.1	1192.0
1948	1186.6	1198.0	1173.4	1486.2	1568.8	1765.5	2422.8	2883.8	3035.3	2533.0	2059.9	1963.9
1949	1814.1	1747.1	1761.6	1814.1	1895.8	2182.9	2491.5	2691.1	2285.1	1958.1	1862.6	1768.0
1950	1717.7	1726.9	1748.4	2030.8	2491.7	2935.3	3373.0	3538.0	3200.6	2648.4	2215.9	2147.7
1951	2196.9	2764.2	2866.0	2846.0	2925.0	3105.0	3354.7	3538.0	3375.9	2775.3	2371.1	2314.4
1952	2251.3	2308.6	2786.4	2788.0	2832.0	2988.0	3452.0	3538.0	3538.0	3538.0	3534.5	3350.0
1953	3163.0	3163.0	2918.0	2809.0	3059.3	3059.0	3284.0	3538.0	3538.0	3249.2	2892.5	2856.7
1954	2885.3	3017.8	3147.4	2918.0	2903.0	2943.0	3292.0	3050.0	2774.1	2306.8	1886.9	1793.9
1955	1652.1	1644.9	1737.4	1865.4	1953.3	2079.9	2187.9	2368.5	2125.6	1882.7	1739.7	1657.7
1956	1582.6	1563.1	2788.0	2788.0	2788.0	3018.0	3427.0	3538.0	3538.0	3071.1	2698.6	2887.9
1957	2962.3	3046.6	2934.9	3045.1	2847.0	2990.0	3003.8	3288.5	2997.5	2646.3	2275.0	2264.9
1958	2282.5	2327.2	2547.5	2849.0	2788.0	2788.0	3235.0	3538.0	3538.0	3492.7	3341.1	3350.0
1959	3163.0	3163.0	3163.0	2978.0	2839.0	3054.0	3182.6	3159.5	2729.1	2117.9	1632.9	1599.1
1960	1388.4	1286.5	1213.6	1339.0	1938.1	2503.2	2727.2	2826.7	2489.9	2056.4	1574.3	1466.9
1961	1415.5	1451.6	1548.9	1662.5	1961.4	2226.3	2370.8	2443.3	2247.7	1755.3	1279.7	1144.5
1962	944.9	904.8	992.3	1114.8	1685.6	2033.9	2537.4	2690.8	2351.3	1851.7	1367.9	1227.5
1963	1898.7	2025.5	2391.4	2692.7	3057.0	2927.0	3180.0	3538.0	3306.1	2869.5	2456.6	2500.7
1964	2505.4	2680.9	2728.0	2880.8	3013.2	3135.4	2933.4	3029.0	2757.6	2182.5	1677.6	1410.9
1965	1296.0	1310.7	2788.0	2788.0	2997.0	3096.0	3354.0	3419.1	3476.7	3176.2	2867.6	2837.2
1966	2890.0	2943.0	2946.0	3015.0	3100.0	3163.0	3459.0	3314.0	2904.4	2423.9	2018.1	1781.5
1967	1541.4	1651.8	2020.9	2657.1	2951.0	2847.0	3236.0	3538.0	3538.0	3538.0	3505.2	3350.0
1968	3162.0	3162.0	3141.0	2922.0	2962.0	3036.0	3036.2	3126.1	2837.6	2444.9	2042.7	1841.7
1969	1750.8	1810.2	2032.6	2788.0	2788.0	3027.0	3470.0	3538.0	3538.0	3444.1	3140.6	3142.1
1970	3162.0	3162.0	2806.0	2787.0	2787.0	3163.0	3130.6	3176.0	2850.5	2391.8	1940.5	1723.8
1971	1598.6	1863.6	2279.4	2652.9	2925.0	3162.0	3433.0	3538.0	3538.0	2997.5	2677.7	2680.1
1972	2732.5	2775.3	2898.2	3088.0	3058.0	3163.0	3322.3	3397.6	3056.8	2626.6	2233.3	2121.6
1973	2076.0	2237.4	2515.2	2788.0	2788.0	2951.0	3287.2	3538.0	3080.4	2573.9	2160.3	2149.7
1974	2178.0	2788.0	2800.0	2870.0	3009.0	2788.0	3292.0	3538.0	3381.3	3342.6	3171.9	3133.8
1975	3157.2	3163.0	3163.0	3163.0	2884.0	2833.0	3270.7	3538.0	3538.0	3072.9	2989.4	2955.2
1976	2998.5	3156.1	3163.0	3163.0	3162.0	3163.0	3077.5	2948.9	2704.7	2224.9	1901.0	1746.5
1977	1649.5	1585.8	1526.1	1507.9	1491.8	1479.4	1329.8	1264.5	986.5	680.9	484.9	493.1
1978	448.1	472.6	677.7	1584.9	2099.6	2944.0	3218.0	3519.0	3423.9	3256.0	2853.9	2874.4
1979	2902.8	2925.0	2607.3	2813.3	2843.0	3001.0	3225.0	3508.7	3061.4	2686.7	2305.7	2219.5
1980	2259.5	2317.6	2440.7	2813.0	2788.0	3028.0	3283.9	3467.6	3428.2	2936.9	2487.4	2638.3
1981	2613.7	2638.2	2767.2	2914.1	3075.0	3024.0	3187.6	3170.6	2814.2	2277.1	1796.9	1690.0
1982	1612.3	2542.3	2788.0	2943.0	2987.0	2936.0	3303.0	3538.0	3538.0	3116.4	2892.7	3187.1
1983	3149.0	2981.0	2930.0	2854.0	2788.0	2788.0	3208.0	3538.0	3538.0	3538.0	3538.0	3351.0
1984	3163.0	2950.0	2788.0	3091.0	3078.0	3120.0	3313.9	3458.1	3223.4	2786.0	2380.8	2166.7
1985	2169.4	2376.7	2538.4	2609.8	2801.1	3036.8	3184.6	3029.2	2647.9	2081.2	1584.8	1320.2
1986	1153.2	1081.7	1149.8	1474.6	2788.0	2788.0	3135.7	3215.3	2990.8	2433.7	2019.8	2425.4
1987	2456.4	2546.5	2564.6	2580.4	2740.9	3053.0	2925.6	2788.9	2345.5	1779.7	1308.6	1198.1
1988	1055.7	1085.0	1420.1	1669.4	1742.9	1839.0	1870.7	1832.5	1652.4	1367.2	1223.5	1224.4
1989	1196.7	1359.4	1454.7	1521.0	1661.1	2788.0	3171.5	3004.3	2656.4	2064.5	1573.7	1465.1
1990	1386.8	1401.3	1279.2	1413.2	1490.2	1749.5	1706.1	1721.0	1635.6	1412.7	1179.3	1040.7
1991	1012.0	1012.1	1013.4	1010.9	1025.6	1413.9	1611.4	1741.2	1671.4	1525.1	1426.6	1410.6
1992	1413.3	1395.1	1419.0	1457.7	1718.9	1962.4	2099.5	1981.5	1788.1	1577.3	1410.3	1194.6
1993	1219.5	1201.4	1365.7	1946.8	2457.6	2964.0	3456.0	3538.0	3538.0	3005.6	2583.2	2661.9
AVG:	1994.7	2052.1	2163.1	2320.3	2501.1	2686.4	2946.2	3054.6	2860.7	2458.2	2115.0	2053.1
MIN:	448.1	472.6	677.7	1010.9	1025.6	1413.9	1329.8	1264.5	986.5	680.9	484.9	493.1
MAX:	3163.0	3163.0	3163.0	3163.0	3163.0	3163.0	3470.0	3538.0	3538.0	3538.0	3538.0	3351.0

Table 3.5.3-33. Simulated Oroville Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2.9	-2.9	-2.9	-2.9	0.0	0.0	0.0	0.0	0.0	-0.9	-4.4	-4.6
1923	-4.6	-4.6	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-4.5	-7.9	-14.0
1924	-16.3	-16.3	-24.5	-24.6	-24.6	-26.9	-31.7	-41.8	-49.5	-49.7	-41.6	-4.0
1925	-4.0	-4.0	-4.0	-4.0	-4.0	-2.1	-2.1	-2.1	0.0	0.8	1.5	0.3
1926	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.8	-6.6	-7.1	-7.8	-20.6
1927	-21.5	-21.5	-21.5	-21.6	0.0	0.0	0.0	0.0	12.5	19.3	15.7	15.7
1928	10.1	10.1	10.1	10.1	10.1	0.0	0.0	-1.1	1.2	-0.2	-0.8	-1.0
1929	0.0	0.0	0.1	0.1	0.1	0.1	0.1	-5.1	30.2	26.5	23.4	21.1
1930	17.6	-1.1	-1.2	-1.2	-1.2	-1.1	-1.1	-6.6	-10.1	-16.8	-20.6	-20.0
1931	-20.0	-20.0	-23.2	-23.2	-23.2	-23.2	-23.5	-24.1	-19.9	-23.9	-24.0	-24.4
1932	-24.7	-24.7	-24.7	-24.8	-24.8	-24.8	-24.7	-24.6	-25.2	-23.4	-21.6	-21.5
1933	-21.9	-22.2	-22.2	-22.3	-22.3	-22.3	-22.3	-22.2	-25.2	-28.3	-30.9	-34.9
1934	-36.5	-36.4	-36.5	-36.5	-36.6	-36.5	-40.8	-43.5	-46.2	-49.7	-21.4	-22.8
1935	-19.5	-19.4	-19.4	-19.5	-19.5	-19.5	-19.5	-19.4	-20.0	-19.0	-14.6	4.4
1936	4.4	4.4	9.6	9.6	9.6	0.0	0.0	0.0	-4.8	-6.5	-8.0	-10.7
1937	-8.1	-8.2	-9.6	-9.6	-9.6	-9.6	-9.6	-9.6	-9.3	-9.2	-8.5	-3.8
1938	-0.4	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-6.8	-4.4
1939	0.0	0.0	0.0	0.0	0.0	0.0	-2.7	-6.7	-12.7	-15.7	-17.6	-23.4
1940	-29.1	-29.1	-29.1	-29.2	-29.2	0.0	0.0	2.4	-2.2	-3.0	-3.8	-130.1
1941	-169.7	-169.8	-170.0	-163.7	0.0	0.0	0.0	0.0	-1.9	-5.5	-23.9	-17.2
1942	-17.2	-17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	-3.0	-4.2
1943	-4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.0	-5.5	-8.9	-8.9
1944	-8.9	-10.7	-8.2	-8.2	-8.2	0.0	0.0	0.0	-0.9	-1.8	-2.5	-2.3
1945	-2.0	-2.0	-2.0	-1.9	-1.9	-1.9	-1.9	-1.9	-2.7	-2.2	-3.8	-3.7
1946	-5.4	-5.4	-5.4	0.0	-7.7	0.0	0.0	0.0	-0.8	-1.7	-2.6	-5.4
1947	-5.7	-6.5	-6.5	-6.5	-6.5	-6.5	-6.5	-7.3	-6.1	-7.1	-7.4	-8.4
1948	-8.9	-11.1	-11.6	-11.6	-11.5	-11.6	-11.5	-11.5	-11.5	-12.1	-15.5	-15.4
1949	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-1.6	-0.9	-2.2	-2.2
1950	-2.1	-2.1	-2.1	-2.1	-2.1	0.0	0.0	0.0	0.0	-0.9	-3.7	-3.7
1951	-3.6	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.6	-7.1	-8.9
1952	-11.2	-11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	-5.4	-5.4
1954	-5.4	-5.4	-5.4	0.0	0.0	0.0	0.0	-0.8	-0.8	-6.4	-7.2	-7.4
1955	-7.3	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.3	-4.8	-4.8	-4.7
1956	-4.7	-4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-4.3	-4.9
1957	-4.8	-4.8	-19.7	-19.7	0.0	0.0	-0.9	-0.9	-1.9	-0.1	0.6	-0.4
1958	-0.4	-0.4	-0.4	-0.4	0.0	0.0	0.0	0.0	0.0	-0.9	-5.6	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19.7	-22.3	-25.3	-28.5	8.1
1960	-24.2	-24.2	-23.8	-23.8	-23.8	-23.8	-28.4	-28.2	-31.3	-27.1	-38.6	22.8
1961	23.0	23.2	23.2	23.3	23.2	23.2	23.2	21.0	31.4	4.5	3.3	3.0
1962	1.8	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-6.7	-6.4	-6.7	-23.2	-33.9
1963	-33.8	-33.8	-33.9	-33.9	0.0	0.0	0.0	0.0	-1.1	-7.7	-11.3	-11.3
1964	-11.3	-11.3	-11.3	-11.3	-11.3	0.0	-12.0	-12.0	-30.8	-34.0	-36.2	-14.0
1965	-17.6	-17.6	0.0	0.0	0.0	0.0	0.0	-1.2	-4.5	-6.2	-9.5	-9.5
1966	-9.5	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-2.5	-1.4	-1.7	-3.0
1967	-3.0	-3.0	-3.0	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-5.5	-5.5	-9.7	-2.4	-5.6	-11.3
1969	-14.5	-14.5	-14.6	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-5.4	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.8	-2.5	-1.2	-2.3	-0.7
1971	-0.7	-0.7	-0.7	-0.7	-4.8	0.0	0.0	0.0	0.0	-1.2	-4.6	-8.3
1972	-11.1	-11.1	-11.1	0.0	0.0	0.0	0.0	-3.2	-4.2	-4.2	-4.1	-5.7
1973	-5.7	-5.7	-5.7	0.0	0.0	0.0	0.0	0.0	-1.2	-1.8	-1.5	-1.4
1974	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-4.6	-7.7	-7.7
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-4.3	-4.3
1976	-4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.0	-15.0	-22.8	-25.8
1977	-25.4	-23.6	-18.4	-18.5	-15.0	-17.1	-18.0	-21.2	-24.6	-19.2	-21.5	-45.8
1978	-47.2	-47.3	-47.4	-47.5	-47.5	-15.4	0.0	0.0	-1.2	-4.4	-7.8	-7.7
1979	-9.6	-16.8	-15.9	-15.9	0.0	0.0	0.0	0.0	-3.8	-3.8	-9.5	-17.0
1980	-44.0	-44.1	-44.1	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-2.1	-4.1
1981	-4.1	-4.1	-4.1	-4.1	0.0	0.0	0.0	0.0	-4.5	-10.7	-13.7	-6.3
1982	-32.3	-32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-9.2	-4.9
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-0.7	-1.2	-3.0	-6.7	-4.7
1985	-11.9	-12.0	-12.0	-12.1	-12.1	-12.1	-13.7	-16.4	-15.8	-16.7	-17.4	-21.0
1986	-20.9	-20.9	-20.9	-21.0	0.0	0.0	0.0	0.0	-3.3	-4.2	-7.1	-18.2
1987	-18.2	-18.2	-18.3	-18.3	-18.3	0.0	-4.4	-7.7	-10.0	-20.2	-23.5	-24.5
1988	-24.5	-24.6	-24.6	-24.6	-24.6	-28.2	-28.2	-61.3	-73.9	-78.6	-84.7	-69.4
1989	-69.6	-69.7	-69.8	-69.9	-69.9	0.0	0.0	-1.7	-8.3	-9.2	-9.5	-16.8
1990	-11.8	-11.8	-5.6	-5.6	-5.7	-5.7	-8.6	-8.6	-11.8	-21.5	-15.3	-41.6
1991	-37.7	-27.9	-27.9	-27.9	-27.9	-28.0	-27.9	-27.9	-31.0	-34.2	-36.8	-37.4
1992	-37.3	-38.2	-38.2	-38.3	-38.3	-38.3	-38.3	-36.8	-37.1	-36.9	-36.7	-36.4
1993	-56.1	-18.6	-18.6	-18.7	-18.7	0.0	0.0	0.0	0.0	6.7	11.1	56.9
AVG:	-14.0	-13.5	-12.3	-11.0	-7.2	-4.7	-5.1	-6.6	-7.7	-9.2	-11.1	-11.2
MIN:	-169.7	-169.8	-170.0	-163.7	-69.9	-38.3	-40.8	-61.3	-73.9	-78.6	-84.7	-130.1
MAX:	23.0	23.2	23.2	23.3	23.2	23.2	23.2	21.0	31.4	26.5	23.4	56.9

Table 3.5.3-34. Simulated Oroville Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2.5	-2.5	-2.5	-2.5	0.0	0.0	0.0	0.0	0.0	-5.4	-26.7	-26.8
1923	-26.7	-26.8	0.0	0.0	0.0	0.0	0.0	0.0	13.2	10.7	2.8	-3.3
1924	-13.6	-13.6	-36.9	-36.9	-37.0	-36.4	-38.2	-40.2	-41.1	-36.8	-35.4	-18.1
1925	-18.1	-18.1	-18.1	-18.1	-18.2	-16.2	-16.2	-16.1	-15.1	-16.1	-16.7	-19.7
1926	-18.4	-18.4	-18.4	-18.4	-18.4	-18.4	0.0	-1.2	-2.4	-4.0	-5.1	-7.7
1927	-8.6	-8.7	-8.7	-8.7	0.0	0.0	0.0	0.0	1.7	-39.2	-60.5	-60.4
1928	-65.9	-65.9	-66.0	-66.0	-66.0	0.0	0.0	10.7	0.5	-12.3	-12.1	-12.3
1929	-17.2	-17.2	-17.2	-17.3	-17.3	-17.3	-17.3	-18.5	19.1	18.4	17.4	17.3
1930	17.0	2.0	1.9	1.9	1.9	1.9	1.9	0.6	0.2	-4.2	-3.7	-4.0
1931	-4.0	-4.1	-1.7	-1.7	-1.7	-1.7	-2.0	-2.8	-2.9	-5.3	-5.5	-5.4
1932	-10.5	-10.5	-10.5	-10.6	-10.6	-10.5	-10.5	-10.5	-11.3	-10.2	-9.4	-9.3
1933	-9.2	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.7	-9.5	-9.7	-9.6
1934	-9.5	-9.5	-9.5	-9.6	-9.6	-9.6	-10.4	-11.1	-11.9	-12.7	1.7	-9.0
1935	-7.7	-7.7	-7.7	-7.7	-7.7	-7.7	-7.7	-8.4	-9.0	-8.5	-9.6	-7.9
1936	-7.9	-7.9	-9.9	-9.9	-9.9	0.0	0.0	0.0	15.9	10.3	5.1	-14.3
1937	-9.8	-9.8	-10.2	-10.2	-10.2	-10.2	-10.2	-10.2	-6.5	-8.8	-11.4	-23.8
1938	-13.3	-13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-42.4	-26.5
1939	0.0	0.0	0.0	0.0	0.0	0.0	-8.0	-9.1	-8.8	-1.6	-0.7	-10.7
1940	-9.7	-9.7	-9.7	-9.7	-9.7	0.0	0.0	15.0	18.8	14.2	9.7	-129.9
1941	-169.5	-169.6	-169.8	-163.5	0.0	0.0	0.0	0.0	11.9	-9.7	-43.8	-15.6
1942	-15.6	-15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-70.9	-119.9	-27.6
1943	-27.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	12.0	-4.1	-4.1
1944	-4.1	-3.3	-2.8	-2.8	-2.8	0.0	0.0	0.0	-1.0	-1.7	-2.2	-4.3
1945	1.4	1.5	1.5	9.1	9.1	9.1	9.1	9.1	21.1	13.3	10.2	-1.6
1946	-21.4	-21.4	-21.4	0.0	-30.0	0.0	0.0	0.0	-3.2	-6.9	-10.5	-23.0
1947	-21.5	-16.7	-16.7	-16.7	-16.8	-16.7	-16.7	-16.9	1.5	0.3	-0.4	-10.0
1948	-5.6	-0.7	1.8	1.9	2.7	2.7	2.7	2.7	2.7	2.0	-1.4	-1.4
1949	-30.9	-31.0	-31.0	-31.1	-31.1	-31.1	-31.0	-30.9	-31.6	-21.4	-25.0	-24.8
1950	-24.6	-24.5	-24.5	-24.6	-24.6	-4.7	0.0	0.0	22.3	17.5	8.9	8.8
1951	8.8	8.7	0.0	0.0	0.0	0.0	0.0	0.0	-16.5	-55.1	-64.5	-41.8
1952	-44.9	-44.9	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.4	-8.8	-8.2
1954	-8.2	-8.2	-8.2	0.0	0.0	0.0	0.0	-0.8	-0.8	-4.6	-5.4	-7.4
1955	-7.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.5	-0.9	-0.9	-0.9
1956	-1.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-26.6	-22.8
1957	-22.8	-22.8	-26.3	-26.3	0.0	0.0	-0.9	-0.9	-2.2	3.4	5.7	4.0
1958	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	-5.3	-34.7	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.6	-1.1	-3.2	-4.2	-29.4
1960	-28.5	-28.5	-30.6	-30.6	-30.6	-30.6	-31.3	-31.2	-31.9	-29.3	-44.1	14.2
1961	14.4	14.5	14.5	14.6	14.6	14.5	14.5	12.6	17.4	-12.3	-11.6	0.7
1962	-0.3	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-2.0	-2.0	-2.0	5.9	-0.5
1963	-0.5	-0.5	-0.5	-0.5	0.0	0.0	0.0	0.0	-12.6	-110.0	-131.4	-53.2
1964	-53.1	-53.2	-53.2	-53.3	-53.3	-27.6	-39.5	-39.3	-40.1	-40.8	-41.2	-25.8
1965	-28.8	-28.7	0.0	0.0	0.0	0.0	0.0	-0.9	11.9	32.4	17.6	17.6
1966	17.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-1.9	-0.9	-1.1	-2.4
1967	-2.4	-2.4	-2.4	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-2.0	-0.8	-1.6	-3.2
1969	-3.0	-3.0	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.3	-26.5	-19.9
1970	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.8	-2.9	-0.5	-1.9	0.3
1971	0.3	0.3	0.3	0.3	-4.8	0.0	0.0	0.0	0.0	-0.5	-4.9	-9.5
1972	-12.3	-12.3	-12.4	0.0	0.0	0.0	0.0	-3.2	-4.2	-4.4	-4.6	-6.1
1973	-6.1	-6.1	-6.1	0.0	0.0	0.0	0.0	0.0	3.8	1.5	1.9	3.1
1974	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	-11.1	-29.9	-29.8
1975	-5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	-17.5	-17.4
1976	-17.4	-6.9	0.0	0.0	0.0	0.0	0.0	0.0	-4.8	-2.7	-4.4	-3.9
1977	0.4	6.7	10.0	10.0	15.1	17.0	23.5	22.8	21.1	17.8	17.0	16.7
1978	16.3	16.3	16.3	16.3	16.3	0.0	0.0	0.0	-1.1	-2.0	-5.3	-5.3
1979	-7.1	-9.3	-7.9	-7.9	0.0	0.0	0.0	0.0	0.4	-0.6	0.6	-3.6
1980	-0.8	-0.8	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	-4.2	-8.7	-24.0
1981	-24.0	-24.0	-24.1	-24.1	0.0	0.0	0.0	0.0	-1.2	-4.9	-5.7	-2.2
1982	-12.7	-12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2	-27.7	-15.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	-0.1	1.5	-5.3	-1.6
1985	-13.8	-13.8	-13.8	-13.9	-13.9	-13.9	-15.5	-18.2	-17.7	-18.5	-19.3	-22.7
1986	-22.6	-22.6	-22.6	-22.7	0.0	0.0	0.0	0.0	13.9	9.1	0.0	-16.3
1987	-16.3	-16.4	-16.4	-16.4	-16.4	0.0	-1.9	-2.7	-3.5	-4.7	-5.5	-18.2
1988	-18.1	-18.1	-18.1	-18.2	-18.2	-17.6	-17.6	-21.5	-22.3	-18.2	-17.5	-18.7
1989	-17.9	-17.9	-18.0	-18.0	-18.0	0.0	0.0	-1.0	-2.2	-3.2	-3.7	-2.0
1990	-5.2	-5.2	-0.4	-0.4	-0.4	-0.4	-1.0	-1.0	-1.9	-3.2	4.9	-21.3
1991	-18.5	-12.0	-12.0	-12.0	-12.0	-12.0	-12.0	-12.0	-12.8	-13.7	-14.5	-14.3
1992	-14.2	-14.3	-14.3	-14.4	-14.4	-14.4	-14.4	-14.9	-15.6	-15.5	-15.4	-15.3
1993	-21.8	-6.5	-6.5	-6.5	-6.5	0.0	0.0	0.0	0.0	-1.3	-3.1	-13.4
AVG:	-12.9	-12.1	-10.4	-9.5	-6.3	-3.6	-3.6	-3.7	-2.2	-7.3	-13.1	-12.6
MIN:	-169.5	-169.6	-169.8	-163.5	-66.0	-36.4	-39.5	-40.2	-41.1	-110.0	-131.4	-129.9
MAX:	17.5	16.3	16.3	16.3	16.3	17.0	23.5	22.8	22.3	32.4	17.6	17.6

The following series of tables display monthly data for CVP total upstream storage (the sum of storage in Shasta, Trinity, and Folsom Reservoirs), followed by CVP San Luis Reservoir and SWP San Luis Reservoir storage. Results from each alternative are presented, along with a comparison of each Action alternative to Alternative 1.

Table 3.5.3-35. Simulated CVP Total Upstream Storage (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5085.4	5069.3	5235.7	5337.0	5719.3	6249.9	6951.3	7332.4	7035.6	6290.5	5637.7	5203.1
1923	5096.6	5130.0	5270.5	5495.8	5646.9	5811.6	6471.2	6281.7	5809.7	4955.2	4302.0	4023.6
1924	3900.2	3780.7	3695.0	3654.6	3882.1	3792.1	3533.9	3122.1	2550.9	1926.7	1519.0	1316.6
1925	1341.8	1599.2	1786.7	1994.9	3760.0	3966.5	5155.9	5432.4	4913.3	4156.5	3643.2	3361.5
1926	3231.9	3219.0	3287.5	3325.0	4321.9	4652.4	5368.3	5072.3	4461.0	3732.6	3245.1	3037.5
1927	3033.6	3853.1	4567.2	5223.7	5444.9	6353.7	7178.7	7344.2	7064.6	6167.3	5550.4	5189.0
1928	5050.5	5295.4	5386.5	5713.4	6318.4	6462.4	7268.3	7072.1	6324.9	5312.0	4712.1	4464.6
1929	4302.9	4246.8	4232.6	4279.5	4544.6	4854.1	5010.9	4986.3	4658.5	3990.3	3415.3	3180.9
1930	3035.7	2931.3	3708.9	4001.7	4485.9	5186.3	5545.1	5341.6	4831.7	4100.0	3600.4	3450.9
1931	3267.8	3223.4	3146.9	3247.8	3395.0	3687.8	3471.5	3173.4	2738.1	2096.7	1655.2	1439.2
1932	1357.9	1367.7	1682.5	1963.4	2190.9	2819.5	3112.9	3509.4	3268.4	2687.1	2239.3	1945.6
1933	1735.8	1646.8	1640.7	1701.2	1766.9	2554.5	2867.0	3045.2	2985.2	2407.8	1930.5	1727.2
1934	1590.6	1532.1	1753.7	2205.9	2700.9	3183.0	3201.2	2978.1	2416.1	1808.8	1372.6	1215.7
1935	1114.9	1344.3	1450.2	1883.9	2379.1	2939.0	4341.0	4735.0	4468.8	3787.3	3147.4	2861.7
1936	2821.4	2799.2	2806.9	3577.2	4594.3	5162.5	5686.6	5680.8	5422.4	4686.1	4061.2	3745.6
1937	3565.1	3438.3	3337.4	3283.5	3415.1	4264.9	5273.1	5740.7	5611.0	4952.6	4369.8	4057.5
1938	3974.2	4704.4	5181.7	5636.7	5685.6	5901.3	6977.4	7821.0	7680.9	7196.4	6580.0	6025.0
1939	5726.5	5677.0	5736.9	5839.0	5962.2	6549.1	6469.4	6128.4	5420.4	4448.9	3701.4	3448.8
1940	3343.8	3245.5	3458.3	4749.9	5293.3	5837.6	6972.8	7021.6	6436.6	5499.1	4906.8	4579.2
1941	4492.0	4469.1	5326.1	5570.6	5925.5	6712.0	7556.0	7947.0	7912.9	7316.8	6650.0	6025.0
1942	5722.6	5625.0	5741.0	5861.0	6079.0	6550.8	7545.9	7780.5	7760.1	7211.3	6636.0	6025.0
1943	5715.2	5677.0	5781.0	6006.0	6385.0	6836.0	7633.1	7627.0	7273.3	6395.9	5833.0	5483.3
1944	5359.5	5333.9	5297.3	5364.0	5749.0	6227.5	6233.4	6238.2	5824.0	5023.3	4480.7	4147.7
1945	4051.7	4364.8	4822.4	5080.0	6003.3	6455.3	6835.2	7028.4	6630.5	5706.7	5107.9	4742.8
1946	4750.1	5043.4	5247.3	5730.9	5819.8	6440.8	7027.7	7128.8	6549.6	5684.0	5104.7	4779.0
1947	4570.8	4628.5	4739.4	4718.3	5116.3	5902.7	6133.3	5645.8	5318.8	4448.7	3809.9	3505.5
1948	3649.8	3739.6	3764.2	4608.9	4394.2	4788.5	6194.6	6714.7	6773.6	6074.2	5490.4	5235.7
1949	5041.1	4968.0	4966.6	4935.8	5176.7	6189.0	6894.5	6981.8	6384.1	5360.7	4695.6	4353.3
1950	4138.2	4042.0	3953.9	4455.5	4916.9	5587.5	6213.8	6347.2	6043.7	5350.6	4808.0	4541.4
1951	4887.4	4977.9	5228.6	5635.9	6047.5	6839.8	7303.7	7449.0	6830.3	5728.7	5102.8	4747.1
1952	4700.8	4860.4	5504.8	5862.1	6186.2	6735.4	7390.0	7938.5	7825.6	7272.8	6601.0	6025.0
1953	5734.0	5620.2	5770.0	5840.0	6264.6	6941.8	7601.7	7712.0	7805.1	7115.2	6627.5	6025.0
1954	5716.9	5677.0	5746.8	6014.0	6236.0	6878.0	7646.0	7357.7	6878.9	5873.3	5388.9	5133.9
1955	5048.6	5233.6	5504.3	5724.2	5811.0	6033.3	6283.7	6405.5	5885.7	5179.0	4674.7	4498.7
1956	4357.9	4373.0	5421.1	5545.0	5679.0	6634.4	7496.7	7919.0	7662.6	7042.5	6545.5	6025.0
1957	5741.0	5625.0	5581.6	5671.7	6203.0	6896.0	7043.8	7583.7	7220.5	6178.9	5563.9	5405.3
1958	5495.6	5553.2	5709.4	6006.0	5875.9	6187.0	7273.0	7947.0	7905.8	7229.3	6613.9	6025.0
1959	5711.5	5624.6	5605.2	6123.0	6352.0	6700.1	6917.7	6538.1	5720.7	4649.2	3977.2	3934.5
1960	3752.9	3611.7	3574.3	3832.5	4987.9	5968.2	6324.2	6265.5	5838.3	4934.6	4250.2	4084.8
1961	3955.5	4105.8	4664.9	4887.6	5790.2	6312.0	6615.3	6557.6	6165.2	5083.8	4271.2	3999.8
1962	3799.5	3834.9	4175.3	4321.0	5618.3	6239.9	6900.8	6768.8	6311.7	5327.3	4744.4	4448.5
1963	5202.3	5114.3	5385.2	5570.4	6215.9	6606.0	7149.6	7580.0	7296.5	6335.7	5803.3	5602.5
1964	5541.8	5631.3	5658.1	6176.0	6358.1	6558.6	6274.7	6005.4	5727.6	4904.4	4255.9	3974.6
1965	3913.4	4150.3	5381.4	5628.0	6157.1	6447.5	7495.6	7476.2	7110.3	6122.4	5663.4	5363.8
1966	5276.8	5498.5	5620.8	6094.4	6474.8	6861.1	7540.0	7377.7	6567.1	5566.4	4949.0	4721.8
1967	4484.8	5002.1	5687.6	6014.7	6480.0	6775.0	7490.2	7860.2	7909.1	7370.0	6650.0	6025.0
1968	5730.4	5637.2	5679.1	5999.6	6287.3	6998.0	7115.1	6836.2	6158.0	5063.1	4639.8	4415.1
1969	4364.7	4473.1	4947.5	5451.8	5683.9	6505.4	7400.4	7947.0	7707.2	6901.3	6334.1	6025.0
1970	5736.7	5677.0	5742.0	5539.0	5811.0	6777.7	6830.2	6682.9	6191.0	5019.2	4516.9	4315.3
1971	4303.0	5067.3	5459.0	5889.7	6101.0	6636.0	7403.7	7844.4	7812.7	7041.5	6519.1	6025.0
1972	5717.4	5624.9	5754.7	6186.0	6554.0	7009.0	7494.0	7410.1	6551.7	5547.9	5007.2	4878.4
1973	4882.8	5265.8	5563.8	5922.3	6156.5	6914.0	7462.3	7722.5	7069.3	6062.2	5565.2	5312.6
1974	5376.4	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7855.6	7698.7	7168.3	6629.4	6025.0
1975	5722.2	5632.5	5743.1	5910.4	6435.1	6530.0	7315.2	7871.1	7837.9	7249.9	6622.5	6025.0
1976	5773.3	5677.0	5664.8	5670.6	5860.3	6154.4	6358.1	6195.0	5653.2	5010.9	4731.4	4590.0
1977	4498.8	4513.9	4341.6	4337.8	4319.9	4318.3	3869.6	3692.4	2991.3	2004.7	1400.9	1316.7
1978	1136.4	1205.0	1997.4	4646.9	5339.9	6125.2	7054.8	7246.7	6858.3	5976.4	5410.7	5258.1
1979	5101.6	5107.5	5096.0	5277.7	5682.1	6434.5	6779.3	7134.7	6342.2	5420.5	4924.7	4648.4
1980	4677.8	4928.8	5205.5	5658.9	5682.0	6732.4	7342.7	7345.4	6889.2	6209.0	5659.8	5360.7
1981	5219.3	5147.7	5251.6	5683.2	6255.6	6850.5	7079.4	6714.9	5960.3	4930.0	4281.3	4053.7
1982	4091.1	5362.9	5496.0	5908.0	5868.0	6634.0	7194.0	7590.4	7296.5	6853.4	6331.2	5971.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5808.2	5479.0	5464.0	5888.0	6362.8	6935.0	7318.3	7447.2	7016.9	5943.6	5562.0	5343.7
1985	5331.1	5529.0	5679.5	5768.1	6021.1	6362.4	6697.3	6229.1	5524.0	4634.6	3968.7	3787.2
1986	3731.1	3816.0	4079.5	4801.0	5332.6	6169.7	6850.1	6853.1	6321.4	5533.5	4951.9	4804.0
1987	4741.7	4663.5	4610.3	4721.9	5187.2	6220.9	6199.9	5749.8	4952.4	4184.2	3652.3	3415.5
1988	3225.9	3222.8	3934.2	4532.6	4548.7	4741.0	4836.4	4689.2	4184.4	3527.2	2986.8	2744.1
1989	2595.1	2944.7	3103.8	3261.7	3449.5	5397.4	6178.6	5812.7	5137.1	4243.0	3671.3	3633.4
1990	3769.4	3724.8	3643.6	3972.5	4020.6	4430.6	4340.1	4477.7	4236.8	3542.4	3119.3	2950.5
1991	2805.3	2716.2	2643.5	2596.5	2624.8	3341.2	3649.5	3670.3	3428.8	2899.0	2431.8	2182.9
1992	2081.4	1948.4	1934.6	1980.8	2966.6	3638.7	4120.5	3738.5	3159.6	2463.8	1882.4	1564.2
1993	1435.9	1389.7	1730.0	2810.6	3669.8	5571.8	6589.9	7046.7	7089.8	6297.4	5794.8	5502.3
AVG:	4264.8	4341.6	4547.7	4865.1	5250.1	5822.5	6359.9	6441.0	6044.7	5247.0	4682.4	4379.5
MIN:	1114.9	1205.0	1450.2	1701.2	1766.9	2554.5	2867.0	2978.1	2416.1	1808.8	1372.6	1215.7
MAX:	5820.0	5677.0	5781.0	6186.0	6554.0	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.5.3-36. Simulated CVP Total Upstream Storage (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5085.4	5069.3	5235.7	5337.0	5719.3	6249.9	6951.3	7332.4	7035.6	6287.9	5635.1	5203.1
1923	5096.6	5130.0	5270.5	5495.8	5646.9	5811.6	6471.2	6281.7	5809.8	4952.7	4299.4	4022.7
1924	3899.4	3779.9	3694.1	3653.7	3881.2	3782.9	3524.4	3112.9	2530.9	1903.8	1490.9	1272.2
1925	1318.1	1575.5	1763.1	1971.2	3727.6	3932.4	5124.2	5402.9	4882.6	4126.6	3614.3	3332.9
1926	3205.2	3192.5	3261.0	3298.5	4293.4	4622.3	5340.4	5044.8	4423.0	3685.9	3189.2	2982.2
1927	2970.2	3783.3	4528.9	5185.5	5431.6	6340.4	7165.4	7331.0	7051.4	6160.6	5544.0	5182.5
1928	5043.5	5282.4	5367.5	5694.4	6299.5	6449.5	7255.4	7058.1	6308.9	5299.1	4701.2	4454.0
1929	4292.4	4235.2	4221.0	4268.0	4533.1	4842.6	4989.2	4958.4	4617.4	3940.0	3352.6	3120.2
1930	2971.8	2887.7	3664.6	3957.4	4444.2	5144.7	5504.6	5303.9	4780.1	4031.8	3520.4	3376.3
1931	3184.4	3131.6	3056.4	3157.4	3291.4	3583.4	3367.5	3065.6	2632.1	1989.8	1549.7	1357.6
1932	1290.3	1300.2	1615.1	1884.3	2146.4	2775.2	3069.2	3466.4	3232.0	2663.1	2199.2	1906.4
1933	1686.9	1598.9	1592.9	1653.4	1719.3	2507.0	2808.4	2979.9	2915.8	2331.5	1848.7	1643.4
1934	1502.9	1444.3	1666.1	2118.4	2613.5	3094.0	3106.9	2875.7	2305.6	1690.9	1282.3	1092.5
1935	980.4	1209.9	1318.3	1765.1	2279.6	2839.6	4240.2	4638.1	4372.1	3692.6	3049.3	2764.6
1936	2724.5	2702.5	2710.2	3485.6	4502.8	5071.2	5598.5	5597.3	5341.0	4607.0	3982.5	3668.0
1937	3487.9	3363.0	3262.1	3208.3	3340.0	4189.9	5199.9	5674.5	5542.3	4885.2	4307.4	3995.7
1938	3917.5	4647.7	5192.2	5647.2	5696.1	5911.8	6987.8	7831.4	7691.4	7204.3	6590.3	6025.0
1939	5726.5	5677.0	5736.9	5839.0	5962.2	6549.1	6469.7	6128.8	5407.5	4431.4	3676.2	3420.0
1940	3304.3	3197.4	3410.3	4705.1	5274.1	5818.4	6953.7	7002.5	6408.9	5464.1	4869.1	4541.9
1941	4454.9	4442.0	5307.3	5551.8	5906.7	6712.0	7556.0	7947.0	7910.7	7314.6	6650.0	6025.0
1942	5722.6	5625.0	5741.0	5861.0	6079.0	6550.8	7545.9	7780.5	7760.1	7208.7	6636.0	6025.0
1943	5715.2	5677.0	5781.0	6006.0	6385.0	6836.0	7633.1	7627.0	7273.2	6392.5	5829.4	5479.8
1944	5356.0	5330.4	5293.9	5360.5	5745.5	6224.1	6230.1	6235.0	5818.3	5016.9	4473.9	4141.1
1945	4045.8	4358.9	4816.5	5074.1	6002.2	6454.2	6834.0	7027.2	6627.0	5699.8	5098.3	4733.4
1946	4741.0	5042.3	5246.2	5729.8	5818.4	6439.3	7026.4	7127.7	6546.1	5678.0	5096.1	4770.5
1947	4562.2	4618.8	4726.4	4706.4	5107.9	5889.9	6120.9	5633.8	5304.5	4438.2	3804.0	3500.2
1948	3644.3	3733.8	3758.8	4602.1	4389.0	4783.1	6189.7	6710.1	6769.2	6067.0	5483.1	5228.5
1949	5033.9	4963.5	4964.7	4933.9	5174.8	6184.5	6890.0	6977.4	6377.3	5352.1	4685.9	4343.6
1950	4127.4	4029.8	3941.7	4443.8	4905.2	5575.9	6202.4	6336.1	6032.9	5340.2	4797.9	4531.5
1951	4877.9	4973.7	5224.3	5631.7	6043.2	6835.6	7299.5	7444.8	6826.0	5721.4	5095.4	4739.0
1952	4693.0	4852.7	5500.6	5857.9	6182.1	6731.3	7390.0	7938.5	7825.6	7271.1	6598.3	6025.0
1953	5734.0	5619.7	5770.0	5840.0	6264.6	6941.8	7601.7	7712.0	7805.1	7111.5	6623.7	6025.0
1954	5716.9	5677.0	5746.8	6014.0	6236.0	6878.0	7646.0	7354.9	6876.5	5871.2	5384.7	5129.6
1955	5044.7	5227.2	5504.0	5723.9	5810.5	6033.1	6278.5	6400.5	5876.9	5169.5	4668.1	4492.5
1956	4350.4	4365.6	5421.1	5545.0	5679.0	6634.4	7496.7	7919.0	7662.6	7039.9	6542.8	6025.0
1957	5741.0	5625.0	5581.6	5671.7	6203.0	6896.0	7042.7	7582.7	7216.6	6178.3	5560.0	5405.3
1958	5495.3	5551.0	5709.4	6006.0	5875.9	6187.0	7273.0	7947.0	7905.8	7228.0	6613.9	6025.0
1959	5711.5	5624.6	5605.2	6123.0	6352.0	6694.2	6911.6	6532.0	5705.8	4625.1	3943.4	3900.4
1960	3683.9	3569.0	3531.6	3789.9	4945.3	5925.7	6276.0	6220.8	5783.5	4866.8	4169.5	4011.6
1961	3883.8	4034.1	4593.3	4816.2	5755.1	6276.9	6579.7	6523.1	6127.7	5069.3	4256.1	3986.0
1962	3787.3	3818.4	4158.8	4304.5	5607.0	6228.6	6889.6	6757.8	6301.0	5316.6	4713.7	4417.9
1963	5191.9	5103.2	5374.1	5559.3	6204.8	6601.6	7138.5	7568.9	7285.5	6320.6	5788.3	5587.6
1964	5527.0	5616.4	5643.3	6171.5	6353.8	6554.0	6239.3	5968.8	5691.8	4854.5	4200.1	3919.1
1965	3861.5	4098.5	5354.9	5628.0	6157.1	6444.6	7495.0	7473.6	7107.8	6118.1	5659.4	5360.9
1966	5274.0	5497.9	5621.2	6093.8	6474.2	6860.5	7540.0	7377.7	6564.1	5559.9	4940.7	4712.0
1967	4474.3	4994.4	5685.0	6012.1	6480.0	6775.0	7490.2	7860.2	7909.1	7370.0	6650.0	6025.0
1968	5730.4	5636.2	5678.1	5998.7	6287.3	6998.0	7108.4	6829.1	6137.9	5037.7	4604.9	4373.2
1969	4321.2	4430.3	4902.2	5441.7	5673.8	6495.3	7390.3	7943.2	7703.6	6894.4	6327.0	6025.0
1970	5736.7	5677.0	5742.0	5539.0	5811.0	6777.7	6828.8	6681.5	6186.0	5012.5	4508.0	4306.3
1971	4294.6	5058.9	5458.7	5889.3	6098.3	6636.0	7401.7	7844.3	7812.8	7038.2	6515.6	6025.0
1972	5717.4	5624.9	5754.7	6186.0	6554.0	7009.0	7490.7	7406.9	6546.0	5540.2	4997.4	4867.0
1973	4871.6	5254.7	5561.3	5919.8	6154.1	6911.5	7459.8	7720.0	7063.9	6054.0	5554.9	5304.8
1974	5369.1	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7855.6	7698.7	7168.7	6629.4	6025.0
1975	5722.2	5631.6	5742.0	5909.5	6434.9	6530.0	7315.2	7871.1	7837.9	7247.3	6619.9	6025.0
1976	5773.3	5677.0	5664.8	5670.6	5860.3	6154.4	6351.8	6189.2	5632.8	4980.3	4691.3	4550.8
1977	4450.3	4459.9	4291.1	4287.2	4272.4	4268.1	3810.8	3624.1	2913.2	1914.8	1303.7	1235.6
1978	1075.8	1141.0	1908.0	4562.4	5375.6	6160.9	7090.5	7282.3	6893.6	6011.6	5445.7	5292.9
1979	5136.6	5142.5	5130.8	5312.5	5716.9	6469.3	6814.0	7169.3	6374.8	5444.8	4940.7	4664.4
1980	4694.0	4943.7	5222.8	5693.1	5682.0	6732.4	7342.7	7345.4	6889.2	6206.0	5653.6	5360.7
1981	5219.3	5147.7	5251.6	5683.2	6255.6	6850.5	7079.4	6714.9	5948.3	4909.3	4251.5	4022.8
1982	4061.3	5344.5	5496.0	5908.0	5868.0	6634.0	7194.0	7590.4	7296.5	6851.3	6331.2	5971.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5808.2	5479.0	5464.0	5888.0	6362.8	6935.0	7317.5	7446.5	7016.2	5939.3	5557.8	5338.9
1985	5326.6	5529.0	5679.5	5768.1	6021.1	6362.4	6697.3	6229.2	5520.2	4628.3	3959.8	3779.2
1986	3722.7	3807.7	4071.2	4793.3	5329.2	6166.3	6846.7	6849.9	6318.5	5530.9	4949.6	4801.6
1987	4739.4	4661.2	4607.9	4719.6	5184.9	6218.6	6185.3	5725.7	4924.8	4146.1	3608.6	3366.0
1988	3180.5	3177.8	3889.7	4488.1	4502.0	4688.4	4843.9	4699.2	4184.8	3519.2	2973.3	2725.8
1989	2576.0	2925.6	3084.8	3244.7	3430.5	5389.1	6170.5	5800.5	5126.6	4236.2	3666.9	3620.8
1990	3757.1	3722.7	3651.1	3986.9	4037.9	4447.8	4348.4	4485.0	4231.1	3523.8	3102.1	2916.8
1991	2766.4	2667.9	2595.3	2549.8	2578.2	3294.6	3606.8	3628.0	3377.2	2855.2	2385.7	2136.9
1992	2026.4	1890.9	1877.1	1923.5	2909.3	3581.5	4067.7	3688.6	3108.3	2413.2	1839.6	1568.0
1993	1460.6	1377.5	1717.9	2781.8	3641.0	5543.1	6562.3	7040.8	7083.9	6304.6	5817.1	5499.7
AVG:	4243.0	4320.0	4528.5	4847.4	5235.5	5808.0	6344.9	6426.1	6026.8	5226.7	4660.4	4357.7
MIN:	980.4	1141.0	1318.3	1653.4	1719.3	2507.0	2808.4	2875.7	2305.6	1690.9	1282.3	1092.5
MAX:	5820.0	5677.0	5781.0	6186.0	6554.0	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.5.3-37. Simulated CVP Total Upstream Storage (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	5085.4	5069.3	5235.7	5337.0	5719.3	6249.9	6951.3	7332.4	7035.6	6274.6	5621.8	5203.1
1923	5096.6	5130.0	5270.5	5495.8	5646.9	5811.6	6471.2	6281.7	5809.8	4947.7	4294.1	4014.3
1924	3883.6	3758.5	3669.8	3629.5	3857.0	3765.4	3506.2	3095.0	2521.5	1891.0	1483.2	1272.5
1925	1316.1	1573.5	1761.0	1969.2	3724.1	3937.7	5127.6	5405.0	4896.3	4140.5	3627.6	3345.9
1926	3214.6	3201.8	3270.4	3307.9	4306.3	4638.0	5352.9	5057.3	4443.1	3713.0	3224.5	3017.2
1927	3014.5	3834.8	4550.8	5207.3	5438.8	6347.6	7172.6	7338.2	7058.6	6146.0	5528.6	5167.5
1928	5030.2	5289.5	5394.3	5721.2	6326.3	6461.8	7267.7	7087.6	6332.9	5317.4	4714.8	4467.2
1929	4300.9	4242.9	4228.8	4275.7	4540.9	4850.4	5005.3	4979.2	4648.5	3981.8	3404.6	3168.3
1930	3023.7	2935.1	3712.1	4004.9	4489.6	5190.0	5548.7	5345.0	4831.5	4089.9	3586.9	3437.2
1931	3254.3	3211.4	3138.9	3239.8	3373.2	3666.0	3448.8	3150.7	2712.7	2069.7	1628.9	1414.6
1932	1338.7	1348.5	1663.4	1944.3	2181.9	2810.6	3104.1	3500.7	3261.0	2682.0	2231.2	1937.4
1933	1727.7	1637.8	1631.8	1692.2	1758.0	2545.6	2856.2	3034.4	2972.0	2393.1	1915.2	1712.9
1934	1576.7	1518.3	1740.0	2192.2	2687.2	3169.3	3186.6	2961.3	2396.9	1787.6	1360.8	1189.8
1935	1088.0	1317.4	1425.7	1857.0	2352.2	2912.2	4323.2	4717.6	4451.7	3770.7	3129.0	2843.5
1936	2803.2	2781.0	2788.7	3561.2	4578.3	5146.5	5670.7	5665.2	5407.2	4671.4	4031.6	3716.2
1937	3535.8	3411.5	3310.6	3256.7	3401.0	4250.9	5259.1	5727.0	5603.4	4945.4	4356.9	4044.7
1938	3961.6	4691.8	5169.8	5624.8	5673.7	5889.5	6965.5	7809.2	7669.2	7168.8	6568.3	6025.0
1939	5726.5	5677.0	5736.9	5839.0	5962.2	6549.1	6469.5	6128.5	5419.3	4445.7	3695.7	3443.2
1940	3338.5	3240.3	3453.1	4745.1	5291.3	5835.5	6970.8	7019.5	6435.3	5484.6	4879.0	4551.8
1941	4464.8	4452.8	5324.1	5568.6	5923.4	6712.0	7556.0	7947.0	7916.0	7319.9	6650.0	6025.0
1942	5722.6	5625.0	5741.0	5861.0	6079.0	6550.8	7545.9	7780.5	7760.1	7183.9	6636.0	6025.0
1943	5715.2	5677.0	5781.0	6006.0	6385.0	6836.0	7633.1	7627.0	7273.3	6406.6	5844.2	5494.2
1944	5370.2	5344.5	5307.9	5374.5	5759.5	6238.0	6243.7	6248.1	5831.0	5024.9	4478.0	4145.0
1945	4041.3	4380.3	4828.6	5073.2	5993.2	6445.2	6825.1	7018.3	6643.8	5705.4	5092.6	4727.9
1946	4729.4	5055.8	5262.1	5745.8	5823.8	6444.7	7031.3	7131.4	6543.2	5666.7	5076.6	4751.2
1947	4539.3	4602.8	4714.1	4696.4	5101.4	5873.7	6105.1	5618.7	5293.5	4436.3	3806.4	3507.8
1948	3654.6	3744.0	3769.0	4612.0	4400.1	4794.5	6200.1	6719.9	6778.5	6076.1	5492.3	5237.6
1949	5043.0	4972.7	4974.0	4943.2	5184.0	6193.7	6899.2	6986.5	6386.1	5360.1	4683.9	4341.1
1950	4125.1	4030.3	3942.3	4445.9	4907.3	5578.0	6204.7	6338.4	6035.2	5342.6	4795.6	4533.8
1951	4880.7	4982.4	5233.1	5640.4	6052.0	6844.4	7308.2	7453.5	6834.7	5722.3	5096.0	4733.4
1952	4688.1	4842.8	5509.2	5866.5	6190.6	6739.9	7390.0	7938.5	7825.6	7263.6	6586.9	6025.0
1953	5734.0	5619.7	5770.0	5840.0	6264.6	6941.8	7601.7	7712.0	7805.1	7110.6	6622.7	6025.0
1954	5716.9	5677.0	5746.8	6014.0	6236.0	6878.0	7646.0	7354.9	6876.5	5870.4	5383.8	5128.8
1955	5043.9	5227.0	5504.0	5723.9	5812.1	6034.8	6282.9	6404.6	5882.7	5174.4	4671.4	4495.6
1956	4354.7	4370.9	5421.1	5545.0	5679.0	6634.4	7496.7	7919.0	7662.6	7026.6	6528.8	6025.0
1957	5741.0	5625.0	5581.6	5671.7	6203.0	6896.0	7042.7	7582.7	7216.0	6174.9	5554.8	5396.0
1958	5495.3	5551.4	5709.4	6006.0	5875.9	6187.0	7273.0	7947.0	7905.8	7221.4	6613.9	6025.0
1959	5711.5	5624.6	5605.2	6123.0	6352.0	6699.5	6917.1	6537.5	5722.8	4644.9	3970.1	3927.3
1960	3747.2	3605.1	3567.7	3826.0	4981.3	5961.7	6316.7	6258.7	5828.9	4923.5	4234.1	4074.1
1961	3945.5	4095.7	4654.8	4877.6	5784.8	6306.6	6609.0	6551.4	6155.4	5096.5	4281.2	4011.9
1962	3811.2	3837.0	4177.4	4323.1	5619.1	6240.7	6901.5	6769.3	6312.1	5327.7	4738.7	4442.9
1963	5202.6	5115.0	5385.9	5571.1	6216.6	6603.9	7150.3	7580.7	7297.3	6316.9	5784.7	5588.2
1964	5527.9	5617.3	5644.2	6172.4	6354.8	6555.0	6241.8	5971.1	5693.9	4878.8	4228.9	3947.4
1965	3889.0	4126.0	5368.8	5628.0	6157.1	6447.8	7495.6	7474.2	7108.3	6114.7	5656.0	5355.5
1966	5268.6	5498.5	5626.5	6094.5	6474.8	6861.1	7540.0	7377.7	6564.4	5560.2	4941.1	4712.4
1967	4476.3	4996.3	5685.7	6012.8	6480.0	6775.0	7490.2	7860.2	7909.1	7370.0	6650.0	6025.0
1968	5730.4	5636.2	5678.2	5998.7	6287.3	6998.0	7114.0	6835.0	6153.5	5056.9	4631.1	4404.5
1969	4355.1	4465.4	4941.5	5449.4	5681.5	6503.0	7398.0	7947.0	7707.3	6885.5	6317.6	6025.0
1970	5736.7	5677.0	5742.0	5539.0	5811.0	6777.7	6828.8	6681.5	6185.1	5011.0	4505.9	4304.2
1971	4292.7	5057.0	5458.7	5889.3	6098.1	6636.0	7401.8	7844.3	7812.8	7037.4	6514.7	6025.0
1972	5717.4	5624.9	5754.7	6186.0	6554.0	7009.0	7490.6	7406.9	6546.0	5540.2	4997.4	4867.0
1973	4871.6	5254.7	5561.3	5919.8	6154.1	6911.5	7459.8	7720.0	7075.0	6055.5	5551.3	5315.5
1974	5379.4	5677.0	5692.0	5647.0	6174.0	6122.0	7389.0	7855.6	7698.7	7166.4	6629.4	6025.0
1975	5722.2	5628.8	5738.7	5906.7	6434.4	6530.0	7315.2	7871.1	7837.9	7239.5	6612.1	6025.0
1976	5773.3	5677.0	5664.8	5670.6	5860.3	6154.4	6356.9	6193.9	5648.1	5003.0	4719.3	4576.9
1977	4481.5	4494.2	4321.8	4317.9	4303.1	4304.0	3853.8	3674.6	2969.2	1997.1	1393.2	1310.6
1978	1134.2	1199.3	1991.7	4641.2	5338.6	6124.0	7053.6	7245.5	6857.1	5975.2	5409.5	5256.9
1979	5100.4	5106.3	5094.8	5276.5	5680.9	6433.4	6778.1	7133.6	6347.3	5425.7	4929.1	4651.5
1980	4680.5	4931.4	5208.2	5657.7	5681.2	6731.6	7341.9	7344.7	6888.5	6195.7	5633.0	5360.1
1981	5218.6	5147.1	5250.9	5682.6	6255.0	6850.3	7079.3	6714.7	5957.0	4925.3	4274.2	4046.5
1982	4084.2	5357.3	5496.0	5908.0	5868.0	6634.0	7194.0	7590.4	7296.5	6841.3	6331.3	5971.0
1983	5820.0	5675.0	5751.0	5835.0	5803.0	6139.0	7174.0	7947.0	7922.0	7370.0	6650.0	6025.0
1984	5808.2	5479.0	5464.0	5888.0	6362.8	6935.0	7317.5	7446.6	7016.3	5938.5	5557.1	5339.2
1985	5326.9	5529.0	5679.5	5768.1	6021.1	6362.4	6697.3	6229.2	5520.4	4628.4	3959.9	3779.2
1986	3724.0	3809.0	4072.6	4794.6	5329.7	6166.8	6847.2	6850.4	6319.0	5531.5	4950.2	4802.2
1987	4740.0	4661.8	4608.6	4720.2	5185.6	6219.3	6193.4	5741.0	4942.5	4172.3	3639.3	3402.4
1988	3218.4	3215.6	3927.2	4525.6	4541.4	4733.0	4828.6	4681.8	4174.6	3515.5	2976.0	2733.7
1989	2584.3	2933.8	3093.0	3250.2	3438.7	5386.9	6168.3	5799.7	5121.7	4228.5	3656.2	3621.3
1990	3758.0	3719.7	3644.7	3973.9	4024.8	4434.8	4342.7	4479.9	4235.0	3536.4	3115.0	2942.3
1991	2794.2	2698.8	2626.2	2579.1	2607.5	3323.8	3633.5	3654.5	3410.5	2879.2	2409.9	2160.9
1992	2059.9	1927.3	1913.5	1959.8	2945.6	3617.7	4100.9	3719.9	3138.8	2441.4	1867.1	1549.8
1993	1427.2	1366.1	1706.4	2789.4	3648.6	5550.6	6569.4	7042.2	7085.3	6287.8	5780.4	5492.6
AVG:	4256.9	4334.9	4542.6	4860.2	5245.7	5817.9	6354.6	6436.0	6039.4	5237.9	4672.1	4371.0
MIN:	1088.0	1199.3	1425.7	1692.2	1758.0	2545.6	2856.2	2961.3	2396.9	1787.6	1360.8	1189.8
MAX:	5820.0	5677.0	5781.0	6186.0	6554.0	7009.0	7646.0	7947.0	7922.0	7370.0	6650.0	6025.0

Table 3.5.3-38. Simulated CVP Total Upstream Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-2.5	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-2.5	-2.6	-0.9
1924	-0.9	-0.8	-0.8	-0.8	-0.8	-9.2	-9.5	-9.2	-20.0	-22.9	-28.0	-44.5
1925	-23.7	-23.7	-23.7	-23.7	-32.4	-34.1	-31.6	-29.5	-30.7	-29.9	-28.9	-28.7
1926	-26.7	-26.6	-26.5	-26.5	-28.5	-30.1	-28.0	-27.6	-38.0	-46.7	-55.9	-55.3
1927	-63.4	-69.8	-38.2	-38.2	-13.3	-13.2	-13.2	-13.2	-13.2	-6.7	-6.4	-6.5
1928	-7.0	-13.0	-18.9	-18.9	-18.9	-13.0	-13.0	-14.1	-16.0	-12.9	-10.9	-10.6
1929	-10.5	-11.6	-11.6	-11.5	-11.5	-11.5	-21.7	-27.9	-41.2	-50.3	-62.7	-60.7
1930	-63.9	-43.6	-44.3	-44.3	-41.7	-41.6	-40.5	-37.7	-51.6	-68.2	-80.0	-74.5
1931	-83.4	-91.7	-90.5	-90.4	-103.7	-104.3	-104.0	-107.8	-105.9	-106.9	-105.5	-81.6
1932	-67.6	-67.5	-67.5	-79.1	-44.5	-44.3	-43.7	-42.9	-36.4	-24.0	-40.1	-39.2
1933	-48.9	-47.9	-47.8	-47.7	-47.6	-47.5	-58.6	-65.3	-69.4	-76.3	-81.8	-83.8
1934	-87.7	-87.7	-87.7	-87.6	-87.5	-88.9	-94.3	-102.4	-110.5	-118.0	-90.4	-123.2
1935	-134.5	-134.4	-131.9	-118.8	-99.5	-99.4	-100.8	-96.9	-96.6	-94.7	-98.1	-97.1
1936	-96.8	-96.7	-96.7	-91.6	-91.5	-91.4	-88.1	-83.5	-81.4	-79.1	-78.8	-77.6
1937	-77.1	-75.4	-75.3	-75.2	-75.1	-75.0	-73.2	-66.2	-68.7	-67.4	-62.4	-61.8
1938	-56.7	-56.7	10.5	10.5	10.5	10.5	10.5	10.5	10.4	7.9	10.3	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	-12.9	-17.5	-25.2	-28.8
1940	-39.5	-48.0	-48.0	-44.8	-19.2	-19.2	-19.1	-19.1	-27.7	-35.0	-37.7	-37.3
1941	-37.1	-27.0	-18.8	-18.8	-18.8	0.0	0.0	0.0	-2.2	-2.2	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.6	-3.5
1944	-3.5	-3.5	-3.5	-3.4	-3.4	-3.4	-3.3	-3.2	-5.8	-6.4	-6.8	-6.7
1945	-5.9	-5.9	-5.9	-5.9	-1.1	-1.1	-1.1	-1.1	-3.6	-6.9	-9.5	-9.4
1946	-9.0	-1.1	-1.1	-1.1	-1.4	-1.4	-1.3	-1.2	-3.5	-6.0	-8.5	-8.4
1947	-8.5	-9.7	-13.1	-11.9	-8.4	-12.8	-12.4	-11.9	-14.3	-10.5	-5.9	-5.3
1948	-5.5	-5.8	-5.4	-6.8	-5.3	-5.4	-4.9	-4.7	-4.5	-7.2	-7.2	-7.2
1949	-7.2	-4.4	-1.9	-1.9	-1.9	-4.4	-4.4	-4.4	-6.8	-8.6	-9.8	-9.7
1950	-10.7	-12.2	-12.2	-11.7	-11.7	-11.7	-11.4	-11.1	-10.8	-10.4	-10.1	-9.9
1951	-9.5	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-7.3	-7.4	-8.1
1952	-7.9	-7.7	-4.2	-4.2	-4.2	-4.2	0.0	0.0	0.0	-1.7	-2.7	0.0
1953	0.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-3.9	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	-2.4	-2.0	-4.2	-4.3
1955	-4.0	-6.4	-0.3	-0.3	-0.4	-0.2	-5.1	-5.0	-8.9	-9.5	-6.6	-6.2
1956	-7.4	-7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-2.7	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.0	-3.9	-0.6	-3.9	0.0
1958	-0.3	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-5.9	-6.1	-6.0	-14.9	-24.1	-33.9	-34.1
1960	-69.1	-42.7	-42.7	-42.6	-42.6	-42.5	-48.2	-44.6	-54.8	-67.7	-80.8	-73.2
1961	-71.8	-71.7	-71.6	-71.5	-35.1	-35.1	-35.7	-34.5	-37.5	-14.5	-15.1	-13.8
1962	-12.1	-16.5	-16.5	-16.5	-11.4	-11.3	-11.2	-11.0	-10.7	-10.7	-30.8	-30.6
1963	-10.4	-11.1	-11.1	-11.1	-11.1	-4.4	-11.1	-11.0	-11.0	-15.1	-15.0	-15.0
1964	-14.8	-14.8	-14.8	-4.6	-4.3	-4.6	-35.4	-36.6	-35.8	-49.9	-55.8	-55.5
1965	-51.8	-51.8	-26.5	0.0	0.0	-2.9	-0.6	-2.6	-2.5	-4.3	-4.0	-2.9
1966	-2.8	-0.6	0.4	-0.6	-0.6	-0.6	0.0	0.0	-3.0	-6.6	-8.2	-9.8
1967	-10.5	-7.8	-2.6	-2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-1.0	-1.0	-1.0	0.0	0.0	-6.7	-7.1	-20.0	-25.4	-34.9	-41.8
1969	-43.6	-42.8	-45.4	-10.1	-10.1	-10.1	-10.1	-3.8	-3.6	-6.9	-7.1	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-1.4	-5.0	-6.7	-9.0	-9.0
1971	-8.4	-8.4	-0.3	-0.3	-2.7	0.0	-2.0	0.0	0.1	-3.3	-3.5	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.2	-5.7	-7.7	-9.8	-11.4
1973	-11.1	-11.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-5.4	-8.2	-10.3	-7.8
1974	-7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
1975	0.0	-1.0	-1.1	-1.0	-0.2	0.0	0.0	0.0	0.0	-2.6	-2.6	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	-6.3	-5.8	-20.4	-30.6	-40.1	-39.2
1977	-48.5	-54.1	-50.6	-50.5	-47.5	-50.2	-58.7	-68.3	-78.1	-89.8	-97.1	-81.1
1978	-60.6	-64.0	-89.4	-84.6	35.8	35.7	35.7	35.6	35.3	35.1	34.9	34.8
1979	35.0	35.0	34.8	34.8	34.8	34.8	34.7	34.6	32.5	24.3	16.0	16.0
1980	16.2	15.0	17.3	34.3	0.0	0.0	0.0	0.0	0.0	-3.0	-6.2	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12.0	-20.7	-29.7	-30.9
1982	-29.8	-18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.1	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.7	-0.7	-4.3	-4.2	-4.8
1985	-4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-3.7	-6.4	-8.9	-8.0
1986	-8.4	-8.4	-8.3	-7.8	-3.4	-3.4	-3.4	-3.2	-2.9	-2.6	-2.3	-2.4
1987	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-14.6	-24.1	-27.6	-38.1	-43.7	-49.6
1988	-45.5	-45.1	-44.5	-44.5	-46.7	-52.5	7.5	10.0	0.5	-8.0	-13.6	-18.2
1989	-19.1	-19.1	-19.0	-17.0	-19.0	-8.3	-8.1	-12.2	-10.5	-6.9	-4.4	-12.6
1990	-12.3	-2.1	7.5	14.4	17.3	17.3	8.3	7.2	-5.7	-18.6	-17.2	-33.7
1991	-38.9	-48.3	-48.2	-46.7	-46.6	-46.6	-42.8	-42.3	-51.6	-43.7	-46.0	-46.0
1992	-55.0	-57.5	-57.4	-57.4	-57.3	-57.2	-52.7	-49.9	-51.3	-50.6	-42.8	3.8
1993	24.8	-12.2	-12.2	-28.8	-28.8	-28.7	-27.6	-5.9	-5.9	7.2	22.4	-2.7
AVG:	-21.8	-21.6	-19.1	-17.8	-14.6	-14.5	-15.0	-14.9	-17.9	-20.3	-22.0	-21.8
MIN:	-134.5	-134.4	-131.9	-118.8	-103.7	-104.3	-104.0	-107.8	-110.5	-118.0	-105.5	-123.2
MAX:	35.0	35.0	34.8	34.8	35.8	35.7	35.7	35.6	35.3	35.1	34.9	34.8

Table 3.5.3-39. Simulated CVP Total Upstream Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.9	-15.8	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-7.5	-7.9	-9.3
1924	-16.6	-22.3	-25.1	-25.1	-25.1	-26.8	-27.7	-27.1	-29.3	-35.8	-35.7	-44.2
1925	-25.8	-25.7	-25.7	-25.7	-35.9	-28.8	-28.2	-27.4	-17.1	-15.9	-15.6	-15.6
1926	-17.3	-17.2	-17.1	-17.1	-15.6	-14.4	-15.4	-15.0	-17.9	-19.6	-20.6	-20.3
1927	-19.1	-18.3	-16.4	-16.4	-6.1	-6.1	-6.1	-6.0	-6.0	-21.2	-21.8	-21.5
1928	-20.3	-6.0	7.9	7.8	7.8	-0.6	-0.6	15.4	8.0	5.4	2.6	2.5
1929	-2.0	-3.8	-3.8	-3.8	-3.8	-3.7	-5.5	-7.1	-10.0	-8.5	-10.7	-12.6
1930	-12.1	3.8	3.2	3.2	3.7	3.7	3.6	3.4	-0.2	-10.1	-13.5	-13.7
1931	-13.5	-11.9	-8.0	-8.0	-21.8	-21.8	-22.7	-22.7	-25.4	-27.0	-26.3	-24.7
1932	-19.2	-19.1	-19.1	-19.1	-9.0	-8.9	-8.8	-8.7	-7.4	-5.1	-8.1	-8.2
1933	-8.1	-9.0	-8.9	-8.9	-8.9	-8.9	-10.8	-10.8	-13.1	-14.7	-15.2	-14.3
1934	-14.0	-13.8	-13.8	-13.7	-13.7	-13.7	-14.6	-16.8	-19.2	-21.2	-11.8	-25.9
1935	-27.0	-26.9	-24.6	-26.9	-26.8	-26.8	-17.8	-17.4	-17.0	-16.6	-18.5	-18.2
1936	-18.2	-18.2	-18.2	-16.0	-16.0	-16.0	-15.9	-15.5	-15.2	-14.7	-29.7	-29.4
1937	-29.3	-26.8	-26.8	-26.8	-14.0	-14.0	-14.0	-13.8	-7.5	-7.3	-12.9	-12.7
1938	-12.6	-12.6	-11.9	-11.9	-11.9	-11.9	-11.8	-11.8	-11.8	-27.6	-11.7	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-1.1	-3.2	-5.7	-5.6
1940	-5.3	-5.2	-5.2	-4.8	-2.1	-2.1	-2.1	-2.1	-1.3	-14.5	-27.8	-27.4
1941	-27.2	-16.3	-2.0	-2.0	-2.0	0.0	0.0	0.0	3.1	3.1	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-27.4	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	11.2	10.9
1944	10.7	10.7	10.6	10.5	10.5	10.5	10.3	9.9	7.0	1.6	-2.7	-2.8
1945	-10.4	15.5	6.2	-6.8	-10.1	-10.1	-10.1	-10.0	13.2	-1.3	-15.3	-14.9
1946	-20.7	12.5	14.9	14.9	3.9	3.9	3.6	2.5	-6.4	-17.3	-28.0	-27.8
1947	-31.4	-25.7	-25.3	-21.9	-14.9	-29.0	-28.2	-27.1	-25.3	-12.3	-3.5	2.3
1948	4.8	4.4	4.8	3.1	5.9	6.0	5.4	5.1	4.8	1.9	1.9	1.9
1949	1.9	4.7	7.4	7.4	7.4	4.7	4.7	4.7	2.0	-0.6	-11.7	-12.1
1950	-13.0	-11.6	-11.6	-9.6	-9.6	-9.6	-9.1	-8.8	-8.5	-8.1	-12.4	-7.6
1951	-6.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	-6.4	-6.9	-13.7
1952	-12.8	-17.6	4.4	4.4	4.4	4.4	0.0	0.0	0.0	-9.3	-14.1	0.0
1953	0.0	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.6	-4.8	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	-2.4	-2.9	-5.0	-5.1
1955	-4.8	-6.6	-0.3	-0.3	1.2	1.6	-0.7	-0.9	-3.0	-4.6	-3.3	-3.1
1956	-3.2	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.9	-16.7	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-1.0	-4.5	-4.0	-9.1	-9.2
1958	-0.3	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.9	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	-0.6	2.1	-4.3	-7.2	-7.2
1960	-5.7	-6.6	-6.6	-6.6	-6.6	-6.5	-7.5	-6.7	-9.5	-11.0	-16.1	-10.7
1961	-10.1	-10.1	-10.0	-10.0	-5.4	-5.4	-6.4	-6.2	-9.8	12.7	10.0	12.1
1962	11.8	2.1	2.1	2.1	0.8	0.7	0.7	0.5	0.4	0.4	-5.7	-5.7
1963	0.3	0.7	0.7	0.7	0.7	-2.1	0.7	0.7	0.7	-18.8	-18.7	-14.3
1964	-13.9	-13.9	-13.9	-3.7	-3.4	-3.5	-33.0	-34.3	-33.7	-25.6	-27.1	-27.1
1965	-24.4	-24.3	-12.5	0.0	0.0	0.3	0.1	-1.9	-2.0	-7.7	-7.4	-8.3
1966	-8.2	0.1	5.6	0.1	0.1	0.1	0.0	0.0	-2.7	-6.2	-7.8	-9.4
1967	-8.5	-5.8	-1.9	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	-0.9	-0.9	-0.9	0.0	0.0	-1.2	-1.2	-4.5	-6.2	-8.8	-10.6
1969	-9.6	-7.7	-6.0	-2.4	-2.4	-2.4	-2.4	0.0	0.1	-15.8	-16.5	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-1.4	-5.9	-8.2	-11.1	-11.1
1971	-10.3	-10.3	-0.3	-0.3	-2.8	0.0	-2.0	0.0	0.1	-4.2	-4.4	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-3.2	-5.7	-7.7	-9.8	-11.4
1973	-11.1	-11.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	5.7	-6.7	-13.9	2.9
1974	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9	0.0	0.0
1975	0.0	-3.8	-4.3	-3.8	-0.7	0.0	0.0	0.0	0.0	-10.5	-10.4	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-1.1	-5.0	-7.9	-12.1	-13.1
1977	-17.3	-19.8	-19.9	-19.9	-16.8	-14.3	-15.8	-17.9	-22.2	-7.5	-7.7	-6.2
1978	-2.3	-5.7	-5.7	-5.7	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
1979	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	5.1	5.2	4.4	3.1
1980	2.7	2.6	2.6	-1.2	-0.8	-0.8	-0.8	-0.7	-0.7	-13.3	-26.8	-0.7
1981	-0.6	-0.6	-0.6	-0.6	-0.6	-0.2	-0.2	-0.2	-3.3	-4.7	-7.1	-7.1
1982	-6.9	-5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12.1	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.7	-0.7	-5.1	-4.9	-4.5
1985	-4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-3.6	-6.3	-8.7	-8.0
1986	-7.2	-7.1	-6.9	-6.4	-2.9	-2.9	-2.9	-2.6	-2.3	-2.0	-1.7	-1.7
1987	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-6.5	-8.8	-9.8	-11.9	-13.0	-13.1
1988	-7.5	-7.2	-7.0	-7.0	-7.2	-7.9	-7.8	-7.4	-9.7	-11.8	-10.9	-10.4
1989	-10.9	-10.9	-10.8	-11.6	-10.8	-10.5	-10.2	-13.0	-15.4	-14.6	-15.1	-12.1
1990	-11.3	-5.0	1.1	1.4	4.2	4.2	2.6	2.1	-1.7	-6.0	-4.3	-8.2
1991	-11.1	-17.4	-17.4	-17.4	-17.4	-17.3	-16.1	-15.8	-18.3	-19.7	-21.8	-21.9
1992	-21.5	-21.1	-21.1	-21.1	-21.1	-21.0	-19.6	-18.6	-20.8	-22.4	-15.2	-14.5
1993	-8.7	-23.6	-23.6	-21.2	-21.2	-21.2	-20.5	-4.5	-4.5	-9.5	-14.4	-9.7
AVG:	-7.9	-6.6	-5.0	-4.9	-4.4	-4.6	-5.3	-4.9	-5.4	-9.1	-10.3	-8.5
MIN:	-31.4	-26.9	-26.8	-26.9	-35.9	-29.0	-33.0	-34.3	-33.7	-35.8	-35.7	-44.2
MAX:	11.8	15.5	14.9	14.9	10.5	10.5	10.3	15.4	13.2	12.7	11.2	12.1

Table 3.5.3-40. Simulated CVP San Luis Storage (TAF)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	482.7	668.8	717.2	787.3	939.1	972.0	861.9	713.3	482.9	375.5	504.5
1923	599.5	737.5	938.9	972.0	972.0	972.0	925.4	675.2	426.9	219.5	90.3	127.3
1924	195.2	229.8	332.4	482.7	561.4	532.4	491.5	438.8	334.2	200.8	137.6	164.2
1925	227.9	268.0	474.1	689.9	926.1	899.8	905.6	786.8	576.7	401.8	207.6	272.6
1926	327.0	398.9	479.4	583.2	707.2	745.4	780.3	695.6	577.7	370.2	213.1	230.2
1927	186.5	354.0	592.2	814.5	972.0	972.0	949.3	759.5	502.1	301.8	130.1	144.4
1928	205.8	339.9	498.6	632.5	723.5	839.2	807.4	647.6	433.6	270.7	135.0	145.9
1929	162.7	323.7	499.7	662.4	748.5	721.1	657.4	543.3	399.8	234.5	108.7	102.3
1930	146.8	176.3	315.2	464.3	634.5	782.6	748.3	602.3	433.3	267.7	135.0	135.0
1931	195.3	288.0	293.4	504.7	603.4	590.8	549.3	469.8	351.3	225.9	105.3	111.7
1932	90.0	129.0	388.5	682.8	918.8	972.0	972.0	886.6	787.6	705.3	661.6	831.9
1933	937.6	972.0	972.0	972.0	972.0	927.8	883.0	799.2	675.4	541.2	439.2	472.7
1934	544.1	549.7	790.0	972.0	972.0	953.0	895.1	792.3	636.8	454.3	290.0	272.7
1935	247.6	383.9	541.1	824.6	887.0	972.0	972.0	835.4	718.6	472.3	453.6	512.0
1936	477.6	494.8	628.5	818.1	972.0	972.0	972.0	838.6	663.9	393.0	328.1	393.7
1937	422.7	462.3	647.4	841.3	972.0	972.0	972.0	944.0	799.8	588.5	548.1	602.3
1938	682.8	840.9	943.3	941.7	934.2	954.0	881.8	746.7	653.2	606.1	513.2	848.9
1939	926.7	972.0	972.0	972.0	954.5	972.0	855.4	658.3	401.9	252.4	135.0	148.1
1940	90.0	119.4	184.0	412.4	542.7	675.4	695.1	567.6	368.7	198.5	113.7	156.5
1941	232.7	323.7	513.1	698.4	856.4	960.7	915.2	822.0	659.3	412.0	253.4	268.5
1942	340.0	528.0	699.7	857.4	972.0	972.0	949.2	754.8	630.7	360.2	234.0	454.1
1943	526.8	664.3	828.4	897.0	972.0	972.0	965.0	815.4	529.5	314.2	174.5	195.6
1944	277.7	366.3	521.3	667.7	755.8	857.9	776.6	618.8	407.7	259.5	135.0	181.2
1945	145.9	299.0	515.4	692.8	860.4	968.4	898.4	659.2	465.7	278.6	171.0	200.4
1946	279.9	422.9	633.9	789.9	809.2	860.7	816.3	651.1	392.8	173.7	45.0	68.0
1947	161.8	323.7	521.4	666.8	758.4	886.3	820.4	616.2	366.5	233.4	135.0	180.3
1948	135.0	211.0	266.2	458.7	700.6	803.3	808.2	586.6	381.5	224.6	131.3	166.6
1949	251.1	363.4	526.6	692.2	748.4	870.3	723.6	490.5	232.1	160.9	135.0	166.7
1950	203.8	323.7	374.7	477.0	589.1	735.3	739.6	581.0	451.9	359.1	361.4	439.0
1951	478.9	643.0	904.1	972.0	972.0	972.0	902.4	701.9	424.9	183.0	45.0	84.8
1952	157.3	319.2	481.4	640.1	768.8	879.2	941.4	830.3	710.0	604.1	425.9	647.9
1953	720.3	909.4	972.0	972.0	972.0	961.7	908.2	677.7	420.5	264.7	133.6	157.6
1954	234.0	374.1	541.6	669.1	770.2	879.3	851.4	665.8	374.6	206.0	77.4	153.5
1955	210.2	323.7	487.1	633.0	683.6	691.0	632.2	512.0	399.3	189.5	135.0	162.8
1956	161.8	323.7	576.9	704.4	838.7	972.0	955.1	841.0	666.2	404.6	263.1	399.1
1957	468.5	655.0	814.5	942.2	972.0	972.0	932.6	679.0	409.2	243.1	123.6	156.9
1958	228.0	370.6	456.4	519.0	607.7	727.3	796.1	694.5	606.9	519.5	294.0	586.6
1959	661.3	852.7	972.0	972.0	972.0	971.0	879.2	686.2	413.6	176.4	45.0	111.2
1960	135.0	165.4	140.7	207.2	289.7	430.1	349.7	213.5	72.9	106.8	135.0	135.0
1961	170.7	325.5	533.3	723.9	925.0	972.0	821.2	581.9	297.0	175.1	126.1	135.0
1962	135.0	182.0	372.7	426.1	542.3	667.4	619.1	441.9	291.5	221.5	135.0	179.8
1963	269.3	421.3	633.8	845.6	972.0	971.0	961.3	758.9	515.3	307.8	138.5	153.3
1964	223.1	357.7	516.9	651.9	665.6	671.1	637.1	446.1	254.7	135.0	95.5	172.9
1965	149.8	304.7	529.6	728.6	866.1	971.0	968.7	775.0	472.2	288.2	111.4	135.0
1966	203.3	336.7	494.3	645.0	748.2	846.2	783.9	619.9	386.3	243.7	135.0	135.0
1967	161.8	303.9	399.3	496.1	633.5	754.0	808.4	686.0	612.6	602.1	498.5	531.3
1968	612.9	828.1	972.0	972.0	972.0	972.0	905.9	702.4	389.5	226.8	75.7	135.0
1969	161.8	323.7	515.8	673.3	801.5	972.0	972.0	856.2	725.6	834.8	688.7	751.6
1970	823.2	959.7	972.0	972.0	972.0	972.0	902.4	711.5	424.9	261.2	122.0	135.0
1971	195.5	333.9	499.2	646.6	809.2	916.8	888.5	641.5	392.2	158.7	45.0	61.8
1972	134.9	323.7	486.3	627.2	736.2	849.4	762.8	583.0	365.2	238.5	135.0	135.0
1973	204.8	349.9	553.1	655.8	754.1	884.8	853.9	646.4	442.2	252.5	106.1	135.0
1974	208.9	346.8	542.1	704.3	771.0	856.2	827.8	594.5	405.3	339.6	217.4	332.2
1975	407.3	590.6	757.5	906.0	972.0	972.0	950.0	729.7	460.5	228.8	109.8	335.4
1976	408.6	546.3	710.3	853.7	861.8	902.4	828.0	698.6	545.5	343.4	209.3	228.5
1977	223.0	237.4	236.5	349.9	336.7	301.8	253.2	164.7	94.9	90.0	90.0	115.8
1978	180.1	204.6	432.8	596.3	800.7	972.0	972.0	821.4	696.9	603.2	459.9	481.8
1979	557.2	650.8	658.9	820.1	972.0	972.0	942.6	765.5	476.3	291.8	135.0	148.1
1980	218.5	323.7	513.8	668.6	802.2	972.0	972.0	822.1	690.8	551.4	462.1	642.5
1981	732.3	838.4	972.0	972.0	972.0	972.0	915.6	715.9	430.1	218.4	88.0	135.0
1982	147.8	284.4	371.8	455.7	562.5	709.7	791.0	706.5	625.6	465.8	384.3	735.9
1983	815.9	972.0	953.1	919.3	901.8	923.9	855.4	724.9	639.3	569.5	642.6	739.4
1984	948.9	972.0	972.0	972.0	972.0	972.0	937.5	718.4	414.5	259.5	114.5	135.0
1985	209.1	347.2	486.7	631.0	693.0	778.1	706.1	540.2	310.4	135.0	73.2	119.6
1986	135.0	200.6	404.7	581.9	731.3	918.3	956.5	825.2	696.5	413.0	298.9	329.1
1987	436.8	566.8	738.0	895.9	972.0	972.0	916.7	774.1	567.0	328.5	135.0	135.0
1988	119.0	208.6	338.3	560.0	729.8	676.2	645.7	561.6	385.8	199.0	90.0	90.0
1989	115.4	183.4	310.0	489.4	520.1	714.3	686.0	563.6	401.5	230.2	135.0	135.0
1990	176.8	265.1	430.2	537.2	657.2	708.9	650.2	546.4	399.6	245.1	110.7	90.0
1991	128.9	134.1	156.0	239.7	257.5	463.1	412.5	320.0	218.6	90.0	90.0	188.5
1992	251.3	293.6	372.4	498.5	730.9	854.7	765.9	637.5	478.5	224.3	90.0	90.0
1993	142.1	191.9	401.6	535.4	689.8	805.4	822.0	712.2	603.2	419.7	328.7	411.5
AVG:	320.1	430.5	571.4	699.2	790.8	854.8	821.4	667.2	480.3	320.2	211.8	270.9
MIN:	90.0	119.4	140.7	207.2	257.5	301.8	253.2	164.7	72.9	90.0	45.0	61.8
MAX:	948.9	972.0	972.0	972.0	972.0	972.0	972.0	944.0	799.8	834.8	688.7	848.9

Table 3.5.3-41. Simulated CVP San Luis Storage (TAF)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	481.6	667.7	716.1	786.2	938.1	972.0	862.1	713.8	483.7	376.1	502.1
1923	597.1	735.1	936.6	972.0	972.0	972.0	925.4	675.2	426.9	219.5	90.3	126.3
1924	193.5	227.3	329.8	480.0	558.8	530.0	489.2	436.7	335.2	203.0	128.3	163.0
1925	212.6	256.5	464.4	682.6	919.0	897.5	904.4	787.6	583.7	408.4	218.6	284.4
1926	339.4	410.3	491.5	596.3	717.8	753.1	788.5	704.5	595.7	389.6	235.4	241.6
1927	200.4	368.0	606.5	829.3	972.0	972.0	949.3	759.5	502.1	301.8	130.1	144.4
1928	201.4	335.5	494.2	628.1	719.1	835.9	804.4	646.6	435.5	271.6	135.0	145.3
1929	162.4	323.7	500.4	664.1	751.5	704.0	640.6	527.1	388.4	228.8	107.6	101.4
1930	146.2	144.2	283.3	432.6	602.7	752.4	718.7	574.9	410.1	257.1	135.0	126.0
1931	187.7	285.8	288.8	501.9	603.1	591.7	551.2	473.1	356.9	234.3	115.9	110.6
1932	90.0	127.0	387.0	682.1	914.0	972.0	972.0	888.6	789.9	709.5	668.7	838.1
1933	945.0	972.0	972.0	972.0	972.0	927.8	883.1	799.5	677.3	544.4	440.2	473.8
1934	545.8	554.3	794.5	972.0	972.0	951.8	896.4	797.2	647.3	471.6	312.3	276.4
1935	277.0	396.2	565.9	851.4	902.2	972.0	972.0	836.8	723.9	481.6	470.4	527.2
1936	494.0	512.7	652.5	843.9	972.0	972.0	972.0	843.2	676.1	411.8	353.1	418.5
1937	448.4	487.7	674.2	870.6	972.0	972.0	972.0	946.3	806.0	597.1	554.1	609.1
1938	684.7	843.3	937.1	936.8	930.8	950.8	878.9	744.3	651.6	605.4	513.3	846.7
1939	924.7	972.0	972.0	972.0	954.5	972.0	855.9	659.5	404.8	251.3	135.0	142.3
1940	90.0	120.7	180.3	409.1	539.9	672.4	691.9	564.2	364.8	198.9	113.7	153.7
1941	222.5	323.7	513.0	698.2	856.0	960.3	914.8	821.8	659.1	411.9	253.5	268.6
1942	340.1	528.1	699.8	857.6	972.0	972.0	949.2	754.8	630.7	360.2	234.1	473.9
1943	546.5	684.0	848.0	897.0	972.0	972.0	965.0	815.4	529.5	314.2	174.5	195.6
1944	277.7	365.2	521.2	667.6	755.8	858.0	777.0	619.7	409.3	260.2	135.0	181.4
1945	145.1	298.4	514.9	692.5	860.4	968.5	898.3	659.2	465.7	279.3	171.7	201.1
1946	280.5	423.5	634.6	790.5	809.2	860.0	815.6	650.5	392.4	173.6	45.0	68.0
1947	161.8	323.7	521.4	667.1	758.8	887.5	822.4	619.5	371.8	235.7	135.0	180.8
1948	135.0	213.7	268.4	461.8	704.6	807.2	812.1	589.8	383.4	225.0	130.6	165.5
1949	249.9	356.7	519.8	685.0	742.0	864.0	717.4	484.3	225.7	154.5	135.0	166.7
1950	202.7	323.7	374.6	476.9	589.0	734.9	739.6	581.9	453.8	360.2	363.7	442.2
1951	481.8	646.1	907.4	972.0	972.0	972.0	902.3	701.8	424.7	182.8	45.0	85.3
1952	157.8	319.7	481.9	640.6	769.4	879.7	941.9	830.8	710.3	606.1	430.6	655.1
1953	727.4	917.0	972.0	972.0	972.0	961.5	907.9	677.5	420.0	264.5	133.5	157.5
1954	233.9	374.0	541.6	669.1	770.2	879.3	851.4	665.8	374.2	202.7	74.8	153.5
1955	208.8	323.7	487.1	633.0	683.6	691.0	632.5	512.2	399.4	189.7	135.0	161.6
1956	161.8	323.7	576.9	704.6	838.9	972.0	955.1	841.0	666.2	404.6	263.8	398.6
1957	468.0	654.5	814.0	947.1	972.0	972.0	932.6	678.4	407.5	236.9	118.5	149.9
1958	220.8	365.5	451.0	513.3	601.6	721.5	790.7	689.8	603.2	518.3	293.7	588.7
1959	663.6	855.2	972.0	972.0	972.0	971.0	878.3	686.0	413.5	176.2	45.0	97.6
1960	135.0	146.0	114.7	181.1	263.7	403.9	325.3	191.7	55.2	98.8	135.0	135.0
1961	176.8	325.6	538.9	730.9	933.5	972.0	823.2	587.1	306.7	177.9	134.9	135.0
1962	135.0	185.3	375.5	430.8	549.0	674.0	624.4	447.0	292.4	211.8	135.0	179.9
1963	269.3	421.2	633.6	845.2	972.0	971.0	961.3	758.9	515.3	307.8	138.5	153.3
1964	223.1	357.7	516.9	651.9	665.6	670.3	639.4	449.1	248.3	135.0	114.9	175.4
1965	146.5	301.5	526.7	726.1	864.0	971.0	968.9	775.3	472.7	288.5	111.8	135.0
1966	203.3	336.7	494.4	645.1	748.5	846.6	784.2	620.1	386.3	244.6	135.0	135.0
1967	161.8	303.9	399.3	496.1	633.5	754.1	808.4	686.0	612.6	602.1	498.5	531.3
1968	612.9	829.1	972.0	972.0	972.0	972.0	906.0	701.4	388.7	226.0	74.9	135.0
1969	159.5	319.0	511.2	668.6	796.8	966.6	972.0	856.2	725.6	834.8	688.4	746.2
1970	817.7	954.2	972.0	972.0	972.0	972.0	902.5	711.7	425.4	261.4	122.3	135.0
1971	193.8	332.3	497.5	645.1	809.2	916.8	888.5	641.5	391.6	158.1	45.0	61.8
1972	134.9	323.7	486.3	627.2	736.2	849.4	763.0	583.2	365.5	238.5	135.0	135.0
1973	204.0	349.1	552.3	655.1	753.5	884.0	852.9	645.4	441.6	252.2	107.7	135.0
1974	208.9	346.8	542.1	704.3	774.9	857.1	828.7	595.4	406.4	340.1	218.0	334.9
1975	410.0	594.3	761.1	909.7	972.0	972.0	950.0	729.7	460.5	228.8	109.8	334.1
1976	407.3	545.0	709.0	852.4	860.5	895.4	821.2	692.0	540.2	338.6	193.5	207.3
1977	206.9	222.8	222.0	337.9	324.8	290.1	241.6	153.4	89.4	90.0	90.0	115.9
1978	181.2	206.7	435.4	599.0	801.0	972.0	972.0	821.4	696.7	600.3	457.0	479.2
1979	554.3	645.4	654.6	815.8	969.7	972.0	942.1	765.6	477.4	292.4	135.0	148.4
1980	218.9	323.7	514.0	669.1	803.1	972.0	972.0	822.1	690.8	551.4	462.1	639.9
1981	729.8	834.1	972.0	972.0	972.0	972.0	914.7	713.9	429.1	216.1	86.1	135.0
1982	136.1	272.6	360.0	443.9	550.7	698.7	781.1	698.4	620.0	463.5	384.5	736.9
1983	817.5	972.0	953.7	920.8	903.3	925.4	856.7	726.0	640.1	569.1	642.5	739.3
1984	948.6	972.0	972.0	972.0	972.0	972.0	937.6	718.4	414.3	259.1	114.0	135.0
1985	209.1	347.2	486.7	631.0	693.0	777.5	705.6	539.7	310.9	135.4	69.7	119.1
1986	135.0	199.0	403.1	580.3	729.7	916.9	955.2	824.5	696.7	412.0	298.7	329.2
1987	437.1	566.7	738.1	896.3	972.0	972.0	917.4	774.7	567.6	329.0	135.0	135.0
1988	107.4	192.0	320.5	542.4	713.9	662.0	627.7	548.5	377.4	196.4	90.0	92.7
1989	119.0	188.5	315.9	497.1	529.7	723.9	695.5	573.2	408.0	231.4	135.0	135.0
1990	177.2	261.9	420.8	527.8	647.9	698.8	640.1	536.3	392.8	238.3	98.5	90.0
1991	129.6	148.7	159.8	245.3	268.1	473.7	423.2	330.8	230.3	90.0	90.0	182.8
1992	245.6	287.5	366.4	492.9	725.4	849.3	764.9	644.4	497.6	256.2	105.5	90.0
1993	139.8	194.2	429.0	566.2	724.8	819.8	831.0	713.9	594.9	397.7	298.8	387.8
AVG:	320.6	430.3	571.5	699.4	790.0	853.2	820.0	666.4	480.5	320.8	213.1	271.1
MIN:	90.0	120.7	114.7	181.1	263.7	290.1	241.6	153.4	55.2	90.0	45.0	61.8
MAX:	948.6	972.0	972.0	972.0	972.0	972.0	972.0	946.3	806.0	834.8	688.4	846.7

Table 3.5.3-42. Simulated CVP San Luis Storage (TAF)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	363.8	481.8	667.9	716.3	786.4	938.3	972.0	862.1	713.7	483.5	374.9	488.8
1923	583.8	721.2	922.7	972.0	972.0	972.0	925.4	675.2	426.9	219.5	90.3	128.4
1924	203.0	239.2	344.5	494.8	573.5	544.6	503.7	451.1	348.9	215.7	145.9	186.5
1925	237.5	280.0	488.0	706.0	942.3	911.7	918.1	800.5	580.6	400.7	206.4	270.1
1926	325.3	399.0	479.9	584.3	702.7	740.5	775.9	691.9	580.1	374.5	221.6	241.8
1927	197.1	364.8	603.3	826.0	972.0	972.0	949.3	759.5	502.1	301.8	130.1	144.4
1928	194.2	328.4	487.0	621.0	712.0	827.8	797.2	639.1	427.7	268.0	135.0	145.0
1929	161.8	323.7	500.3	663.9	751.1	720.9	657.3	543.5	399.8	234.5	108.5	102.2
1930	146.8	157.3	296.3	445.4	615.7	764.2	730.2	584.7	416.9	260.1	135.0	135.0
1931	195.5	287.7	289.3	501.0	600.1	587.4	546.7	468.4	351.8	228.8	109.5	116.7
1932	90.0	130.1	390.0	684.9	920.2	972.0	972.0	887.0	786.0	702.3	658.6	830.5
1933	936.3	972.0	972.0	972.0	972.0	927.8	883.1	799.5	676.3	542.7	440.2	473.8
1934	545.2	550.8	791.2	972.0	972.0	952.7	895.3	793.2	638.9	457.7	294.4	277.3
1935	258.2	394.5	556.1	840.0	905.9	972.0	972.0	834.9	718.3	470.9	452.9	511.0
1936	477.8	491.5	627.3	817.3	972.0	972.0	972.0	839.4	666.1	380.6	316.8	385.1
1937	414.4	453.3	638.6	833.0	972.0	972.0	972.0	944.6	801.4	578.4	532.3	586.7
1938	666.6	824.9	941.9	940.6	933.5	953.3	881.2	746.2	652.8	606.0	513.2	833.2
1939	911.1	972.0	972.0	972.0	954.5	972.0	855.5	658.5	402.2	252.5	135.0	146.8
1940	90.0	117.4	184.2	412.7	543.1	675.8	695.4	568.0	369.1	198.5	113.7	153.8
1941	222.7	323.7	513.1	698.4	856.4	960.7	915.2	822.0	659.3	412.0	253.4	268.5
1942	340.0	528.0	699.7	857.4	972.0	972.0	949.2	754.8	630.7	371.7	251.5	460.6
1943	533.2	670.7	834.8	897.0	972.0	972.0	965.0	815.4	529.5	314.2	174.5	195.6
1944	277.7	363.3	524.0	670.4	758.5	860.2	778.2	619.5	406.9	259.1	135.0	180.9
1945	145.6	298.6	514.7	691.5	858.7	967.2	896.7	657.8	464.8	276.7	169.6	199.1
1946	285.3	414.2	625.4	781.5	809.2	859.6	815.1	650.0	392.0	173.2	45.0	68.0
1947	161.8	323.7	521.4	668.0	759.8	890.0	826.1	625.0	378.2	237.4	135.0	181.4
1948	135.0	213.2	271.2	465.5	709.4	811.6	816.1	593.5	386.7	227.8	133.0	167.7
1949	252.0	364.4	525.6	690.7	746.3	868.0	721.3	488.3	233.7	162.6	135.0	166.7
1950	206.3	323.7	374.7	477.0	589.1	731.9	735.7	578.0	450.9	346.1	354.3	446.2
1951	482.2	646.4	907.8	972.0	972.0	972.0	902.3	701.8	424.7	182.8	45.0	89.4
1952	161.9	323.7	485.9	644.6	773.4	883.7	945.9	834.9	712.3	615.8	452.1	686.5
1953	758.8	948.3	972.0	972.0	972.0	961.6	907.9	677.5	420.0	264.5	133.5	157.4
1954	233.9	373.9	541.5	669.1	770.1	879.3	851.3	665.8	374.3	203.7	75.5	153.5
1955	206.7	323.7	487.1	633.0	684.3	692.2	633.5	513.1	400.6	189.8	135.0	161.6
1956	161.8	323.7	576.9	704.5	838.8	972.0	955.1	841.0	666.2	404.6	263.8	407.2
1957	476.5	663.0	822.6	958.2	972.0	972.0	932.6	676.6	402.8	232.1	112.5	148.3
1958	218.8	362.8	447.8	509.2	596.3	716.9	786.9	687.2	601.4	525.6	302.7	609.8
1959	685.0	876.9	972.0	972.0	972.0	971.0	879.1	686.3	414.1	177.2	45.0	110.2
1960	135.0	163.3	138.4	204.9	287.5	427.9	347.8	212.1	72.1	106.4	135.0	135.0
1961	176.9	324.6	537.6	728.5	929.8	972.0	821.2	582.0	295.1	158.9	126.6	135.0
1962	135.0	186.5	381.6	435.9	552.2	677.0	628.0	450.2	292.0	217.2	135.0	179.6
1963	268.9	420.7	632.9	844.3	972.0	971.0	961.3	758.9	515.3	307.8	138.5	153.3
1964	223.1	357.7	516.9	651.9	665.6	670.0	639.3	448.4	264.9	135.0	104.1	179.5
1965	149.8	304.8	529.8	728.9	866.4	971.0	968.7	775.1	472.2	288.2	110.7	135.0
1966	203.3	336.7	494.3	645.0	748.2	846.3	784.0	619.9	386.2	244.6	135.0	135.0
1967	161.8	304.0	399.4	496.2	633.6	754.1	808.5	686.1	612.7	602.1	498.5	531.3
1968	612.9	829.1	972.0	972.0	972.0	972.0	905.9	702.2	389.3	226.6	75.6	135.0
1969	161.8	323.7	515.8	673.3	801.5	972.0	972.0	856.2	725.6	834.8	686.8	735.9
1970	807.4	943.9	972.0	972.0	972.0	972.0	902.5	711.7	425.4	261.5	122.3	135.0
1971	193.7	332.1	497.4	644.9	809.2	916.8	888.5	641.5	391.5	158.1	45.0	61.8
1972	134.9	323.7	486.3	627.2	736.2	849.4	763.0	583.2	365.5	238.5	135.0	135.0
1973	206.5	351.6	554.8	657.6	756.1	887.5	856.4	648.9	443.2	254.2	113.5	135.0
1974	208.9	346.8	542.1	704.3	783.1	863.6	836.2	604.4	415.0	352.9	234.6	384.9
1975	460.3	647.7	815.0	964.4	972.0	972.0	950.0	729.7	460.5	228.8	109.8	341.6
1976	414.8	552.5	716.4	859.8	867.9	908.0	833.6	704.1	551.5	349.3	215.2	232.5
1977	228.0	246.2	245.3	360.9	347.7	312.9	264.4	176.0	107.1	90.0	90.0	115.9
1978	179.4	205.2	432.8	596.4	802.5	972.0	972.0	821.4	696.7	600.5	457.1	478.5
1979	553.9	646.0	654.6	815.8	969.7	972.0	942.8	766.4	478.2	292.7	135.0	148.4
1980	219.0	323.7	514.0	669.2	803.1	972.0	972.0	822.1	690.8	551.5	462.1	630.4
1981	720.2	820.5	972.0	972.0	972.0	972.0	915.5	715.5	429.9	216.9	86.7	135.0
1982	144.1	280.7	368.1	452.0	558.8	706.2	787.9	704.0	623.8	465.1	384.4	736.2
1983	816.4	972.0	953.3	919.8	902.3	924.4	855.8	725.2	639.6	569.4	642.5	739.4
1984	948.8	972.0	972.0	972.0	972.0	972.0	937.6	718.4	414.6	259.8	114.7	135.0
1985	209.1	347.2	486.7	631.0	693.0	777.5	705.6	539.7	310.6	135.2	68.9	119.2
1986	135.0	197.9	402.0	579.2	728.6	915.8	954.3	823.6	695.7	399.7	286.6	317.2
1987	425.2	551.8	723.2	881.5	972.0	972.0	917.3	774.7	567.5	329.0	135.0	135.0
1988	115.8	205.4	335.0	556.9	727.1	673.9	643.6	560.3	385.6	200.1	90.0	90.1
1989	117.3	185.1	312.5	491.9	523.0	717.3	689.1	567.1	403.9	230.3	135.0	135.0
1990	173.3	262.7	425.2	532.4	652.6	705.3	646.6	542.7	397.1	242.6	106.5	90.0
1991	129.4	146.9	154.8	238.7	256.4	462.1	411.6	319.2	219.0	90.0	90.0	187.6
1992	250.4	292.2	371.2	497.6	730.0	854.3	767.0	638.3	487.6	237.9	90.0	90.0
1993	141.3	197.4	414.7	549.7	705.7	820.6	836.2	725.2	613.2	427.0	331.4	405.1
AVG:	320.9	431.4	572.4	700.5	791.6	855.1	821.9	667.9	481.2	320.2	212.4	272.0
MIN:	90.0	117.4	138.4	204.9	256.4	312.9	264.4	176.0	72.1	90.0	45.0	61.8
MAX:	948.8	972.0	972.0	972.0	972.0	972.0	972.0	944.6	801.4	834.8	686.8	833.2

Table 3.5.3-43. Simulated CVP San Luis Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-1.1	-1.1	-1.1	-1.1	-1.0	0.0	0.2	0.4	0.7	0.6	-2.4
1923	-2.4	-2.3	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1
1924	-1.7	-2.5	-2.7	-2.7	-2.7	-2.5	-2.3	-2.0	1.0	2.2	-9.3	-1.3
1925	-15.2	-11.5	-9.7	-7.3	-7.1	-2.3	-1.3	0.7	7.0	6.7	11.0	11.8
1926	12.4	11.4	12.1	13.1	10.6	7.7	8.2	8.9	18.0	19.5	22.3	11.4
1927	13.9	14.1	14.3	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	-4.4	-4.4	-4.4	-4.4	-4.4	-3.3	-2.9	-1.0	1.9	0.9	0.0	-0.6
1929	-0.3	0.0	0.7	1.7	2.9	-17.2	-16.8	-16.2	-11.3	-5.7	-1.1	-0.8
1930	-0.7	-32.1	-31.9	-31.6	-31.8	-30.2	-29.6	-27.3	-23.1	-10.7	0.0	-9.0
1931	-7.6	-2.2	-4.6	-2.8	-0.3	0.9	1.9	3.3	5.6	8.4	10.6	-1.1
1932	0.0	-2.1	-1.5	-0.7	-4.8	0.0	0.0	2.0	2.2	4.2	7.1	6.2
1933	7.4	0.0	0.0	0.0	0.0	0.1	0.2	0.3	1.9	3.1	1.0	1.1
1934	1.7	4.6	4.5	0.0	0.0	-1.2	1.3	4.9	10.5	17.4	22.4	3.7
1935	29.4	12.3	24.8	26.8	15.2	0.0	0.0	1.4	5.4	9.3	16.9	15.2
1936	16.4	17.9	24.0	25.8	0.0	0.0	0.0	4.7	12.1	18.8	25.0	24.8
1937	25.7	25.4	26.8	29.3	0.0	0.0	0.0	2.3	6.2	8.6	6.0	6.8
1938	1.9	2.4	-6.2	-4.9	-3.4	-3.2	-2.9	-2.4	-1.6	-0.6	0.1	-2.2
1939	-2.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	2.9	-1.1	0.0	-5.8
1940	0.0	1.3	-3.7	-3.3	-2.9	-3.0	-3.2	-3.5	-3.9	0.4	0.0	-2.8
1941	-10.2	0.0	-0.1	-0.3	-0.4	-0.4	-0.3	-0.3	-0.2	-0.1	0.0	0.0
1942	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	19.7
1943	19.7	19.7	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	-1.0	-0.1	-0.1	-0.1	0.1	0.4	0.9	1.6	0.7	0.0	0.2
1945	-0.8	-0.7	-0.5	-0.3	0.0	0.1	-0.1	-0.1	0.0	0.7	0.7	0.7
1946	0.6	0.6	0.6	0.6	0.0	-0.6	-0.7	-0.6	-0.4	-0.1	0.0	0.1
1947	0.0	0.0	0.0	0.3	0.4	1.2	2.0	3.3	5.3	2.3	0.0	0.5
1948	0.0	2.7	2.1	3.1	4.0	3.9	3.9	3.1	1.9	0.4	-0.7	-1.0
1949	-1.2	-6.7	-6.8	-7.2	-6.4	-6.2	-6.2	-6.2	-6.4	-6.4	0.0	0.0
1950	-1.1	0.0	-0.1	-0.1	-0.1	-0.4	0.0	0.8	1.9	1.1	2.3	3.2
1951	2.9	3.1	3.3	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	0.0	0.5
1952	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	2.0	4.7	7.1
1953	7.1	7.6	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.4	-0.2	-0.1	-0.1
1954	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.4	-3.3	-2.5	0.0
1955	-1.4	0.0	0.0	0.0	0.0	-0.1	0.3	0.2	0.1	0.2	0.0	-1.2
1956	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.6	-0.5
1957	-0.5	-0.5	-0.5	4.9	0.0	0.0	0.0	-0.7	-1.7	-6.1	-5.1	-7.1
1958	-7.2	-5.1	-5.3	-5.7	-6.1	-5.8	-5.3	-4.7	-3.7	-1.2	-0.3	2.1
1959	2.3	2.5	0.0	0.0	0.0	0.0	-0.9	-0.2	-0.2	-0.2	0.0	-13.5
1960	0.0	-19.4	-26.0	-26.0	-26.0	-26.1	-24.4	-21.8	-17.7	-8.0	0.0	0.0
1961	6.1	0.1	5.6	7.0	8.6	0.0	2.0	5.2	9.7	2.9	8.8	0.0
1962	0.0	3.3	2.8	4.7	6.7	6.5	5.3	5.1	0.8	-9.7	0.0	0.0
1963	0.0	-0.1	-0.2	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	-0.8	2.3	3.0	-6.4	0.0	19.4	2.4
1965	-3.3	-3.1	-2.9	-2.5	-2.1	0.0	0.2	0.3	0.5	0.2	0.4	0.0
1966	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.3	0.0	0.8	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	1.0	0.0	0.0	0.0	0.0	0.1	-1.0	-0.7	-0.7	-0.8	0.0
1969	-2.3	-4.6	-4.6	-4.6	-4.7	-5.4	0.0	0.0	0.0	0.0	-0.3	-5.4
1970	-5.4	-5.4	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.3	0.0
1971	-1.7	-1.6	-1.6	-1.6	0.0	0.0	0.0	0.0	-0.6	-0.6	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.0	0.0
1973	-0.8	-0.8	-0.8	-0.7	-0.6	-0.9	-1.0	-1.0	-0.5	-0.3	1.6	0.0
1974	0.0	0.0	0.0	0.0	3.9	0.9	0.9	0.9	1.1	0.5	0.6	2.7
1975	2.7	3.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3
1976	-1.3	-1.3	-1.3	-1.3	-1.3	-6.9	-6.8	-6.6	-5.3	-4.9	-15.8	-21.2
1977	-16.1	-14.6	-14.5	-12.0	-11.9	-11.8	-11.6	-11.3	-5.6	0.0	0.0	0.1
1978	1.1	2.1	2.5	2.7	0.3	0.0	0.0	0.0	-0.2	-2.9	-2.9	-2.6
1979	-2.9	-5.4	-4.3	-4.3	-2.3	0.0	-0.5	0.1	1.1	0.6	0.0	0.3
1980	0.4	0.0	0.2	0.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-2.6
1981	-2.6	-4.3	0.0	0.0	0.0	0.0	-0.9	-2.0	-1.0	-2.3	-1.9	0.0
1982	-11.7	-11.8	-11.8	-11.8	-11.8	-11.0	-9.8	-8.2	-5.5	-2.2	0.2	1.0
1983	1.5	0.0	0.6	1.6	1.6	1.4	1.3	1.1	0.7	-0.4	0.0	-0.1
1984	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.5	-0.5	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.6	-0.5	-0.5	0.4	0.4	-3.4	-0.5
1986	0.0	-1.6	-1.6	-1.6	-1.6	-1.4	-1.3	-0.7	0.3	-1.1	-0.2	0.1
1987	0.3	0.0	0.0	0.4	0.0	0.0	0.7	0.7	0.6	0.5	0.0	0.0
1988	-11.6	-16.7	-17.8	-17.6	-15.8	-14.2	-18.0	-13.2	-8.5	-2.6	0.0	2.7
1989	3.6	5.0	5.9	7.7	9.6	9.6	9.5	9.6	6.5	1.1	0.0	0.0
1990	0.4	-3.2	-9.4	-9.4	-9.3	-10.1	-10.1	-10.0	-6.8	-6.8	-12.2	0.0
1991	0.7	14.6	3.8	5.6	10.5	10.6	10.7	10.9	11.7	0.0	0.0	-5.8
1992	-5.7	-6.2	-6.0	-5.6	-5.5	-5.4	-1.0	6.9	19.1	31.9	15.5	0.0
1993	-2.3	2.3	27.5	30.9	35.0	14.4	9.0	1.7	-8.3	-22.1	-29.9	-23.6
AVG:	0.5	-0.2	0.0	0.2	-0.7	-1.6	-1.3	-0.8	0.3	0.6	1.3	0.1
MIN:	-16.1	-32.1	-31.9	-31.6	-31.8	-30.2	-29.6	-27.3	-23.1	-22.1	-29.9	-23.6
MAX:	29.4	25.4	27.5	30.9	35.0	14.4	10.7	10.9	19.1	31.9	25.0	24.8

Table 3.5.3-44. Simulated CVP San Luis Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.9	-0.9	-0.9	-0.9	-0.8	0.0	0.1	0.3	0.6	-0.6	-15.7
1923	-15.6	-16.2	-16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
1924	7.8	9.4	12.1	12.1	12.1	12.2	12.3	12.4	14.7	14.9	8.3	22.3
1925	9.6	12.0	13.8	16.1	16.2	11.9	12.4	13.6	3.8	-1.1	-1.2	-2.5
1926	-1.7	0.1	0.5	1.2	-4.5	-5.0	-4.5	-3.7	2.4	4.4	8.5	11.6
1927	10.6	10.8	11.1	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	-11.6	-11.5	-11.5	-11.5	-11.5	-11.4	-10.2	-8.5	-6.0	-2.7	0.0	-0.9
1929	-0.8	0.0	0.6	1.5	2.5	-0.2	0.0	0.2	0.1	0.0	-0.2	-0.1
1930	0.0	-19.0	-18.9	-18.8	-18.8	-18.5	-18.2	-17.6	-16.4	-7.7	0.0	0.0
1931	0.2	-0.3	-4.1	-3.7	-3.3	-3.4	-2.6	-1.4	0.5	2.8	4.2	5.0
1932	0.0	1.0	1.4	2.1	1.3	0.0	0.0	0.4	-1.7	-2.9	-3.0	-1.4
1933	-1.3	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.9	1.4	1.0	1.1
1934	1.1	1.1	1.2	0.0	0.0	-0.3	0.2	0.9	2.1	3.5	4.5	4.6
1935	10.6	10.6	15.0	15.4	18.9	0.0	0.0	-0.5	-0.2	-1.4	-0.6	-1.0
1936	0.2	-3.2	-1.2	-0.8	0.0	0.0	0.0	0.8	2.1	-12.4	-11.3	-8.6
1937	-8.3	-9.0	-8.8	-8.3	0.0	0.0	0.0	0.6	1.6	-10.1	-15.8	-15.6
1938	-16.2	-16.0	-1.4	-1.1	-0.8	-0.7	-0.6	-0.5	-0.4	-0.1	0.0	-15.7
1939	-15.7	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.0	-1.3
1940	0.0	-2.0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.0	0.0	-2.7
1941	-10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	17.5	6.4
1943	6.4	6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	-3.0	2.7	2.7	2.7	2.3	1.6	0.7	-0.8	-0.4	0.0	-0.3
1945	-0.3	-0.4	-0.7	-1.2	-1.8	-1.2	-1.7	-1.4	-0.9	-2.0	-1.5	-1.3
1946	5.4	-8.7	-8.6	-8.4	0.0	-1.1	-1.1	-1.0	-0.8	-0.5	0.0	0.1
1947	0.0	0.0	0.0	1.3	1.5	3.8	5.7	8.8	11.7	4.0	0.0	1.1
1948	0.0	2.2	5.0	6.9	8.8	8.3	7.9	6.8	5.1	3.1	1.7	1.2
1949	0.9	1.0	-0.9	-1.5	-2.1	-2.3	-2.2	-2.2	1.6	1.6	0.0	0.0
1950	2.6	0.0	0.0	0.0	0.0	-3.4	-3.8	-3.0	-1.0	-13.0	-7.1	7.2
1951	3.3	3.4	3.7	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	0.0	4.6
1952	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	2.3	11.6	26.2	38.5
1953	38.5	38.9	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.5	-0.2	-0.2	-0.1
1954	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.3	-2.3	-1.9	0.0
1955	-3.5	0.0	0.0	0.0	0.7	1.2	1.2	1.0	1.4	0.3	0.0	-1.2
1956	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.6	8.1
1957	8.0	8.0	8.0	16.0	0.0	0.0	0.0	-2.4	-6.4	-11.0	-11.1	-8.6
1958	-9.2	-7.8	-8.5	-9.8	-11.3	-10.4	-9.1	-7.3	-5.5	6.1	8.8	23.2
1959	23.7	24.2	0.0	0.0	0.0	0.0	-0.1	0.1	0.5	0.8	0.0	-0.9
1960	0.0	-2.1	-2.2	-2.2	-2.2	-2.2	-1.9	-1.4	-0.8	-0.4	0.0	0.0
1961	6.2	-1.0	4.3	4.6	4.8	0.0	0.0	0.0	-1.9	-16.2	0.5	0.0
1962	0.0	4.5	8.8	9.9	9.9	9.6	9.0	8.3	0.5	-4.2	0.0	-0.3
1963	-0.4	-0.6	-0.8	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	-1.1	2.2	2.3	10.1	0.0	8.6	6.6
1965	0.1	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	-0.7	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	-0.1	0.9	0.0	0.0
1967	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
1968	0.0	0.9	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.2	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9	-15.8
1970	-15.7	-15.7	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.2	0.3	0.0
1971	-1.8	-1.8	-1.7	-1.7	0.0	0.0	0.0	0.0	-0.7	-0.6	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.0	0.0	0.0
1973	1.7	1.7	1.8	1.8	1.9	2.7	2.5	2.5	1.0	1.7	7.4	0.0
1974	0.0	0.0	0.0	0.0	12.1	7.4	8.4	9.8	9.7	13.3	17.2	52.7
1975	52.9	57.0	57.5	58.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
1976	6.2	6.2	6.2	6.2	6.2	5.6	5.6	5.5	5.9	5.9	5.9	4.0
1977	5.0	8.8	8.8	11.0	11.0	11.1	11.1	11.3	12.1	0.0	0.0	0.1
1978	-0.6	0.6	0.0	0.1	1.9	0.0	0.0	0.0	-0.2	-2.8	-2.7	-3.3
1979	-3.3	-4.9	-4.3	-4.3	-2.3	0.0	0.2	0.9	1.9	0.8	0.0	0.3
1980	0.4	0.0	0.2	0.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-12.1
1981	-12.1	-18.0	0.0	0.0	0.0	0.0	-0.1	-0.4	-0.1	-1.5	-1.3	0.0
1982	-3.7	-3.7	-3.7	-3.7	-3.7	-3.4	-3.1	-2.6	-1.7	-0.7	0.1	0.3
1983	0.5	0.0	0.2	0.5	0.5	0.5	0.4	0.3	0.2	-0.1	0.0	0.0
1984	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.6	-0.5	-0.5	0.2	0.2	-4.2	-0.5
1986	0.0	-2.7	-2.7	-2.7	-2.7	-2.5	-2.2	-1.6	-0.7	-13.3	-12.3	-11.9
1987	-11.6	-14.9	-14.8	-14.4	0.0	0.0	0.6	0.6	0.5	0.5	0.0	0.0
1988	-3.2	-3.2	-3.3	-3.1	-2.7	-2.3	-2.0	-1.3	-0.2	1.1	0.0	0.1
1989	1.9	1.7	2.5	2.5	3.0	3.0	3.1	3.5	2.4	0.1	0.0	0.0
1990	-3.5	-2.4	-5.1	-4.8	-4.6	-3.7	-3.7	-3.6	-2.5	-2.5	-4.2	0.0
1991	0.5	12.8	-1.2	-1.0	-1.1	-1.0	-0.9	-0.7	0.5	0.0	0.0	-0.9
1992	-0.8	-1.4	-1.2	-1.0	-0.9	-0.4	1.2	0.8	9.0	13.6	0.0	0.0
1993	-0.8	5.5	13.2	14.4	15.8	15.2	14.3	13.0	10.1	7.3	2.7	-6.4
AVG:	0.8	0.9	0.9	1.3	0.9	0.3	0.5	0.7	0.9	0.0	0.6	1.1
MIN:	-16.2	-19.0	-18.9	-18.8	-18.8	-18.5	-18.2	-17.6	-16.4	-16.2	-15.8	-15.8
MAX:	52.9	57.0	57.5	58.4	18.9	15.2	14.3	13.6	14.7	14.9	26.2	52.7

Table 3.5.3-45. Simulated SWP San Luis Storage (TAF)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	83.3	113.1	410.8	674.2	803.4	621.9	455.0	450.0	388.1	321.6	262.5
1923	210.1	198.0	184.6	439.8	431.2	290.4	142.9	55.0	55.0	55.0	55.0	165.0
1924	156.6	55.0	129.9	300.1	436.9	364.5	290.4	286.0	232.3	148.2	110.0	142.8
1925	225.6	306.3	485.4	664.3	820.1	703.3	704.9	690.9	909.8	734.9	548.3	654.2
1926	693.6	673.0	723.9	889.4	870.8	776.0	707.8	514.3	427.8	303.1	218.1	141.9
1927	131.4	317.7	384.4	700.4	943.2	981.8	795.5	619.5	480.5	239.9	187.6	193.9
1928	165.0	248.6	366.5	630.1	764.7	957.0	841.0	687.2	549.3	286.4	165.0	153.2
1929	134.2	120.1	177.5	400.2	519.6	535.5	465.9	381.5	411.9	295.4	206.1	165.8
1930	184.7	124.6	306.7	490.5	552.3	740.2	557.3	379.0	345.6	320.8	286.0	427.3
1931	294.4	167.2	80.2	222.2	253.7	224.2	120.5	55.0	55.0	125.5	110.0	110.0
1932	155.5	128.0	341.7	570.4	678.6	709.0	550.7	513.4	565.3	644.5	460.6	798.3
1933	812.4	815.4	848.4	1067.0	960.3	1010.7	910.1	853.7	722.0	561.0	489.4	426.4
1934	437.0	357.1	538.0	733.3	819.5	746.8	591.6	444.3	334.9	133.8	110.0	110.0
1935	110.0	186.4	255.4	492.1	603.7	885.2	754.5	366.2	295.1	224.6	162.8	133.0
1936	104.9	55.0	55.0	316.7	693.9	846.0	646.3	416.6	226.5	178.4	159.0	240.5
1937	165.0	55.0	55.0	320.2	696.3	932.7	784.2	637.2	409.6	266.6	259.1	239.0
1938	175.4	323.0	322.4	612.2	809.9	877.8	683.2	517.0	615.9	562.0	476.3	493.1
1939	589.3	675.2	836.5	1063.1	980.0	868.5	568.8	365.4	233.7	165.0	141.4	110.0
1940	110.0	55.0	55.0	237.5	628.1	775.4	584.7	340.7	192.1	173.4	141.9	234.5
1941	132.1	55.0	139.3	407.2	616.9	782.4	647.2	556.0	555.5	526.4	497.0	591.6
1942	767.9	817.0	1041.8	1067.0	1067.0	876.7	736.9	605.3	613.6	494.6	422.1	456.0
1943	615.4	770.7	967.3	1067.0	1067.0	1067.0	932.7	762.7	724.5	386.7	350.9	398.1
1944	357.5	245.8	271.9	476.2	573.9	631.2	431.2	221.9	93.2	55.0	55.0	153.3
1945	139.3	297.8	334.6	547.2	878.7	930.6	678.1	425.4	292.1	279.4	234.6	251.7
1946	177.3	174.5	183.8	454.2	454.4	495.9	302.2	119.3	55.2	55.0	55.0	150.5
1947	139.4	122.1	139.7	268.8	401.5	514.8	339.2	93.0	55.0	55.0	106.2	110.0
1948	110.0	110.0	55.0	257.9	192.5	314.9	363.1	219.0	233.1	195.5	194.5	160.3
1949	133.1	70.8	60.9	263.1	350.4	536.3	439.1	362.8	459.4	299.8	140.5	391.2
1950	300.6	262.7	220.8	414.3	705.7	727.0	524.2	315.4	291.5	242.0	224.8	288.5
1951	340.3	493.9	544.1	834.2	961.1	1015.5	765.0	549.4	315.9	213.9	159.0	165.0
1952	165.0	172.7	347.8	650.2	895.3	1067.0	1007.2	939.3	1021.6	801.3	681.9	737.0
1953	911.6	977.9	1067.0	1067.0	1067.0	1067.0	844.9	677.1	648.8	398.6	346.1	317.3
1954	390.9	528.6	505.2	544.2	713.1	854.9	669.3	481.7	356.8	165.0	150.0	122.7
1955	97.7	115.4	243.4	607.0	611.1	626.8	585.6	561.5	540.5	433.0	299.1	350.0
1956	345.0	480.3	682.6	718.8	820.1	875.6	640.4	450.8	505.6	452.7	374.8	349.2
1957	442.3	313.7	382.4	442.9	642.9	854.9	726.3	505.2	411.1	232.8	163.3	185.4
1958	389.8	552.1	768.7	1037.5	1067.0	1067.0	907.0	761.7	885.2	574.2	522.4	491.3
1959	613.6	558.3	623.5	864.1	831.8	634.4	424.1	225.7	165.0	143.9	107.3	81.0
1960	112.6	55.0	55.0	249.8	598.0	765.8	560.6	453.3	459.3	408.4	434.9	380.0
1961	308.6	350.7	448.4	600.3	754.7	729.0	486.5	228.9	236.8	129.6	125.1	110.0
1962	110.0	110.0	182.0	267.9	665.7	895.6	670.5	389.0	370.4	172.4	132.8	110.0
1963	269.4	421.7	453.4	554.3	733.4	788.8	605.1	415.9	425.8	168.5	116.7	243.1
1964	248.6	332.8	329.9	592.2	474.4	383.2	245.4	55.0	55.0	55.0	55.0	120.7
1965	110.0	214.4	311.0	631.0	851.4	881.9	791.4	614.3	526.9	266.8	268.3	348.8
1966	270.6	463.5	716.9	982.3	971.0	1002.8	758.7	534.4	383.8	244.6	165.0	59.1
1967	55.0	181.4	228.3	571.4	764.8	901.9	707.0	540.7	635.5	580.0	556.6	851.1
1968	948.9	997.0	1067.0	1067.0	1067.0	1067.0	887.0	673.4	435.2	199.5	158.2	126.2
1969	132.0	138.6	196.1	574.3	839.0	1014.6	929.6	863.8	951.1	578.3	537.0	658.7
1970	824.0	961.8	1067.0	1067.0	1067.0	1067.0	850.8	605.4	421.9	198.5	147.0	119.8
1971	121.1	262.8	436.6	659.3	398.0	556.5	355.6	55.0	55.0	55.0	55.0	55.0
1972	118.3	56.4	146.6	369.0	410.8	609.7	473.5	342.9	259.6	179.8	279.0	314.8
1973	358.2	594.4	716.9	980.7	1067.0	1067.0	853.5	673.5	657.1	528.1	456.9	369.1
1974	416.0	567.0	599.8	868.8	982.6	1038.2	841.0	662.5	746.1	395.0	332.4	321.9
1975	421.9	465.2	628.4	852.5	1067.0	1067.0	905.6	745.9	649.2	594.9	514.6	484.4
1976	578.0	665.3	791.5	901.6	865.8	789.7	569.3	381.0	222.8	165.0	149.2	125.9
1977	123.5	114.4	55.0	125.7	110.0	106.1	61.0	55.0	99.1	109.7	110.0	116.1
1978	110.0	136.0	346.6	567.8	800.4	926.2	776.2	685.0	841.2	419.3	415.3	505.4
1979	388.1	250.8	366.0	702.7	796.7	900.3	722.0	533.3	361.1	201.1	165.0	196.2
1980	165.0	198.0	232.1	589.5	858.5	1023.8	893.2	754.6	660.2	633.8	580.2	591.5
1981	625.6	478.2	537.8	816.5	811.0	868.8	674.8	450.7	276.5	165.0	156.1	92.6
1982	118.3	277.3	288.7	564.2	769.3	910.0	739.1	595.0	627.5	574.8	488.7	486.0
1983	622.8	765.6	985.7	1067.0	1067.0	1067.0	1024.4	883.8	966.7	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	882.9	661.7	414.6	214.2	165.0	130.0
1985	161.1	298.0	263.8	403.9	409.3	317.6	104.3	55.0	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	344.9	723.1	893.5	767.2	602.8	621.9	613.0	578.6	612.9
1987	625.6	474.5	399.4	594.1	676.0	707.3	504.8	217.1	161.0	161.0	126.6	110.0
1988	55.0	55.0	55.0	166.2	152.6	105.1	99.1	105.1	113.9	110.0	110.0	110.0
1989	110.0	208.1	318.4	462.4	442.9	636.1	428.1	199.9	58.8	55.0	55.0	55.0
1990	110.0	55.0	55.0	328.0	373.5	437.5	350.0	334.9	263.5	165.4	110.0	201.4
1991	219.9	165.9	175.9	222.6	215.7	432.9	373.4	326.6	407.6	304.4	253.3	225.7
1992	239.2	186.8	234.0	329.5	533.7	647.2	547.1	432.5	370.0	206.8	119.8	186.1
1993	124.6	110.0	266.3	476.3	680.7	765.6	573.4	392.7	397.5	335.6	279.7	207.3
AVG:	304.3	330.5	401.6	599.5	710.0	769.5	615.3	457.4	415.6	307.3	264.1	287.5
MIN:	55.0	55.0	55.0	125.7	110.0	105.1	61.0	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1024.4	939.3	1021.6	1067.0	1067.0	1067.0

Table 3.5.3-46. Simulated SWP San Luis Storage (TAF)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	82.4	112.2	410.3	673.9	803.0	621.4	454.4	449.3	387.4	321.3	258.2
1923	202.9	188.1	174.7	430.4	421.8	282.7	135.9	55.0	55.0	55.0	55.0	165.0
1924	155.4	55.0	128.4	297.2	434.6	362.8	289.6	285.9	231.8	148.4	110.0	117.0
1925	200.8	274.9	456.4	638.1	809.9	693.5	694.5	680.4	910.2	735.2	548.8	658.9
1926	700.4	679.5	730.6	896.2	877.7	779.9	711.6	517.9	435.5	306.4	223.5	141.5
1927	129.6	316.4	383.5	701.8	946.2	984.7	798.4	619.9	488.6	242.7	190.3	186.7
1928	158.8	242.0	359.3	622.2	756.7	948.8	834.0	681.6	542.3	281.8	165.0	153.3
1929	134.1	120.1	179.0	401.1	520.4	526.8	457.3	373.0	362.9	247.2	160.9	121.1
1930	144.8	110.0	292.2	476.4	539.5	740.5	556.4	377.0	335.4	314.0	278.1	426.8
1931	291.9	160.8	74.2	217.0	250.4	222.5	119.6	55.0	55.0	124.2	110.0	110.0
1932	158.7	129.4	343.7	573.0	682.7	713.4	554.6	520.3	572.9	651.9	477.2	817.3
1933	835.1	847.7	884.0	1067.0	993.8	1045.3	947.0	884.5	754.4	595.7	490.4	429.9
1934	442.2	363.9	546.4	740.9	812.7	739.6	588.2	445.2	382.9	187.9	132.9	110.0
1935	110.0	174.4	257.8	494.5	617.8	898.3	768.3	380.0	309.0	236.2	169.0	131.5
1936	108.7	55.0	55.0	316.7	693.5	844.5	643.4	412.0	220.5	171.7	152.0	243.5
1937	165.0	55.0	55.0	319.0	694.9	931.4	783.7	642.3	414.5	269.4	259.6	233.8
1938	170.2	318.5	315.0	605.0	803.3	874.3	679.7	513.5	621.0	567.1	481.3	493.0
1939	589.1	671.4	832.7	1059.5	976.5	863.7	564.1	360.1	233.9	165.0	140.0	110.0
1940	110.0	55.0	55.0	236.2	627.8	774.1	583.4	338.9	198.2	179.3	147.7	77.7
1941	55.0	55.0	92.4	364.6	573.4	743.2	606.2	513.3	593.2	561.6	502.1	555.8
1942	728.6	774.1	997.1	1067.0	1067.0	876.7	736.9	605.3	613.6	490.8	418.3	456.0
1943	615.4	770.7	967.3	1067.0	1067.0	1067.0	932.7	760.1	721.9	385.5	349.7	394.6
1944	351.2	240.4	263.8	469.4	568.6	623.4	423.5	214.4	86.4	55.0	55.0	153.5
1945	139.1	297.7	334.7	547.2	878.9	930.8	678.1	425.2	292.3	278.2	234.2	250.1
1946	173.9	165.5	174.8	445.9	453.6	493.3	299.6	116.7	55.0	55.0	55.0	151.6
1947	138.9	121.6	139.3	266.1	399.0	513.4	338.3	90.4	55.0	55.0	105.5	110.0
1948	110.0	110.0	55.0	258.4	193.1	315.5	364.3	220.9	235.2	197.8	197.2	171.8
1949	132.5	68.7	60.0	262.2	351.1	537.2	440.8	363.9	452.5	295.1	138.7	388.8
1950	297.8	260.4	219.9	413.4	705.1	726.1	523.1	314.1	289.4	239.8	222.7	285.4
1951	337.1	490.7	540.9	831.2	958.1	1012.6	761.8	546.0	314.3	209.9	155.0	165.0
1952	165.0	171.6	346.7	649.2	894.3	1067.0	1007.2	939.3	1021.9	798.0	673.4	728.5
1953	903.1	967.4	1067.0	1067.0	1067.0	1067.0	844.7	676.6	647.7	398.3	345.4	316.6
1954	388.8	526.6	494.4	534.2	703.4	845.6	661.0	474.6	350.5	165.0	148.4	123.0
1955	98.3	114.7	246.6	610.2	614.4	630.3	588.6	564.5	542.6	434.3	300.3	350.6
1956	345.5	480.7	683.2	718.7	820.1	875.6	640.3	450.6	504.6	451.7	370.5	346.1
1957	439.2	308.7	382.4	450.7	652.0	864.5	736.3	515.6	416.7	234.9	163.2	188.2
1958	392.9	553.4	770.2	1038.9	1067.0	1067.0	907.0	761.7	882.7	569.1	517.4	486.3
1959	609.1	551.9	619.5	860.6	831.7	630.0	419.7	222.9	165.0	143.1	106.8	63.2
1960	108.8	55.0	55.0	244.9	593.5	760.6	562.6	461.5	476.5	420.9	439.3	391.3
1961	329.7	371.2	479.2	629.8	779.7	716.4	471.4	211.7	214.6	130.9	125.5	110.0
1962	110.0	110.0	178.8	264.9	662.7	889.2	663.9	376.3	351.7	148.9	132.2	110.0
1963	270.0	422.7	454.9	558.1	739.1	788.8	604.8	415.2	416.7	165.0	113.2	240.5
1964	241.1	324.8	322.3	586.1	469.7	379.0	246.1	55.0	55.0	55.0	58.3	117.4
1965	110.0	221.8	320.3	639.6	859.5	888.5	797.2	618.9	539.3	278.9	279.3	345.3
1966	265.2	457.5	710.5	976.3	965.0	997.3	758.7	534.4	383.4	243.3	165.0	59.2
1967	55.0	181.7	228.7	572.1	765.5	901.9	707.0	540.7	633.5	578.0	554.6	851.1
1968	948.9	994.9	1067.0	1067.0	1067.0	1067.0	887.1	672.4	433.7	187.4	146.3	126.4
1969	131.0	134.7	192.2	572.2	836.8	1012.4	927.2	861.3	956.1	583.1	542.1	658.1
1970	823.2	959.2	1067.0	1067.0	1067.0	1067.0	850.9	605.2	422.3	196.8	145.3	116.7
1971	121.1	262.7	436.5	659.5	398.2	557.1	356.1	55.0	55.0	55.0	55.0	55.0
1972	118.3	55.0	143.7	367.0	406.5	605.7	470.2	340.2	255.6	175.8	274.9	314.3
1973	358.1	594.6	717.6	980.7	1067.0	1067.0	853.3	673.0	657.3	528.0	453.1	363.1
1974	408.0	558.9	591.7	860.7	974.5	1030.1	832.9	654.2	743.8	393.7	330.9	320.9
1975	421.0	462.3	625.5	847.7	1067.0	1067.0	903.9	744.3	644.9	590.6	510.4	480.2
1976	573.8	657.1	783.2	891.9	857.1	780.7	561.1	372.6	219.0	165.0	150.1	125.9
1977	121.2	112.1	55.0	126.6	110.0	106.1	59.3	55.0	108.5	109.8	110.0	116.4
1978	110.0	134.4	345.4	567.0	804.8	933.5	783.4	691.4	839.2	417.1	415.3	502.4
1979	382.8	250.8	364.6	701.3	796.6	900.3	721.1	532.0	359.7	199.0	165.0	185.2
1980	164.6	195.3	229.2	590.2	858.7	1024.0	892.9	753.7	657.5	630.7	577.1	581.2
1981	612.7	463.9	520.9	801.7	797.4	869.4	674.2	448.5	273.9	165.0	154.3	79.0
1982	117.7	276.4	287.6	563.1	768.2	910.0	739.1	595.0	631.2	578.5	492.2	485.8
1983	623.7	766.5	986.6	1067.0	1067.0	1067.0	1024.4	883.8	965.2	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	882.9	661.5	414.1	214.3	165.0	126.5
1985	160.7	297.6	263.4	404.3	410.5	320.1	107.4	55.0	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	356.6	735.1	904.3	776.5	610.4	627.7	617.0	580.8	612.0
1987	622.5	470.1	394.3	591.3	675.6	709.0	506.1	217.4	160.8	160.8	124.8	110.0
1988	55.0	55.0	55.0	166.4	153.2	105.2	94.3	103.2	110.0	110.0	110.0	110.0
1989	110.0	208.5	319.2	465.1	447.3	642.1	432.5	203.2	69.4	55.0	55.0	55.0
1990	110.0	55.0	55.0	327.6	375.6	439.3	352.0	336.0	264.8	166.9	110.0	200.5
1991	211.6	157.7	168.6	218.3	215.5	432.6	374.1	328.2	422.2	320.2	256.2	224.5
1992	240.4	188.7	236.8	333.3	538.2	651.5	555.3	444.7	388.9	230.7	142.4	218.4
1993	193.3	115.1	297.3	506.4	707.5	764.7	572.8	392.7	402.6	340.1	282.8	206.1
AVG:	302.0	328.1	399.5	598.1	709.8	768.6	614.5	456.6	417.0	308.6	264.0	283.2
MIN:	55.0	55.0	55.0	126.6	110.0	105.2	59.3	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1024.4	939.3	1021.9	1067.0	1067.0	1067.0

Table 3.5.3-47. Simulated SWP San Luis Storage (TAF)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	165.0	82.6	112.4	410.4	674.0	803.1	621.5	454.6	449.4	387.5	322.4	238.5
1923	189.2	165.7	152.3	409.8	401.0	266.5	121.9	55.0	55.0	55.0	55.0	165.0
1924	156.3	55.0	128.7	297.5	435.1	363.5	290.5	287.1	237.0	154.2	110.0	137.7
1925	223.6	301.8	483.4	664.9	813.3	698.3	698.0	684.0	905.3	739.6	555.5	661.9
1926	701.7	682.8	735.0	900.8	884.2	790.2	723.1	528.4	429.1	304.4	213.9	141.4
1927	130.7	316.3	382.2	699.3	942.8	981.4	797.7	618.1	482.6	282.9	230.2	179.9
1928	147.8	231.2	348.8	618.6	758.9	957.6	839.5	686.0	553.3	295.2	165.0	150.5
1929	133.1	119.1	169.2	397.2	517.3	532.7	463.9	380.4	362.8	248.3	171.0	131.8
1930	155.9	110.0	292.6	476.8	539.9	740.5	556.8	377.7	329.4	307.5	269.8	430.7
1931	290.8	169.3	79.6	222.5	254.3	224.7	121.0	55.0	55.0	125.4	110.0	110.0
1932	160.7	133.0	346.7	575.5	681.0	711.5	552.5	516.5	570.8	648.7	468.4	806.6
1933	821.9	825.1	859.4	1067.0	971.5	1022.2	922.4	865.5	734.5	574.5	492.4	430.3
1934	441.6	362.3	543.9	738.9	816.9	744.4	589.9	443.6	348.9	149.0	110.0	110.0
1935	110.0	182.4	256.1	492.9	603.4	885.3	754.9	366.5	295.1	223.1	162.3	132.2
1936	103.4	55.0	55.0	316.8	694.2	847.3	646.9	417.6	229.8	181.5	162.5	243.6
1937	165.0	55.0	55.0	322.3	698.4	933.8	785.1	638.1	412.6	265.4	256.7	236.0
1938	171.7	319.2	323.9	614.0	812.2	883.2	688.6	522.3	613.0	559.1	473.4	493.0
1939	589.2	657.1	818.4	1046.0	963.6	852.2	561.5	359.5	239.8	165.0	141.3	110.0
1940	110.0	55.0	55.0	240.4	631.2	778.2	587.5	345.5	200.9	182.0	150.4	78.2
1941	55.0	55.0	92.3	364.8	573.5	743.4	606.3	513.4	614.0	565.1	505.6	556.0
1942	728.8	774.3	997.3	1067.0	1067.0	876.7	736.9	605.3	613.6	560.1	481.1	457.0
1943	616.4	771.7	968.3	1067.0	1067.0	1067.0	932.7	793.0	754.8	401.8	365.9	402.7
1944	359.3	244.0	269.4	468.5	567.3	623.8	424.1	215.1	87.3	55.0	55.0	154.7
1945	138.9	297.6	334.8	558.2	888.3	927.4	674.7	421.6	286.0	272.8	226.5	240.3
1946	159.8	145.8	156.7	429.6	460.1	494.5	301.4	122.4	76.0	55.0	55.0	130.7
1947	137.3	120.1	136.3	259.1	392.5	511.3	339.9	96.0	55.0	55.0	98.6	110.0
1948	110.0	110.0	55.0	259.9	194.4	316.8	364.2	219.5	229.4	191.6	190.4	141.0
1949	133.3	73.2	61.0	263.8	351.9	538.6	446.4	373.7	484.3	320.8	158.3	401.9
1950	321.9	281.9	245.9	439.3	730.6	748.2	542.5	330.9	306.6	256.0	228.7	264.2
1951	312.0	464.2	513.0	804.9	931.7	986.2	735.4	522.1	286.4	221.4	166.3	165.0
1952	165.0	168.6	343.6	646.1	891.2	1067.0	1007.2	939.3	1023.8	785.0	637.3	692.5
1953	867.1	931.4	1067.0	1067.0	1067.0	1067.0	844.7	676.6	647.3	400.1	345.2	316.4
1954	388.7	526.4	494.0	534.0	703.2	845.4	660.8	474.5	352.3	165.0	148.8	123.0
1955	100.4	114.7	246.7	610.1	615.6	631.2	589.9	564.8	543.6	435.4	299.3	348.7
1956	342.3	477.7	679.6	718.8	820.2	875.7	640.4	450.7	521.9	468.9	390.2	361.6
1957	454.6	323.9	382.4	458.6	660.3	872.9	744.8	524.3	423.1	237.0	163.2	184.3
1958	389.1	550.0	766.9	1035.5	1067.0	1067.0	907.0	761.7	879.9	553.0	501.3	470.3
1959	594.0	548.4	639.0	881.7	846.3	647.8	436.5	237.5	165.9	155.1	116.2	78.0
1960	110.0	55.0	55.0	245.4	593.9	762.6	563.6	462.5	476.2	427.7	456.0	407.0
1961	344.6	384.6	492.3	642.7	792.3	720.6	476.4	217.9	210.1	130.4	124.0	110.0
1962	110.0	110.0	185.6	274.2	672.0	902.6	676.9	393.3	347.0	148.1	132.7	110.0
1963	269.0	420.8	452.1	553.1	732.4	788.8	605.1	415.8	367.8	202.5	150.4	229.8
1964	225.4	309.6	302.0	570.9	456.6	369.1	239.6	55.0	55.0	55.0	67.1	117.0
1965	110.0	223.7	324.4	643.4	863.1	892.4	800.7	621.7	537.5	265.4	264.7	350.2
1966	272.0	464.1	716.7	982.2	970.9	1002.3	759.0	534.7	383.5	243.2	165.0	59.2
1967	55.0	182.4	229.5	572.8	766.2	901.9	707.0	540.7	633.5	578.0	554.7	851.1
1968	948.9	995.0	1067.0	1067.0	1067.0	1067.0	887.0	673.2	434.9	197.1	155.8	126.3
1969	131.8	138.1	195.6	574.2	838.9	1014.5	929.4	863.6	951.0	578.2	538.8	658.6
1970	823.8	960.3	1067.0	1067.0	1067.0	1067.0	850.9	605.1	422.3	196.4	144.9	115.8
1971	121.1	262.8	436.6	659.6	398.3	557.1	356.1	55.0	55.0	55.0	55.0	55.0
1972	118.3	55.0	143.4	366.8	406.1	605.3	469.9	339.9	255.2	175.7	275.1	314.7
1973	355.9	592.5	715.5	980.7	1067.0	1067.0	853.3	674.9	655.6	525.2	443.7	346.3
1974	391.9	542.8	575.6	844.6	958.4	1013.9	816.8	639.6	747.7	394.0	329.4	406.6
1975	506.5	543.1	705.0	919.2	1067.0	1067.0	904.4	745.8	659.1	605.0	524.9	494.8
1976	589.5	669.4	794.7	899.4	864.2	788.6	568.8	380.9	224.9	165.0	149.9	126.2
1977	123.2	114.5	55.0	128.4	110.0	106.1	55.0	55.0	96.5	109.6	110.0	115.9
1978	110.0	136.3	346.0	567.1	798.1	923.0	773.1	681.7	841.4	419.6	415.7	503.9
1979	386.1	250.8	366.3	704.3	798.8	900.3	722.1	534.0	364.4	203.5	165.0	199.4
1980	165.0	197.5	231.5	589.1	858.1	1023.4	891.6	750.8	643.7	622.0	568.5	552.8
1981	585.1	432.6	486.4	772.3	770.9	868.8	673.9	448.7	273.9	165.0	154.4	85.1
1982	118.1	276.4	287.1	562.6	767.7	910.0	739.1	595.0	627.5	574.8	488.6	486.0
1983	623.0	765.9	985.9	1067.0	1067.0	1067.0	1024.4	883.8	966.2	1067.0	1067.0	1067.0
1984	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	882.9	661.4	414.3	213.9	164.7	123.5
1985	161.0	297.9	263.7	404.7	411.0	320.7	108.1	55.0	55.0	55.0	55.0	55.0
1986	55.0	55.0	55.0	360.0	738.4	907.4	779.2	615.1	631.3	620.0	583.3	604.9
1987	615.2	460.2	390.8	582.1	667.5	702.4	501.1	214.3	160.9	160.9	126.2	110.0
1988	55.0	55.0	55.0	166.5	153.4	105.1	99.4	106.0	118.1	110.0	114.1	110.0
1989	110.0	207.6	318.7	462.8	443.8	637.5	428.9	200.5	56.3	55.0	55.0	55.0
1990	110.0	55.0	55.0	330.0	377.7	442.3	354.6	338.9	267.2	168.7	110.0	206.0
1991	219.6	165.4	173.9	220.9	213.9	431.1	372.1	325.7	417.3	314.5	254.7	226.5
1992	241.0	188.9	236.6	332.5	536.9	650.7	551.9	438.5	382.4	220.0	131.2	197.6
1993	146.9	110.0	274.1	483.9	687.4	754.0	561.9	381.4	387.8	326.4	273.5	232.3
AVG:	301.6	327.8	399.3	598.8	708.9	768.5	614.5	457.6	416.3	310.4	265.6	283.3
MIN:	55.0	55.0	55.0	128.4	110.0	105.1	55.0	55.0	55.0	55.0	55.0	55.0
MAX:	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1024.4	939.3	1023.8	1067.0	1067.0	1067.0

Table 3.5.3-48. Simulated SWP San Luis Storage (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.9	-0.9	-0.5	-0.3	-0.3	-0.5	-0.6	-0.7	-0.7	-0.3	-4.3
1923	-7.2	-9.9	-9.9	-9.5	-9.4	-7.7	-7.1	0.0	0.0	0.0	0.0	0.0
1924	-1.3	0.0	-1.5	-2.9	-2.3	-1.7	-0.8	0.0	-0.5	0.3	0.0	-25.8
1925	-24.8	-31.4	-29.1	-26.3	-10.1	-9.8	-10.5	-10.4	0.4	0.3	0.5	4.6
1926	6.9	6.5	6.7	6.7	7.0	3.9	3.8	3.5	7.7	3.2	5.5	-0.4
1927	-1.9	-1.4	-0.9	1.5	3.0	2.9	2.9	0.4	8.0	2.8	2.7	-7.2
1928	-6.2	-6.6	-7.2	-7.9	-8.0	-8.2	-7.0	-5.6	-7.0	-4.7	0.0	0.1
1929	-0.1	0.0	1.5	0.9	0.8	-8.7	-8.6	-8.4	-49.0	-48.2	-45.2	-44.6
1930	-39.9	-14.6	-14.5	-14.1	-12.8	0.3	-1.0	-2.1	-10.2	-6.9	-7.9	-0.5
1931	-2.5	-6.3	-6.0	-5.1	-3.3	-1.7	-0.9	0.0	0.0	-1.3	0.0	0.0
1932	3.2	1.4	1.9	2.5	4.1	4.3	3.9	6.9	7.6	7.4	16.7	19.0
1933	22.6	32.2	35.6	0.0	33.5	34.6	36.9	30.8	32.4	34.7	1.1	3.5
1934	5.2	6.8	8.4	7.6	-6.8	-7.3	-3.3	0.8	48.0	54.0	22.9	0.0
1935	0.0	-12.0	2.4	2.4	14.1	13.1	13.7	13.7	13.9	11.6	6.2	-1.5
1936	3.8	0.0	0.0	0.0	-0.4	-1.4	-2.9	-4.6	-6.0	-6.7	-7.1	3.0
1937	0.0	0.0	0.0	-1.1	-1.3	-1.3	-0.5	5.1	4.9	2.7	0.5	-5.2
1938	-5.1	-4.5	-7.4	-7.2	-6.6	-3.5	-3.5	-3.5	5.1	5.1	5.0	-0.1
1939	-0.2	-3.8	-3.8	-3.6	-3.5	-4.8	-4.7	-5.3	0.2	0.0	-1.4	0.0
1940	0.0	0.0	0.0	-1.3	-0.3	-1.3	-1.4	-1.7	6.1	5.9	5.7	-156.8
1941	-77.1	0.0	-47.0	-42.6	-43.5	-39.2	-41.0	-42.7	37.7	35.2	5.1	-35.8
1942	-39.2	-42.9	-44.7	0.0	0.0	0.0	0.0	0.0	0.0	-3.8	-3.9	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-2.6	-1.3	-1.3	-3.5
1944	-6.3	-5.4	-8.1	-6.7	-5.2	-7.8	-7.6	-7.5	-6.7	0.0	0.0	0.2
1945	-0.2	-0.1	0.1	0.0	0.2	0.2	0.0	-0.2	0.2	-1.2	-0.5	-1.6
1946	-3.4	-9.0	-9.1	-8.3	-0.8	-2.6	-2.6	-2.6	-0.2	0.0	0.0	1.1
1947	-0.5	-0.5	-0.4	-2.7	-2.5	-1.4	-0.9	-2.6	0.0	0.0	-0.6	0.0
1948	0.0	0.0	0.0	0.5	0.6	0.6	1.1	1.9	2.1	2.4	2.7	11.5
1949	-0.6	-2.1	-0.9	-0.8	0.7	0.9	1.7	1.0	-6.9	-4.7	-1.8	-2.4
1950	-2.8	-2.3	-0.9	-0.9	-0.6	-0.9	-1.1	-1.3	-2.2	-2.1	-2.1	-3.1
1951	-3.2	-3.2	-3.1	-3.0	-3.0	-3.0	-3.1	-3.4	-1.6	-4.0	-4.0	0.0
1952	0.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0.0	0.2	-3.2	-8.6	-8.5
1953	-8.5	-10.5	0.0	0.0	0.0	0.0	-0.2	-0.4	-1.1	-0.4	-0.7	-0.7
1954	-2.1	-2.1	-10.8	-10.0	-9.6	-9.3	-8.3	-7.1	-6.3	0.0	-1.6	0.4
1955	0.5	-0.7	3.2	3.3	3.4	3.4	3.0	3.0	2.1	1.3	1.1	0.6
1956	0.5	0.4	0.6	0.0	0.0	0.0	-0.2	-0.2	-1.1	-1.1	-4.3	-3.1
1957	-3.1	-5.0	0.0	7.8	9.1	9.6	10.0	10.4	5.6	2.1	0.0	2.8
1958	3.1	1.2	1.5	1.4	0.0	0.0	0.0	0.0	-2.5	-5.1	-5.0	-5.0
1959	-4.5	-6.4	-4.0	-3.5	0.0	-4.4	-4.4	-2.8	0.0	-0.9	-0.5	-17.8
1960	-3.8	0.0	0.0	-4.9	-4.5	-5.1	1.9	8.1	17.2	12.6	4.4	11.3
1961	21.1	20.5	30.9	29.5	25.0	-12.5	-15.1	-17.2	-22.2	1.3	0.4	0.0
1962	0.0	0.0	-3.2	-3.0	-3.0	-6.4	-6.6	-12.7	-18.7	-23.6	-0.6	0.0
1963	0.5	1.0	1.5	3.9	5.7	0.0	-0.4	-0.7	-9.1	-3.5	-3.5	-2.6
1964	-7.5	-8.0	-7.6	-6.0	-4.7	-4.2	0.7	0.0	0.0	0.0	3.3	-3.3
1965	0.0	7.3	9.3	8.6	8.1	6.6	5.8	4.6	12.4	12.1	11.0	-3.5
1966	-5.4	-6.0	-6.4	-6.0	-6.1	-5.5	0.0	0.0	-0.4	-1.3	0.0	0.1
1967	0.0	0.3	0.4	0.8	0.7	0.0	0.0	0.0	-2.0	-2.0	-2.0	0.0
1968	-0.1	-2.1	0.0	0.0	0.0	0.0	0.1	-1.0	-1.5	-12.1	-12.0	0.1
1969	-1.0	-3.9	-3.9	-2.0	-2.2	-2.2	-2.4	-2.5	5.1	4.8	5.1	-0.6
1970	-0.7	-2.7	0.0	0.0	0.0	0.0	0.0	-0.2	0.3	-1.7	-1.7	-3.2
1971	-0.1	-0.1	-0.1	0.2	0.2	0.5	0.5	0.0	0.0	0.0	0.0	0.0
1972	0.0	-1.4	-2.9	-2.1	-4.3	-4.0	-3.3	-2.7	-4.0	-4.1	-4.1	-0.4
1973	-0.2	0.2	0.7	0.0	0.0	0.0	-0.2	-0.5	0.3	-0.1	-3.8	-6.0
1974	-8.0	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1	-8.3	-2.3	-1.3	-1.4	-1.0
1975	-0.9	-2.9	-2.9	-4.7	0.0	0.0	-1.6	-1.6	-4.3	-4.2	-4.2	-4.2
1976	-4.2	-8.2	-8.3	-9.7	-8.8	-9.1	-8.2	-8.4	-3.8	0.0	0.8	0.0
1977	-2.3	-2.3	0.0	0.9	0.0	0.0	-1.7	0.0	9.4	0.1	0.0	0.2
1978	0.0	-1.6	-1.1	-0.8	4.4	7.3	7.2	6.4	-2.0	-2.2	0.0	-3.0
1979	-5.3	0.0	-1.4	-1.4	-0.1	0.0	-0.9	-1.3	-1.5	-2.2	0.0	-11.0
1980	-0.4	-2.7	-2.9	0.6	0.2	0.2	-0.3	-0.9	-2.7	-3.1	-3.1	-10.3
1981	-12.9	-14.3	-16.9	-14.7	-13.5	0.6	-0.7	-2.1	-2.7	0.0	-1.8	-13.6
1982	-0.6	-0.9	-1.2	-1.2	-1.2	0.0	0.0	0.0	3.7	3.7	3.5	-0.2
1983	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	-1.4	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.5	0.0	0.0	-3.5
1985	-0.4	-0.4	-0.4	0.4	1.2	2.4	3.1	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	11.8	12.0	10.8	9.3	7.6	5.9	4.0	2.2	-0.8
1987	-3.0	-4.4	-5.1	-2.8	-0.4	1.8	1.2	0.2	-0.2	-0.2	-1.8	0.0
1988	0.0	0.0	0.0	0.2	0.6	0.1	-4.8	-1.9	-3.9	0.0	0.0	0.0
1989	0.0	0.4	0.8	2.7	4.4	5.9	4.4	3.3	10.6	0.0	0.0	0.0
1990	0.0	0.0	0.0	-0.4	2.1	1.8	2.0	1.1	1.3	1.6	0.0	-0.9
1991	-8.3	-8.2	-7.2	-4.3	-0.2	-0.3	0.7	1.7	14.6	15.8	2.9	-1.1
1992	1.2	1.9	2.7	3.8	4.5	4.3	8.2	12.3	18.9	23.9	22.7	32.4
1993	68.7	5.1	31.0	30.1	26.8	-0.8	-0.6	0.0	5.1	4.4	3.1	-1.2
AVG:	-2.3	-2.4	-2.1	-1.4	-0.2	-0.9	-0.8	-0.8	1.4	1.3	0.0	-4.3
MIN:	-77.1	-42.9	-47.0	-42.6	-43.5	-39.2	-41.0	-42.7	-49.0	-48.2	-45.2	-156.8
MAX:	68.7	32.2	35.6	30.1	33.5	34.6	36.9	30.8	48.0	54.0	22.9	32.4

Table 3.5.3-49. Simulated SWP San Luis Storage (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.0	-0.7	-0.7	-0.4	-0.2	-0.2	-0.4	-0.5	-0.5	-0.5	0.8	-24.1
1923	-21.0	-32.3	-32.3	-30.0	-30.2	-23.9	-21.1	0.0	0.0	0.0	0.0	0.0
1924	-0.3	0.0	-1.2	-2.6	-1.8	-0.9	0.1	1.1	4.7	6.1	0.0	-5.1
1925	-2.0	-4.5	-2.0	0.6	-6.8	-5.0	-6.9	-6.9	-4.5	4.7	7.2	7.7
1926	8.1	9.8	11.1	11.4	13.4	14.2	15.3	14.0	1.3	1.2	-4.1	-0.5
1927	-0.7	-1.5	-2.2	-1.1	-0.4	-0.4	2.3	-1.4	2.1	43.0	42.6	-14.0
1928	-17.2	-17.4	-17.7	-11.5	-5.8	0.6	-1.5	-1.3	4.0	8.8	0.0	-2.7
1929	-1.1	-1.0	-8.2	-3.0	-2.3	-2.8	-2.0	-1.1	-49.1	-47.0	-35.1	-33.9
1930	-28.8	-14.6	-14.0	-13.7	-12.4	0.3	-0.5	-1.3	-16.2	-13.3	-16.2	3.5
1931	-3.6	2.1	-0.6	0.4	0.5	0.4	0.5	0.0	0.0	-0.1	0.0	0.0
1932	5.2	4.9	5.0	5.1	2.4	2.5	1.7	3.1	5.5	4.2	7.8	8.3
1933	9.5	9.7	11.0	0.0	11.3	11.5	12.3	11.8	12.5	13.5	3.0	3.9
1934	4.7	5.2	5.9	5.6	-2.6	-2.4	-1.6	-0.8	14.0	15.2	0.0	0.0
1935	0.0	-4.0	0.8	0.8	-0.3	0.1	0.4	0.3	0.0	-1.5	-0.4	-0.9
1936	-1.5	0.0	0.0	0.1	0.4	1.3	0.6	1.0	3.3	3.1	3.5	3.1
1937	0.0	0.0	0.0	2.2	2.1	1.1	1.0	0.9	3.0	-1.2	-2.3	-3.0
1938	-3.7	-3.8	1.5	1.7	2.3	5.4	5.4	5.4	-2.9	-2.9	-2.9	-0.1
1939	-0.1	-18.1	-18.2	-17.1	-16.4	-16.3	-7.3	-5.9	6.1	0.0	-0.1	0.0
1940	0.0	0.0	0.0	2.9	3.0	2.8	2.8	4.8	8.8	8.6	8.5	-156.3
1941	-77.1	0.0	-47.0	-42.4	-43.4	-39.1	-40.9	-42.6	58.6	38.7	8.6	-35.6
1942	-39.0	-42.7	-44.5	0.0	0.0	0.0	0.0	0.0	0.0	65.5	59.0	1.0
1943	1.0	1.0	1.0	0.0	0.0	0.0	0.0	30.4	30.3	15.0	14.9	4.6
1944	1.8	-1.8	-2.5	-7.6	-6.5	-7.4	-7.1	-6.7	-5.9	0.0	0.0	1.5
1945	-0.4	-0.1	0.2	10.9	9.6	-3.2	-3.4	-3.8	-6.1	-6.6	-8.2	-11.4
1946	-17.5	-28.7	-27.2	-24.6	5.8	-1.5	-0.8	3.1	20.8	0.0	0.0	-19.8
1947	-2.1	-1.9	-3.4	-9.7	-9.0	-3.5	0.7	3.0	0.0	0.0	-7.6	0.0
1948	0.0	0.0	0.0	2.0	1.9	1.9	1.1	0.5	-3.7	-3.9	-4.1	-19.3
1949	0.1	2.4	0.1	0.8	1.5	2.3	7.4	10.9	24.8	21.0	17.7	10.7
1950	21.3	19.1	25.0	25.0	24.9	21.2	18.3	15.5	15.0	14.1	3.9	-24.3
1951	-28.4	-29.7	-31.1	-29.3	-29.3	-29.3	-29.5	-27.3	-29.5	7.5	7.3	0.0
1952	0.0	-4.0	-4.1	-4.1	-4.1	0.0	0.0	0.0	2.2	-16.3	-44.7	-44.5
1953	-44.5	-46.4	0.0	0.0	0.0	0.0	-0.2	-0.5	-1.5	1.5	-0.9	-0.9
1954	-2.3	-2.2	-11.2	-10.2	-9.8	-9.5	-8.4	-7.2	-4.6	0.0	-1.2	0.4
1955	2.7	-0.7	3.3	3.2	4.5	4.4	4.2	3.4	3.1	2.4	0.1	-1.3
1956	-2.8	-2.5	-2.9	0.1	0.1	0.1	-0.1	-0.1	16.2	16.1	15.4	12.4
1957	12.4	10.1	0.0	15.7	17.5	18.0	18.5	19.0	12.0	4.2	0.0	-1.1
1958	-0.7	-2.2	-1.8	-1.9	0.0	0.0	0.0	0.0	-5.4	-21.2	-21.1	-21.0
1959	-19.6	-10.0	15.5	17.6	14.5	13.4	12.4	11.8	0.9	11.1	8.9	-3.0
1960	-2.6	0.0	0.0	-4.4	-4.1	-3.1	3.0	9.2	16.8	19.3	21.1	27.1
1961	36.0	33.9	44.0	42.5	37.5	-8.4	-10.1	-11.1	-26.7	0.8	-1.1	0.0
1962	0.0	0.0	3.6	6.4	6.3	7.1	6.4	4.3	-23.3	-24.4	-0.2	0.0
1963	-0.4	-0.9	-1.3	-1.2	-1.1	0.0	0.0	-0.1	-58.0	34.0	33.7	-13.3
1964	-23.2	-23.2	-27.9	-21.2	-17.8	-14.1	-5.8	0.0	0.0	0.0	12.1	-3.7
1965	0.0	9.3	13.4	12.4	11.7	10.5	9.3	7.4	10.6	-1.5	-3.6	1.4
1966	1.5	0.6	-0.2	-0.1	-0.2	-0.5	0.2	0.3	-0.3	-1.4	0.0	0.1
1967	0.0	1.0	1.2	1.4	1.5	0.0	0.0	0.0	-2.0	-2.0	-2.0	0.0
1968	0.0	-1.9	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-2.5	-2.4	0.0
1969	-0.3	-0.4	-0.4	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	1.8	-0.1
1970	-0.2	-1.5	0.0	0.0	0.0	0.0	0.0	-0.3	0.4	-2.1	-2.1	-4.1
1971	0.0	0.0	0.0	0.3	0.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0
1972	0.0	-1.4	-3.2	-2.2	-4.7	-4.4	-3.6	-2.9	-4.4	-4.1	-3.9	-0.1
1973	-2.3	-1.9	-1.4	0.0	0.0	0.0	-0.2	1.4	-1.4	-2.8	-13.2	-22.9
1974	-24.2	-24.2	-24.2	-24.2	-24.2	-24.2	-24.2	-23.0	1.7	-0.9	-2.9	84.7
1975	84.5	77.9	76.7	66.7	0.0	0.0	-1.1	-0.1	9.9	10.1	10.3	10.4
1976	11.5	4.1	3.3	-2.2	-1.6	-1.1	-0.5	-0.1	2.1	0.0	0.6	0.3
1977	-0.4	0.0	0.0	2.7	0.0	0.0	-6.0	0.0	-2.6	-0.1	0.0	-0.2
1978	0.0	0.3	-0.6	-0.7	-2.3	-3.2	-3.2	-3.3	0.3	0.3	0.4	-1.5
1979	-2.0	0.0	0.3	1.6	2.0	0.0	0.1	0.7	3.3	2.3	0.0	3.3
1980	0.0	-0.5	-0.6	-0.5	-0.5	-0.4	-1.6	-3.8	-16.5	-11.8	-11.7	-38.8
1981	-40.5	-45.5	-51.4	-44.1	-40.0	0.0	-1.0	-2.0	-2.6	0.0	-1.7	-7.5
1982	-0.2	-0.9	-1.6	-1.6	-1.6	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
1983	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.4	-0.3	-6.5
1985	-0.1	-0.1	-0.1	0.8	1.7	3.1	3.8	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	15.2	15.4	13.8	12.0	12.3	9.4	7.0	4.7	-7.9
1987	-10.3	-14.3	-8.6	-12.0	-8.5	-4.8	-3.7	-2.9	-0.1	-0.1	-0.4	0.0
1988	0.0	0.0	0.0	0.3	0.8	0.0	0.3	0.9	4.2	0.0	4.1	0.0
1989	0.0	-0.5	0.3	0.4	0.9	1.4	0.9	0.6	-2.4	0.0	0.0	0.0
1990	0.0	0.0	0.0	2.0	4.2	4.8	4.5	4.1	3.7	3.4	0.0	4.6
1991	-0.4	-0.5	-2.0	-1.7	-1.8	-1.8	-1.4	-0.8	9.7	10.0	1.4	0.9
1992	1.8	2.1	2.6	3.0	3.3	3.5	4.7	6.0	12.4	13.2	11.4	11.5
1993	22.3	0.0	7.8	7.6	6.7	-11.6	-11.5	-11.3	-9.7	-9.3	-6.2	25.0
AVG:	-2.7	-2.7	-2.3	-0.8	-1.1	-1.1	-0.8	0.2	0.7	3.2	1.5	-4.2
MIN:	-77.1	-46.4	-51.4	-44.1	-43.4	-39.1	-40.9	-42.6	-58.0	-47.0	-44.7	-156.3
MAX:	84.5	77.9	76.7	66.7	37.5	21.2	18.5	30.4	58.6	65.5	59.0	84.7

3.5.4 River Flows

This section provides absolute and comparative results for key river flows in the CVP/SWP system under the FRWP alternatives. Flows and comparisons are provided for the Trinity River, Sacramento River below Keswick Dam, Sacramento River at the Navigation Control Point, Sacramento River at Freeport, Feather River below Thermalito Afterbay, Feather River at the mouth, American River at Nimbus, American River at H Street, Mokelumne River below Camanche Reservoir, and Mokelumne River at Woodbridge.

Absolute simulated results are provided for each flow location, followed by a comparison of the flow in each Action alternative to Alternative 1. Figures describing average monthly flows are sometimes provided at key flow points.

Table 3.5.4-1. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	460	4709	2526	1102	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	460	4709	2526	1102	450	450
1928	373	300	300	300	300	300	493	4189	2120	1102	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	493	4189	2120	1102	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	427	4570	4626	1102	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	460	4709	2526	1102	450	450
1941	373	300	300	300	300	3282	2722	4570	4626	1949	450	450
1942	373	300	4480	2667	2418	300	460	4709	2526	1102	450	450
1943	373	300	300	1148	300	300	493	4189	2120	1102	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	493	4189	2120	1102	450	450
1946	373	300	300	300	300	300	460	4709	2526	1102	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	493	4189	2120	1102	450	450
1949	373	300	300	300	300	300	493	4189	2120	1102	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	460	4709	2526	1102	450	450
1952	373	300	300	300	300	300	460	4709	2526	1102	450	450
1953	373	300	300	4554	300	300	460	4709	2526	1102	450	450
1954	373	300	300	300	2339	300	460	4709	2526	1102	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	1465	951	300	427	4570	4626	1102	450	450
1957	373	300	300	300	300	300	493	4189	2120	1102	450	450
1958	373	300	300	300	6000	3066	1714	4570	4626	1102	450	450
1959	373	300	300	300	300	300	493	4189	2120	1102	450	450
1960	373	300	300	300	300	300	493	4189	2120	1102	450	450
1961	373	300	300	300	300	300	493	4189	2120	1102	450	450
1962	373	300	300	300	300	300	493	4189	2120	1102	450	450
1963	373	300	300	300	300	300	460	4709	2526	1102	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	1597	300	300	460	4709	2526	1102	450	450
1966	373	300	300	300	300	300	493	4189	2120	1102	450	450
1967	373	300	300	300	300	300	460	4709	2526	1102	450	450
1968	373	300	300	300	2585	300	493	4189	2120	1102	450	450
1969	373	300	300	300	300	300	427	4570	4626	1102	450	450
1970	373	300	1299	6000	1312	300	460	4709	2526	1102	450	450
1971	373	300	300	300	300	300	460	4709	2526	1102	450	450
1972	373	300	300	300	300	749	493	4189	2120	1102	450	450
1973	373	300	300	300	300	300	460	4709	2526	1102	450	450
1974	373	5421	4247	6000	300	3596	427	4570	4626	1102	450	450
1975	373	300	300	300	300	1536	460	4709	2526	1102	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	427	4570	4626	1102	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	306	300	460	4709	2526	1102	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	1004	300	3170	300	1011	4570	4626	1102	450	450
1983	373	300	2568	2936	3257	6000	427	4570	4942	3439	450	450
1984	373	300	5094	300	300	300	460	4709	2526	1102	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	460	4709	2526	1102	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	493	4189	2120	1102	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	460	4709	2526	1102	450	450
AVG:	373	371	536	633	573	528	558	3731	2030	893	450	450
MIN:	373	300	300	300	300	300	427	1498	783	450	450	450
MAX:	373	5421	5094	6000	6000	6000	2722	4709	4942	3439	450	450

Table 3.5.4-2. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	460	4709	2526	1102	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	460	4709	2526	1102	450	450
1928	373	300	300	300	300	300	493	4189	2120	1102	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	493	4189	2120	1102	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	427	4570	4626	1102	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	460	4709	2526	1102	450	450
1941	373	300	300	300	300	2976	2722	4570	4626	1949	450	450
1942	373	300	4480	2667	2418	300	460	4709	2526	1102	450	450
1943	373	300	300	1148	300	300	493	4189	2120	1102	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	493	4189	2120	1102	450	450
1946	373	300	300	300	300	300	460	4709	2526	1102	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	493	4189	2120	1102	450	450
1949	373	300	300	300	300	300	493	4189	2120	1102	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	460	4709	2526	1102	450	450
1952	373	300	300	300	300	300	460	4709	2526	1102	450	450
1953	373	300	300	4554	300	300	460	4709	2526	1102	450	450
1954	373	300	300	300	2339	300	460	4709	2526	1102	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	1465	951	300	427	4570	4626	1102	450	450
1957	373	300	300	300	300	300	493	4189	2120	1102	450	450
1958	373	300	300	300	6000	3066	1714	4570	4626	1102	450	450
1959	373	300	300	300	300	300	493	4189	2120	1102	450	450
1960	373	300	300	300	300	300	493	4189	2120	1102	450	450
1961	373	300	300	300	300	300	493	4189	2120	1102	450	450
1962	373	300	300	300	300	300	493	4189	2120	1102	450	450
1963	373	300	300	300	300	300	460	4709	2526	1102	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	1167	300	300	460	4709	2526	1102	450	450
1966	373	300	300	300	300	300	493	4189	2120	1102	450	450
1967	373	300	300	300	300	300	460	4709	2526	1102	450	450
1968	373	300	300	300	2581	300	493	4189	2120	1102	450	450
1969	373	300	300	300	300	300	427	4570	4626	1102	450	450
1970	373	300	1298	6000	1311	300	460	4709	2526	1102	450	450
1971	373	300	300	300	300	300	460	4709	2526	1102	450	450
1972	373	300	300	300	300	749	493	4189	2120	1102	450	450
1973	373	300	300	300	300	300	460	4709	2526	1102	450	450
1974	373	5410	4247	6000	300	3596	427	4570	4626	1102	450	450
1975	373	300	300	300	300	1533	460	4709	2526	1102	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	427	4570	4626	1102	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	902	300	460	4709	2526	1102	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	705	300	3170	300	1011	4570	4626	1102	450	450
1983	373	300	2568	2936	3257	6000	427	4570	4942	3439	450	450
1984	373	300	5094	300	300	300	460	4709	2526	1102	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	460	4709	2526	1102	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	493	4189	2120	1102	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	460	4709	2526	1102	450	450
AVG:	373	371	532	627	581	524	558	3731	2030	893	450	450
MIN:	373	300	300	300	300	300	427	1498	783	450	450	450
MAX:	373	5410	5094	6000	6000	6000	2722	4709	4942	3439	450	450

Table 3.5.4-3. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	373	300	300	300	300	300	540	2924	783	450	450	450
1923	373	300	300	300	300	300	540	2924	783	450	450	450
1924	373	300	300	300	300	300	600	1498	783	450	450	450
1925	373	300	300	300	300	300	460	4709	2526	1102	450	450
1926	373	300	300	300	300	300	540	2924	783	450	450	450
1927	373	300	300	300	300	300	460	4709	2526	1102	450	450
1928	373	300	300	300	300	300	493	4189	2120	1102	450	450
1929	373	300	300	300	300	300	600	1498	783	450	450	450
1930	373	300	300	300	300	300	540	2924	783	450	450	450
1931	373	300	300	300	300	300	600	1498	783	450	450	450
1932	373	300	300	300	300	300	540	2924	783	450	450	450
1933	373	300	300	300	300	300	540	2924	783	450	450	450
1934	373	300	300	300	300	300	600	1498	783	450	450	450
1935	373	300	300	300	300	300	540	2924	783	450	450	450
1936	373	300	300	300	300	300	493	4189	2120	1102	450	450
1937	373	300	300	300	300	300	540	2924	783	450	450	450
1938	373	300	300	300	300	300	427	4570	4626	1102	450	450
1939	373	300	300	300	300	300	600	1498	783	450	450	450
1940	373	300	300	300	300	300	460	4709	2526	1102	450	450
1941	373	300	300	300	300	3249	2722	4570	4626	1949	450	450
1942	373	300	4480	2667	2418	300	460	4709	2526	1102	450	450
1943	373	300	300	1148	300	300	493	4189	2120	1102	450	450
1944	373	300	300	300	300	300	600	1498	783	450	450	450
1945	373	300	300	300	300	300	493	4189	2120	1102	450	450
1946	373	300	300	300	300	300	460	4709	2526	1102	450	450
1947	373	300	300	300	300	300	540	2924	783	450	450	450
1948	373	300	300	300	300	300	493	4189	2120	1102	450	450
1949	373	300	300	300	300	300	493	4189	2120	1102	450	450
1950	373	300	300	300	300	300	540	2924	783	450	450	450
1951	373	300	300	300	300	300	460	4709	2526	1102	450	450
1952	373	300	300	300	300	300	460	4709	2526	1102	450	450
1953	373	300	300	4554	300	300	460	4709	2526	1102	450	450
1954	373	300	300	300	2339	300	460	4709	2526	1102	450	450
1955	373	300	300	300	300	300	540	2924	783	450	450	450
1956	373	300	300	1465	951	300	427	4570	4626	1102	450	450
1957	373	300	300	300	300	300	493	4189	2120	1102	450	450
1958	373	300	300	300	6000	3066	1714	4570	4626	1102	450	450
1959	373	300	300	300	300	300	493	4189	2120	1102	450	450
1960	373	300	300	300	300	300	493	4189	2120	1102	450	450
1961	373	300	300	300	300	300	493	4189	2120	1102	450	450
1962	373	300	300	300	300	300	493	4189	2120	1102	450	450
1963	373	300	300	300	300	300	460	4709	2526	1102	450	450
1964	373	300	300	300	300	300	540	2924	783	450	450	450
1965	373	300	429	1393	300	300	460	4709	2526	1102	450	450
1966	373	300	300	300	300	300	493	4189	2120	1102	450	450
1967	373	300	300	300	300	300	460	4709	2526	1102	450	450
1968	373	300	300	300	2581	300	493	4189	2120	1102	450	450
1969	373	300	300	300	300	300	427	4570	4626	1102	450	450
1970	373	300	1298	6000	1311	300	460	4709	2526	1102	450	450
1971	373	300	300	300	300	300	460	4709	2526	1102	450	450
1972	373	300	300	300	300	749	493	4189	2120	1102	450	450
1973	373	300	300	300	300	300	460	4709	2526	1102	450	450
1974	373	5410	4247	6000	300	3596	427	4570	4626	1102	450	450
1975	373	300	300	300	300	1525	460	4709	2526	1102	450	450
1976	373	300	300	300	300	300	540	2924	783	450	450	450
1977	373	300	300	300	300	300	600	1498	783	450	450	450
1978	373	300	300	304	300	300	427	4570	4626	1102	450	450
1979	373	300	300	300	300	300	540	2924	783	450	450	450
1980	373	300	300	300	300	300	460	4709	2526	1102	450	450
1981	373	300	300	300	300	300	540	2924	783	450	450	450
1982	373	300	913	300	3170	300	1011	4570	4626	1102	450	450
1983	373	300	2568	2936	3257	6000	427	4570	4942	3439	450	450
1984	373	300	5094	300	300	300	460	4709	2526	1102	450	450
1985	373	300	300	300	300	300	540	2924	783	450	450	450
1986	373	300	300	300	300	300	460	4709	2526	1102	450	450
1987	373	300	300	300	300	300	540	2924	783	450	450	450
1988	373	300	300	300	300	300	540	2924	783	450	450	450
1989	373	300	300	300	300	300	493	4189	2120	1102	450	450
1990	373	300	300	300	300	300	540	2924	783	450	450	450
1991	373	300	300	300	300	300	600	1498	783	450	450	450
1992	373	300	300	300	300	300	540	2924	783	450	450	450
1993	373	300	300	300	300	300	460	4709	2526	1102	450	450
AVG:	373	371	535	630	573	528	558	3731	2030	893	450	450
MIN:	373	300	300	300	300	300	427	1498	783	450	450	450
MAX:	373	5410	5094	6000	6000	6000	2722	4709	4942	3439	450	450

Table 3.5.4-4. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	-305	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	-431	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	-4	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	-1	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	-10	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	-3	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	596	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	-299	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	-4	-6	8	-4	0	0	0	0	0	0
MIN:	0	-10	-299	-431	-4	-305	0	0	0	0	0	0
MAX:	0	0	0	0	596	0	0	0	0	0	0	0

Table 3.5.4-5. Simulated Trinity River Flows Below Lewiston Reservoir (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	-33	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	-204	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	-4	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	-1	0	-1	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	-10	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	-11	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	-6	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	-90	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	-1	-3	0	-1	0	0	0	0	0	0
MIN:	0	-10	-90	-204	-6	-33	0	0	0	0	0	0
MAX:	0	0	0	0	0	0	0	0	0	0	0	0

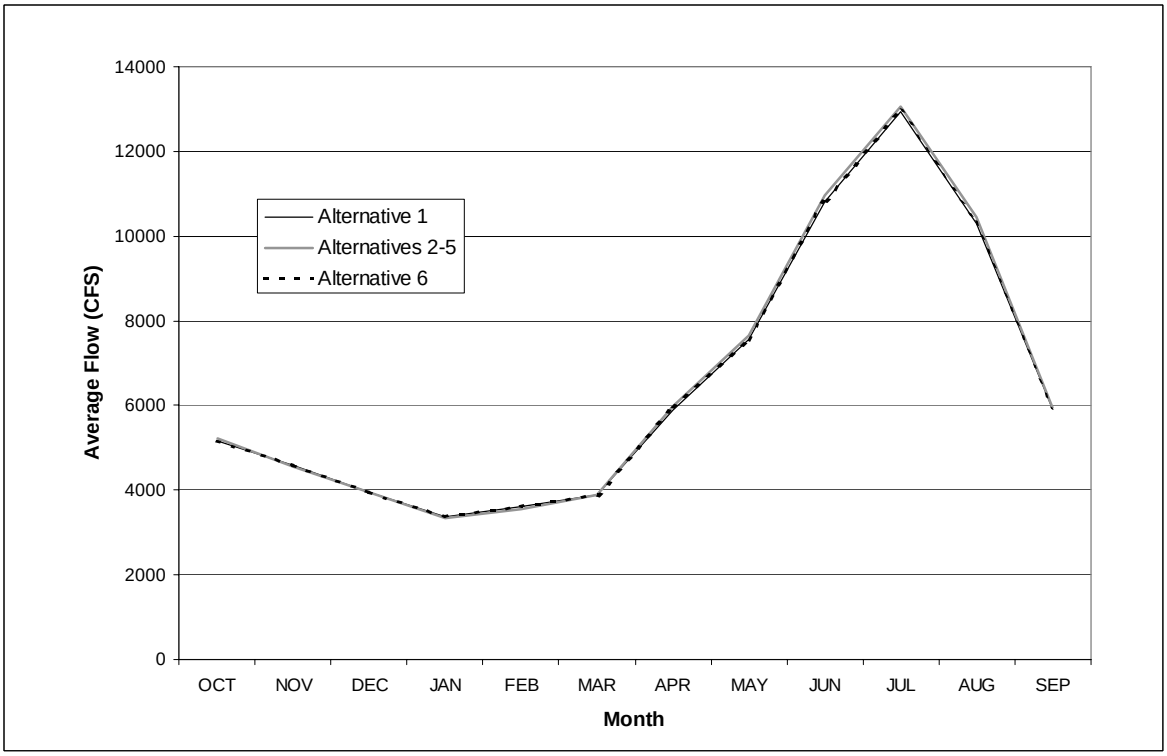


Figure 3.5.4-1 Simulated Average Monthly Sacramento River Flow Below Keswick Dam (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-6. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6057	4183	3974	3250	3250	3250	4521	7678	10972	12527	11701	8075
1923	4537	3250	3250	3250	3250	3250	4457	10897	11760	13611	11740	6013
1924	4940	4758	4275	3420	3250	3568	7605	8124	10415	10846	8146	5096
1925	3250	3250	3250	3250	3250	6134	4002	6254	10079	11272	10199	6440
1926	4975	4232	3250	3250	3250	3250	4171	6471	9522	11589	9136	5646
1927	3250	3250	3250	3250	26194	3600	9889	8606	10552	14104	11442	7715
1928	4651	4121	3915	3250	3250	18229	4643	9728	10673	15582	11708	6981
1929	4907	4917	4275	3420	3250	3250	5209	6993	8343	11495	9684	5922
1930	5028	4498	3250	3250	3250	3250	4297	6680	9644	11438	9269	5060
1931	4215	3250	3250	3250	3250	3250	8069	7526	9058	11193	8525	5325
1932	4126	3250	3250	3250	3250	3250	4546	4153	6981	8963	8294	5201
1933	3907	3250	3250	3250	3250	3250	4727	5617	7394	10493	9258	5753
1934	4361	3635	3250	3250	3250	3250	5163	6864	10217	10422	8115	5305
1935	3614	3250	3250	3250	3250	3250	3250	5733	9537	10328	9820	6046
1936	3478	3575	3250	3250	3250	3250	4395	7024	8440	11134	10601	6445
1937	4793	4318	4103	3282	3250	3250	4109	6654	8140	10221	9857	6310
1938	4057	3250	14617	3958	30086	33790	12271	7885	9000	11080	10986	9824
1939	8691	4707	4275	3420	3250	3250	8801	9122	13254	15000	13337	6605
1940	5024	4592	3250	3250	28350	20737	4343	7548	11251	13813	11726	7269
1941	4552	4297	7992	24464	22853	13083	13390	13373	9000	13622	13167	11591
1942	8331	5478	15887	17912	27053	3600	4879	11253	9000	11442	11228	11017
1943	8223	5494	6409	12039	8086	12366	4969	8000	10232	14004	11636	7767
1944	4849	4334	4117	3293	3250	3250	6594	7196	10194	14372	11072	6685
1945	4565	3250	3250	3250	3591	3250	4839	7902	10367	13902	11751	7690
1946	4502	3807	22448	7259	6497	3250	6452	8610	11406	13382	11779	7243
1947	5505	4449	3568	3560	3250	3250	4501	10067	11307	14980	11781	6645
1948	3823	3250	3250	3250	8145	3600	4218	7406	8749	11303	10983	6070
1949	5970	4880	4275	3420	3250	8848	4714	7856	11034	15034	11329	6880
1950	5867	4884	4275	3420	3250	3250	4401	7214	9109	10485	9864	5692
1951	4233	7002	15008	7454	15457	3600	6775	7767	11610	15311	11611	7411
1952	4268	5169	11207	7927	18376	10783	18737	9021	9000	11979	11530	11168
1953	8010	4772	9134	28398	3600	3250	4912	10710	9628	13735	10245	11018
1954	8314	8079	4938	13861	18089	10991	12379	12160	9973	17001	10085	6540
1955	4544	3673	6038	3600	4487	3250	7090	7110	12202	13088	10577	6076
1956	4530	4746	22011	30353	21696	3600	4675	11151	9000	10974	10394	9996
1957	8973	5207	4116	3293	10694	9991	9672	7599	10115	15347	11728	5429
1958	6507	6927	10727	13862	53770	20634	11699	9118	9343	13598	13067	11647
1959	8680	5146	4058	11483	13885	6667	8277	9455	16172	15572	12846	4827
1960	6528	5926	4275	3420	3250	3250	4528	7315	10342	15000	12745	5877
1961	4966	3250	3250	3250	4854	5924	5772	7895	11463	18239	14191	7051
1962	6631	5328	4275	3420	7841	3600	5228	8342	10810	15000	11345	6380
1963	4326	5199	8819	3600	9092	7382	28582	7516	9281	15000	10551	6313
1964	4771	8381	4275	3587	3754	3250	12299	8586	10161	13592	11570	6144
1965	4523	3250	15072	20889	3250	5807	8452	9138	10058	15000	9751	6638
1966	4664	7026	4275	5959	6056	11906	7736	8707	15500	15000	12582	6924
1967	7139	3900	9220	8967	7839	15911	10011	14154	9489	12427	12771	11394
1968	8766	5003	4116	3293	18186	3410	7789	8166	13256	15675	10429	7249
1969	4993	4655	3873	19014	21308	5686	11792	11427	9382	13888	11220	7334
1970	8727	4416	17364	52774	13134	3600	7471	8087	10692	18241	11234	6846
1971	3980	3250	13614	14317	8491	14269	5953	8671	9315	13982	10444	10954
1972	8858	5976	4275	3782	5622	14623	7511	7950	14471	16229	11608	5986
1973	4269	3250	6885	14513	18779	6977	4775	7923	11223	15992	10485	6459
1974	4471	25727	20315	38498	5479	35234	6922	7719	9336	11127	11785	11867
1975	8624	5740	4275	3420	8360	27500	4504	9431	10185	11223	12731	11714
1976	9869	5636	4275	3420	3250	3250	4821	7402	11547	11989	7528	5101
1977	4995	3250	5376	3600	4195	3953	10399	5869	14191	17949	12428	6112
1978	6313	3551	3250	3300	10762	14247	6418	9054	10798	15000	10730	5494
1979	5081	3982	3782	3250	3250	3250	4807	7833	13240	15000	9590	6182
1980	4278	3365	3250	15143	30104	3600	4698	7798	11184	12137	10603	6600
1981	4631	5049	4275	3420	3250	7077	4837	9107	14689	15000	11812	6029
1982	3887	5921	22223	7726	23313	13536	24662	7459	8739	10289	9443	6731
1983	8706	6832	12847	19127	34947	45897	10136	12724	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7773	8571	11168	15089	9359	6063
1985	4668	9745	5617	3600	3250	3250	5324	10416	13486	14938	12420	6193
1986	4881	3944	3746	3250	41923	19820	4392	8311	11898	12164	11308	5402
1987	4321	4744	4275	3420	3250	3250	8950	10651	15000	13798	9632	6798
1988	5989	3908	3693	3250	6965	4023	4908	6146	12466	11278	10573	6779
1989	5639	3250	3250	3250	3250	3250	4413	9706	10096	13492	10235	4133
1990	3697	4336	4065	3252	4978	3600	6527	5806	9516	12584	8513	5264
1991	5208	4478	3250	3250	3250	3250	3478	6471	7727	8869	8211	4495
1992	4794	4688	3250	3250	3250	3250	3609	8934	11714	12245	9742	7070
1993	5319	4028	3250	3250	3250	3250	4548	9037	10003	14071	9153	6488
AVG:	5555	5044	6773	7835	10026	8044	7162	8401	10696	13340	10850	7098
MIN:	3250	3250	3250	3250	3250	3250	3250	4153	6981	8869	7528	4133
MAX:	9869	25727	24635	52774	53770	45897	28582	14154	16172	18241	14243	12549

Table 3.5.4-7. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6057	4183	3974	3250	3250	3250	4521	7678	10972	12527	11701	8075
1923	4537	3250	3250	3250	3250	3250	4457	10896	11760	13653	11742	6012
1924	4939	4758	4275	3420	3250	3672	7609	8119	10597	10896	8232	5181
1925	3250	3250	3250	3250	3250	6162	3962	6221	10102	11260	10185	6438
1926	4974	4232	3250	3250	3250	3250	4164	6466	9517	11779	9142	5639
1927	3250	3250	3250	3250	25745	3600	9889	8606	10553	13999	11437	7717
1928	4659	4223	4011	3250	3250	18133	4643	9742	10661	15579	11678	6974
1929	4906	4937	4275	3420	3250	3250	5206	6990	8715	11688	9913	6058
1930	4944	4170	3250	3250	3250	3250	4281	6639	9627	11741	9274	5047
1931	4563	3553	3375	3250	3250	3250	8051	7517	9109	11221	8518	4932
1932	3600	3250	3250	3250	3250	3250	4539	4144	6969	8951	8283	5367
1933	3915	3250	3250	3250	3250	3250	4833	5623	7518	10619	9346	5743
1934	4532	3720	3250	3250	3250	3250	5147	6843	10423	10557	8099	5289
1935	3609	3250	3250	3250	3250	3250	3250	5702	9513	10305	9800	6035
1936	3477	3575	3250	3250	3250	3250	4344	6952	8410	11104	10573	6431
1937	4790	4318	4102	3282	3250	3250	4080	6545	8120	10207	9844	6303
1938	3978	3250	13524	3958	30086	33790	12271	7885	9000	11080	10987	9997
1939	8691	4707	4275	3420	3250	3250	8798	9119	13458	15000	13465	6608
1940	5230	4746	3250	3250	27906	20737	4343	7548	11250	13934	11731	7265
1941	4551	4296	7874	24464	22853	13083	13390	13373	9000	13622	13167	11591
1942	8331	5478	15887	17912	27053	3600	4879	11253	9000	11442	11228	11016
1943	8223	5494	6409	12039	8086	12366	4969	8000	10232	14059	11639	7766
1944	4848	4333	4117	3293	3250	3250	6592	7194	10238	14378	11068	6683
1945	4553	3250	3250	3250	3521	3250	4839	7902	10367	13956	11754	7689
1946	4498	3753	22448	7259	6502	3250	6450	8608	11404	13423	11779	7242
1947	5565	4467	3642	3564	3250	3250	4495	10060	11348	14913	11707	6638
1948	3827	3250	3250	3250	8123	3600	4217	7403	8745	11303	10984	6070
1949	5970	4880	4275	3420	3250	8848	4714	7856	11031	15105	11341	6879
1950	5885	4908	4275	3420	3250	3250	4397	7209	9104	10480	9859	5690
1951	4226	6914	15008	7454	15457	3600	6775	7767	11610	15361	11613	7408
1952	4264	5170	11161	7927	18376	10783	18667	9021	9000	12008	11502	11168
1953	8010	4780	9126	28398	3600	3250	4912	10710	9628	13795	10248	10953
1954	8314	8079	4938	13861	18089	10991	12379	12198	9975	16995	10115	6542
1955	4540	3714	5939	3600	4494	3250	7173	7108	12268	13090	10497	6070
1956	4561	4755	21909	30353	21696	3600	4675	11151	9000	11007	10396	9961
1957	8973	5207	4116	3293	10694	9991	9690	7598	10114	15342	11781	5424
1958	6512	6960	10691	13862	53770	20634	11699	9118	9343	13619	13046	11647
1959	8680	5146	4058	11483	13885	6763	8280	9454	16322	15722	13007	4832
1960	7100	5484	4275	3420	3250	3250	4511	7282	10606	15000	13026	5820
1961	4946	3250	3250	3250	4201	5924	5784	7878	11516	17866	14202	7032
1962	6605	5401	4275	3420	7925	3600	5225	8339	10807	15000	11342	6380
1963	4327	5211	8819	3600	9092	7272	28695	7516	9281	15000	10551	6313
1964	4769	8381	4275	3420	3744	3250	12818	8607	10149	13779	11661	6141
1965	4466	3250	14723	20889	3250	5854	8412	9165	10058	15000	9747	6637
1966	4663	7006	4275	5959	6056	11906	7727	8706	15551	15000	12610	6950
1967	7151	3900	9136	8967	7792	15911	10011	14154	9489	12427	12771	11394
1968	8766	5019	4116	3293	18173	3410	7902	8173	13474	15765	10585	7367
1969	5073	4693	3965	18440	21308	5686	11792	11325	9379	13942	11223	7215
1970	8727	4416	17365	52774	13134	3600	7494	8088	10752	18270	11271	6847
1971	3970	3250	13484	14317	8529	14230	5981	8645	9313	14038	10447	10949
1972	8858	5976	4275	3781	5622	14623	7568	7947	14513	16137	11702	6015
1973	4264	3250	6810	14513	18779	6977	4775	7923	11224	16086	10489	6422
1974	4463	25642	20315	38498	5479	35234	6922	7719	9336	11121	11791	11867
1975	8624	5756	4275	3420	8346	27500	4504	9431	10185	11223	12731	11714
1976	9869	5636	4275	3420	3250	3250	4927	7394	11793	12158	7684	5088
1977	5147	3346	5319	3600	4141	3998	10545	6028	14362	18146	12560	5758
1978	6345	3584	3250	3300	8596	14247	6418	9054	10802	15000	10731	5493
1979	5027	3933	3734	3250	3250	3250	4806	7832	13272	15000	9592	6184
1980	4275	3385	3250	15090	30104	3600	4698	7798	11184	12137	10603	6600
1981	4631	5049	4275	3420	3250	7076	4837	9107	14891	15000	11961	6052
1982	3872	5872	22223	7726	23313	13536	24662	7459	8739	10289	9443	6731
1983	8706	6832	12847	19127	34947	45897	10136	12724	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7785	8572	11168	15147	9358	6074
1985	4663	9670	5617	3600	3250	3250	5323	10415	13543	14976	12456	6194
1986	4881	3943	3746	3250	41844	19820	4392	8308	11894	12160	11304	5402
1987	4320	4744	4275	3420	3250	3250	9156	10777	15000	13946	9727	6901
1988	5979	3902	3684	3250	7006	4120	4901	6103	12621	11413	9611	6843
1989	5655	3250	3250	3250	3250	3250	4410	9755	10099	13426	10190	4108
1990	3693	4327	4056	3250	4674	3600	6535	5824	9754	12794	8520	5546
1991	5295	4636	3250	3250	3250	3250	3417	6466	7727	8868	8259	4498
1992	4944	4731	3250	3250	3250	3250	3537	8892	11742	12238	9619	6616
1993	4983	4648	3250	3250	3250	3250	4530	8685	10003	13858	9172	6686
AVG:	5564	5054	6747	7824	9968	8047	7177	8393	10739	13370	10859	7094
MIN:	3250	3250	3250	3250	3250	3250	3250	4144	6969	8868	7684	4108
MAX:	9869	25642	24635	52774	53770	45897	28695	14154	16322	18270	14243	12549

Table 3.5.4-8. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6057	4183	3974	3250	3250	3250	4521	7678	10972	12527	11701	8075
1923	4537	3250	3250	3250	3250	3250	4457	10896	11760	13734	11746	6011
1924	4938	4757	4275	3420	3250	3865	7621	8116	10454	10954	8149	5123
1925	3250	3250	3250	3250	3250	6019	3993	6243	9907	11254	10195	6441
1926	4976	4232	3250	3250	3250	3250	4168	6467	9517	11627	9134	5642
1927	3250	3250	3250	3250	26008	3600	9889	8606	10553	14352	11453	7711
1928	4633	3879	3690	3250	3250	18366	4643	9524	10677	15781	11705	6974
1929	4936	4994	4275	3420	3250	3250	5208	6992	8396	11472	9720	5934
1930	5039	4242	3250	3250	3250	3250	4298	6683	9640	11609	9276	5054
1931	4301	3295	3250	3250	3250	3250	8185	7527	9106	11222	8519	5301
1932	3886	3250	3250	3250	3250	3250	4545	4151	6979	8961	8292	5200
1933	3906	3250	3250	3250	3250	3250	4768	5619	7423	10520	9268	5733
1934	4373	3646	3250	3250	3250	3250	5160	6860	10273	10457	8112	5301
1935	3613	3250	3250	3250	3250	3250	3250	5728	9532	10323	9816	6044
1936	3478	3575	3250	3250	3250	3250	4393	7019	8435	11128	10596	6442
1937	4793	4318	4102	3282	3250	3250	4108	6651	8137	10217	9854	6308
1938	4056	3250	14604	3958	30086	33790	12271	7885	9000	11080	10987	9627
1939	8691	4707	4275	3420	3250	3250	8801	9121	13271	15000	13378	6607
1940	5046	4593	3250	3250	28302	20737	4343	7548	11251	14028	11738	7264
1941	4549	4295	7777	24464	22853	13083	13390	13373	9000	13622	13167	11591
1942	8331	5478	15887	17912	27053	3600	4879	11253	9000	11442	11228	11017
1943	8223	5494	6409	12039	8086	12366	4969	8000	10232	13830	11626	7771
1944	4851	4335	4118	3294	3250	3250	6598	7201	10243	14456	11080	6686
1945	4969	3250	3250	3250	3349	3250	4839	7902	10366	14089	11760	7685
1946	4488	3250	22409	7259	6675	3250	6457	8618	11416	13560	11797	7241
1947	5757	4386	3711	3568	3250	3250	4488	10051	11280	14770	11637	6633
1948	3783	3250	3250	3250	8100	3600	4219	7411	8753	11303	10983	6070
1949	5970	4880	4275	3420	3250	8848	4714	7856	11037	15117	11478	6887
1950	5882	4860	4275	3420	3250	3250	4394	7209	9104	10480	9859	5690
1951	4218	6814	15008	7454	15457	3600	6775	7767	11610	15488	11619	7459
1952	4253	5244	10920	7927	18376	10783	18811	9021	9000	12130	11380	11168
1953	8010	4780	9126	28398	3600	3250	4912	10710	9628	13810	10248	10951
1954	8314	8079	4938	13861	18089	10991	12379	12198	9975	17009	10115	6542
1955	4539	3705	5936	3600	4468	3250	7129	7113	12238	13105	10534	6072
1956	4543	4738	21979	30353	21696	3600	4675	11151	9000	11225	10408	9725
1957	8973	5207	4116	3293	10694	9991	9690	7598	10114	15397	11810	5417
1958	6362	6953	10697	13862	53770	20634	11699	9118	9343	13727	12938	11647
1959	8680	5146	4058	11483	13885	6676	8277	9455	16128	15675	12893	4828
1960	6505	5941	4275	3420	3250	3250	4524	7307	10404	15000	12829	5871
1961	4956	3250	3250	3250	4772	5924	5788	7893	11525	17873	14233	7016
1962	6635	5490	4275	3420	7890	3600	5229	8344	10813	15000	11348	6380
1963	4325	5191	8819	3600	9092	7428	28534	7516	9281	15000	10551	6313
1964	4764	8381	4275	3420	3745	3250	12794	8609	10153	13454	11586	6147
1965	4479	3250	14906	20889	3250	5802	8456	9165	10060	15000	9747	6654
1966	4662	6989	4275	5959	6056	11906	7737	8707	15544	15000	12609	6949
1967	7125	3900	9157	8967	7804	15911	10011	14154	9489	12427	12771	11394
1968	8766	5019	4116	3293	18174	3410	7809	8167	13312	15704	10471	7280
1969	5028	4672	3896	18956	21308	5686	11792	11388	9380	14147	11231	7058
1970	8727	4416	17366	52774	13134	3600	7494	8088	10768	18279	11281	6847
1971	3967	3250	13452	14317	8531	14227	5981	8645	9312	14052	10448	10948
1972	8858	5976	4275	3781	5622	14623	7568	7947	14513	16137	11702	6014
1973	4264	3250	6810	14513	18779	6977	4775	7923	11223	16061	10488	6309
1974	4468	25776	20315	38498	5479	35234	6922	7719	9336	11158	11754	11867
1975	8624	5803	4275	3420	8305	27500	4504	9431	10185	11223	12731	11714
1976	9869	5636	4275	3420	3250	3250	4841	7401	11613	12036	7598	5117
1977	5064	3292	5379	3600	4140	3912	10425	5904	14265	17712	12432	6048
1978	6303	3553	3250	3300	10682	14247	6418	9054	10799	15000	10730	5494
1979	5081	3982	3781	3250	3250	3250	4807	7833	13135	15000	9592	6183
1980	4285	3366	3250	15230	30104	3600	4698	7798	11184	12137	10603	6600
1981	4631	5049	4275	3420	3250	7070	4837	9107	14742	15000	11851	6031
1982	3884	5921	22223	7726	23313	13536	24662	7459	8739	10289	9443	6731
1983	8706	6832	12847	19127	34947	45897	10136	12724	14977	14703	14243	12549
1984	9319	13793	24635	7553	4223	10301	7784	8572	11168	15161	9358	6057
1985	4663	9674	5617	3600	3250	3250	5323	10415	13542	14976	12456	6195
1986	4863	3942	3745	3250	41859	19820	4392	8307	11893	12160	11304	5402
1987	4320	4744	4275	3420	3250	3250	9031	10680	15000	13832	9652	6801
1988	5912	3902	3690	3250	6975	4035	4906	6141	12506	11313	10560	6771
1989	5648	3250	3250	3250	3250	3250	4409	9736	10095	13496	10256	4105
1990	3684	4235	3970	3250	4935	3600	6529	5813	9581	12627	8514	5330
1991	5256	4584	3250	3250	3250	3250	3458	6469	7726	8868	8281	4499
1992	4788	4682	3250	3250	3250	3250	3587	8919	11753	12274	9628	7058
1993	5226	4279	3250	3250	3250	3250	4537	8777	10003	14153	9146	6410
AVG:	5557	5036	6754	7833	10016	8049	7175	8395	10705	13371	10856	7084
MIN:	3250	3250	3250	3250	3250	3250	3250	4151	6979	8868	7598	4105
MAX:	9869	25776	24635	52774	53770	45897	28534	14154	16128	18279	14243	12549

Table 3.5.4-9. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	-1	42	2	-1
1924	-1	0	0	0	0	104	4	-4	182	50	86	85
1925	0	0	0	0	0	28	-40	-33	23	-12	-13	-2
1926	-1	0	0	0	0	0	-7	-4	-5	190	6	-7
1927	0	0	0	0	-449	0	0	0	1	-105	-5	2
1928	8	101	96	0	0	-96	0	14	-11	-3	-31	-7
1929	-1	20	0	0	0	0	-2	-3	372	193	229	136
1930	-84	-328	0	0	0	0	-16	-41	-16	303	5	-13
1931	349	303	125	0	0	0	-18	-9	51	27	-8	-393
1932	-525	0	0	0	0	0	-7	-8	-12	-12	-11	166
1933	9	0	0	0	0	0	106	5	124	127	88	-10
1934	172	85	0	0	0	0	-16	-20	206	135	-17	-16
1935	-5	0	0	0	0	0	0	-32	-25	-23	-20	-11
1936	-1	0	0	0	0	0	-51	-71	-29	-30	-28	-14
1937	-4	-1	-1	0	0	0	-29	-109	-20	-14	-13	-7
1938	-79	0	-1093	0	0	0	0	0	0	1	0	173
1939	0	0	0	0	0	0	-4	-3	203	0	128	4
1940	206	154	0	0	-444	0	0	0	-1	121	6	-4
1941	-1	-1	-119	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	56	3	-1
1944	-1	0	0	0	0	0	-2	-2	44	6	-3	-2
1945	-12	0	0	0	-70	0	0	0	0	54	3	-1
1946	-4	-53	0	0	5	0	-2	-2	-3	41	0	-1
1947	59	18	74	3	0	0	-6	-7	41	-67	-74	-7
1948	4	0	0	0	-22	0	-1	-4	-3	0	0	0
1949	0	0	0	0	0	0	0	0	-3	71	12	-1
1950	18	24	0	0	0	0	-4	-5	-5	-5	-5	-2
1951	-7	-88	0	0	0	0	0	0	0	50	2	-2
1952	-4	0	-46	0	0	0	-70	0	0	28	-28	0
1953	0	8	-8	0	0	0	0	0	0	60	3	-65
1954	0	0	0	0	0	0	0	38	1	-6	30	2
1955	-5	41	-99	0	7	0	83	-2	66	3	-80	-6
1956	31	9	-102	0	0	0	0	0	0	33	2	-36
1957	0	0	0	0	0	0	18	-1	-1	-5	54	-5
1958	5	32	-36	0	0	0	0	0	0	21	-21	0
1959	0	0	0	0	0	96	4	-1	151	150	162	5
1960	571	-442	0	0	0	0	-18	-34	265	0	282	-57
1961	-20	0	0	0	-653	0	12	-17	54	-373	12	-19
1962	-26	73	0	0	84	0	-3	-3	-3	0	-3	0
1963	1	11	0	0	0	-110	113	0	0	0	0	0
1964	-2	0	0	-167	-9	0	520	21	-12	187	91	-3
1965	-58	0	-349	0	0	47	-39	28	-1	0	-4	-1
1966	-2	-21	0	0	0	0	-9	0	51	0	28	26
1967	12	0	-84	0	-47	0	0	0	0	0	0	0
1968	0	16	0	0	-13	0	113	7	218	90	156	119
1969	79	38	92	-574	0	0	0	-102	-3	54	3	-119
1970	0	0	1	0	0	0	23	1	60	29	37	1
1971	-10	0	-130	0	38	-40	28	-27	-2	56	3	-6
1972	0	0	0	0	0	0	57	-3	43	-92	94	29
1973	-5	0	-75	0	0	0	0	0	0	94	4	-38
1974	-8	-85	0	0	0	0	0	0	0	-6	6	0
1975	0	16	0	0	-14	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	106	-8	246	169	156	-13
1977	152	96	-57	0	-53	45	145	158	171	198	131	-354
1978	32	33	0	0	-2166	0	0	0	4	0	1	0
1979	-54	-50	-47	0	0	0	0	0	32	0	2	1
1980	-3	20	0	-53	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	201	0	150	22
1982	-16	-49	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	1	0	58	-2	10
1985	-5	-74	0	0	0	0	0	-1	57	38	36	1
1986	0	-1	-1	0	-79	0	0	-3	-4	-4	-4	0
1987	0	0	0	0	0	0	206	126	0	148	95	102
1988	-10	-6	-9	0	41	97	-7	-43	154	135	-962	64
1989	16	0	0	0	0	0	-3	49	3	-66	-45	-25
1990	-4	-10	-10	-2	-303	0	9	18	239	210	6	282
1991	86	158	0	0	0	0	-62	-5	0	-1	49	3
1992	150	43	0	0	0	0	-72	-42	28	-7	-123	-453
1993	-337	621	0	0	0	0	-18	-352	0	-213	20	198
AVG:	9	10	-26	-11	-58	2	15	-7	43	30	10	-4
MIN:	-525	-442	-1093	-574	-2166	-110	-72	-352	-29	-373	-962	-453
MAX:	571	621	125	3	84	104	520	158	372	303	282	282

Table 3.5.4-10. Simulated Sacramento River Flow Below Keswick Dam (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	-1	123	6	-3
1924	-2	-1	0	0	0	297	16	-7	39	108	3	27
1925	0	0	0	0	0	-115	-9	-11	-172	-17	-4	1
1926	0	1	0	0	0	0	-3	-4	-5	38	-2	-3
1927	0	0	0	0	-186	0	0	0	0	248	11	-4
1928	-18	-242	-225	0	0	137	0	-203	4	198	-3	-8
1929	30	77	0	0	0	0	-1	-1	52	-23	36	12
1930	12	-256	0	0	0	0	1	3	-3	170	6	-5
1931	86	45	0	0	0	0	116	1	48	29	-7	-25
1932	-240	0	0	0	0	0	-1	-2	-2	-2	-2	-1
1933	0	0	0	0	0	0	41	2	29	27	10	-20
1934	12	10	0	0	0	0	-3	-4	57	34	-3	-3
1935	-1	0	0	0	0	0	0	-6	-5	-5	-4	-2
1936	0	0	0	0	0	0	-2	-4	-5	-6	-5	-3
1937	-1	0	0	0	0	0	-1	-2	-4	-4	-4	-2
1938	-1	0	-13	0	0	0	0	0	0	0	0	-197
1939	0	0	0	0	0	0	0	0	17	0	41	2
1940	23	1	0	0	-48	0	0	0	0	215	12	-5
1941	-3	-1	-215	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	-173	-10	4
1944	2	1	1	1	0	0	4	5	49	84	8	1
1945	404	0	0	0	-242	0	0	0	-1	188	10	-5
1946	-14	-557	-39	0	178	0	6	8	10	178	18	-2
1947	251	-63	143	7	0	0	-13	-16	-27	-210	-144	-12
1948	-40	0	0	0	-45	0	1	5	4	0	0	0
1949	0	0	0	0	0	0	0	0	3	83	149	7
1950	15	-23	0	0	0	0	-7	-5	-5	-5	-5	-2
1951	-14	-188	0	0	0	0	0	0	0	177	8	48
1952	-15	75	-287	0	0	0	74	0	0	151	-151	0
1953	0	8	-8	0	0	0	0	0	0	75	4	-66
1954	0	0	0	0	0	0	0	38	1	8	30	1
1955	-6	32	-102	0	-19	0	38	3	36	17	-43	-4
1956	13	-8	-32	0	0	0	0	0	0	250	14	-271
1957	0	0	0	0	0	0	18	-1	-1	50	82	-12
1958	-145	26	-30	0	0	0	0	0	0	129	-129	0
1959	0	0	0	0	0	9	0	0	-44	103	47	1
1960	-24	14	0	0	0	0	-4	-8	63	0	85	-6
1961	-10	0	0	0	-83	0	16	-2	62	-366	42	-35
1962	5	161	0	0	49	0	1	2	3	0	2	0
1963	-1	-8	0	0	0	47	-48	0	0	0	0	0
1964	-8	0	0	-167	-9	0	495	23	-9	-138	16	3
1965	-44	0	-167	0	0	-5	4	27	2	0	-4	15
1966	-2	-38	0	0	0	0	1	0	45	0	27	26
1967	-14	0	-63	0	-35	0	0	0	0	0	0	0
1968	0	16	0	0	-12	0	20	1	55	28	42	31
1969	34	17	23	-58	0	0	0	-39	-1	259	12	-276
1970	0	0	1	0	1	0	22	1	76	38	47	1
1971	-13	0	-162	0	41	-42	27	-27	-2	70	3	-6
1972	0	0	0	0	0	0	57	-3	42	-92	94	29
1973	-5	0	-75	0	0	0	0	0	0	69	3	-150
1974	-3	49	0	0	0	0	0	0	0	31	-31	0
1975	0	63	0	0	-55	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	20	-1	66	47	70	17
1977	69	42	2	0	-54	-41	25	34	74	-237	4	-64
1978	-9	2	0	0	-80	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	-105	0	2	1
1980	7	2	0	88	0	0	0	-1	0	0	0	0
1981	-1	0	0	0	0	-7	0	0	53	0	40	2
1982	-4	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	1	0	72	-1	-6
1985	-6	-71	0	0	0	0	0	-1	56	38	36	2
1986	-18	-2	-2	0	-64	0	0	-3	-5	-5	-4	0
1987	-1	0	0	0	0	0	81	29	0	34	20	3
1988	-77	-6	-3	0	10	12	-2	-5	40	34	-13	-8
1989	8	0	0	0	0	0	-4	30	-1	4	21	-28
1990	-13	-101	-95	-2	-43	0	2	7	65	43	1	66
1991	47	106	0	0	0	0	-21	-3	-1	-1	71	4
1992	-5	-6	0	0	0	0	-23	-15	39	28	-114	-12
1993	-93	251	0	0	0	0	-11	-259	0	83	-7	-78
AVG:	2	-8	-19	-2	-10	4	13	-6	10	32	6	-14
MIN:	-240	-557	-287	-167	-242	-115	-48	-259	-172	-366	-151	-276
MAX:	404	251	143	88	178	297	495	38	76	259	149	66

Table 3.5.4-11. Simulated Sacramento River Flow Below Navigation Control Point (CFS) Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10279	7296	17474	10597	7399	6748	5000	5000	5000	5000
1923	6033	6034	14001	10352	7352	5319	8572	5000	5000	6331	5000	5000
1924	5000	5000	5272	5774	8481	3875	3250	3250	4446	4693	3250	3250
1925	3868	5296	7716	6509	21299	11487	12106	5827	5889	4500	4500	4500
1926	4500	4500	5285	8172	19614	5738	8691	3500	3500	5180	3500	3500
1927	3682	10716	13430	14748	22718	16540	17288	7290	5000	7101	5000	5000
1928	5153	9433	8603	9253	16732	21089	11872	6879	4512	8998	5582	4500
1929	4500	7191	6963	5853	10140	5440	3250	3250	4148	5050	3791	3316
1930	4324	5047	11944	9563	13540	15094	4612	4666	3500	4923	3500	3500
1931	4202	4004	4403	8612	6025	4998	3897	3250	4070	4875	3250	3638
1932	3751	4523	13352	8058	6769	8256	3500	3500	3500	3500	3500	3500
1933	3500	3576	4961	7729	5441	10143	3495	3250	3531	5140	4451	4106
1934	3938	4330	9139	9183	10804	7484	3500	3500	5208	4757	3500	3500
1935	3500	7680	5997	15276	10018	13500	19192	5817	4000	4000	4000	4000
1936	4000	4000	5557	18142	19335	8408	6039	4544	4500	4500	4500	4500
1937	4500	4500	5596	5980	13598	16764	9401	5306	4000	4000	4000	4000
1938	5331	16753	20856	12098	22753	22754	18771	15085	5326	5000	5000	8198
1939	9460	5447	7318	5866	6157	5075	4500	4500	6219	7716	6446	4500
1940	4874	4500	5862	18311	21009	21326	17555	6113	5000	6435	5000	5000
1941	5000	5000	20124	22163	22165	21322	20902	16743	5046	7241	6706	8645
1942	8225	6600	21126	20982	22482	8767	14836	13313	6008	5000	5000	8292
1943	8213	6908	11268	20977	19641	20173	9471	6986	5000	6904	5000	5000
1944	5000	5000	5554	6961	11570	9354	4500	4500	4530	7062	4500	4500
1945	4619	7129	8853	6416	18552	10247	5341	6332	5000	6148	5000	5000
1946	5227	7210	21731	19530	10086	7308	5000	5000	5000	5870	5000	5000
1947	5053	6081	7943	5000	9433	9673	4731	4500	6421	8018	5538	4500
1948	5561	5448	4787	9981	9824	9508	15638	13530	7816	5000	5000	5000
1949	6510	5916	6719	5412	6455	20904	5448	5829	5000	7965	5195	5000
1950	5335	5539	5398	10588	15759	8736	5729	4000	4000	4000	4000	4000
1951	5656	12812	20579	18776	20778	10767	5000	7046	5000	7567	5000	5484
1952	5185	8420	19622	20647	21094	20350	18304	10747	6873	6599	6041	10022
1953	8223	6525	20042	22267	10673	9013	6281	12014	6746	7658	5000	9883
1954	8922	10312	7058	18691	21233	19659	17615	10100	5000	10566	5284	5000
1955	5049	9270	14170	9996	7577	5840	6787	5198	6456	6498	4793	4500
1956	4753	7880	21828	22445	21196	13729	7253	12969	5009	5000	5000	8530
1957	9701	6715	5664	6990	16461	18563	9711	6939	5053	8644	5638	5425
1958	12226	10625	17010	20383	23467	21344	20118	11395	8257	8059	7998	10337
1959	8654	6125	6007	18525	20514	12153	5000	5000	9091	7844	6979	5000
1960	6456	6503	5201	7548	18440	12318	3883	6340	4356	8927	6941	3859
1961	4863	6643	12018	6156	19029	15673	6210	5000	6231	11226	8297	5634
1962	6496	7310	12895	6904	20143	14597	5000	5000	5000	8190	5002	5000
1963	11972	7082	15940	7680	20268	14355	21239	7971	5000	8795	5000	5000
1964	7130	13459	6770	9352	7293	5156	7529	4500	4500	6651	5871	4500
1965	4758	8676	21404	21558	11179	10060	17946	6918	5000	7983	5134	5000
1966	5214	12350	6250	17893	15318	17599	6917	5000	8391	7471	6830	5082
1967	6823	8050	18806	19655	19172	19525	18125	16439	7874	5934	7394	9502
1968	9163	6999	7751	13409	21216	14269	6388	5000	6786	7615	5996	5116
1969	6613	7573	16851	21864	21680	18445	16898	11168	5000	7418	5000	5853
1970	10381	6042	21076	23455	20552	14947	5878	5000	5306	11640	5381	5000
1971	5219	11160	20868	20712	14677	19292	5729	7959	5000	7666	5000	9888
1972	9644	7305	8375	8476	10080	18059	4913	4766	8193	9179	6001	4851
1973	6698	9581	15340	21049	21114	19205	7247	6191	5000	8859	5000	5182
1974	6917	21489	21050	22834	15940	22163	18875	6498	5000	7237	6654	11253
1975	9994	7553	9083	7414	20576	21846	9756	8915	5000	5149	7444	10350
1976	11693	6592	6595	5779	5137	7209	3677	3803	6083	5708	4493	3936
1977	4497	3818	5815	4913	5165	4471	5868	3506	7252	10930	7698	6132
1978	5801	5163	11061	21049	20621	21126	17400	8678	5000	8154	5000	5875
1979	5030	5000	5015	9980	15870	12311	7354	6068	6229	8121	5000	5000
1980	6473	7677	11266	21190	21892	17692	5895	5524	5000	5000	5000	5000
1981	5346	5000	8804	14265	13371	17459	6829	5000	6715	7241	6591	5000
1982	5922	18458	21306	19254	21335	20061	20599	7987	6082	5000	5000	7803
1983	10809	11944	20794	21280	22803	23286	19323	17653	15422	10814	10507	13355
1984	10883	19883	22198	17907	11026	16331	8195	5000	5000	8193	5050	5024
1985	6357	18444	12969	6904	7627	7245	5000	5000	5955	7858	5774	5000
1986	5179	5000	8449	11244	23409	21627	6479	5000	5000	5000	5000	5000
1987	5000	5000	6045	7836	11385	15683	6546	5287	7900	7125	4671	4630
1988	5687	4000	12403	17635	10265	5273	3250	3404	6582	5501	5509	3808
1989	4831	6862	5917	7997	4885	19328	7396	5461	4500	7249	5011	5659
1990	6649	5585	5829	10410	8276	7861	3250	4748	5037	6079	3250	3748
1991	4900	5156	4722	4686	4863	16705	5812	3250	3250	3250	4166	3250
1992	4810	5269	4790	6661	17990	12954	5576	4000	6643	5696	4864	6393
1993	5476	4848	8921	20641	20145	17654	14432	10539	11269	7071	5100	5578
AVG:	6249	7618	11314	13043	15152	13793	9305	6750	5670	6768	5279	5596
MIN:	3500	3576	4403	4686	4863	3875	3250	3250	3250	3250	3250	3250
MAX:	12226	21489	22198	23455	23467	23286	21239	17653	15422	11640	10507	13355

Table 3.5.4-12. Simulated Sacramento River Flows Below Navigation Control Point (CFS) Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10279	7296	17474	10597	7399	6748	5000	5000	5000	5000
1923	6033	6034	14001	10352	7352	5319	8572	5000	5000	6373	5000	5000
1924	5000	5000	5272	5774	8481	3979	3250	3250	4631	4736	3340	3334
1925	3867	5301	7718	6510	21299	11515	12069	5805	5926	4500	4500	4500
1926	4500	4500	5285	8172	19614	5739	8686	3500	3500	5375	3500	3500
1927	3685	10717	13430	14748	22701	16546	17287	7288	5000	6995	5000	5000
1928	5160	9533	8693	9249	16736	21084	11881	6904	4512	9007	5563	4500
1929	4500	7211	6962	5854	10141	5440	3250	3250	4523	5224	4022	3449
1930	4242	4734	11965	9557	13538	15092	4602	4636	3500	5240	3500	3500
1931	4557	4287	4521	8617	6034	5003	3890	3250	4131	4908	3250	3250
1932	3250	4541	13337	8051	6765	8254	3500	3500	3500	3500	3500	3672
1933	3500	3581	4963	7730	5442	10143	3602	3250	3659	5261	4536	4096
1934	4115	4407	9140	9188	10807	7485	3500	3500	5438	4903	3500	3500
1935	3500	7682	5998	15276	10018	13500	19195	5803	4000	4000	4000	4000
1936	4000	4000	5557	18142	19335	8408	6003	4500	4500	4500	4500	4500
1937	4500	4500	5595	5979	13598	16764	9381	5212	4000	4000	4000	4000
1938	5251	16758	20791	12112	22751	22753	18771	15084	5325	5000	5000	8371
1939	9451	5451	7319	5867	6157	5076	4500	4500	6427	7708	6582	4500
1940	5085	4644	5859	18315	20985	21328	17555	6113	5000	6558	5000	5000
1941	5000	5000	20095	22164	22165	21322	20902	16743	5045	7241	6706	8645
1942	8225	6600	21126	20982	22482	8767	14836	13312	6008	5000	5000	8291
1943	8213	6908	11268	20977	19641	20173	9471	6986	5000	6960	5000	5000
1944	5000	5000	5554	6961	11570	9354	4500	4500	4576	7068	4500	4500
1945	4608	7130	8852	6416	18535	10248	5341	6331	5000	6202	5000	5000
1946	5223	7157	21732	19529	10091	7307	5000	5000	5000	5913	5000	5000
1947	5113	6095	8017	5000	9435	9674	4731	4500	6470	7956	5475	4500
1948	5562	5447	4787	9981	9802	9509	15636	13526	7812	5000	5000	5000
1949	6510	5915	6719	5412	6455	20904	5449	5831	5000	8039	5206	5000
1950	5355	5562	5397	10589	15760	8736	5730	4000	4000	4000	4000	4000
1951	5650	12725	20580	18775	20778	10766	5000	7046	5000	7617	5000	5482
1952	5182	8421	19610	20647	21094	20350	18287	10748	6872	6627	6011	10024
1953	8222	6533	20040	22267	10673	9013	6281	12014	6746	7718	5000	9819
1954	8926	10311	7057	18691	21233	19659	17615	10138	5000	10560	5315	5000
1955	5045	9311	14068	10000	7583	5840	6871	5192	6525	6499	4716	4500
1956	4784	7886	21822	22445	21196	13729	7253	12969	5009	5033	5000	8495
1957	9703	6714	5663	6990	16461	18563	9729	6937	5052	8639	5691	5416
1958	12232	10658	16974	20384	23467	21344	20118	11395	8257	8079	7977	10339
1959	8654	6125	6007	18525	20514	12248	5000	5000	9242	7988	7137	5000
1960	7033	6028	5244	7543	18440	12317	3874	6319	4638	8927	7243	3795
1961	4857	6647	12019	6157	18867	15684	6232	5000	6308	10874	8344	5613
1962	6474	7383	12890	6905	20165	14596	5000	5000	5000	8194	5002	5000
1963	11972	7093	15939	7680	20268	14245	21248	7968	5000	8794	5000	5000
1964	7128	13459	6770	9185	7294	5152	8050	4500	4500	6847	5958	4500
1965	4706	8682	21384	21558	11177	10107	17935	6947	5000	7986	5130	5000
1966	5212	12330	6250	17892	15317	17599	6907	5000	8442	7468	6859	5106
1967	6835	8050	18785	19656	19160	19525	18124	16439	7873	5934	7394	9502
1968	9163	7015	7750	13409	21215	14269	6501	5000	7006	7694	6154	5231
1969	6641	7566	16897	21831	21683	18445	16898	11066	5000	7470	5000	5735
1970	10389	6039	21075	23454	20551	14947	5901	5000	5366	11667	5420	5000
1971	5210	11161	20861	20712	14715	19282	5757	7931	5000	7722	5000	9883
1972	9645	7306	8375	8475	10080	18059	4971	4760	8238	9086	6100	4873
1973	6693	9582	15265	21050	21114	19204	7247	6191	5000	8952	5000	5146
1974	6912	21484	21050	22834	15939	22163	18875	6498	5000	7231	6660	11252
1975	9994	7570	9082	7415	20572	21847	9756	8914	5000	5149	7444	10350
1976	11693	6592	6595	5779	5136	7209	3784	3790	6333	5865	4648	3921
1977	4658	3907	5758	4921	5113	4520	6011	3658	7418	11127	7831	5776
1978	5860	5187	11058	21049	20496	21130	17396	8672	5000	8152	5000	5874
1979	5025	5000	5017	9980	15870	12311	7352	6065	6258	8116	5000	5000
1980	6471	7698	11264	21187	21892	17693	5895	5524	5000	5000	5000	5000
1981	5346	5000	8803	14265	13371	17458	6829	5000	6916	7232	6745	5015
1982	5910	18449	21307	19254	21335	20061	20599	7987	6082	5000	5000	7803
1983	10809	11944	20794	21280	22803	23286	19323	17653	15422	10814	10507	13355
1984	10883	19883	22198	17907	11026	16331	8206	5000	5000	8251	5046	5035
1985	6352	18426	12970	6903	7627	7244	5000	5000	6013	7894	5811	5000
1986	5180	5000	8448	11245	23406	21627	6481	5000	5000	5000	5000	5000
1987	5000	5000	6045	7836	11385	15682	6753	5403	7901	7280	4762	4733
1988	5676	4000	12397	17636	10307	5370	3250	3377	6757	5646	4560	3944
1989	4823	6854	5913	7995	4883	19328	7393	5510	4500	7185	4970	5635
1990	6644	5574	5819	10408	7972	7879	3250	4763	5273	6275	3250	4037
1991	4973	5318	4719	4694	4867	16707	5753	3250	3250	3250	4215	3250
1992	4961	5303	4792	6664	17991	12954	5526	4000	6710	5730	4781	5968
1993	5164	5477	8870	20648	20147	17656	14415	10188	11280	6853	5129	5768
AVG:	6260	7630	11312	13041	15144	13798	9321	6745	5718	6800	5292	5594
MIN:	3250	3581	4521	4694	4867	3979	3250	3250	3250	3250	3250	3250
MAX:	12232	21484	22198	23454	23467	23286	21248	17653	15422	11667	10507	13355

Table 3.5.4-13. Simulated Sacramento River Flows Below Navigation Control Point (CFS) Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5000	5000	10279	7296	17474	10597	7399	6748	5000	5000	5000	5000
1923	6033	6034	14001	10352	7352	5319	8572	5000	5000	6454	5000	5000
1924	5000	5000	5272	5774	8481	4172	3250	3250	4490	4801	3250	3281
1925	3869	5298	7717	6509	21299	11372	12104	5820	5724	4500	4500	4500
1926	4500	4500	5285	8172	19614	5739	8689	3500	3500	5223	3500	3500
1927	3683	10717	13430	14748	22711	16542	17288	7289	5000	7348	5000	5000
1928	5137	9194	8393	9260	16723	21095	11873	6684	4537	9200	5577	4500
1929	4532	7267	6959	5856	10142	5441	3250	3250	4202	5026	3831	3327
1930	4336	4791	11960	9557	13538	15092	4614	4672	3500	5097	3500	3500
1931	4291	4045	4403	8614	6026	4999	4020	3250	4128	4910	3250	3618
1932	3514	4537	13346	8056	6768	8255	3500	3500	3500	3500	3500	3500
1933	3500	3576	4961	7729	5441	10143	3537	3250	3562	5167	4460	4086
1934	3953	4340	9139	9184	10804	7484	3500	3500	5269	4793	3500	3500
1935	3500	7681	5997	15276	10018	13500	19193	5816	4000	4000	4000	4000
1936	4000	4000	5557	18142	19335	8408	6040	4544	4500	4500	4500	4500
1937	4500	4500	5595	5980	13598	16764	9403	5307	4000	4000	4000	4000
1938	5330	16753	20855	12099	22753	22754	18771	15085	5326	5000	5000	8001
1939	9471	5442	7316	5865	6156	5075	4500	4500	6237	7715	6488	4500
1940	4898	4500	5863	18311	21006	21326	17555	6113	5000	6650	5000	5000
1941	5000	5000	20071	22164	22164	21322	20902	16743	5045	7241	6706	8645
1942	8225	6600	21126	20982	22482	8767	14836	13313	6008	5000	5000	8292
1943	8213	6908	11268	20977	19641	20173	9471	6986	5000	6731	5000	5000
1944	5000	5000	5554	6962	11569	9354	4500	4500	4572	7137	4500	4500
1945	5024	7105	8864	6421	18494	10252	5341	6332	5000	6336	5000	5000
1946	5215	6655	21748	19521	10257	7296	5000	5000	5000	6039	5000	5000
1947	5305	6003	8097	5000	9438	9676	4731	4500	6412	7827	5419	4500
1948	5516	5448	4785	9980	9778	9510	15638	13534	7820	5000	5000	5000
1949	6510	5916	6719	5412	6455	20904	5446	5826	5000	8045	5338	5000
1950	5354	5517	5401	10588	15760	8736	5726	4000	4000	4000	4000	4000
1951	5642	12625	20582	18774	20777	10766	5000	7046	5000	7744	5000	5535
1952	5169	8498	19548	20650	21094	20350	18323	10746	6873	6750	5882	10034
1953	8221	6532	20040	22267	10673	9013	6281	12014	6746	7733	5000	9818
1954	8926	10311	7057	18691	21233	19659	17615	10138	5000	10575	5314	5000
1955	5044	9302	14065	10000	7557	5841	6825	5199	6493	6514	4751	4500
1956	4766	7871	21827	22445	21196	13729	7253	12969	5009	5250	5000	8264
1957	9719	6710	5662	6989	16461	18563	9729	6937	5052	8694	5718	5409
1958	12084	10657	16978	20383	23467	21344	20118	11395	8257	8188	7864	10347
1959	8652	6124	6006	18525	20514	12162	5000	5000	9047	7949	7021	5000
1960	6434	6520	5200	7549	18440	12318	3881	6334	4422	8926	7030	3850
1961	4856	6645	12018	6157	19009	15674	6228	5000	6297	10861	8356	5594
1962	6503	7469	12885	6907	20157	14598	5000	5000	5000	8188	5002	5000
1963	11971	7074	15940	7680	20268	14402	21236	7972	5000	8795	5000	5000
1964	7122	13459	6770	9185	7295	5152	8023	4500	4500	6519	5898	4500
1965	4714	8679	21394	21558	11178	10055	17947	6945	5000	7984	5130	5016
1966	5211	12313	6251	17892	15318	17599	6918	5000	8436	7469	6858	5106
1967	6809	8052	18790	19656	19163	19525	18125	16439	7874	5934	7394	9502
1968	9163	7015	7750	13409	21215	14269	6408	5000	6842	7641	6038	5147
1969	6597	7543	16826	21861	21680	18445	16898	11129	5000	7676	5000	5582
1970	10400	6036	21075	23454	20551	14947	5900	5000	5383	11675	5430	5000
1971	5208	11161	20859	20712	14717	19281	5757	7931	5000	7736	5000	9883
1972	9645	7306	8376	8476	10081	18059	4972	4760	8238	9086	6101	4873
1973	6693	9582	15266	21051	21114	19204	7247	6191	5000	8928	5000	5033
1974	6924	21490	21049	22833	15939	22163	18875	6498	5000	7269	6621	11255
1975	9994	7617	9079	7416	20562	21847	9756	8915	5000	5149	7445	10350
1976	11694	6592	6595	5779	5137	7209	3697	3801	6149	5751	4562	3950
1977	4568	3857	5818	4915	5112	4435	5896	3538	7325	10692	7712	6065
1978	5795	5163	11060	21049	20616	21127	17400	8678	5000	8154	5000	5875
1979	5030	5000	5015	9980	15871	12311	7354	6068	6125	8128	5000	5000
1980	6480	7678	11266	21195	21892	17693	5895	5523	5000	5000	5000	5000
1981	5345	5000	8804	14265	13371	17452	6829	5000	6767	7239	6632	5000
1982	5920	18459	21307	19254	21335	20061	20599	7988	6083	5000	5000	7803
1983	10809	11944	20794	21280	22803	23286	19323	17653	15422	10814	10507	13356
1984	10883	19883	22198	17907	11026	16332	8206	5000	5000	8265	5046	5019
1985	6352	18427	12970	6903	7627	7245	5000	5000	6012	7894	5811	5001
1986	5162	5000	8447	11245	23407	21627	6481	5000	5000	5000	5000	5000
1987	5000	5000	6045	7836	11385	15683	6628	5313	7903	7162	4691	4634
1988	5611	4000	12399	17634	10275	5285	3250	3402	6626	5537	5499	3805
1989	4841	6861	5917	7997	4885	19328	7394	5493	4500	7257	5034	5630
1990	6639	5485	5739	10411	8230	7862	3250	4755	5101	6118	3250	3816
1991	4945	5262	4718	4690	4865	16707	5793	3250	3250	3250	4237	3250
1992	4807	5264	4791	6662	17990	12954	5561	4000	6695	5738	4763	6397
1993	5382	5105	8903	20645	20147	17656	14422	10280	11277	7150	5088	5501
AVG:	6252	7610	11306	13041	15151	13796	9319	6745	5681	6800	5285	5583
MIN:	3500	3576	4403	4690	4865	4172	3250	3250	3250	3250	3250	3250
MAX:	12084	21490	22198	23454	23467	23286	21236	17653	15422	11675	10507	13356

Table 3.5.4-14. Simulated Sacramento River Flows Below Navigation Control Point (CFS) Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	42	0	0
1924	0	0	0	0	0	104	0	0	185	42	90	84
1925	-1	4	2	1	0	29	-37	-22	37	0	0	0
1926	0	0	0	0	0	0	-5	0	0	195	0	0
1927	3	1	1	0	-17	6	-1	-1	0	-106	0	0
1928	7	100	90	-3	4	-5	8	25	0	9	-20	0
1929	0	20	-1	0	0	0	0	0	375	174	231	133
1930	-82	-313	21	-6	-3	-2	-10	-30	0	316	0	0
1931	354	284	118	5	10	5	-7	0	60	33	0	-388
1932	-501	18	-16	-7	-4	-2	0	0	0	0	0	172
1933	0	4	2	1	1	0	107	0	127	121	85	-10
1934	177	77	1	5	3	2	0	0	229	145	0	0
1935	0	2	1	0	0	0	4	-14	0	0	0	0
1936	0	0	0	0	0	0	-36	-44	0	0	0	0
1937	0	0	-1	-1	0	0	-21	-93	0	0	0	0
1938	-80	4	-64	13	-1	0	-1	-1	-1	0	0	173
1939	-10	4	2	1	0	0	0	0	208	-8	136	0
1940	211	144	-3	4	-24	2	0	0	0	123	0	0
1941	0	0	-29	1	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	56	0	0
1944	0	0	0	0	0	0	0	0	47	7	0	0
1945	-12	1	0	0	-17	1	-1	0	0	54	0	0
1946	-4	-53	2	-1	5	-1	0	0	0	43	0	0
1947	60	15	75	0	2	1	0	0	49	-62	-63	0
1948	2	-1	-1	0	-22	1	-2	-4	-4	0	0	0
1949	0	0	0	0	0	0	2	2	0	74	11	0
1950	19	23	-1	1	0	0	0	0	0	0	0	0
1951	-7	-88	2	-1	0	0	0	0	0	49	0	-2
1952	-3	1	-11	0	0	0	-17	1	-1	28	-30	2
1953	-1	8	-2	0	0	0	0	0	0	60	0	-64
1954	4	-1	-1	0	0	0	0	38	0	-6	30	0
1955	-4	41	-101	4	6	-1	84	-6	69	1	-77	0
1956	30	6	-6	0	0	0	0	0	0	33	0	-35
1957	2	-1	0	0	0	0	18	-2	-1	-5	54	-8
1958	6	32	-37	1	0	0	0	0	0	21	-22	1
1959	0	0	0	0	0	96	0	0	151	144	158	0
1960	577	-475	43	-5	0	0	-9	-21	282	-1	302	-64
1961	-6	4	1	1	-162	11	22	0	77	-352	46	-22
1962	-22	73	-6	1	21	-1	0	0	0	3	-1	0
1963	1	11	-1	0	0	-110	9	-3	0	0	0	0
1964	-2	0	0	-167	1	-4	521	0	0	196	86	0
1965	-52	6	-20	1	-2	46	-11	29	0	3	-4	0
1966	-1	-21	0	0	0	0	-10	0	50	-3	29	25
1967	11	0	-20	1	-12	0	0	0	0	0	0	0
1968	0	16	-1	0	-1	0	113	0	220	79	158	114
1969	28	-8	46	-33	2	0	0	-102	0	52	0	-119
1970	7	-3	0	0	0	0	23	0	61	27	38	0
1971	-9	1	-7	0	37	-11	29	-29	0	56	0	-5
1972	1	0	0	0	0	0	57	-6	45	-93	99	22
1973	-4	2	-75	2	0	0	0	0	0	93	0	-36
1974	-5	-5	0	0	0	0	0	0	0	-6	6	-1
1975	0	16	-1	0	-3	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	107	-14	251	157	154	-15
1977	161	90	-56	8	-52	49	143	152	167	197	132	-356
1978	59	24	-3	0	-125	4	-4	-6	0	-2	0	-1
1979	-5	0	3	0	0	0	-1	-3	29	-5	0	0
1980	-3	20	-1	-3	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	201	-9	154	15
1982	-12	-10	1	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	0	0	58	-4	12
1985	-5	-18	1	0	0	0	0	0	58	36	36	0
1986	1	0	0	0	-3	0	2	0	0	0	0	0
1987	0	0	0	0	0	0	208	116	1	155	91	103
1988	-11	0	-6	2	42	97	0	-27	175	145	-950	136
1989	-8	-8	-4	-2	-1	0	-3	49	0	-64	-40	-24
1990	-4	-11	-10	-2	-304	18	0	14	236	196	0	289
1991	73	162	-3	7	4	2	-60	0	0	0	50	0
1992	151	34	2	3	1	1	-50	0	67	33	-83	-425
1993	-312	629	-51	6	2	2	-17	-351	11	-218	29	190
AVG:	11	12	-2	-2	-9	5	16	-5	48	32	13	-1
MIN:	-501	-475	-101	-167	-304	-110	-60	-351	-4	-352	-950	-425
MAX:	577	629	118	13	42	104	521	152	375	316	302	289

Table 3.5.4-15. Simulated Sacramento River Flows Below Navigation Control Point (CFS), Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	124	0	0
1924	0	0	0	0	0	297	0	0	44	108	0	31
1925	0	2	1	1	0	-115	-2	-7	-165	0	0	0
1926	0	0	0	0	0	0	-2	0	0	43	0	0
1927	1	0	0	0	-7	2	0	0	0	248	0	0
1928	-16	-239	-210	7	-9	6	1	-195	25	203	-5	0
1929	32	76	-3	3	1	1	0	0	53	-25	40	10
1930	12	-256	16	-6	-3	-2	2	6	0	174	0	0
1931	89	41	0	2	1	1	123	0	57	35	0	-20
1932	-237	14	-6	-2	-1	-1	0	0	0	0	0	0
1933	0	0	0	0	0	0	42	0	31	27	10	-20
1934	14	10	0	0	0	0	0	0	61	36	0	0
1935	0	0	0	0	0	0	1	-2	0	0	0	0
1936	0	0	0	0	0	0	1	0	0	0	0	0
1937	0	0	0	0	0	0	1	1	0	0	0	0
1938	-1	0	-1	0	0	0	0	0	0	0	0	-197
1939	11	-5	-2	-1	-1	0	0	0	18	0	42	0
1940	24	0	1	0	-3	0	0	0	0	215	0	0
1941	0	0	-53	1	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	-173	0	0
1944	0	0	1	1	0	0	0	0	43	75	0	0
1945	405	-24	11	4	-58	6	0	0	0	189	0	0
1946	-11	-555	17	-9	170	-12	0	0	0	169	0	0
1947	253	-77	154	0	5	2	1	0	-10	-191	-119	0
1948	-45	0	-2	-1	-45	2	0	4	4	0	0	0
1949	0	0	0	0	0	0	-2	-2	0	80	142	0
1950	18	-22	3	0	0	0	-3	0	0	0	0	0
1951	-14	-187	4	-2	-1	-1	0	0	0	176	0	51
1952	-16	78	-74	3	0	0	18	-1	0	151	-159	13
1953	-2	7	-2	0	0	0	0	0	0	75	0	-65
1954	4	-1	0	0	0	0	0	38	0	8	30	0
1955	-5	33	-104	4	-20	1	38	0	37	16	-43	0
1956	12	-9	-1	0	0	0	0	0	0	250	0	-265
1957	18	-5	-2	-1	-1	0	18	-2	0	50	80	-15
1958	-142	32	-32	1	0	0	0	0	0	129	-134	10
1959	-2	-1	0	0	0	9	0	0	-44	105	42	0
1960	-22	17	-1	0	0	0	-3	-6	66	-1	89	-9
1961	-7	2	0	0	-20	1	18	0	67	-365	59	-41
1962	7	160	-10	4	13	0	0	0	0	-3	0	0
1963	-1	-8	0	0	0	47	-4	1	0	0	0	0
1964	-8	0	0	-167	2	-4	494	0	0	-132	26	0
1965	-45	3	-10	0	-1	-5	1	27	0	1	-4	16
1966	-3	-37	1	0	0	0	1	0	45	-2	28	24
1967	-15	2	-16	1	-9	0	0	0	0	0	0	0
1968	0	16	-1	0	-1	0	20	0	56	26	42	30
1969	-16	-30	-25	-3	0	0	0	-39	0	258	0	-272
1970	19	-6	-1	-1	0	0	23	0	77	35	49	0
1971	-11	2	-9	0	40	-11	29	-28	0	70	0	-5
1972	1	1	0	0	0	0	58	-6	45	-93	100	22
1973	-4	2	-75	2	0	0	0	0	0	69	0	-149
1974	7	1	-1	0	0	0	0	0	0	31	-33	3
1975	0	63	-4	2	-13	1	0	0	0	0	0	0
1976	0	0	0	0	0	0	20	-3	67	44	69	14
1977	71	39	3	2	-53	-36	28	32	73	-238	14	-67
1978	-6	0	-1	0	-5	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	-104	6	0	0
1980	6	1	0	5	0	0	0	-1	0	0	0	0
1981	0	0	0	0	0	-7	0	0	53	-3	41	0
1982	-2	1	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	0	0	72	-4	-4
1985	-5	-17	1	0	0	0	0	0	57	36	36	1
1986	-17	0	-2	0	-2	0	2	0	0	0	0	0
1987	0	0	0	0	0	0	83	26	3	37	20	4
1988	-76	0	-5	-1	10	12	0	-2	44	36	-10	-3
1989	10	0	0	0	0	0	-2	32	0	7	24	-29
1990	-10	-100	-90	1	-46	1	0	6	64	39	0	68
1991	44	106	-4	4	2	1	-20	0	0	0	72	0
1992	-4	-5	1	0	0	0	-15	0	53	41	-101	4
1993	-94	257	-18	3	2	1	-10	-258	8	80	-12	-77
AVG:	3	-9	-8	-2	-1	3	13	-5	11	33	6	-13
MIN:	-237	-555	-210	-167	-58	-115	-20	-258	-165	-365	-159	-272
MAX:	405	257	154	7	170	297	494	38	77	258	142	68

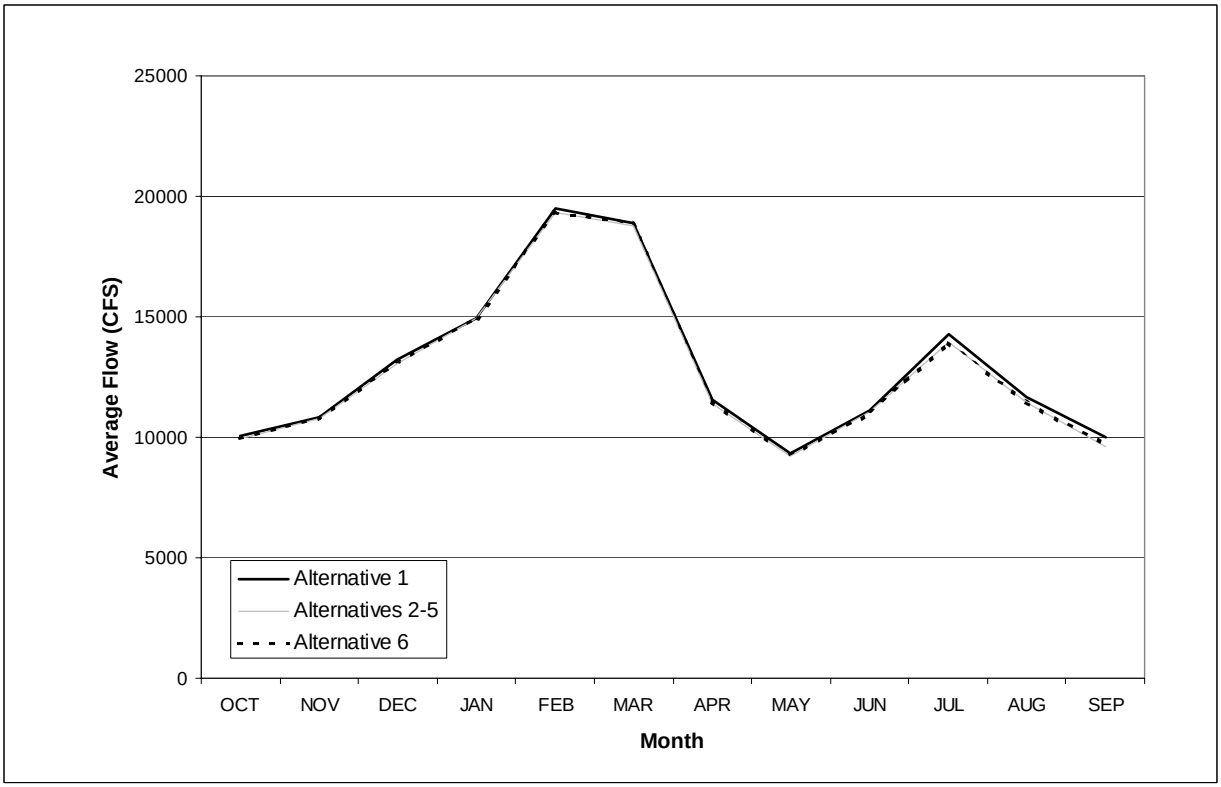


Figure 3.5.4-2 Simulated Average Monthly Sacramento River Flow Below Freeport Upstream of DSA 70Return Flow (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-16. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS) Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	10127	9990	17339	15955	35706	29088	21927	46191	34447	20378	14405	12412
1923	10933	13798	27860	28402	14665	14509	22571	14516	13595	18738	14946	13650
1924	11402	9782	11983	12864	15946	9663	6175	6695	8007	8918	9685	6393
1925	7610	8080	13031	12637	64023	26239	20659	12938	14951	10716	7399	10717
1926	8533	8112	8524	17069	40469	13152	20188	11555	10472	14415	10120	8960
1927	8764	23431	19314	30781	74727	42658	44803	24054	17898	18896	14815	11546
1928	12309	17181	15123	22269	23295	74053	25149	18073	14273	17030	12774	11487
1929	9958	12046	12133	12590	15877	11656	5869	6581	8743	9683	7427	5352
1930	7162	6754	18103	21591	18290	31597	11739	11030	10859	15525	12334	9923
1931	8598	8114	8807	13339	10830	7792	7225	6444	8255	13843	10098	7625
1932	7221	6684	19327	21083	17093	12998	9365	10547	13197	14985	11003	10449
1933	8589	8084	8477	13441	11485	12791	9234	5962	8367	10122	7224	6107
1934	7280	6757	14385	18418	14527	12420	10275	6729	9542	9415	6361	7574
1935	7198	11046	10039	29609	13625	26674	47202	22024	19722	16732	15651	11670
1936	11114	8866	10554	39626	60959	28807	20025	13783	13837	17005	15199	11221
1937	10334	8796	11243	13396	35459	39306	21109	14323	13072	15928	14990	11261
1938	10096	23805	61938	30921	74052	74442	59590	53938	32768	18334	14335	15996
1939	14521	11903	14416	13130	12208	13621	8065	10087	13097	17910	14853	11791
1940	10086	8099	8879	32268	56725	73616	63820	17520	16495	20355	14990	11743
1941	10417	12043	41912	72403	73572	70139	60936	37917	17721	19684	14163	16862
1942	12439	12674	60259	68657	74163	22679	42860	32921	24398	17461	14279	16439
1943	12645	15754	28691	71559	51259	66981	25079	16941	15287	15259	14424	11427
1944	9690	9477	11343	14026	24388	21216	10388	9590	14161	17158	14149	12203
1945	10746	14425	16304	13753	45263	22011	11274	11913	16492	19064	15050	11566
1946	10158	15099	64658	48852	25664	17859	10752	12801	15643	19018	15403	13910
1947	11964	12174	15469	11100	17834	19977	13020	9613	12486	18136	15986	12671
1948	9680	9927	9040	15705	15895	16318	25712	26475	19537	19639	15994	12522
1949	11878	11202	13353	11009	12229	47325	11357	12790	15210	17010	9835	11684
1950	8582	9010	8831	19643	34627	20177	18937	16403	19340	18543	15231	11587
1951	11595	44598	74219	61751	63936	27306	13637	17062	11828	21454	15684	13607
1952	11524	15215	39176	73093	71982	55376	59426	57983	36109	16701	13396	20366
1953	15831	12892	43129	72747	22368	21025	15550	23818	21894	19778	14885	18125
1954	13121	15738	11965	34045	61891	49031	38884	23459	13212	20642	15255	14392
1955	12113	14440	23229	18530	14024	10978	11706	12196	14270	11911	8306	9923
1956	8797	11747	73760	74995	68990	34127	18322	36429	18326	19346	14417	16471
1957	14114	11290	13515	12713	34981	45448	19197	14842	16048	19002	15201	12054
1958	17250	13717	22846	37892	75072	73080	73242	42300	28593	16695	14097	18345
1959	16541	11426	11875	36999	52896	21247	9111	11385	17168	20219	16073	11288
1960	11273	9637	9098	12869	28601	20253	9761	12166	13071	17905	16169	9944
1961	8556	11785	15583	11927	30317	19332	10219	10141	11484	19133	16761	11770
1962	10985	10109	16309	9879	46745	24700	10229	11986	17097	19510	15301	13348
1963	32009	15894	26961	15022	69074	30134	70424	29036	16897	19339	14694	12159
1964	12478	25727	12597	21511	14164	11257	17701	10312	12150	17855	16938	13128
1965	8691	14046	69132	74026	30853	22062	41616	21065	12112	19301	14599	11758
1966	8766	20803	15031	29275	24945	27355	12405	13770	15875	18559	14282	11371
1967	12131	14219	35470	40439	53735	54107	37325	42183	35495	13578	14612	20215
1968	17350	13258	15578	28671	60102	35668	13939	10218	13481	18072	15224	12075
1969	11749	12362	23288	73948	73679	46326	40922	44288	20271	14694	14496	13358
1970	16471	13515	59478	76223	70667	32871	13580	10672	14088	22341	15189	12886
1971	11638	17456	58254	46974	27869	42170	20714	24716	18397	23826	14933	17061
1972	13874	12974	16909	15980	24676	34741	10564	10133	17940	18284	14374	10816
1973	10947	18534	25527	73090	72760	51512	15467	15454	18846	20066	14482	12353
1974	11803	57996	66807	74292	39555	73545	64983	20827	20561	16963	14585	19572
1975	14059	13286	16275	14963	64760	70542	20869	25779	20927	19048	14102	18486
1976	17624	14005	15838	13345	12898	14758	8234	6142	8458	12670	10372	9302
1977	7193	7104	8473	8114	7314	7110	7631	5037	9843	13299	11558	6384
1978	7150	6747	15152	63543	52838	61567	35352	18007	15261	15504	15507	13094
1979	8761	10184	14835	22177	36210	30044	16135	13230	19012	18036	14793	11761
1980	11454	12953	18443	73872	73964	44306	17221	14617	11404	17947	15757	12308
1981	9653	8975	14145	21013	26326	31541	15926	10207	12981	18409	16294	12431
1982	11303	31739	73561	68861	73464	70946	73975	37922	20524	17542	14241	16808
1983	19958	36567	64097	70831	74670	77090	61598	54640	53331	21970	19564	25704
1984	19071	64768	74807	50269	33650	34936	15994	11556	13756	21335	15116	13571
1985	10877	30363	21579	13608	15206	14051	12965	11747	12800	18232	16652	14551
1986	11030	11196	16825	23242	78108	74021	17172	11321	12708	17824	15507	12601
1987	10595	8961	10481	13936	19670	24862	12275	9179	13210	15031	12364	10983
1988	10471	8476	18654	28362	15297	8253	9938	8584	9414	10915	7204	7123
1989	7161	9576	10025	12860	8638	46031	19844	14253	13124	17768	16063	12677
1990	13069	10454	11995	19330	15272	13128	9600	7426	6911	8416	10457	7559
1991	7141	6800	6633	6720	7915	31775	12333	8015	6312	10325	8550	8208
1992	7132	6761	6623	10588	33213	20057	10840	7591	9530	9332	6446	9591
1993	7266	6769	13489	56820	56309	43933	36436	28948	24855	20961	15398	12325
AVG:	11397	14697	24903	32853	39229	34200	24008	18486	16409	16939	13653	12481
MIN:	7132	6684	6623	6720	7314	7110	5869	5037	6312	8416	6361	5352
MAX:	32009	64768	74807	76223	78108	77090	73975	57983	53331	23826	19564	25704

Table 3.5.4-17. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS) Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	10053	9886	17259	15900	35579	28992	21824	46058	34316	20312	14338	12239
1923	10812	13695	27706	28349	14664	14424	22464	14400	13532	18671	14878	13620
1924	11400	9744	12107	12864	15874	9579	5978	6620	8043	8700	9446	6095
1925	7214	8082	13023	12628	64087	26143	20510	12792	14823	10588	7292	10699
1926	8531	8110	8527	17073	40427	12933	19851	11323	10435	14321	10064	9010
1927	8763	23257	18692	30728	74627	42568	44679	23935	17554	18558	14751	11415
1928	12285	17152	15132	22209	23299	73956	25032	18004	14155	16895	12642	11367
1929	9854	12055	12132	12593	15800	11408	5778	6490	8107	9626	7498	5222
1930	7162	6754	18041	21526	18245	31344	11464	10811	10889	15620	12369	9629
1931	8593	8114	8715	13349	11094	7690	7135	6321	8128	13836	10064	6795
1932	7218	6689	19219	21008	16402	12911	9256	10423	13077	14861	10916	10606
1933	8588	8083	8483	13385	11407	12543	9157	5710	8308	10035	7177	6087
1934	7279	6757	14390	18364	14533	12198	10192	6649	9471	9363	6080	6109
1935	7195	10902	10037	29294	13294	26579	47107	21887	19603	16609	15529	11249
1936	11093	8866	10473	39488	60884	28865	19880	13617	13787	16905	15146	11188
1937	10281	8770	11269	13399	35381	39209	20964	14108	13004	15802	14793	11205
1938	9916	23680	60756	30877	73974	74344	59466	53803	32635	18268	14268	16030
1939	14299	11806	14336	13075	12131	13366	7849	9872	13142	17751	14747	11732
1940	10222	8036	8723	32010	56105	73506	63701	17362	16595	20367	14922	13736
1941	10939	11811	41702	72327	73420	70044	60808	37781	17663	19618	14306	16726
1942	12318	12572	59899	68602	74086	22580	42734	32786	24266	17333	14211	16304
1943	12505	15554	28610	71503	51183	66883	24963	16829	15218	15232	14357	11297
1944	9575	9444	11292	14024	24314	20992	10286	9468	14092	17068	14075	12181
1945	10719	14295	16222	13741	45099	21923	11170	11795	16422	18999	14984	11463
1946	10140	14927	64581	48708	25806	17643	10650	12682	15574	18952	15335	13853
1947	11933	12166	15477	11056	17760	19960	12911	9505	12385	17984	15832	12663
1948	9679	9990	9052	15709	15896	16228	25596	26336	19408	19573	15927	12417
1949	11581	11117	13301	11007	12152	47267	11253	12672	15140	16910	9751	11574
1950	8558	9021	8822	19581	34551	20052	18829	16281	19210	18445	15179	11570
1951	11576	44380	74135	61693	63857	27209	13534	16943	11760	21384	15617	13523
1952	11474	15173	38855	73037	71908	55277	59246	57852	35976	16607	13286	20184
1953	15691	12798	43040	72691	22361	20951	15451	23705	21767	19748	14818	17923
1954	13026	15607	11954	33900	61815	48933	38768	23398	13086	20605	15181	14320
1955	11994	14392	23047	18478	14022	10875	11681	12067	14200	11787	8155	9843
1956	8805	11744	73653	74938	68915	34030	18217	36294	18194	19280	14350	16287
1957	13975	11189	13683	12662	34549	45352	19125	14705	15989	18797	15123	11917
1958	17115	13646	22728	37838	74995	72983	73118	42175	28468	16608	14030	18180
1959	16401	11325	11802	36943	52828	21104	8855	11432	17079	20134	16004	10367
1960	12186	8966	8968	12707	28374	20007	9682	11865	13017	17806	16443	9487
1961	8553	11792	15588	11931	29586	19242	10132	10056	11256	19061	16700	11713
1962	10944	10220	16295	9868	46575	24456	9971	11802	16813	19241	15628	13252
1963	31383	15624	26725	14811	68233	29944	70323	28899	16790	19391	14630	12031
1964	12362	25598	12525	21288	14168	10829	18164	10019	12183	17869	16869	12903
1965	8687	14052	68352	73969	30773	22024	41450	21002	12042	19239	14524	11622
1966	8694	20477	14937	29233	24868	27267	12293	13670	15823	18474	14192	11312
1967	12104	14090	35262	40385	53557	54010	37199	42050	35363	13447	14490	20078
1968	17210	13173	15496	28616	60015	35416	13886	9945	13492	17755	15157	12004
1969	11590	12160	23099	73871	73603	46226	40800	44053	20138	14643	14443	13018
1970	16338	13410	59397	76167	70591	32773	13514	10554	14050	22225	15123	12732
1971	11549	17328	58043	46920	27917	41950	20641	24553	18271	23779	14865	16917
1972	13801	12874	16829	15743	24603	34645	10516	10058	17874	18193	14290	10754
1973	10896	18407	25307	73032	72683	51414	15363	15337	18791	19998	14385	12185
1974	11713	57732	66727	74236	39478	73447	64861	20710	20443	16903	14518	19433
1975	13794	13201	16193	14911	64669	70444	20764	25647	20802	18982	14036	18304
1976	17483	13831	15766	13343	12824	14495	8066	5839	8569	12624	10413	9144
1977	7188	7036	8327	8116	7191	6934	7512	4949	9779	13143	11521	6269
1978	7143	6738	15140	63393	50580	60881	34961	17886	15156	15432	15439	12963
1979	8672	10239	14810	22120	35847	29791	15874	12955	18825	17887	14740	11686
1980	11658	12810	18362	73763	73891	44208	17116	14499	11279	17889	15704	12076
1981	9570	8937	14134	20957	26175	31288	15665	9933	12976	18342	16217	12080
1982	11504	31295	73465	68806	73386	70849	73849	37790	20392	17475	14213	16673
1983	19737	36438	64017	70775	74593	76992	61472	54507	53200	21840	19434	25568
1984	18931	64639	74727	50240	33597	34854	15928	11445	13638	21301	15049	13420
1985	10901	30160	21499	13601	15129	13961	12889	11675	12730	18166	16584	14493
1986	10999	11157	16744	23177	78019	73922	17065	11201	12636	17716	15430	12494
1987	10552	8950	10473	13942	19594	24305	12290	9095	13048	15010	12299	10973
1988	10234	8319	18492	28205	15336	8153	8653	8822	9518	10879	7203	7107
1989	7156	9563	10015	12852	8631	44618	19742	14226	13074	17600	15967	12813
1990	12971	10282	11744	19162	15225	12887	9523	7154	6890	8257	10367	8058
1991	7141	6799	6632	6704	7922	31523	12008	7721	6240	9978	8381	7970
1992	7132	6761	6628	10594	33139	19797	10519	7417	9469	9234	6253	8757
1993	7258	6764	13352	57035	56222	43533	36300	28462	24733	20511	14968	11861
AVG:	11344	14603	24791	32792	39088	34027	23868	18343	16317	16839	13582	12344
MIN:	7132	6689	6628	6704	7191	6934	5778	4949	6240	8257	6080	5222
MAX:	31383	64639	74727	76167	78019	76992	73849	57852	53200	23779	19434	25568

Table 3.5.4-18. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS), Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	10047	9886	17259	15900	35585	28991	21824	46058	34316	20602	14628	12015
1923	10814	13695	27346	28351	14664	14424	22464	14400	13249	18782	14989	13675
1924	11651	9838	12398	12863	15875	9579	6086	6642	7944	8847	9620	6362
1925	7266	8080	13022	12627	64113	25999	20546	12807	14640	10619	7313	10698
1926	8531	8110	8526	17073	40364	13041	19783	11453	10414	14379	10093	8995
1927	8764	23290	19202	30723	74640	42564	44680	23936	17736	19689	15036	11415
1928	12263	16813	14832	22220	23285	73930	25029	17528	14466	17158	12695	11366
1929	9982	12083	12130	12595	15801	11564	5789	6504	8045	9573	7450	5379
1930	7162	6754	18035	21526	18282	31497	11630	10932	10798	15612	12307	9884
1931	8593	8115	8709	13346	11086	7686	7136	6324	8195	13811	10064	7630
1932	7218	6690	19229	21013	16829	12907	9254	10421	13078	14870	10925	10443
1933	8589	8084	8480	13383	11406	12698	9156	5836	8307	10062	7206	6099
1934	7280	6757	14388	18360	14530	12321	10191	6648	9468	9361	6160	7491
1935	7196	11045	10036	29544	13623	26573	46925	21913	19602	16611	15575	11560
1936	11092	8867	10589	39534	60884	28548	19918	13660	13440	16971	15427	11464
1937	10248	8757	11254	13400	35152	39208	20986	14202	12761	15841	15004	11417
1938	9877	23676	61627	30865	73974	74344	59468	53805	32635	18557	14557	15660
1939	13961	11799	14333	13073	12130	13520	8093	9979	12981	17767	14761	11732
1940	10081	8058	8881	32204	56600	73514	63700	17157	16295	20522	15145	13958
1941	10938	11799	41605	72328	73420	70044	60808	37781	17321	19913	14645	16724
1942	12318	12573	59925	68602	74086	22581	42734	32786	24266	18940	14502	16306
1943	12507	15163	28613	71503	51183	66883	24966	16831	15178	14758	14565	11296
1944	9575	9399	11325	14024	24314	21080	10286	9468	14090	17133	14124	12219
1945	10650	13957	16388	13833	45246	21925	11170	11796	15806	19234	15222	11460
1946	10536	14503	64572	48435	26393	17267	10652	12665	15740	19123	15497	14016
1947	11962	11947	15426	10960	17763	20120	12910	9497	12037	17853	15785	12660
1948	9555	9850	9001	15708	15867	16228	25607	26344	19415	19574	15928	12417
1949	12298	11112	13300	11008	12152	47269	11248	12667	15138	16762	9946	11571
1950	8556	8946	8826	19554	34551	19764	18747	16281	18834	18508	15349	11491
1951	11570	44281	74140	61691	63857	27208	13534	16943	11981	22136	15712	13512
1952	11474	15260	38029	73036	71907	55277	59392	57851	35977	16730	13345	20000
1953	15691	12798	43040	72691	22361	20952	15452	23705	21768	19803	14832	17922
1954	13026	15608	11954	33855	61815	48933	38768	23398	13086	20590	15181	14320
1955	11993	14251	23045	18478	13993	10874	11635	12074	14201	11833	8179	9843
1956	8788	11729	73671	74938	68915	34031	18217	36294	18194	19570	14640	16055
1957	13991	11185	13497	12662	34430	45352	19125	14705	16003	18781	15124	11910
1958	16966	13646	22733	37837	74997	72983	73118	42175	28468	16789	14320	17863
1959	16402	11325	11802	36943	52828	21172	9010	11358	16919	20235	16005	11422
1960	11197	9616	9119	12867	28526	20160	9681	12034	13000	17793	16441	9374
1961	8554	11789	15587	11930	30156	19232	10126	10047	11338	19065	16680	11711
1962	10969	10262	16290	9871	46693	24610	10125	11889	16972	19385	15150	13350
1963	31770	15758	26881	14966	68988	30097	70289	28904	16984	21121	14914	12032
1964	12359	25601	12526	21289	14168	10750	18291	10174	12035	17618	16879	12701
1965	8686	14048	68390	73969	30773	21972	41495	20994	11770	18941	14710	11655
1966	8692	20831	14860	29310	24867	27267	12304	13667	15811	18477	14189	11312
1967	12078	14092	35284	40385	53580	54010	37199	42051	35363	13447	14490	20078
1968	17210	13173	15496	28616	60016	35570	13871	10100	13429	17955	15157	12004
1969	11647	12293	23183	73889	73603	46228	40801	44116	20138	14917	14717	12845
1970	16026	13409	59396	76167	70590	32773	13514	10554	14074	22215	15137	12723
1971	11547	17328	58012	46920	27938	41946	20641	24553	18271	23782	14881	16917
1972	13801	12875	16829	15723	24604	34645	10517	10058	17874	18196	14293	10754
1973	10897	18407	25307	73031	72683	51414	15363	15337	18519	20184	14524	12032
1974	11725	57978	66724	74236	39478	73447	64861	20710	20394	17093	14735	19435
1975	13528	13153	16261	14912	64629	70445	20764	25647	20802	19153	14206	18172
1976	17484	13727	15654	13344	12825	14649	8133	6005	8469	12578	10337	9270
1977	7189	7033	8417	8110	7163	6939	7426	4943	9809	13002	11529	6307
1978	7143	6738	15142	63471	52663	61736	35226	17891	15155	15396	15439	12964
1979	8676	10157	14800	22121	35991	29947	16030	13113	18776	17934	14661	11686
1980	11337	12915	18363	73814	73890	44209	17116	14499	11279	18098	15926	11740
1981	9573	8937	14135	20957	25817	31438	15820	10087	12926	18342	16224	12273
1982	11385	31586	73473	68804	73386	70849	73849	37790	20392	17686	14303	16673
1983	19572	36439	64017	70775	74593	76992	61472	54507	53200	21840	19434	25568
1984	18931	64639	74727	50241	33598	34855	15928	11445	13621	21259	15097	13375
1985	10983	30164	21499	13601	15129	13961	12889	11675	12730	18166	16584	14492
1986	10980	11157	16742	23179	78019	73922	17065	11201	12348	17779	15530	12493
1987	10552	8950	10473	13942	19594	24490	12277	9099	13109	14955	12289	10935
1988	10365	8473	18649	28298	15300	8152	9813	8511	9341	10777	7135	6846
1989	7156	9570	10019	12854	8631	45632	19735	14196	13056	17650	15988	12573
1990	13099	10349	11825	19270	15223	13027	9521	7302	6855	8142	10490	7990
1991	7141	6799	6631	6725	7919	31677	12203	7876	6241	10241	8499	8125
1992	7132	6761	6627	10591	33137	19951	10709	7472	9459	9242	6236	9516
1993	7259	6765	13470	56722	56225	43731	36306	28555	24730	20939	15379	12295
AVG:	11334	14604	24805	32800	39157	34077	23908	18359	16265	16962	13667	12395
MIN:	7132	6690	6627	6725	7163	6939	5789	4943	6241	8142	6160	5379
MAX:	31770	64639	74727	76167	78019	76992	73849	57851	53200	23782	19434	25568

Table 3.5.4-19.Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS) Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-74	-104	-80	-55	-127	-96	-103	-133	-131	-66	-67	-173
1923	-121	-104	-154	-54	-1	-85	-106	-116	-62	-66	-67	-30
1924	-1	-39	123	0	-72	-84	-197	-75	36	-218	-239	-298
1925	-396	2	-8	-9	64	-95	-149	-146	-128	-128	-107	-19
1926	-2	-1	3	4	-41	-218	-336	-232	-37	-95	-57	51
1927	-1	-174	-622	-53	-100	-90	-124	-119	-343	-338	-64	-131
1928	-24	-29	9	-59	4	-97	-117	-70	-118	-135	-133	-120
1929	-103	9	-1	3	-77	-248	-91	-91	-636	-57	71	-130
1930	1	0	-62	-64	-45	-254	-275	-219	29	96	34	-294
1931	-5	0	-92	10	264	-102	-89	-124	-127	-7	-34	-829
1932	-3	5	-108	-75	-691	-88	-109	-124	-120	-124	-86	157
1933	-1	-1	6	-57	-78	-248	-77	-252	-58	-87	-48	-20
1934	-1	0	4	-54	6	-222	-83	-80	-71	-52	-280	-1465
1935	-3	-144	-2	-314	-331	-94	-96	-137	-119	-123	-123	-421
1936	-20	0	-81	-138	-75	58	-145	-166	-50	-100	-53	-33
1937	-53	-26	26	3	-77	-96	-145	-215	-68	-126	-197	-57
1938	-180	-126	-1182	-44	-78	-98	-124	-135	-133	-66	-67	34
1939	-223	-97	-79	-55	-76	-255	-216	-214	45	-159	-106	-59
1940	136	-62	-156	-258	-620	-110	-119	-158	100	12	-67	1993
1941	522	-231	-211	-76	-152	-95	-128	-136	-58	-66	142	-136
1942	-121	-102	-360	-55	-77	-98	-126	-135	-132	-128	-67	-135
1943	-140	-200	-80	-56	-77	-98	-116	-112	-70	-27	-67	-130
1944	-115	-33	-51	-2	-74	-225	-102	-123	-69	-90	-74	-22
1945	-27	-130	-82	-12	-165	-88	-104	-118	-70	-66	-66	-104
1946	-18	-172	-77	-145	142	-216	-102	-119	-69	-65	-68	-57
1947	-31	-8	8	-44	-74	-18	-108	-109	-101	-153	-154	-8
1948	-2	63	12	4	1	-89	-116	-140	-129	-66	-67	-105
1949	-298	-84	-52	-2	-77	-58	-105	-119	-70	-99	-83	-110
1950	-24	11	-9	-62	-76	-125	-108	-122	-130	-98	-52	-17
1951	-19	-218	-84	-58	-79	-98	-103	-119	-67	-70	-67	-84
1952	-50	-41	-321	-56	-74	-98	-181	-131	-133	-94	-110	-181
1953	-140	-94	-89	-56	-7	-74	-98	-113	-126	-30	-67	-203
1954	-95	-130	-11	-145	-76	-98	-116	-61	-126	-37	-74	-73
1955	-119	-48	-182	-52	-2	-103	-25	-129	-70	-124	-151	-80
1956	8	-3	-107	-57	-75	-96	-105	-135	-132	-66	-67	-184
1957	-139	-101	169	-51	-432	-96	-73	-138	-59	-205	-78	-137
1958	-135	-71	-117	-54	-77	-98	-124	-125	-125	-87	-67	-165
1959	-140	-101	-73	-56	-69	-143	-256	46	-89	-85	-69	-921
1960	914	-671	-130	-162	-228	-246	-79	-301	-54	-98	274	-457
1961	-3	7	5	4	-731	-90	-87	-85	-228	-72	-61	-57
1962	-41	112	-13	-10	-170	-244	-258	-184	-284	-269	327	-96
1963	-626	-269	-236	-211	-842	-191	-101	-137	-107	53	-64	-127
1964	-116	-129	-72	-223	4	-428	463	-293	32	14	-70	-225
1965	-4	6	-780	-57	-80	-38	-167	-64	-70	-63	-75	-136
1966	-73	-326	-94	-41	-77	-88	-112	-101	-52	-85	-90	-59
1967	-27	-129	-208	-54	-177	-97	-126	-133	-132	-131	-122	-137
1968	-140	-85	-82	-56	-87	-252	-53	-273	11	-316	-67	-71
1969	-159	-202	-189	-77	-76	-100	-122	-236	-132	-52	-53	-340
1970	-133	-105	-81	-56	-77	-98	-65	-118	-38	-116	-67	-154
1971	-89	-128	-211	-54	49	-221	-73	-164	-126	-47	-68	-144
1972	-74	-100	-81	-237	-73	-97	-48	-75	-66	-91	-85	-62
1973	-50	-128	-221	-59	-77	-98	-104	-117	-55	-68	-97	-168
1974	-90	-264	-80	-56	-77	-98	-122	-117	-118	-60	-67	-139
1975	-265	-85	-82	-52	-90	-98	-105	-133	-125	-66	-67	-182
1976	-142	-174	-72	-2	-74	-263	-168	-303	110	-46	40	-158
1977	-5	-68	-146	3	-122	-176	-119	-88	-64	-156	-37	-115
1978	-7	-9	-12	-150	-2258	-686	-392	-122	-105	-72	-67	-132
1979	-89	56	-24	-56	-362	-253	-261	-275	-187	-149	-53	-75
1980	205	-143	-81	-109	-74	-98	-105	-118	-125	-57	-54	-232
1981	-82	-38	-11	-56	-151	-254	-261	-274	-5	-67	-76	-352
1982	201	-444	-96	-55	-78	-98	-126	-131	-132	-67	-28	-136
1983	-221	-128	-81	-56	-77	-98	-125	-133	-132	-131	-130	-136
1984	-140	-129	-81	-30	-54	-82	-66	-112	-118	-34	-67	-152
1985	24	-203	-79	-8	-77	-90	-76	-73	-70	-66	-67	-58
1986	-31	-39	-81	-65	-88	-99	-107	-119	-72	-108	-77	-107
1987	-43	-11	-8	5	-77	-557	15	-83	-162	-21	-64	-10
1988	-237	-157	-162	-157	39	-100	-1285	238	103	-36	-1	-15
1989	-5	-13	-9	-8	-7	-1412	-103	-27	-50	-168	-96	136
1990	-98	-172	-251	-167	-47	-241	-77	-271	-21	-159	-90	500
1991	0	-1	-2	-16	6	-252	-326	-294	-72	-347	-169	-238
1992	0	0	5	6	-75	-260	-321	-174	-61	-98	-193	-834
1993	-9	-5	-137	214	-86	-400	-136	-486	-122	-450	-431	-465
AVG:	-53	-94	-112	-61	-141	-173	-140	-143	-92	-100	-71	-137
MIN:	-626	-671	-1182	-314	-2258	-1412	-1285	-486	-636	-450	-431	-1465
MAX:	914	112	169	214	264	58	463	238	110	96	327	1993

Table 3.5.4-20. Simulated Sacramento River Flow Below Freeport, Upstream of DSA 70 Return Flow (CFS) Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-80	-104	-80	-55	-120	-97	-103	-133	-131	224	223	-397
1923	-119	-103	-514	-52	-1	-85	-106	-116	-346	44	43	24
1924	250	55	415	-1	-71	-84	-89	-53	-63	-71	-65	-30
1925	-344	-1	-9	-9	90	-239	-113	-131	-311	-97	-86	-19
1926	-3	-2	2	4	-105	-110	-404	-102	-58	-36	-27	35
1927	0	-141	-112	-57	-87	-94	-123	-118	-162	793	221	-131
1928	-45	-368	-291	-48	-10	-123	-119	-545	193	128	-79	-121
1929	24	37	-3	5	-76	-93	-79	-77	-698	-110	23	27
1930	0	0	-67	-64	-8	-101	-110	-98	-61	87	-28	-39
1931	-4	0	-98	7	256	-106	-89	-120	-60	-32	-34	5
1932	-3	5	-98	-70	-264	-91	-111	-125	-119	-115	-77	-6
1933	-1	0	3	-58	-79	-94	-78	-125	-59	-60	-18	-8
1934	0	0	3	-58	3	-99	-83	-81	-74	-55	-201	-82
1935	-2	-1	-2	-64	-3	-101	-277	-110	-120	-122	-76	-110
1936	-22	1	35	-93	-75	-259	-106	-123	-397	-34	229	243
1937	-85	-40	11	4	-307	-97	-123	-121	-312	-87	14	156
1938	-218	-129	-310	-56	-78	-98	-122	-134	-132	223	222	-336
1939	-560	-104	-83	-57	-77	-101	28	-107	-116	-142	-92	-59
1940	-5	-41	1	-64	-125	-102	-120	-363	-200	167	156	2215
1941	521	-244	-308	-76	-152	-95	-128	-136	-399	229	482	-138
1942	-121	-101	-334	-55	-77	-98	-126	-135	-132	1479	224	-134
1943	-138	-591	-77	-56	-76	-98	-113	-110	-110	-501	141	-131
1944	-115	-78	-18	-2	-74	-136	-102	-123	-71	-25	-25	16
1945	-95	-468	84	80	-17	-86	-104	-118	-686	169	172	-106
1946	378	-596	-86	-417	729	-592	-100	-136	96	105	94	105
1947	-2	-227	-43	-141	-70	142	-109	-116	-449	-283	-201	-11
1948	-126	-77	-39	3	-28	-89	-105	-132	-122	-65	-67	-105
1949	420	-90	-53	-2	-76	-56	-109	-124	-72	-248	111	-113
1950	-26	-63	-6	-89	-76	-413	-190	-122	-506	-35	119	-96
1951	-25	-318	-78	-60	-79	-98	-103	-119	153	682	28	-95
1952	-50	46	-1147	-56	-74	-98	-35	-132	-132	29	-52	-365
1953	-140	-94	-89	-56	-7	-73	-97	-112	-126	25	-53	-204
1954	-95	-130	-11	-190	-76	-98	-115	-61	-126	-51	-74	-73
1955	-120	-189	-184	-52	-31	-103	-71	-122	-69	-79	-126	-80
1956	-9	-18	-88	-57	-75	-96	-104	-135	-132	224	223	-416
1957	-123	-106	-17	-51	-551	-95	-73	-138	-44	-221	-77	-144
1958	-284	-71	-113	-55	-75	-98	-124	-124	-124	94	222	-482
1959	-139	-101	-73	-56	-68	-75	-101	-28	-249	16	-68	135
1960	-76	-21	21	-2	-76	-93	-80	-132	-70	-111	272	-570
1961	-2	5	4	4	-161	-100	-93	-94	-146	-68	-81	-59
1962	-17	153	-18	-8	-52	-89	-103	-96	-125	-125	-152	2
1963	-239	-136	-80	-56	-86	-38	-135	-132	87	1782	219	-127
1964	-120	-126	-71	-222	4	-507	590	-138	-115	-236	-59	-427
1965	-5	2	-742	-57	-80	-90	-122	-71	-342	-361	111	-103
1966	-75	27	-171	35	-77	-88	-102	-104	-64	-83	-93	-59
1967	-53	-127	-187	-54	-155	-97	-126	-132	-132	-131	-122	-137
1968	-140	-86	-82	-55	-86	-97	-67	-118	-52	-117	-67	-71
1969	-102	-69	-105	-59	-77	-98	-121	-172	-132	222	221	-513
1970	-445	-105	-82	-56	-77	-98	-66	-118	-14	-127	-53	-163
1971	-91	-127	-242	-54	70	-224	-73	-163	-126	-44	-52	-144
1972	-74	-100	-80	-257	-72	-97	-47	-75	-66	-87	-81	-62
1973	-50	-128	-221	-59	-77	-98	-104	-117	-327	118	42	-321
1974	-78	-18	-83	-56	-77	-98	-121	-117	-167	129	150	-137
1975	-532	-133	-14	-51	-131	-97	-105	-133	-125	105	104	-314
1976	-140	-277	-184	-1	-74	-108	-101	-137	10	-91	-36	-32
1977	-4	-71	-57	-4	-151	-172	-205	-94	-34	-297	-29	-77
1978	-7	-9	-10	-72	-174	169	-126	-117	-106	-108	-68	-130
1979	-85	-27	-34	-56	-219	-97	-105	-117	-236	-102	-132	-75
1980	-117	-38	-81	-57	-74	-97	-105	-118	-125	152	169	-568
1981	-80	-38	-10	-56	-509	-104	-106	-119	-55	-67	-70	-159
1982	82	-153	-88	-57	-78	-98	-126	-131	-132	144	62	-135
1983	-386	-127	-80	-56	-77	-98	-125	-133	-132	-130	-130	-136
1984	-140	-129	-81	-28	-52	-81	-67	-111	-135	-76	-19	-197
1985	106	-199	-79	-8	-76	-89	-76	-73	-70	-66	-67	-59
1986	-51	-39	-82	-63	-89	-99	-107	-119	-360	-44	23	-108
1987	-43	-11	-7	5	-77	-372	2	-80	-100	-76	-74	-48
1988	-106	-4	-6	-64	3	-101	-125	-73	-73	-137	-69	-276
1989	-5	-6	-5	-6	-7	-398	-110	-57	-69	-118	-75	-105
1990	30	-105	-169	-59	-49	-101	-79	-123	-55	-275	33	432
1991	1	-1	-3	5	4	-99	-131	-139	-72	-84	-51	-83
1992	0	0	4	3	-76	-107	-131	-120	-71	-90	-211	-75
1993	-8	-4	-19	-98	-84	-202	-130	-393	-125	-21	-19	-30
AVG:	-63	-93	-98	-54	-72	-122	-99	-127	-144	23	14	-85
MIN:	-560	-596	-1147	-417	-551	-592	-404	-545	-698	-501	-211	-570
MAX:	521	153	415	80	729	169	590	-28	193	1782	482	2215

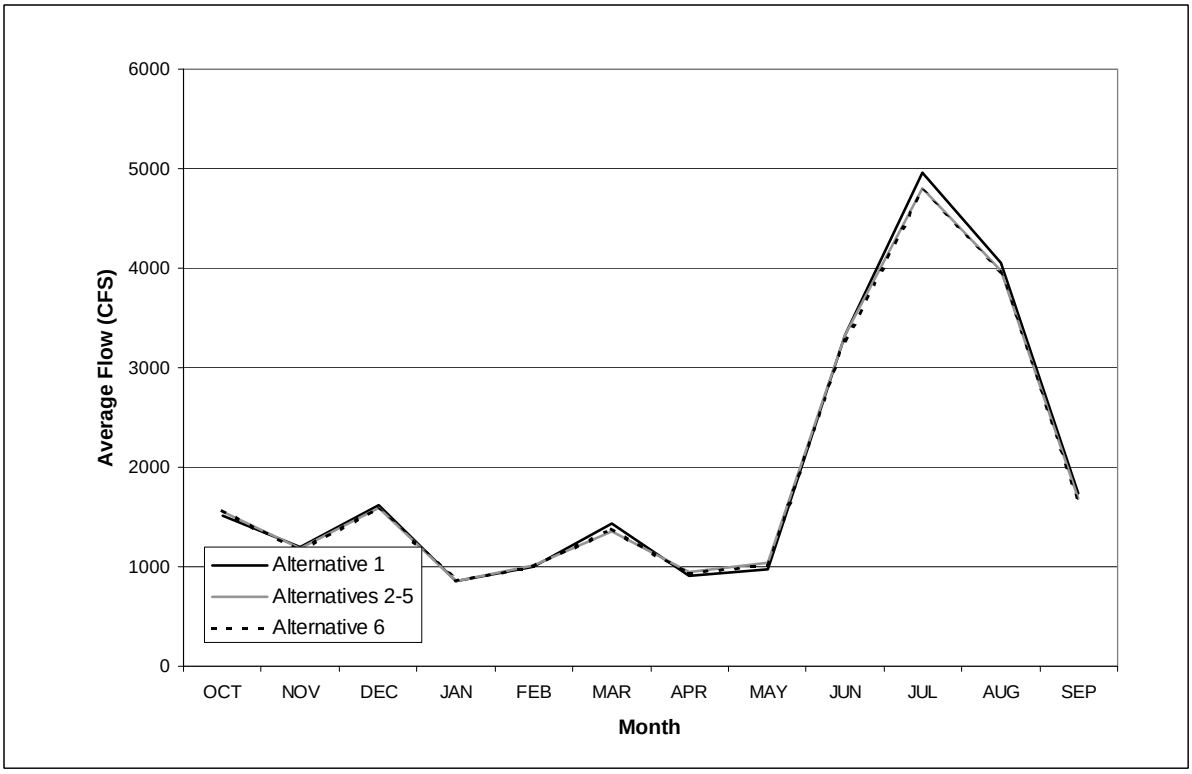


Figure 3.5.4-3 Simulated Average Monthly Feather River Flow Below Thermalito (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-21. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1436	1900	2499	1108	5147	4202	627	16082	5867	8556	5947	408
1923	1108	1900	3476	4334	1093	3000	1314	1113	2975	7246	6749	2203
1924	2842	1900	4341	1108	1034	2329	1657	2235	2993	3500	3298	2046
1925	294	308	294	294	300	2335	156	148	4032	698	428	156
1926	494	308	1134	294	300	148	797	3538	3909	6225	5002	1141
1927	1865	308	3504	294	11937	6513	4087	3294	2577	5157	6129	408
1928	3357	1097	2108	1108	2635	21741	408	4512	4672	4429	4618	2351
1929	2159	1097	1108	1108	1093	1108	156	1524	2298	1260	1262	699
1930	1008	518	3226	294	2260	148	156	287	3403	6871	5442	1293
1931	294	308	1153	294	300	148	2229	1407	2858	8504	4138	2288
1932	1727	347	3391	294	269	1228	156	148	1778	5319	3040	156
1933	961	1900	294	294	300	3344	156	148	1419	1227	1093	736
1934	606	308	2259	294	1966	148	2144	1807	2728	2107	2342	2557
1935	1659	308	294	294	300	148	408	2628	7592	7491	6408	1468
1936	3400	1900	2171	1108	1034	1618	408	392	1197	7370	6649	858
1937	2835	1900	2109	1108	1093	1108	408	392	3443	6711	7005	1357
1938	1782	1097	3270	4730	13937	18805	12443	16562	7466	7611	4181	408
1939	1743	2319	2747	3146	2082	4229	1615	3159	5638	7461	7380	2676
1940	3137	1900	603	603	565	15641	3185	1964	6154	8807	7196	408
1941	2802	1900	1108	1211	17039	10874	3150	7805	5321	7359	3030	408
1942	1108	1097	14840	13774	17043	2209	9901	5074	5189	6667	5217	408
1943	1108	2853	8134	18186	6903	15506	3546	392	4714	3459	6200	408
1944	1108	1263	2025	1108	1034	2423	408	392	5970	7577	6806	1785
1945	3355	1097	1108	1962	1093	1108	408	392	6106	7901	6958	408
1946	1558	1097	1108	3531	6625	3305	408	956	6192	8351	7387	2649
1947	2882	1532	1108	1108	1093	1108	408	1080	3375	7592	7254	1511
1948	1134	804	1271	603	831	392	408	392	408	7820	6703	408
1949	1800	1900	1108	1108	1093	1108	156	148	6185	4039	410	156
1950	294	307	294	294	300	471	1415	2575	7449	8435	6537	408
1951	1108	1097	13655	11092	10255	3943	408	903	2619	8514	6048	948
1952	2853	1097	1812	8331	11557	6514	16834	19489	8242	1578	392	2902
1953	4263	2243	8508	20423	1093	5593	3900	2578	4889	5413	6026	408
1954	1108	1097	1108	9090	7991	9563	5553	7161	4938	6831	6512	2466
1955	3400	1762	1108	1108	1093	1108	408	392	3978	2519	1368	408
1956	1108	1097	6214	20407	10756	5850	2582	10131	3720	8516	5725	408
1957	1108	1097	4415	1108	14536	6350	3022	392	5597	4983	5062	408
1958	1108	1104	1108	1108	22815	11342	7063	9818	6016	1252	1919	826
1959	4284	2229	2768	9400	8985	1674	408	1744	6276	8471	6771	1170
1960	2956	1900	1947	603	565	392	899	392	5063	5675	6386	1770
1961	603	593	658	603	606	392	156	552	3258	5992	6713	2043
1962	2897	1320	294	294	300	148	156	1260	7264	6968	7035	2282
1963	603	593	603	1308	11366	7735	12490	2418	4903	5007	5681	408
1964	1108	1097	1108	1108	1034	1591	5421	392	4446	7643	7058	3851
1965	2011	1097	4052	18580	4276	4684	7066	4549	625	4895	5103	408
1966	1108	2659	3047	2929	1202	3728	469	3915	5534	7141	5930	2583
1967	3400	1097	1108	1108	3814	13838	1540	8483	7826	801	392	2456
1968	4585	2186	3054	7543	11193	6064	3775	392	4355	5461	6413	2875
1969	2672	1097	1108	11718	11887	5892	6861	12048	3001	1018	4685	518
1970	2767	3226	15801	35278	10069	3553	2621	392	4264	6036	7001	3488
1971	3400	1097	1108	1108	1462	9368	3050	7799	4823	9287	5580	408
1972	1277	1900	1108	1450	5979	6246	408	407	4143	5189	5476	1153
1973	1108	1097	1108	6638	9526	5539	408	1755	6832	6189	5569	408
1974	1108	3874	9628	19970	5192	25693	7747	4991	6289	1616	2934	408
1975	1499	2905	2263	2368	12638	12333	408	7508	5402	7375	1466	408
1976	1108	1274	3404	3026	3390	2908	408	665	1212	4642	3325	2745
1977	1476	1695	1121	603	700	545	1071	451	2857	3109	2726	489
1978	884	308	294	294	300	670	4431	392	2339	766	6075	408
1979	603	1167	6728	603	5894	3850	408	392	6680	4964	5594	408
1980	1387	1097	1108	14093	17554	4742	408	392	408	7029	6203	408
1981	1108	1097	1108	1108	2957	6386	408	392	4518	6479	6256	2577
1982	2781	593	14726	7743	17397	12836	18388	7319	2992	6902	3227	408
1983	3833	8103	10401	12097	21136	31245	8151	11222	11015	2125	786	4444
1984	4471	13969	23745	5012	8009	8445	1043	392	4554	6825	6176	3529
1985	1683	1097	1108	1438	1093	1108	1905	2761	4263	7761	6462	3963
1986	3400	1900	1108	1108	18940	21287	408	392	4023	8016	6034	408
1987	1108	1097	1108	1108	1093	1555	2775	508	4535	6297	5451	2827
1988	3400	1900	603	603	565	599	156	1103	1999	3491	1561	1116
1989	1389	308	294	294	300	1542	156	2687	4283	7640	6826	2186
1990	3119	1900	4039	294	300	148	745	148	244	1471	2627	907
1991	1135	1033	951	294	300	148	156	148	970	1894	1236	699
1992	294	970	294	294	269	148	156	330	873	1129	1048	2513
1993	612	1392	294	294	300	11262	2870	7013	3694	8391	6584	1882
AVG:	1904	1624	3239	4305	5297	5486	2645	3154	4301	5542	4809	1382
MIN:	294	307	294	294	269	148	156	148	244	698	392	156
MAX:	4585	13969	23745	35278	22815	31245	18388	19489	11015	9287	7387	4444

Table 3.5.4-22. Simulated Feather River Flow Below Thermalito (CFS)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1482	1900	2499	1108	5095	4202	627	16082	5867	8571	6003	408
1923	1108	1900	3401	4334	1093	3000	1314	1113	3037	7260	6804	2306
1924	2880	1900	4474	1108	1034	2367	1737	2401	3124	3507	3168	1622
1925	294	308	294	294	300	2304	156	148	3997	684	417	156
1926	532	308	1134	294	300	148	763	3584	3974	6233	5015	1356
1927	1881	307	3504	294	11549	6513	4087	3294	2366	5046	6187	408
1928	3400	1097	2108	1108	2635	21906	408	4530	4634	4452	4628	2355
1929	2142	1097	1108	1108	1093	1108	156	1608	1705	1318	1312	741
1930	1065	831	3227	294	2260	148	156	375	3462	6981	5505	1283
1931	294	308	1204	294	300	148	2233	1418	2788	8570	4141	2396
1932	1734	347	3391	294	269	1228	156	148	1789	5292	3012	156
1933	970	1900	294	294	300	3344	156	148	1471	1279	1138	806
1934	633	308	2259	294	1966	148	2218	1853	2776	2167	1884	2195
1935	1607	308	294	294	300	148	408	2627	7603	7475	6337	1149
1936	3400	1900	2087	1108	1034	1775	408	392	1277	7397	6673	904
1937	2793	1900	2132	1108	1093	1108	408	392	3439	6712	6994	1404
1938	1728	1097	3265	4730	13937	18805	12443	16562	7466	7628	4276	408
1939	1671	2319	2747	3146	2082	4229	1661	3224	5740	7510	7412	2784
1940	3229	1900	603	603	565	15166	3185	1924	6231	8820	7211	2532
1941	3400	1900	1108	1108	14090	10874	3150	7805	5353	7417	3330	408
1942	1108	1097	14561	13774	17043	2209	9901	5074	5189	6620	5313	408
1943	1108	2782	8134	18186	6903	15506	3546	392	4766	3499	6256	408
1944	1108	1294	1985	1108	1034	2289	408	392	5985	7592	6819	1782
1945	3352	1097	1108	1959	1093	1108	408	392	6120	7893	6984	408
1946	1585	1097	1108	3444	6764	3180	408	956	6205	8365	7402	2696
1947	2887	1546	1108	1108	1093	1108	408	1093	3356	7610	7259	1517
1948	1143	841	1280	603	829	392	408	392	408	7831	6758	408
1949	1563	1900	1108	1108	1093	1108	156	148	6199	4029	431	156
1950	294	308	294	294	300	436	1415	2575	7449	8450	6581	408
1951	1108	1097	13596	11092	10255	3943	408	903	2677	8516	6105	979
1952	2891	1097	1630	8331	11557	6514	16834	19489	8242	1578	392	2902
1953	4263	2243	8508	20423	1093	5593	3900	2578	4889	5444	6083	408
1954	1108	1097	1108	9002	7991	9563	5553	7175	4937	6922	6525	2523
1955	3400	1737	1108	1108	1093	1108	408	392	3969	2510	1368	408
1956	1108	1097	6137	20407	10756	5850	2582	10131	3720	8530	5781	408
1957	1108	1097	4657	1108	14181	6350	3036	392	5615	4954	5051	408
1958	1108	1104	1108	1108	22808	11342	7063	9818	6016	1266	1996	797
1959	4284	2229	2768	9400	8985	1674	408	2064	6320	8521	6825	513
1960	3400	1900	1940	603	565	392	977	392	5118	5609	6577	1354
1961	603	593	658	603	606	392	156	588	3081	6428	6732	2079
1962	2915	1371	294	294	300	148	156	1349	7261	6972	7305	2448
1963	603	593	603	1307	10756	7734	12490	2418	4921	5115	5739	408
1964	1108	1097	1108	1108	1034	1407	5623	392	4765	7697	7095	3718
1965	2071	1097	3766	18580	4276	4684	7066	4569	680	4923	5156	408
1966	1108	2499	3047	2929	1202	3728	469	3932	5557	7123	5935	2605
1967	3400	1097	1108	1108	3760	13838	1540	8483	7826	801	392	2456
1968	4585	2186	3054	7543	11193	6064	3868	392	4425	5342	6465	2972
1969	2724	1097	1108	11481	11887	5892	6861	12048	3001	1036	4756	426
1970	2767	3226	15801	35278	10069	3553	2635	392	4292	6015	7020	3460
1971	3400	1097	1108	1108	1536	9289	3050	7799	4823	9306	5637	408
1972	1323	1900	1108	1270	5979	6246	408	459	4161	5188	5476	1180
1973	1108	1097	1108	6546	9526	5539	408	1755	6852	6198	5564	408
1974	1108	3850	9628	19970	5192	25693	7747	4991	6296	1685	2984	408
1975	1374	2905	2263	2368	12638	12333	408	7508	5402	7389	1522	408
1976	1108	1201	3404	3026	3390	2908	408	665	1364	4740	3454	2796
1977	1470	1665	1036	603	637	579	1087	504	2914	3022	2766	899
1978	909	308	294	294	300	148	4172	392	2359	819	6130	408
1979	634	1288	6713	603	5608	3850	408	392	6744	4964	5687	614
1980	1828	1097	1108	13376	17554	4742	408	392	408	7046	6221	408
1981	1108	1097	1108	1108	2883	6386	408	392	4593	6580	6306	2495
1982	3205	593	14200	7743	17397	12836	18388	7319	2992	6922	3356	408
1983	3754	8103	10401	12097	21136	31245	8151	11222	11015	2125	786	4444
1984	4471	13969	23745	5012	8009	8445	1055	392	4563	6854	6238	3495
1985	1801	1097	1108	1440	1093	1108	1933	2805	4254	7776	6476	4024
1986	3400	1900	1108	1108	18562	21287	408	392	4078	8032	6081	408
1987	1108	1097	1108	1108	1093	1258	2849	562	4573	6464	5506	2950
1988	3400	1900	603	603	565	658	156	1643	2212	3572	1665	1123
1989	1395	308	294	294	300	405	156	2713	4394	7655	6831	2309
1990	3038	1900	3939	294	300	148	795	148	298	1630	2527	1268
1991	1073	867	949	294	300	148	156	148	1023	1949	1280	699
1992	294	985	294	294	269	148	156	308	880	1129	1048	2513
1993	934	764	294	294	300	10957	2870	7013	3694	8281	6513	1133
AVG:	1935	1616	3220	4284	5228	5446	2652	3179	4319	5567	4842	1401
MIN:	294	307	294	294	269	148	156	148	298	684	392	156
MAX:	4585	13969	23745	35278	22808	31245	18388	19489	11015	9306	7412	4444

Table 3.5.4-23. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1476	1900	2499	1108	5102	4202	627	16082	5867	8643	6296	408
1923	1108	1900	3040	4335	1093	3001	1315	1113	2753	7287	6878	2306
1924	3011	1900	4719	1108	1034	2320	1687	2269	3010	3433	3276	1825
1925	294	308	294	294	300	2304	156	148	4016	716	439	156
1926	474	308	1134	294	300	148	487	3558	3927	6252	5019	1184
1927	1881	308	3504	294	11781	6513	4087	3294	2547	5825	6476	408
1928	3400	1097	2107	1108	2634	20667	408	4338	4842	4636	4615	2355
1929	2237	1097	1108	1108	1093	1108	156	1545	1666	1271	1277	701
1930	1013	770	3227	294	2260	148	156	308	3409	6943	5433	1299
1931	294	308	1114	294	300	148	2235	1420	2859	8545	4141	2311
1932	1811	347	3391	294	269	1228	156	148	1792	5303	3027	156
1933	960	1900	294	294	300	3344	156	148	1432	1239	1097	736
1934	605	308	2259	294	1966	148	2158	1819	2742	2121	2108	2489
1935	1638	308	294	294	300	148	408	2640	7603	7482	6426	1460
1936	3400	1900	2203	1108	1034	1458	408	392	930	7460	6735	1183
1937	2762	1900	2116	1108	1093	1108	408	392	3382	6749	7046	1618
1938	1611	1097	3054	4730	13937	18805	12443	16562	7466	7698	4785	408
1939	1313	2319	2747	3146	2082	4229	1751	3177	5634	7344	7365	2687
1940	3121	1900	603	603	565	15483	3185	1720	6090	8881	7269	2756
1941	3400	1900	1108	1108	14093	10874	3150	7805	5121	7710	3586	408
1942	1108	1097	14587	13774	17043	2209	9901	5074	5189	7822	6017	408
1943	1108	2389	8134	18186	6903	15506	3546	392	4724	3254	6462	408
1944	1108	1249	2017	1108	1034	2378	408	392	5987	7589	6816	1820
1945	3263	1097	1108	1837	1093	1108	408	392	5905	8026	7008	408
1946	1880	1097	1108	3183	7165	2817	408	956	6246	8411	7447	2860
1947	2858	1451	1108	1108	1093	1108	408	1085	3066	7612	7268	1497
1948	1069	727	1231	603	817	392	408	392	408	7831	6758	408
1949	2280	1900	1108	1108	1093	1108	156	148	6200	3876	471	156
1950	294	308	294	294	300	148	1335	2574	7074	8512	6676	408
1951	1108	1097	13797	11092	10255	3943	408	903	2898	9142	6203	862
1952	2903	1097	1108	8306	11557	6514	16834	19489	8242	1578	392	2902
1953	4263	2243	8508	20423	1093	5593	3900	2578	4889	5484	6097	408
1954	1108	1097	1108	8956	7991	9563	5553	7175	4937	6893	6525	2523
1955	3400	1605	1108	1108	1093	1108	408	392	4002	2541	1368	408
1956	1108	1097	6198	20407	10756	5850	2582	10131	3720	8602	6071	408
1957	1108	1097	4472	1108	14062	6350	3036	392	5619	4893	5025	408
1958	1108	1104	1108	1108	22887	11342	7063	9818	6016	1338	2398	473
1959	4284	2229	2768	9400	8985	1674	408	1835	6199	8505	6787	1413
1960	2942	1900	1979	603	565	392	912	392	5078	5636	6629	1216
1961	603	593	658	603	606	392	156	583	3177	6475	6703	2070
1962	2912	1328	294	294	300	148	156	1282	7265	6968	6906	2387
1963	603	593	603	1308	11356	7735	12490	2418	5115	6594	6033	408
1964	1108	1097	1108	1108	1034	1174	5621	392	4462	7657	7068	3517
1965	2062	1097	3585	18580	4276	4684	7066	4564	408	4562	5342	408
1966	1108	2953	3047	2929	1202	3728	469	3929	5551	7124	5933	2605
1967	3400	1097	1108	1108	3771	13838	1540	8483	7826	801	392	2456
1968	4585	2186	3054	7543	11193	6064	3791	392	4373	5440	6427	2901
1969	2670	1097	1108	11669	11887	5892	6861	12048	3001	1104	5030	408
1970	2443	3226	15801	35278	10069	3553	2635	392	4300	5997	7023	3451
1971	3400	1097	1108	1108	1554	9289	3050	7799	4823	9295	5653	408
1972	1322	1900	1108	1249	5979	6246	408	459	4161	5192	5479	1179
1973	1108	1097	1108	6539	9526	5539	408	1755	6768	6226	5563	408
1974	1108	3926	9628	19970	5192	25693	7747	4991	6247	1837	3241	408
1975	1108	2808	2263	2367	12638	12333	408	7508	5402	7432	1694	408
1976	1108	1097	3291	3026	3390	2908	408	665	1294	4608	3353	2737
1977	1405	1590	1066	603	609	514	962	463	2883	3162	2737	493
1978	891	308	294	294	300	936	4430	392	2358	780	6129	408
1979	633	1205	6704	603	5751	3850	408	392	6674	4980	5574	458
1980	1342	1097	1108	14080	17554	4742	408	392	408	7098	6277	408
1981	1108	1097	1108	1108	2524	6386	408	392	4537	6539	6270	2548
1982	2952	593	14519	7743	17397	12836	18388	7319	2992	6971	3610	408
1983	3589	8103	10401	12097	21136	31245	8151	11222	11015	2125	786	4444
1984	4471	13969	23745	5012	8009	8445	1054	392	4546	6798	6287	3466
1985	1882	1097	1108	1439	1093	1108	1933	2805	4255	7776	6476	4021
1986	3400	1900	1108	1108	18531	21287	408	392	3789	8094	6181	408
1987	1108	1097	1108	1108	1093	1288	2806	523	4548	6317	5465	2856
1988	3400	1900	603	603	565	590	156	1168	2012	3425	1551	1038
1989	1377	308	294	294	300	1249	156	2703	4302	7655	6836	2157
1990	3171	1900	3959	294	300	148	754	148	259	1493	2495	1266
1991	1089	924	950	294	300	148	156	148	984	1909	1249	699
1992	294	972	294	294	269	148	156	339	885	1129	1048	2513
1993	717	1136	294	294	300	11156	2870	7013	3694	8412	6613	2059
AVG:	1911	1612	3211	4290	5241	5441	2645	3156	4275	5626	4905	1418
MIN:	294	308	294	294	269	148	156	148	259	716	392	156
MAX:	4585	13969	23745	35278	22887	31245	18388	19489	11015	9295	7447	4444

Table 3.5.4-24. Simulated Feather River Flow Below Thermalito (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	46	0	0	0	-52	0	0	0	0	15	56	0
1923	0	0	-75	0	0	0	0	0	62	14	55	103
1924	38	0	134	0	0	38	80	167	131	7	-129	-423
1925	0	0	0	0	0	-31	0	0	-35	-14	-10	0
1926	38	0	0	0	0	0	-34	45	65	8	13	215
1927	15	0	0	0	-388	0	0	0	-211	-112	58	0
1928	43	0	0	0	0	165	0	18	-38	23	9	5
1929	-17	0	0	0	0	0	0	84	-593	58	50	41
1930	57	313	2	0	0	0	0	88	59	110	63	-10
1931	0	0	52	0	0	0	5	11	-69	66	2	107
1932	6	0	0	0	0	0	0	0	11	-27	-27	0
1933	9	0	0	0	0	0	0	0	52	52	45	70
1934	27	0	0	0	0	0	73	46	48	60	-458	-362
1935	-52	0	0	0	0	0	0	-1	11	-15	-70	-320
1936	0	0	-84	0	0	157	0	0	80	26	24	46
1937	-42	0	22	0	0	0	0	0	-4	0	-11	47
1938	-54	0	-6	0	0	0	0	0	0	16	95	0
1939	-72	0	0	0	0	0	46	65	101	49	32	108
1940	93	0	0	0	0	-475	0	-40	77	13	14	2123
1941	598	0	0	-104	-2950	0	0	0	33	58	300	0
1942	0	0	-279	0	0	0	0	0	0	-47	97	0
1943	0	-71	0	0	0	0	0	0	51	39	56	0
1944	0	31	-40	0	0	-134	0	0	15	15	12	-3
1945	-4	0	0	-2	0	0	0	0	14	-8	26	0
1946	28	0	0	-87	139	-126	0	0	14	14	15	47
1947	5	14	0	0	0	0	0	13	-20	17	5	6
1948	8	37	9	0	-2	0	0	0	0	11	55	0
1949	-237	0	0	0	0	0	0	0	14	-10	21	0
1950	0	0	0	0	0	-34	0	0	0	15	45	0
1951	0	0	-59	0	0	0	0	0	58	3	56	31
1952	38	0	-183	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	32	57	0
1954	0	0	0	-88	0	0	0	14	-1	91	14	57
1955	0	-25	0	0	0	0	0	0	-9	-9	0	0
1956	0	0	-77	0	0	0	0	0	0	14	56	0
1957	0	0	241	0	-355	0	15	0	18	-30	-11	0
1958	0	0	0	0	-8	0	0	0	0	14	77	-30
1959	0	0	0	0	0	0	0	321	44	50	54	-657
1960	444	0	-7	0	0	0	78	0	55	-66	191	-416
1961	0	0	0	0	0	0	0	36	-177	436	19	36
1962	18	51	0	0	0	0	0	88	-4	4	270	167
1963	0	0	0	0	-610	0	0	0	18	108	59	0
1964	0	0	0	0	0	-184	202	0	318	54	37	-133
1965	60	0	-286	0	0	0	0	19	55	28	53	0
1966	0	-160	0	0	0	0	0	18	23	-18	6	22
1967	0	0	0	0	-54	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	93	0	70	-118	52	97
1969	52	0	0	-237	0	0	0	0	0	18	71	-91
1970	0	0	0	0	0	0	14	0	28	-21	19	-28
1971	0	0	0	0	75	-78	0	0	0	19	56	0
1972	46	0	0	-181	0	0	0	52	18	-1	0	26
1973	0	0	0	-92	0	0	0	0	20	9	-5	0
1974	0	-24	0	0	0	0	0	0	7	69	50	0
1975	-125	0	0	0	0	0	0	0	0	14	56	0
1976	0	-72	0	0	0	0	0	0	152	98	129	51
1977	-6	-30	-84	0	-63	34	16	53	58	-86	39	410
1978	25	0	0	0	0	-522	-259	0	20	53	54	0
1979	30	120	-15	0	-286	0	0	0	64	1	93	206
1980	441	0	0	-717	0	0	0	0	0	16	18	0
1981	0	0	0	0	-74	0	0	0	75	101	50	-83
1982	424	0	-526	0	0	0	0	0	0	20	129	0
1983	-80	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	0	8	30	61	-34
1985	118	0	0	1	0	0	28	45	-9	15	14	61
1986	0	0	0	0	-378	0	0	0	55	16	47	0
1987	0	0	0	0	0	-297	74	54	38	167	55	123
1988	0	0	0	0	0	58	0	540	214	81	104	7
1989	6	0	0	0	0	-1137	0	27	111	15	5	123
1990	-81	0	-100	0	0	0	50	0	54	159	-100	361
1991	-62	-166	-1	0	0	0	0	0	53	55	44	0
1992	0	15	0	0	0	0	0	-22	7	-1	-1	0
1993	322	-629	0	0	0	-304	0	0	0	-110	-71	-749
AVG:	31	-8	-19	-21	-70	-40	7	24	18	25	33	19
MIN:	-237	-629	-526	-717	-2950	-1137	-259	-40	-593	-118	-458	-749
MAX:	598	313	241	1	139	165	202	540	318	436	300	2123

Table 3.5.4-25. Simulated Feather River Flow Below Thermalito (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	41	0	0	0	-45	0	0	0	0	87	349	0
1923	0	0	-435	0	0	0	0	1	-222	41	129	104
1924	170	0	379	0	0	-9	30	34	17	-67	-21	-221
1925	0	0	0	0	0	-32	0	0	-16	18	11	0
1926	-20	0	0	0	0	0	-309	20	19	27	17	43
1927	16	0	0	0	-156	0	0	0	-29	667	347	0
1928	43	0	-1	0	0	-1074	0	-174	171	207	-3	4
1929	78	0	0	0	0	0	0	21	-632	11	15	1
1930	5	252	2	0	0	0	0	22	6	72	-9	6
1931	0	0	-39	0	0	0	6	13	1	41	2	23
1932	84	0	0	0	0	0	0	0	14	-17	-12	0
1933	-1	0	0	0	0	0	0	0	13	12	4	0
1934	-1	0	0	0	0	0	14	12	14	15	-234	-69
1935	-21	0	0	0	0	0	0	12	11	-8	19	-9
1936	0	0	31	0	0	-161	0	0	-267	90	86	326
1937	-73	0	7	0	0	0	0	0	-61	37	42	262
1938	-171	0	-216	0	0	0	0	0	0	87	605	0
1939	-431	0	0	0	0	0	135	18	-5	-117	-14	11
1940	-16	0	0	0	0	-158	0	-245	-64	74	73	2348
1941	598	0	0	-104	-2946	0	0	0	-200	351	556	0
1942	0	0	-254	0	0	0	0	0	0	1155	800	0
1943	0	-463	0	0	0	0	0	0	10	-205	263	0
1944	0	-14	-8	0	0	-46	0	0	17	12	10	35
1945	-92	0	0	-124	0	0	0	0	-201	125	50	0
1946	323	0	0	-348	540	-488	0	0	54	60	60	211
1947	-24	-80	0	0	0	0	0	6	-309	20	14	-14
1948	-66	-77	-40	0	-14	0	0	0	0	11	55	0
1949	480	0	0	0	0	0	0	0	15	-163	61	0
1950	0	0	0	0	0	-323	-80	0	-376	77	140	0
1951	0	0	142	0	0	0	0	0	278	629	154	-86
1952	50	0	-705	-26	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	72	71	0
1954	0	0	0	-134	0	0	0	14	-1	62	14	57
1955	0	-157	0	0	0	0	0	0	23	23	0	0
1956	0	0	-16	0	0	0	0	0	0	87	347	0
1957	0	0	57	0	-474	0	15	0	22	-90	-37	0
1958	0	0	0	0	72	0	0	0	0	87	479	-353
1959	0	0	0	0	0	0	0	92	-77	34	16	243
1960	-14	0	32	0	0	0	13	0	14	-39	244	-554
1961	0	0	0	0	0	0	0	30	-81	483	-10	27
1962	15	7	0	0	0	0	0	21	0	0	-129	106
1963	0	0	0	0	-10	0	0	0	212	1587	352	0
1964	0	0	0	0	0	-417	200	0	16	13	9	-334
1965	51	0	-467	0	0	0	0	15	-217	-334	239	0
1966	0	294	0	0	0	0	0	14	17	-17	4	22
1967	0	0	0	0	-43	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	16	0	18	-20	14	26
1969	-2	0	0	-49	0	0	0	0	0	86	345	-109
1970	-324	0	0	0	0	0	14	0	35	-39	22	-36
1971	0	0	0	0	93	-79	0	0	0	8	72	0
1972	45	0	0	-201	0	0	0	52	18	3	4	26
1973	0	0	0	-99	0	0	0	0	-64	37	-6	0
1974	0	52	0	0	0	0	0	0	-42	221	307	0
1975	-391	-97	0	-1	0	0	0	0	0	57	228	0
1976	0	-176	-113	0	0	0	0	0	81	-34	28	-8
1977	-71	-105	-54	0	-91	-31	-110	11	27	53	11	4
1978	7	0	0	0	0	266	0	0	19	14	54	0
1979	30	38	-24	0	-142	0	0	0	-6	16	-20	49
1980	-45	0	0	-13	0	0	0	0	0	68	74	0
1981	0	0	0	0	-433	0	0	0	20	60	13	-30
1982	171	0	-207	0	0	0	0	0	0	69	382	0
1983	-245	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	0	-9	-26	110	-63
1985	199	0	0	1	0	0	28	44	-8	14	14	58
1986	0	0	0	0	-408	0	0	0	-234	77	147	0
1987	0	0	0	0	0	-267	32	14	14	19	15	29
1988	0	0	0	0	0	-10	0	65	14	-66	-10	-78
1989	-11	0	0	0	0	-293	0	17	20	16	9	-29
1990	51	0	-80	0	0	0	9	0	15	22	-132	359
1991	-46	-109	-1	0	0	0	0	0	14	15	13	0
1992	0	1	0	0	0	0	0	10	12	0	0	0
1993	105	-257	0	0	0	-106	0	0	0	21	29	177
AVG:	7	-12	-28	-15	-56	-45	0	2	-26	83	96	36
MIN:	-431	-463	-705	-348	-2946	-1074	-309	-245	-632	-334	-234	-554
MAX:	598	294	379	1	540	266	200	92	278	1587	800	2348

Table 3.5.4-26. Simulated Feather River Flow at the Mouth (CFS)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3394	2909	1708	5271	8879	13014	10272	28470	20677	11886	6805	3351
1923	2103	2762	2712	12160	3320	6085	9251	4831	6095	8182	7278	4440
1924	4176	2843	4861	4630	3728	2863	3063	2790	3089	3576	5841	2690
1925	1701	1261	923	4621	12130	8219	4370	3393	6053	2426	1268	2576
1926	1911	1267	894	5654	5959	5171	6075	6052	4206	7377	5107	3167
1927	3316	7315	894	9885	32936	18476	14414	11362	8290	7603	7136	2893
1928	4710	2742	1708	8894	1634	41689	7795	8556	5558	5264	5421	4828
1929	3872	2489	2003	4892	3496	4245	1954	2408	3091	3552	1543	1409
1930	2245	996	894	8070	900	10330	5345	4156	5197	8130	6436	4204
1931	1775	1622	2413	2176	3139	1579	3317	2319	3415	8440	6327	2938
1932	2781	908	894	10278	5223	748	3364	3266	5323	7452	4138	2773
1933	2332	2013	1696	2738	4702	748	3381	1307	2666	3533	1346	1544
1934	1540	1185	894	6099	900	2811	4834	2202	2995	4048	2295	3110
1935	2488	1264	1770	9620	1601	7778	8710	11038	12798	8712	7479	4138
1936	5019	3056	2938	9750	14688	14720	8855	5362	5119	8557	7634	3265
1937	4137	2517	3263	3997	12649	14144	7321	5968	6348	8003	8004	3686
1938	3011	3320	14600	11985	25916	36251	27109	27367	19425	11108	5516	2675
1939	2737	3397	4102	4909	3933	6015	2564	4402	6246	8190	7586	5263
1940	4342	2497	1278	5588	5471	39126	32443	8381	9139	9898	8088	3030
1941	3881	4427	5772	10887	28532	23556	6644	15729	9902	10208	4201	2943
1942	1995	2602	17599	18650	34532	10487	22570	14480	12894	9409	6127	2805
1943	2538	4690	11548	25580	16758	25989	11929	7174	7737	4237	7162	2628
1944	2711	2219	3449	4113	7091	8356	2902	2114	6926	8027	7611	3900
1945	4204	3947	4029	4456	11318	7373	3795	2304	8372	8701	7846	2720
1946	2419	3473	5569	16054	11736	6933	3729	3852	7525	8958	8183	5202
1947	4387	3176	3797	2965	4504	5514	4194	1974	4312	7787	7572	4342
1948	2552	2083	2243	2324	2606	3064	7431	8906	5281	9673	8214	3511
1949	3591	2647	2810	2961	3488	8484	3031	2097	6718	5025	758	2845
1950	1720	1284	1171	4883	8183	4986	6353	6633	10907	9460	7653	3332
1951	2095	11455	31748	26106	20950	11665	5367	5188	3552	8489	7404	3839
1952	4496	3590	4063	25099	21918	16612	27698	35053	17898	5160	2509	5455
1953	5921	3249	10729	21833	8622	9465	5983	8339	9992	7324	6795	3333
1954	2654	2626	2405	9416	15685	17453	13187	10236	5765	7209	7026	5212
1955	5107	2919	4403	5300	3148	3094	2897	2727	4409	2942	992	2534
1956	2196	1831	6552	40760	19283	17057	8304	17840	8633	9753	5934	2968
1957	2138	2183	5075	3331	13972	18323	6728	4496	8430	5044	6440	2635
1958	2805	1697	3491	4407	28212	31159	25442	20315	12241	3878	2935	3611
1959	6030	3014	3397	12270	17994	6243	2544	3366	7005	8012	7176	3108
1960	4175	2577	2904	3406	5381	3339	3101	2076	5723	6835	6489	3771
1961	2190	2372	1203	2447	5470	1750	2832	2199	3923	6989	6530	4297
1962	4325	1998	1091	1605	12454	5843	2477	3037	8794	7298	7705	4678
1963	10690	4084	6101	1203	26068	12856	26718	12705	9143	5893	6907	3240
1964	2781	5521	1982	7087	3193	3657	8693	2469	5831	8373	8006	5907
1965	3051	3077	6510	42298	12639	9078	12782	10610	4824	6056	7099	3549
1966	2917	5247	5685	7791	6084	7130	4418	6497	6435	7804	6358	4582
1967	4790	2215	7979	4837	21306	20630	9242	15211	17313	5102	3007	4714
1968	5908	2869	4381	11277	15830	17005	5797	1956	5149	5561	6713	4166
1969	3913	2516	3208	31476	31301	19458	15484	22810	8127	2328	5956	3209
1970	3809	3919	23322	62916	40273	13896	4784	2027	5192	6181	7929	5838
1971	4668	1964	14848	9088	7667	13708	11935	12633	9456	12028	7514	3900
1972	3306	3027	3863	4936	11197	10270	4612	3183	5508	6551	7194	4735
1973	2982	5453	6000	21681	25513	20415	6027	6230	9793	7868	7797	3875
1974	2926	10727	19691	36544	15714	36164	30969	9715	11618	4794	4987	4029
1975	2389	3278	4157	4899	25418	20600	7806	12465	10418	10144	3840	4163
1976	3240	2545	5493	5218	5682	5155	3677	992	1413	6482	5441	4319
1977	2852	2517	2316	2849	1864	1986	2188	1371	2830	3043	4043	814
1978	1106	1276	2614	12060	8560	10027	9936	5557	6586	3151	8144	3671
1979	2346	2681	8102	6694	13964	11741	4496	3990	8179	6402	7656	3858
1980	3098	2887	3808	33630	37384	22254	8291	6015	4068	9221	7624	2988
1981	2780	1954	2294	2796	9480	10911	5865	3078	5321	7528	7790	5164
1982	4195	5844	29968	31646	32629	33774	46229	20373	9031	10428	5236	3668
1983	6540	13017	20821	16787	36671	54013	23915	22622	23946	6855	4943	7200
1984	6651	22772	46707	23848	16359	15407	6756	5395	7352	7977	8285	5669
1985	2400	3472	3948	3637	5119	4695	5711	4821	5351	9240	9108	7874
1986	5146	3821	4993	5964	39870	52996	7480	3765	5279	8941	7819	3887
1987	3082	1860	2218	4057	5735	5384	4583	2742	5037	6976	6509	5014
1988	4896	2905	2664	5356	2403	1450	3917	2988	2131	5111	2148	2954
1989	2636	1903	1766	3088	2541	12562	9166	5931	4908	8395	8355	4605
1990	4504	2881	4455	5817	4812	3726	4718	2019	1578	2451	6269	2831
1991	1807	1459	894	1721	2035	8326	4927	3024	2390	5068	2493	2550
1992	1974	1174	1363	3238	10018	4055	4118	1907	2152	2944	748	2558
1993	1527	2238	2296	12602	12529	17235	14340	11637	7983	9771	7194	3764
AVG:	3425	3438	6110	11210	13096	13352	9210	7646	7320	7014	5995	3763
MIN:	1106	908	894	1203	900	748	1954	992	1413	2328	748	814
MAX:	10690	22772	46707	62916	40273	54013	46229	35053	23946	12028	9108	7874

Table 3.5.4-27. Simulated Feather River Flow at the Mouth (CFS)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3440	2909	1708	5271	8828	13015	10272	28470	20677	11901	6861	3350
1923	2103	2762	2637	12160	3319	6085	9251	4831	6157	8196	7333	4543
1924	4214	2843	4995	4630	3729	2902	3143	2956	3219	3582	5712	2268
1925	1703	1261	923	4621	12130	8187	4370	3393	6018	2412	1257	2576
1926	1949	1267	894	5654	5959	5171	6041	6098	4271	7385	5120	3382
1927	3330	7315	894	9885	32548	18478	14414	11362	8079	7492	7194	2892
1928	4753	2742	1708	8894	1634	41854	7794	8575	5520	5287	5431	4833
1929	3855	2489	2003	4892	3496	4245	1954	2492	2498	3613	1593	1450
1930	2301	1309	894	8071	900	10330	5345	4244	5256	8213	6525	4193
1931	1775	1622	2464	2176	3139	1580	3322	2330	3346	8507	6329	3045
1932	2787	908	894	10278	5224	748	3364	3266	5334	7425	4112	2774
1933	2341	2013	1696	2738	4701	748	3381	1306	2718	3585	1391	1614
1934	1567	1185	894	6099	900	2811	4908	2247	3044	4108	1837	2751
1935	2438	1265	1769	9619	1600	7777	8710	11036	12808	8715	7390	3818
1936	5021	3056	2853	9750	14687	14877	8854	5362	5200	8583	7658	3311
1937	4095	2518	3285	3997	12649	14144	7321	5968	6344	8003	7994	3733
1938	2956	3321	14594	11985	25916	36251	27109	27367	19425	11124	5611	2674
1939	2665	3398	4102	4909	3933	6015	2610	4467	6347	8243	7619	5462
1940	4434	2497	1279	5588	5471	38651	32445	8341	9216	9910	8102	5153
1941	4468	4426	5774	10785	25584	23572	6641	15727	9934	10265	4501	2941
1942	1995	2602	17319	18652	34532	10486	22570	14480	12894	9362	6224	2805
1943	2538	4619	11548	25580	16758	25989	11929	7174	7788	4276	7217	2628
1944	2711	2250	3409	4114	7091	8222	2903	2114	6941	8043	7623	3897
1945	4200	3947	4029	4454	11318	7373	3795	2304	8387	8704	7861	2720
1946	2447	3473	5569	15967	11876	6807	3729	3852	7539	8972	8198	5249
1947	4392	3191	3797	2965	4504	5514	4194	1987	4292	7804	7577	4352
1948	2560	2120	2251	2324	2604	3064	7431	8906	5281	9684	8269	3510
1949	3354	2648	2810	2961	3488	8484	3030	2097	6731	5015	779	2845
1950	1721	1284	1171	4884	8183	4952	6353	6633	10907	9476	7697	3331
1951	2095	11455	31688	26107	20950	11665	5367	5188	3610	8491	7461	3870
1952	4534	3590	3880	25100	21918	16612	27698	35053	17898	5160	2509	5455
1953	5921	3249	10729	21833	8622	9465	5983	8339	9992	7356	6852	3333
1954	2654	2627	2405	9327	15686	17453	13187	10250	5764	7301	7039	5269
1955	5107	2894	4403	5300	3148	3094	2897	2727	4400	2933	992	2534
1956	2196	1831	6475	40760	19283	17057	8304	17840	8633	9767	5990	2968
1957	2138	2183	5316	3329	13617	18325	6742	4496	8448	5014	6430	2635
1958	2805	1697	3491	4407	28204	31159	25442	20315	12241	3892	3012	3581
1959	6030	3014	3397	12270	17994	6243	2544	3686	7047	8062	7230	2451
1960	4623	2574	2897	3406	5381	3339	3179	2076	5778	6769	6681	3354
1961	2193	2371	1203	2447	5470	1750	2832	2235	3746	7392	6547	4367
1962	4343	2049	1091	1605	12454	5843	2478	3125	8790	7302	7975	4843
1963	10690	4084	6101	1203	25458	12859	26718	12705	9161	6001	6965	3240
1964	2781	5521	1982	7087	3193	3474	8896	2468	6149	8426	8043	5774
1965	3112	3077	6224	42300	12639	9077	12782	10629	4880	6083	7152	3549
1966	2918	5087	5686	7791	6084	7130	4418	6515	6458	7786	6364	4604
1967	4790	2216	7979	4837	21252	20630	9242	15211	17313	5102	3007	4714
1968	5908	2870	4381	11277	15830	17005	5890	1956	5220	5442	6766	4262
1969	3964	2516	3208	31239	31302	19458	15484	22810	8127	2346	6026	3117
1970	3809	3919	23322	62916	40273	13896	4798	2027	5220	6161	7948	5810
1971	4668	1964	14849	9088	7742	13629	11935	12633	9456	12048	7570	3900
1972	3352	3027	3863	4755	11198	10270	4612	3235	5526	6551	7194	4761
1973	2982	5453	6000	21589	25513	20415	6027	6230	9814	7877	7793	3875
1974	2926	10704	19691	36544	15714	36164	30969	9715	11625	4863	5037	4029
1975	2264	3279	4157	4899	25419	20600	7806	12466	10418	10159	3896	4163
1976	3240	2473	5494	5218	5682	5155	3677	992	1565	6558	5590	4370
1977	2846	2487	2232	2850	1801	2021	2204	1424	2887	2956	4082	1224
1978	1124	1276	2614	12060	8562	9507	9681	5559	6606	3204	8198	3671
1979	2377	2802	8086	6695	13678	11742	4496	3990	8243	6403	7749	4064
1980	3538	2885	3809	32914	37387	22254	8291	6015	4068	9238	7642	2988
1981	2780	1954	2294	2797	9406	10911	5865	3079	5396	7606	7839	5081
1982	4619	5842	29442	31648	32629	33774	46229	20373	9031	10449	5365	3667
1983	6461	13018	20821	16787	36671	54013	23915	22622	23946	6855	4944	7201
1984	6651	22772	46707	23849	16360	15407	6767	5395	7360	8007	8347	5634
1985	2518	3471	3948	3638	5119	4695	5739	4866	5342	9255	9122	7934
1986	5146	3821	4993	5964	39492	52998	7479	3764	5333	8957	7866	3887
1987	3083	1860	2219	4057	5735	5088	4658	2795	5075	7086	6620	5136
1988	4896	2906	2664	5356	2403	1509	3917	3529	2343	5191	2251	2960
1989	2643	1903	1766	3088	2541	11425	9174	5958	5019	8409	8391	4728
1990	4423	2882	4356	5818	4812	3726	4768	2019	1633	2377	6403	3191
1991	1744	1294	894	1722	2035	8326	4928	3024	2443	5123	2536	2550
1992	1974	1189	1363	3238	10018	4055	4119	1886	2160	2944	748	2558
1993	1849	1608	2300	12602	12529	16930	14341	11637	7982	9661	7124	3015
AVG:	3456	3430	6091	11189	13026	13312	9218	7670	7338	7034	6032	3784
MIN:	1124	908	894	1203	900	748	1954	992	1565	2346	748	1224
MAX:	10690	22772	46707	62916	40273	54013	46229	35053	23946	12048	9122	7934

Table 3.5.4-28. Simulated Feather River Flow at the Mouth (CFS)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	3434	2909	1708	5271	8834	13015	10272	28470	20677	11974	7153	3349
1923	2104	2762	2277	12163	3319	6085	9251	4831	5873	8225	7452	4542
1924	4345	2842	5240	4628	3729	2855	3093	2823	3106	3509	5821	2470
1925	1702	1261	923	4621	12130	8187	4370	3393	6037	2443	1278	2576
1926	1891	1267	894	5654	5959	5171	5765	6074	4224	7403	5124	3210
1927	3331	7315	894	9885	32780	18477	14414	11362	8260	8270	7479	2892
1928	4754	2743	1708	8895	1634	40616	7799	8382	5729	5470	5417	4832
1929	3950	2488	2003	4892	3496	4245	1954	2429	2460	3566	1558	1410
1930	2250	1248	894	8071	900	10330	5345	4177	5203	8174	6455	4210
1931	1775	1622	2374	2177	3139	1579	3323	2332	3416	8481	6329	2961
1932	2865	908	894	10278	5224	748	3364	3266	5337	7435	4126	2773
1933	2331	2013	1696	2738	4701	748	3381	1307	2679	3545	1351	1544
1934	1539	1185	894	6099	900	2811	4848	2214	3010	4063	2062	3043
1935	2467	1264	1770	9620	1600	7777	8710	11049	12808	8716	7485	4129
1936	5019	3056	2969	9750	14688	14559	8856	5362	4853	8648	7719	3590
1937	4063	2518	3270	3997	12649	14144	7321	5968	6279	8040	8046	3947
1938	2838	3322	14384	11987	25916	36250	27108	27367	19425	11194	6120	2671
1939	2307	3400	4102	4909	3934	6015	2700	4420	6242	8139	7573	5308
1940	4326	2497	1278	5588	5471	38968	32443	8136	9076	9972	8160	5377
1941	4467	4427	5774	10785	25588	23572	6641	15727	9690	10559	4755	2939
1942	1995	2602	17345	18652	34532	10486	22570	14480	12894	10564	6921	2802
1943	2540	4228	11552	25581	16758	25989	11930	7174	7747	4031	7425	2626
1944	2711	2205	3441	4113	7091	8310	2902	2114	6943	8039	7621	3935
1945	4112	3947	4029	4331	11318	7373	3795	2304	8160	8801	7922	2719
1946	2742	3471	5569	15706	12279	6442	3732	3852	7579	9017	8242	5413
1947	4362	3096	3798	2965	4504	5514	4194	1979	4003	7808	7585	4351
1948	2486	2007	2202	2324	2591	3064	7431	8906	5281	9683	8270	3510
1949	4071	2644	2810	2961	3488	8485	3031	2097	6732	4862	820	2843
1950	1721	1284	1171	4884	8183	4663	6275	6633	10531	9539	7792	3330
1951	2095	11455	31889	26106	20950	11665	5367	5188	3831	9116	7556	3753
1952	4547	3591	3358	25078	21918	16612	27697	35053	17898	5160	2509	5455
1953	5921	3249	10729	21833	8622	9465	5983	8339	9992	7396	6866	3333
1954	2654	2627	2405	9282	15686	17453	13187	10250	5764	7272	7040	5269
1955	5107	2762	4404	5300	3148	3094	2897	2727	4432	2965	992	2535
1956	2196	1831	6536	40760	19283	17058	8304	17840	8633	9839	6280	2966
1957	2138	2184	5132	3331	13498	18326	6742	4496	8451	4953	6404	2635
1958	2805	1697	3491	4407	28284	31159	25442	20316	12241	3965	3413	3255
1959	6032	3014	3397	12270	17994	6243	2544	3457	6928	8047	7192	3351
1960	4160	2578	2937	3406	5382	3340	3114	2076	5738	6796	6733	3216
1961	2193	2371	1203	2447	5470	1750	2832	2230	3842	7413	6518	4386
1962	4340	2005	1092	1605	12454	5843	2478	3058	8794	7298	7576	4784
1963	10689	4084	6101	1203	26059	12856	26718	12705	9355	7480	7250	3240
1964	2783	5522	1983	7088	3194	3241	8896	2468	5847	8387	8016	5573
1965	3104	3077	6043	42301	12638	9077	12782	10625	4607	5723	7339	3547
1966	2917	5541	5683	7791	6084	7130	4418	6511	6452	7788	6362	4604
1967	4790	2216	7979	4837	21263	20630	9242	15211	17313	5102	3007	4714
1968	5908	2870	4381	11277	15830	17005	5814	1956	5168	5540	6728	4191
1969	3910	2516	3208	31426	31301	19458	15484	22810	8127	2415	6300	3098
1970	3486	3921	23322	62916	40273	13896	4798	2027	5228	6142	7951	5801
1971	4668	1964	14849	9088	7760	13628	11935	12633	9456	12036	7586	3899
1972	3351	3027	3863	4735	11198	10270	4612	3235	5526	6554	7198	4761
1973	2982	5453	6000	21582	25513	20415	6027	6230	9729	7906	7851	3875
1974	2926	10780	19691	36544	15714	36165	30969	9715	11577	5015	5293	4028
1975	1998	3184	4158	4898	25418	20600	7806	12466	10419	10201	4068	4162
1976	3240	2369	5381	5219	5682	5155	3677	992	1494	6472	5445	4312
1977	2781	2413	2262	2850	1773	1956	2078	1383	2857	3096	4053	818
1978	1113	1276	2614	12060	8561	10293	9934	5558	6605	3166	8197	3671
1979	2376	2719	8078	6695	13822	11742	4497	3990	8173	6419	7636	3908
1980	3052	2888	3808	33617	37384	22254	8291	6015	4068	9290	7698	2988
1981	2780	1954	2294	2797	9047	10914	5865	3078	5341	7565	7803	5134
1982	4366	5844	29761	31647	32629	33774	46229	20373	9031	10497	5619	3666
1983	6296	13019	20821	16787	36671	54013	23915	22622	23946	6855	4944	7201
1984	6651	22772	46707	23849	16360	15407	6767	5395	7343	7951	8396	5605
1985	2599	3471	3948	3638	5119	4695	5739	4866	5344	9255	9122	7931
1986	5146	3821	4993	5964	39462	52998	7479	3764	5045	9020	7965	3886
1987	3083	1860	2219	4057	5735	5118	4616	2756	5051	6993	6525	5043
1988	4896	2906	2664	5356	2403	1441	3918	3054	2145	5045	2139	2876
1989	2625	1903	1766	3088	2541	12270	9168	5948	4928	8410	8364	4576
1990	4556	2881	4375	5818	4812	3726	4727	2020	1593	2240	6372	3189
1991	1759	1351	894	1722	2035	8326	4928	3024	2404	5083	2506	2550
1992	1974	1176	1363	3238	10018	4055	4119	1917	2165	2944	748	2558
1993	1632	1981	2298	12603	12529	17129	14340	11637	7983	9792	7222	3941
AVG:	3432	3426	6083	11195	13040	13307	9211	7648	7293	7094	6095	3800
MIN:	1113	908	894	1203	900	748	1954	992	1494	2240	748	818
MAX:	10689	22772	46707	62916	40273	54013	46229	35053	23946	12036	9122	7931

Table 3.5.4-29. Simulated Feather River Flow at the Mouth (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	46	0	0	0	-51	0	0	0	0	15	56	0
1923	0	0	-75	0	0	0	0	0	62	14	55	103
1924	37	0	134	-1	0	38	80	166	130	6	-129	-423
1925	2	0	0	0	0	-32	0	0	-35	-14	-10	0
1926	38	0	0	0	0	0	-34	45	65	8	13	215
1927	14	0	0	0	-388	1	0	0	-211	-111	58	-1
1928	42	0	0	0	0	165	-1	18	-38	23	9	5
1929	-17	0	0	0	0	0	0	84	-594	61	49	41
1930	57	313	0	0	0	0	0	88	59	84	89	-11
1931	0	0	52	0	0	0	5	11	-69	67	2	108
1932	6	0	0	0	0	0	0	0	11	-27	-27	0
1933	9	0	0	0	0	0	0	0	52	52	45	70
1934	27	0	0	0	0	0	73	45	48	60	-458	-359
1935	-50	0	-1	-1	-1	0	0	-2	11	3	-89	-319
1936	1	0	-85	0	0	157	-1	0	80	26	24	46
1937	-42	0	22	0	0	0	0	0	-4	0	-11	47
1938	-55	0	-6	0	0	0	0	0	0	16	95	-1
1939	-72	0	0	0	0	0	46	65	101	53	32	198
1940	92	0	0	0	0	-475	2	-40	77	12	14	2123
1941	587	-1	2	-102	-2948	16	-2	-2	31	57	299	-2
1942	0	0	-279	1	0	0	0	0	0	-47	97	-1
1943	0	-71	0	0	0	0	0	0	51	39	56	0
1944	0	31	-40	0	0	-134	1	0	15	15	12	-3
1945	-4	0	0	-2	0	0	0	0	14	3	15	0
1946	28	0	0	-87	140	-126	1	0	14	14	15	47
1947	4	14	0	0	0	0	0	13	-20	17	5	10
1948	8	37	9	0	-2	0	0	0	0	11	55	0
1949	-237	1	0	0	0	0	0	0	14	-10	21	-1
1950	0	0	0	0	0	-34	0	0	0	15	45	0
1951	0	0	-59	0	0	0	0	0	58	3	56	31
1952	38	0	-183	1	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	32	57	0
1954	0	0	0	-88	1	0	0	14	-1	91	13	57
1955	0	-25	0	0	0	0	0	0	-9	-9	0	0
1956	0	0	-77	0	0	0	0	0	0	14	56	0
1957	0	0	241	-1	-355	2	15	0	18	-30	-10	0
1958	0	0	0	0	-8	0	0	0	0	14	77	-30
1959	0	0	0	0	0	0	0	321	43	50	54	-657
1960	448	-3	-7	0	0	0	78	-1	55	-66	191	-417
1961	2	0	0	0	0	0	0	36	-177	403	17	71
1962	18	51	0	0	0	0	0	88	-4	4	270	165
1963	-1	0	0	0	-610	3	0	0	18	108	58	0
1964	0	0	0	0	0	-184	203	-1	318	53	37	-133
1965	61	0	-286	2	0	0	0	19	55	28	53	0
1966	0	-160	1	0	0	0	0	18	23	-18	6	22
1967	0	0	0	0	-54	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	93	0	71	-119	53	97
1969	52	0	0	-237	1	0	0	0	0	18	71	-92
1970	1	0	0	0	0	0	14	0	28	-21	19	-28
1971	0	0	0	0	75	-79	1	0	0	19	56	0
1972	46	0	0	-180	1	0	0	52	18	-1	0	26
1973	0	0	0	-92	1	0	0	0	20	9	-5	0
1974	0	-23	0	0	0	0	0	0	7	69	50	0
1975	-125	1	0	0	0	0	0	0	0	14	56	0
1976	0	-72	1	0	0	0	0	0	152	77	149	50
1977	-6	-30	-84	1	-63	35	16	53	58	-87	39	410
1978	18	0	0	0	2	-521	-255	2	20	53	54	0
1979	31	120	-16	0	-286	2	0	0	64	0	93	206
1980	440	-2	1	-717	3	0	0	0	0	16	18	0
1981	0	0	0	0	-74	1	0	0	75	78	50	-83
1982	425	-2	-526	2	0	0	0	0	0	20	129	-1
1983	-79	1	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	12	0	8	30	61	-34
1985	118	0	0	2	0	0	28	45	-9	15	14	61
1986	0	0	0	0	-378	1	0	0	55	15	47	0
1987	0	0	0	0	0	-297	76	53	38	110	111	122
1988	0	0	0	0	0	59	0	540	211	80	104	7
1989	6	0	0	0	0	-1137	7	27	111	14	37	123
1990	-81	1	-100	1	0	0	50	0	55	-74	134	360
1991	-63	-165	0	0	0	0	0	0	53	55	44	0
1992	0	15	0	0	0	1	0	-21	8	0	0	0
1993	322	-631	4	0	0	-304	2	0	0	-110	-70	-749
AVG:	30	-8	-19	-21	-69	-39	7	24	18	20	37	21
MIN:	-237	-631	-526	-717	-2948	-1137	-255	-40	-594	-119	-458	-749
MAX:	587	313	241	2	140	165	203	540	318	403	299	2123

Table 3.5.4-30. Simulated Feather River Flow at the Mouth (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	41	0	0	0	-45	0	0	0	0	87	348	-2
1923	0	0	-435	3	0	0	0	0	-222	43	173	103
1924	169	-1	379	-2	1	-9	30	34	17	-67	-21	-221
1925	1	0	0	0	0	-32	0	0	-16	18	11	0
1926	-20	0	0	0	0	0	-309	22	18	26	17	43
1927	15	0	0	0	-156	1	0	0	-29	667	343	-1
1928	43	0	0	0	0	-1073	4	-175	171	206	-4	4
1929	78	0	0	0	0	0	0	21	-632	14	15	1
1930	5	252	0	0	0	0	0	22	6	44	19	6
1931	0	0	-39	0	0	0	6	13	1	41	2	23
1932	84	0	0	0	0	0	0	0	14	-17	-12	0
1933	-1	0	0	0	0	0	0	0	13	12	4	0
1934	-1	0	0	0	0	0	14	12	14	15	-234	-67
1935	-21	0	0	0	0	0	0	11	10	4	6	-9
1936	0	0	31	0	0	-161	1	0	-267	91	85	325
1937	-75	1	7	0	0	0	0	0	-69	38	42	261
1938	-172	1	-216	1	0	0	0	0	0	87	604	-3
1939	-430	3	0	0	0	0	135	17	-5	-51	-14	44
1940	-16	0	0	0	0	-158	1	-245	-63	74	72	2347
1941	586	-1	2	-102	-2944	16	-2	-1	-212	351	553	-3
1942	0	0	-254	1	0	0	0	0	0	1155	794	-3
1943	2	-462	3	0	0	0	0	0	10	-205	264	-2
1944	0	-14	-8	0	0	-46	0	0	17	12	10	35
1945	-92	1	0	-124	1	0	0	0	-212	100	75	0
1946	323	-2	0	-348	543	-491	3	0	54	60	59	211
1947	-25	-80	1	0	0	0	0	6	-309	22	13	9
1948	-66	-77	-40	0	-15	0	0	0	0	11	55	0
1949	480	-3	1	0	0	0	0	0	15	-163	62	-2
1950	0	0	0	0	0	-322	-78	0	-376	78	139	-1
1951	0	0	142	0	0	0	0	0	278	627	151	-86
1952	51	0	-704	-21	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	72	71	0
1954	0	0	0	-134	1	0	0	14	-1	62	13	57
1955	0	-157	1	0	0	0	0	0	23	23	0	0
1956	0	0	-16	0	0	0	0	0	0	87	346	-2
1957	0	0	57	0	-474	3	15	0	22	-91	-36	0
1958	0	0	0	0	72	0	0	0	0	87	479	-355
1959	2	0	0	0	0	0	0	92	-77	35	16	243
1960	-16	0	33	0	0	0	13	0	14	-39	244	-555
1961	3	0	0	0	0	0	0	30	-82	424	-12	89
1962	15	7	0	0	0	0	0	21	0	0	-129	106
1963	-1	0	0	0	-10	0	0	0	212	1586	344	0
1964	2	1	1	1	1	-416	203	-1	16	13	10	-334
1965	53	-1	-467	2	-1	0	0	15	-217	-332	240	-2
1966	0	294	-2	0	0	0	0	14	17	-17	4	22
1967	0	0	0	0	-43	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	16	0	18	-20	14	26
1969	-2	0	0	-49	0	0	0	0	0	86	345	-111
1970	-323	2	0	0	0	0	14	0	35	-39	22	-36
1971	0	0	0	0	93	-79	1	0	0	8	72	0
1972	46	0	0	-201	1	0	0	52	18	3	4	26
1973	0	0	0	-99	1	0	0	0	-64	38	53	0
1974	0	52	0	0	0	0	0	0	-42	221	306	-1
1975	-391	-94	1	-1	0	0	0	0	0	57	228	-1
1976	0	-176	-112	1	0	0	0	0	82	-9	4	-8
1977	-71	-104	-54	0	-91	-30	-110	12	27	53	11	4
1978	7	0	0	0	0	266	-1	1	19	14	54	0
1979	30	38	-24	0	-142	1	0	0	-6	16	-20	50
1980	-45	0	0	-13	0	0	0	0	0	69	73	0
1981	0	0	0	0	-433	3	0	0	20	37	13	-29
1982	171	-1	-207	1	0	0	0	0	0	69	382	-2
1983	-244	2	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	11	0	-8	-26	111	-63
1985	199	-1	0	1	0	0	28	45	-8	15	14	58
1986	0	0	0	0	-408	2	0	0	-234	79	147	-1
1987	0	0	0	0	0	-267	33	14	14	18	16	29
1988	0	0	0	0	0	-10	0	65	14	-66	-9	-78
1989	-11	0	0	0	0	-293	2	17	20	16	9	-29
1990	51	0	-80	1	0	0	9	0	16	-212	103	358
1991	-48	-108	0	0	0	0	0	0	15	15	13	0
1992	0	1	0	0	0	1	0	10	12	0	0	0
1993	105	-257	2	0	0	-106	1	0	0	21	29	177
AVG:	7	-12	-28	-15	-56	-44	1	2	-26	80	100	37
MIN:	-430	-462	-704	-348	-2944	-1073	-309	-245	-632	-332	-234	-555
MAX:	586	294	379	3	543	266	203	92	278	1586	794	2347

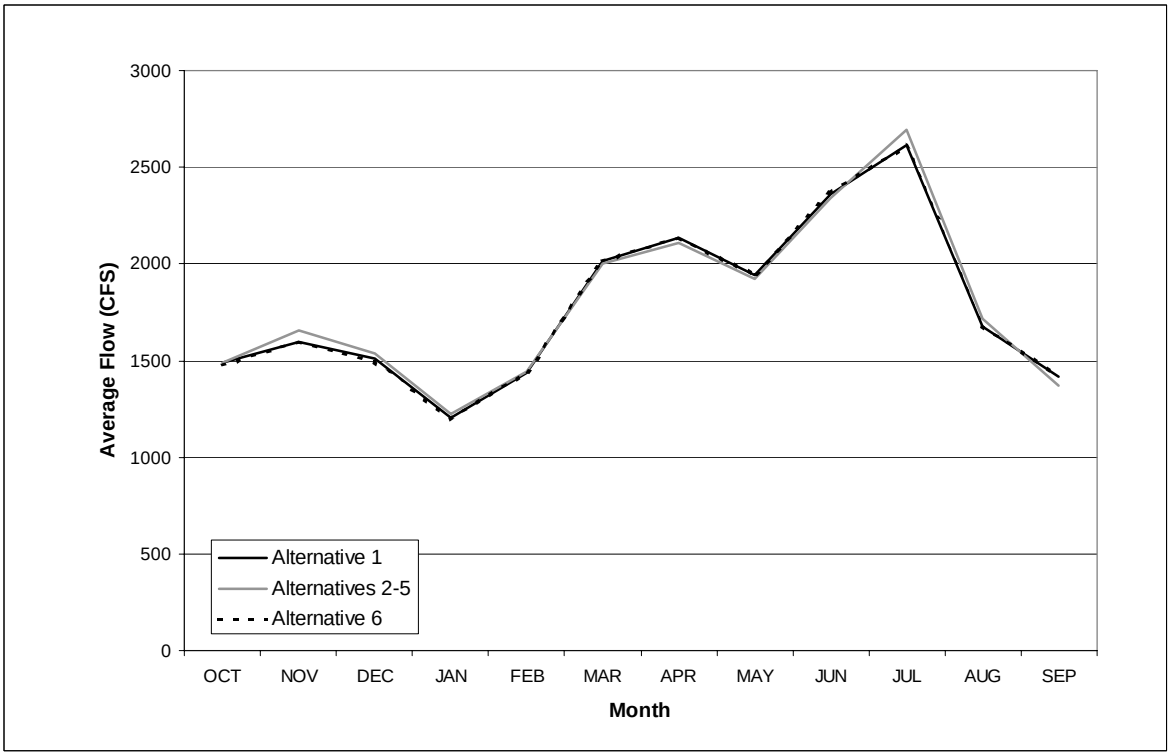


Figure 3.5.4-4 Simulated Average Monthly American River Flow Below Nimbus (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-31. Simulated American River Flow Below Nimbus (CFS)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	1661	1982	6184	3308	4230	9200	9154	4503	2500	2943
1923	2103	2325	6813	4474	2978	3000	3100	4275	3000	5000	2500	2808
1924	1750	1400	1300	1500	1125	2462	750	1000	1500	1750	1000	1000
1925	750	800	1000	1000	4421	5000	3000	3000	5000	4558	1500	2500
1926	1984	1659	1493	1200	2171	1628	2534	2250	3445	2623	1245	1000
1927	1035	828	2657	3571	13392	4492	7635	4497	5132	5000	2500	2500
1928	2039	3029	2700	2025	1587	12710	4545	2655	4878	3572	1491	1000
1929	1500	1200	1300	1000	750	750	1326	1263	2267	2200	2211	1231
1930	856	800	1300	1200	2023	2804	1750	2250	3048	3409	2263	1265
1931	2315	1852	1667	750	500	750	1309	1000	1500	1750	1000	1000
1932	784	800	1000	1000	3895	3000	3000	3000	5000	5000	3233	3184
1933	2816	2327	1000	500	500	750	3010	1000	2834	2406	1821	1001
1934	1618	1294	1000	1000	1100	1500	3154	1164	2168	1750	1078	1018
1935	1411	452	1000	1000	1100	1500	7583	4282	3464	5000	4079	2500
1936	1500	1200	1300	6124	13450	4101	5334	3814	4621	5000	3054	2500
1937	1750	1441	1300	1500	5157	4379	4159	3688	3100	5000	3049	2500
1938	1500	1200	6306	2775	9704	10958	7757	9363	8632	3404	3795	4099
1939	1750	2294	2065	1549	1350	1500	1750	1000	1669	3221	1000	1000
1940	750	925	1300	3311	10512	10738	5708	3000	3172	5000	1806	2500
1941	1500	1859	3851	5681	7950	4768	3664	4793	3110	3000	3011	4002
1942	1750	2456	5568	9162	9909	3000	5286	6488	7047	4081	2958	4042
1943	1750	4197	4657	10704	7130	12490	4817	3000	3000	5000	1921	2500
1944	1867	1513	1471	1500	1914	1893	3000	2250	3181	2798	1722	2500
1945	1500	1200	1300	1500	8898	2250	3000	2250	3339	5000	1846	2500
1946	1751	3573	8812	5063	3204	3000	3000	3241	3676	5000	1985	2500
1947	2369	2097	1945	1458	1100	1635	3000	2250	1500	2539	2018	2500
1948	750	800	1300	1000	1672	1500	1900	3387	4918	4932	2500	2500
1949	1750	1896	1707	1500	1350	3289	3130	3000	3301	4168	3093	2500
1950	1500	1200	1300	1611	5520	3049	4566	3851	3832	5000	2500	2601
1951	2662	16679	16144	10253	8260	3695	3000	3044	3000	5493	2500	2525
1952	1500	1811	4528	8945	9516	6118	8515	11162	10262	5000	4425	3502
1953	1750	2535	2599	7144	2250	1688	3000	3000	5201	5000	2500	3952
1954	1750	2673	2406	1804	3017	4362	4300	3000	3000	3000	2520	2500
1955	1500	1200	1300	1200	2215	1700	1750	3000	3000	2218	1613	1000
1956	1655	1324	16035	16508	6281	3000	3000	4769	5653	4991	2500	3441
1957	1750	2414	2172	1629	3184	4377	3000	2250	3568	5772	2500	2500
1958	1500	1200	1300	1957	10013	6627	10269	9795	7508	5000	2500	3477
1959	1750	1947	1753	1786	3236	2250	1750	2250	1500	4700	1000	1000
1960	750	800	1000	500	500	3786	2694	2250	3005	2562	1995	1224
1961	1500	1200	1300	1000	750	1500	1750	2250	1500	1750	1500	1000
1962	750	800	1000	750	1637	3000	3000	3000	3000	4167	2039	2500
1963	2361	4322	3355	3893	11796	2250	4700	7972	3000	5267	2500	2500
1964	1750	4278	2700	2025	1963	1541	1750	2250	1500	3222	2883	2500
1965	750	800	20838	13034	5466	2250	4354	3924	3000	6210	2525	3028
1966	1500	2191	1972	1996	1868	3000	1750	2250	1541	4219	1000	1000
1967	750	800	1903	6794	4386	6006	3874	8149	10265	3735	4068	4253
1968	1750	2960	2664	1998	4700	3384	1750	2250	1504	5000	1000	1000
1969	750	800	1300	15586	9224	3684	6309	8934	6387	5000	2500	3061
1970	1750	2639	5602	20963	6189	2339	3000	2250	3072	5000	1500	1000
1971	1500	1200	4999	4722	3997	3317	3000	3000	4519	5000	2500	2862
1972	1750	2464	2803	2103	2864	4036	1750	2250	5000	3641	1542	1000
1973	1500	1200	2294	9248	7116	3380	3000	3349	4799	4197	1513	2547
1974	1500	6024	7245	11602	4460	9274	5969	4596	3958	5000	2500	3810
1975	1750	2041	1837	1513	4223	4554	3000	3940	6059	4493	2500	3484
1976	1750	3684	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1000	372	377	338	360	312	366	370	354	401
1978	1322	445	519	2272	4858	5976	3606	3249	3872	5000	2500	2500
1979	1750	1456	1322	2855	3579	3329	3000	3000	5000	3984	1982	2500
1980	1500	1200	1300	17717	13374	3495	3000	3000	3000	4207	2509	3084
1981	2017	1791	1859	1500	1569	1678	3000	2250	1500	4216	1000	1000
1982	750	2658	14242	8143	15311	7585	14328	9096	5863	3073	3829	4546
1983	2063	7993	9094	7528	12340	16369	6454	10243	14191	5704	4743	4961
1984	1750	15642	15011	6629	5762	2467	1922	2355	3000	7015	1501	2500
1985	1500	3360	2700	2025	1519	1500	3000	2250	2413	2667	2235	1238
1986	951	800	1300	4231	32839	11015	2447	2596	3090	5000	2500	2582
1987	2210	1400	1678	1500	1350	1500	1750	1480	1673	1750	1000	1000
1988	809	800	1300	1200	1962	1500	1750	2250	1500	1750	452	507
1989	545	474	1000	1000	750	7563	3112	3306	4424	3056	2511	1396
1990	1500	1806	1612	1209	1115	1500	1835	1000	1761	1796	1500	1000
1991	750	800	1300	1000	500	750	1750	2250	1663	3482	2509	2500
1992	750	800	1000	750	500	1500	1750	2250	1500	1750	1500	835
1993	509	526	520	1976	6086	7465	3397	5132	5221	5000	3064	2500
AVG:	1494	2230	3341	4021	4930	3889	3534	3585	3845	3929	2187	2256
MIN:	509	445	519	372	377	338	360	312	366	370	354	401
MAX:	2816	16679	20838	20963	32839	16369	14328	11162	14191	7015	4743	4961

Table 3.5.4-32. Simulated American River Flow Below Nimbus (CFS)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	1661	1982	6184	3308	4230	9200	9154	4545	2500	2900
1923	2103	2325	6813	4474	2978	3000	3100	4275	3000	5000	2500	2781
1924	1750	1400	1300	1500	1125	2495	750	1000	1500	1750	1000	1195
1925	414	800	1000	1000	4579	5000	3000	3000	5000	4559	1500	2500
1926	1954	1657	1492	1200	2208	1656	2506	2250	3629	2579	1395	1000
1927	1171	937	2144	3571	13392	4492	7635	4497	5132	5000	2500	2500
1928	2039	3029	2700	2025	1587	12711	4546	2661	4924	3527	1492	1000
1929	1500	1200	1300	1000	750	750	1501	1369	2122	2161	2188	1082
1930	995	800	1300	1200	1977	2805	1750	2250	3303	3383	2458	1193
1931	2115	1692	1523	750	750	750	1341	1000	1500	1750	1000	1000
1932	1277	800	1000	1000	3294	3000	3000	3000	5000	5000	3239	3179
1933	2804	2313	1000	500	500	750	3091	1029	2865	2398	1831	1075
1934	1515	1212	1000	1000	1100	1528	3267	1324	2108	1750	1467	769
1935	1608	454	1000	750	754	1500	7615	4282	3464	5000	4163	2500
1936	1500	1200	1300	6043	13450	4102	5334	3815	4622	5000	3083	2500
1937	1750	1413	1300	1500	5158	4382	4159	3688	3167	5000	2987	2500
1938	1500	1200	6307	2775	9704	10958	7757	9363	8632	3444	3755	4099
1939	1750	2294	2065	1549	1350	1500	1750	1000	1690	3298	1000	1000
1940	750	884	1300	3259	10512	10739	5708	3000	3319	5000	1848	2500
1941	1500	1690	3836	5681	7951	4768	3664	4793	3146	3000	2976	4002
1942	1750	2456	5568	9162	9909	3000	5286	6488	7047	4123	2916	4042
1943	1750	4197	4657	10704	7130	12490	4817	3000	3000	5000	1921	2500
1944	1867	1513	1471	1500	1914	1893	3000	2250	3181	2802	1733	2500
1945	1500	1200	1300	1500	8881	2250	3000	2250	3381	5000	1887	2500
1946	1750	3493	8812	5063	3204	3000	3000	3241	3718	5000	2027	2500
1947	2312	2098	1888	1416	1100	1708	3000	2250	1500	2546	2018	2500
1948	750	800	1300	1000	1692	1500	1895	3387	4918	4977	2500	2500
1949	1750	1850	1665	1500	1350	3331	3131	3000	3345	4128	3101	2500
1950	1500	1200	1300	1604	5520	3049	4566	3851	3832	5000	2500	2602
1951	2662	16679	16144	10253	8261	3695	3000	3044	3000	5493	2500	2539
1952	1500	1808	4517	8945	9516	6118	8515	11162	10262	5000	4469	3457
1953	1750	2535	2599	7144	2250	1688	3000	3000	5201	5000	2500	3952
1954	1750	2673	2406	1804	3017	4362	4300	3000	3000	3000	2525	2500
1955	1500	1200	1300	1200	2210	1695	1750	3000	3000	2227	1647	1000
1956	1643	1315	16017	16508	6281	3000	3000	4769	5653	5000	2500	3431
1957	1750	2414	2172	1629	3184	4377	3000	2250	3617	5724	2500	2500
1958	1500	1200	1300	1957	10013	6627	10269	9795	7508	5000	2500	3477
1959	1750	1947	1753	1786	3236	2250	1750	2250	1500	4700	1000	1000
1960	750	800	1000	500	500	3787	2810	2250	2897	2781	1933	1258
1961	1500	1200	1300	1000	750	1500	1750	2250	1500	1750	1500	1000
1962	750	800	1000	750	1461	3000	3000	3000	3000	4167	2371	2500
1963	2032	4322	3355	3893	11796	2250	4700	7972	3000	5334	2500	2500
1964	1750	4278	2700	2025	1969	1544	1750	2250	1500	3268	2892	2500
1965	750	800	20776	13034	5466	2250	4354	3929	3000	6239	2525	3010
1966	1500	2175	1957	2011	1868	3000	1750	2250	1541	4277	1000	1000
1967	750	800	1859	6794	4386	6006	3874	8149	10265	3735	4068	4253
1968	1750	2960	2664	1998	4700	3384	1750	2250	1504	5000	1000	1000
1969	750	800	1300	15586	9224	3684	6309	8934	6387	5000	2500	3061
1970	1750	2639	5602	20963	6189	2339	3000	2250	3072	5000	1500	1000
1971	1500	1200	4999	4722	4000	3314	3000	3000	4518	5000	2500	2862
1972	1750	2464	2803	2103	2864	4036	1750	2250	5000	3767	1483	1000
1973	1500	1200	2229	9248	7117	3380	3000	3349	4849	4150	1543	2543
1974	1500	5997	7245	11602	4460	9274	5969	4596	3958	5000	2500	3810
1975	1750	2041	1837	1513	4223	4554	3000	3940	6059	4536	2500	3440
1976	1750	3684	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1000	372	377	338	360	312	366	370	354	401
1978	1400	446	519	2194	4858	5977	3606	3249	3872	5000	2500	2500
1979	1750	1456	1322	2855	3579	3328	3000	3000	5000	4116	2114	2500
1980	1500	1200	1300	17456	13374	3495	3000	3000	3000	4256	2561	2980
1981	2017	1791	1859	1500	1569	1678	3000	2250	1500	4359	1000	1000
1982	750	2515	14242	8143	15311	7585	14328	9096	5863	3108	3794	4546
1983	2063	7993	9094	7528	12340	16369	6454	10243	14191	5704	4743	4961
1984	1750	15642	15011	6629	5762	2467	1924	2353	3000	7015	1501	2500
1985	1500	3360	2700	2025	1519	1500	3000	2250	2419	2673	2240	1224
1986	958	800	1300	4222	32839	11015	2448	2596	3090	5000	2500	2584
1987	2210	1400	1678	1500	1350	1500	1750	1509	1763	1750	1000	1000
1988	754	800	1300	1200	1960	1500	750	2250	1500	1750	1500	523
1989	545	474	1000	1000	750	7390	3112	3325	4394	3064	2516	1494
1990	1500	1644	1465	1099	1366	1500	1976	1000	1739	1770	1500	1000
1991	750	800	1300	975	500	750	1750	2250	1824	3361	2501	2500
1992	750	800	1000	750	500	1500	1750	2250	1500	1750	1500	507
1993	503	526	520	2246	6086	7465	3397	5132	5221	5000	2797	2722
AVG:	1492	2218	3326	4012	4924	3889	3529	3590	3857	3940	2216	2249
MIN:	414	446	519	372	377	338	360	312	366	370	354	401
MAX:	2804	16679	20776	20963	32839	16369	14328	11162	14191	7015	4743	4961

Table 3.5.4-33. Simulated American River Flow Below Nimbus (CFS)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	1500	1200	1661	1982	6184	3308	4230	9200	9154	4763	2500	2677
1923	2103	2325	6813	4474	2978	3000	3100	4275	3000	5000	2500	2836
1924	1871	1496	1347	1500	1125	2194	750	1000	1500	1750	1000	1159
1925	413	800	1000	1000	4605	5000	3000	3000	5000	4558	1500	2500
1926	2012	1657	1491	1200	2145	1609	2555	2250	3500	2615	1266	1000
1927	1018	815	2627	3571	13392	4492	7635	4497	5132	5000	2500	2500
1928	2039	3029	2700	2025	1587	12711	4546	2598	5000	3415	1544	1000
1929	1500	1200	1300	1000	750	750	1358	1291	2264	2199	2212	1247
1930	836	800	1300	1200	2014	2804	1750	2250	3112	3402	2313	1276
1931	2227	1781	1603	750	750	750	1211	1000	1500	1750	1000	1000
1932	936	800	1000	1000	3719	3000	3000	3000	5000	5000	3234	3188
1933	2815	2343	1000	500	500	750	3001	1000	2844	2405	1822	1012
1934	1601	1281	1000	1000	1100	1500	3175	1205	2155	1750	1168	1018
1935	1431	452	1000	1000	1100	1500	7435	4282	3464	5000	4114	2500
1936	1500	1200	1300	6090	13450	4102	5334	3814	4621	5000	3304	2500
1937	1750	1400	1300	1500	4928	4379	4159	3688	3000	5000	3145	2500
1938	1500	1200	6306	2775	9704	10958	7757	9363	8632	3663	3538	4099
1939	1750	2294	2065	1549	1350	1500	1750	1000	1671	3257	1000	1000
1940	750	895	1300	3305	10512	10738	5708	3000	3160	5000	2013	2500
1941	1500	1677	3834	5681	7950	4768	3664	4793	3057	3000	3062	4002
1942	1750	2456	5568	9162	9909	3000	5286	6488	7047	4528	2514	4042
1943	1750	4197	4657	10704	7130	12490	4817	3000	3000	5000	1921	2500
1944	1867	1513	1471	1500	1914	1893	3000	2250	3181	2802	1785	2500
1945	1104	883	1451	1712	9199	2250	3000	2250	3000	5000	2064	2500
1946	1859	3573	8812	5063	3222	3000	3000	3224	3843	5000	2144	2500
1947	2178	2065	1758	1318	1100	1867	3000	2250	1500	2541	2020	2500
1948	750	800	1300	1000	1699	1500	1905	3387	4918	4978	2500	2500
1949	1750	1848	1663	1500	1350	3332	3130	3000	3343	4127	3125	2500
1950	1500	1200	1300	1578	5520	3049	4566	3851	3832	5000	2576	2523
1951	2662	16679	16144	10253	8261	3695	3000	3044	3000	5493	2500	2593
1952	1500	1818	4456	8945	9516	6118	8515	11162	10262	5000	4656	3264
1953	1750	2535	2599	7144	2250	1688	3000	3000	5201	5000	2500	3952
1954	1750	2673	2406	1804	3017	4362	4300	3000	3000	3000	2525	2500
1955	1500	1200	1300	1200	2207	1693	1750	3000	3000	2226	1636	1000
1956	1643	1315	16032	16508	6281	3000	3000	4769	5653	5000	2500	3431
1957	1750	2414	2172	1629	3184	4377	3000	2250	3628	5714	2500	2500
1958	1500	1200	1300	1957	10013	6627	10269	9795	7508	5000	2500	3477
1959	1750	1947	1753	1786	3236	2250	1750	2250	1500	4700	1000	1000
1960	750	800	1000	500	500	3786	2715	2250	2985	2590	1994	1230
1961	1500	1200	1300	1000	750	1500	1750	2250	1500	1750	1500	1000
1962	750	800	1000	750	1613	3000	3000	3000	3000	4166	2136	2500
1963	2265	4322	3355	3893	11796	2250	4700	7972	3000	5585	2500	2500
1964	1750	4279	2700	2025	1967	1543	1750	2250	1500	3230	2894	2500
1965	750	800	20813	13034	5466	2250	4354	3929	3000	6303	2525	3029
1966	1500	2090	1881	2087	1868	3000	1750	2250	1541	4278	1000	1000
1967	750	800	1860	6794	4386	6006	3874	8149	10265	3735	4068	4253
1968	1750	2960	2664	1998	4700	3384	1750	2250	1504	5000	1000	1000
1969	750	800	1300	15586	9224	3684	6309	8934	6387	5000	2500	3061
1970	1750	2639	5602	20963	6189	2339	3000	2250	3072	5000	1500	1000
1971	1500	1200	4999	4722	4001	3313	3000	3000	4518	5000	2500	2862
1972	1750	2464	2803	2103	2864	4036	1750	2250	5000	3767	1483	1000
1973	1500	1200	2229	9248	7117	3380	3000	3349	4662	4330	1628	2504
1974	1500	6037	7245	11602	4460	9274	5969	4596	3958	5000	2500	3810
1975	1750	2041	1837	1513	4223	4554	3000	3940	6059	4664	2500	3309
1976	1750	3684	2700	2025	1519	1139	750	1000	1500	1750	1000	1000
1977	750	800	1000	372	377	338	360	312	366	370	354	401
1978	1322	445	519	2272	4858	5976	3606	3249	3872	5000	2500	2500
1979	1750	1456	1322	2855	3579	3329	3000	3000	5000	3982	1993	2500
1980	1500	1200	1300	17691	13374	3495	3000	3000	3000	4413	2730	2646
1981	2017	1791	1859	1500	1569	1678	3000	2250	1500	4239	1000	1000
1982	750	2635	14242	8143	15311	7585	14328	9096	5863	3271	3632	4546
1983	2063	7993	9094	7528	12340	16369	6454	10243	14191	5704	4743	4961
1984	1750	15642	15011	6629	5762	2467	1924	2353	3000	7015	1500	2500
1985	1500	3362	2700	2025	1519	1500	3000	2250	2419	2673	2240	1225
1986	956	800	1300	4223	32839	11015	2448	2596	3090	5000	2500	2584
1987	2210	1400	1678	1500	1350	1500	1750	1488	1691	1750	1000	1000
1988	795	800	1300	1200	1956	1500	1750	2250	1500	1750	452	507
1989	545	474	1000	1000	750	7558	3112	3321	4466	3041	2500	1409
1990	1500	1801	1607	1206	1108	1500	1860	1000	1761	1794	1500	1000
1991	750	800	1300	1000	500	750	1750	2250	1708	3508	2474	2500
1992	750	800	1000	750	500	1500	1750	2250	1500	1750	1500	835
1993	509	526	520	1937	6086	7465	3397	5132	5221	5000	3151	2500
AVG:	1483	2219	3335	4021	4934	3888	3532	3585	3844	3959	2204	2243
MIN:	413	445	519	372	377	338	360	312	366	370	354	401
MAX:	2815	16679	20813	20963	32839	16369	14328	11162	14191	7015	4743	4961

Table 3.5.4-34. Simulated American River Flow Below Nimbus (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	42	0	-43
1923	0	0	0	0	0	0	0	0	0	0	0	-28
1924	0	0	0	0	0	33	0	0	0	0	0	195
1925	-336	0	0	0	158	0	0	0	0	1	0	0
1926	-30	-1	-1	0	37	28	-28	0	184	-44	150	0
1927	136	109	-513	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	1	1	5	46	-45	1	0
1929	0	0	0	0	0	0	175	106	-145	-40	-22	-150
1930	139	0	0	0	-46	1	0	0	255	-25	195	-72
1931	-200	-160	-144	0	250	0	32	0	0	0	0	0
1932	493	0	0	0	-601	0	0	0	0	0	7	-5
1933	-12	-15	0	0	0	0	81	29	31	-7	10	75
1934	-102	-82	0	0	0	28	113	160	-60	0	389	-249
1935	197	2	0	-250	-346	0	32	0	1	0	85	0
1936	0	0	0	-81	0	0	0	1	1	0	30	0
1937	0	-27	0	0	1	2	0	0	67	0	-62	0
1938	0	0	1	0	0	0	0	0	0	40	-40	0
1939	0	0	0	0	0	0	0	0	21	77	0	0
1940	0	-41	0	-52	0	1	0	0	148	0	42	0
1941	0	-169	-15	0	0	0	0	0	37	0	-35	0
1942	0	0	0	0	0	0	0	0	0	42	-42	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	4	11	0
1945	0	0	0	0	-17	0	0	0	41	0	41	0
1946	-1	-80	0	0	1	0	0	0	43	0	42	0
1947	-57	1	-56	-42	0	72	0	0	0	7	1	0
1948	0	0	0	0	20	0	-4	0	0	45	0	0
1949	0	-46	-42	0	0	41	0	0	44	-41	8	0
1950	0	0	0	-7	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	15
1952	0	-3	-12	0	0	0	0	0	0	0	43	-45
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	6	0
1955	0	0	0	0	-6	-4	0	0	0	9	33	0
1956	-11	-9	-18	0	0	0	0	0	0	9	0	-10
1957	0	0	0	0	0	0	0	0	49	-47	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	1	116	0	-108	219	-62	34
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	-176	0	0	0	0	0	332	0
1963	-329	0	0	0	0	0	0	0	0	67	0	0
1964	0	0	0	0	5	4	0	0	0	46	10	0
1965	0	0	-62	0	0	0	0	5	0	29	-1	-17
1966	0	-17	-15	15	0	0	0	0	0	58	0	0
1967	0	0	-44	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	4	-4	0	0	-1	0	0	0
1972	0	0	0	0	0	0	0	0	0	126	-59	0
1973	0	0	-65	0	0	0	0	0	50	-48	30	-4
1974	0	-27	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	43	0	-44
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	78	1	0	-78	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	-1	0	0	0	132	132	0
1980	0	0	0	-261	0	0	0	0	0	49	53	-104
1981	0	0	0	0	0	0	0	0	0	143	0	0
1982	0	-143	0	0	0	0	0	0	0	35	-35	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	2	-2	0	0	0	0
1985	0	0	0	0	0	0	0	0	6	6	5	-14
1986	7	0	0	-9	0	0	0	0	1	0	0	1
1987	0	0	0	0	0	0	0	30	91	0	0	0
1988	-55	0	0	0	-2	0	-1000	0	0	0	1048	17
1989	0	0	0	0	0	-173	0	19	-30	7	5	98
1990	0	-163	-146	-110	251	0	141	0	-22	-25	0	0
1991	0	0	0	-25	0	0	0	0	160	-122	-8	0
1992	0	0	0	0	0	0	0	0	0	0	0	-328
1993	-7	0	0	270	0	1	0	0	0	0	-267	222
AVG:	-1	-12	-16	-9	-6	0	-5	5	13	11	29	-6
MIN:	-336	-169	-513	-261	-601	-173	-1000	-2	-145	-122	-267	-328
MAX:	493	109	1	270	251	72	175	160	255	219	1048	222

Table 3.5.4-35. Simulated American River Flow Below Nimbus (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	259	0	-265
1923	0	0	0	0	0	0	0	0	0	0	0	28
1924	121	96	47	0	0	-268	0	0	0	0	0	159
1925	-337	0	0	0	184	0	0	0	0	1	0	0
1926	27	-1	-1	0	-26	-20	21	0	55	-8	21	0
1927	-17	-14	-30	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	1	-57	122	-156	53	0
1929	0	0	0	0	0	0	32	27	-3	-1	1	15
1930	-21	0	0	0	-8	0	0	0	65	-7	50	10
1931	-89	-71	-64	0	250	0	-98	0	0	0	0	0
1932	152	0	0	0	-176	0	0	0	0	0	1	4
1933	-1	15	0	0	0	0	-8	0	10	0	1	11
1934	-17	-13	0	0	0	0	20	40	-14	0	90	0
1935	20	0	0	0	0	0	-149	0	0	0	36	0
1936	0	0	0	-35	0	0	0	0	0	0	250	0
1937	0	-41	0	0	-229	0	0	0	-100	0	96	0
1938	0	0	0	0	0	0	0	0	0	259	-257	0
1939	0	0	0	0	0	0	0	0	2	35	0	0
1940	0	-31	0	-6	0	0	0	0	-12	0	207	0
1941	0	-182	-17	0	0	0	0	0	-53	0	50	0
1942	0	0	0	0	0	0	0	0	0	447	-444	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	3	63	0
1945	-396	-317	151	212	301	0	0	0	-339	0	218	0
1946	108	0	0	0	19	0	0	-17	167	0	159	0
1947	-191	-32	-187	-140	0	231	0	0	0	2	2	0
1948	0	0	0	0	27	0	5	0	0	47	0	0
1949	0	-48	-43	0	0	43	0	0	41	-41	32	0
1950	0	0	0	-33	0	0	0	0	0	0	76	-78
1951	0	0	0	0	0	0	0	0	0	0	0	68
1952	0	7	-72	0	0	0	0	0	0	0	231	-237
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	5	0
1955	0	0	0	0	-8	-6	0	0	0	8	23	0
1956	-11	-9	-3	0	0	0	0	0	0	9	0	-10
1957	0	0	0	0	0	0	0	0	60	-57	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	21	0	-20	27	-2	6
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	-24	0	0	0	0	0	96	0
1963	-96	0	0	0	0	0	0	0	0	318	0	0
1964	0	1	0	0	4	3	0	0	0	8	11	0
1965	0	0	-25	0	0	0	0	5	0	93	-1	1
1966	0	-101	-91	90	0	0	0	0	0	59	0	0
1967	0	0	-43	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	4	-4	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	126	-59	0
1973	0	0	-65	0	0	0	0	0	-138	132	115	-43
1974	0	13	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	170	0	-175
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	-2	10	0
1980	0	0	0	-26	0	0	0	0	0	206	221	-438
1981	0	0	0	0	0	0	0	0	0	22	0	0
1982	0	-22	0	0	0	0	0	0	0	198	-197	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	2	-2	0	0	-1	0
1985	0	1	0	0	0	0	0	0	6	6	5	-14
1986	5	0	0	-8	0	0	0	0	1	0	0	2
1987	0	0	0	0	0	0	0	9	19	0	0	0
1988	-13	0	0	0	-6	0	0	0	0	0	0	0
1989	0	0	0	0	0	-5	0	16	42	-15	-11	13
1990	0	-5	-4	-3	-7	0	25	0	0	-2	0	0
1991	0	0	0	0	0	0	0	0	44	26	-35	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	-38	0	0	0	0	0	0	87	0
AVG:	-10	-10	-6	0	4	0	-2	0	-1	30	17	-13
MIN:	-396	-317	-187	-140	-229	-268	-149	-57	-339	-156	-444	-438
MAX:	152	96	151	212	301	231	32	40	167	447	250	159

Table 3.5.4-36. Simulated American River Flow at H Street (CFS)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1333	1070	1625	1914	6197	3237	4058	8970	8769	4100	2170	2688
1923	1950	2246	6818	4379	2891	2894	3050	4050	2674	4650	2165	2586
1924	1567	1243	1164	1426	1092	2450	632	820	1295	1543	808	845
1925	714	719	987	915	4413	4857	2745	2743	4658	4186	1210	2259
1926	1794	1523	1375	1102	2145	1448	2435	2021	3164	2257	971	783
1927	919	794	2536	3468	13326	4258	7398	4222	4785	4629	2164	2244
1928	1883	2918	2572	1894	1463	12671	4301	2459	4608	3212	1211	783
1929	1320	1097	1201	873	622	667	1169	1038	2022	1866	1943	1008
1930	676	636	1243	1135	1890	2707	1543	2029	2769	3059	1988	1044
1931	2140	1720	1519	664	392	641	1092	800	1260	1417	735	787
1932	625	697	1013	886	3792	2819	2738	2723	4662	4648	2942	2929
1933	2615	2163	888	430	376	662	2795	781	2569	2065	1552	782
1934	1476	1121	954	886	1006	1334	2932	935	1913	1423	816	807
1935	1241	375	910	951	961	1428	7515	3920	3078	4628	3729	2222
1936	1342	1065	1185	6043	13415	3864	5069	3511	4281	4646	2728	2245
1937	1562	1267	1207	1418	5124	4319	3900	3370	2753	4653	2756	2242
1938	1314	1109	6223	2639	9693	10820	7447	9030	8217	3004	3474	3842
1939	1573	2143	1930	1429	1206	1401	1523	801	1404	2890	723	802
1940	599	766	1174	3308	10486	10584	5366	2686	2820	4653	1513	2254
1941	1328	1739	3854	5613	7861	4622	3525	4532	2712	2623	2673	3729
1942	1575	2329	5534	9046	9743	2827	5179	6215	6638	3674	2613	3775
1943	1545	4085	4548	10636	6918	12354	4558	2718	2653	4649	1627	2250
1944	1675	1367	1355	1397	1893	1750	2778	2024	2844	2448	1448	2252
1945	1348	1117	1193	1370	8824	2094	2717	2024	3014	4642	1552	2248
1946	1637	3460	8746	4865	3030	2876	2702	3017	3327	4654	1693	2264
1947	2183	1984	1835	1314	979	1554	2728	2013	1236	2200	1745	2248
1948	627	684	1175	868	1546	1417	1782	3162	4557	4535	2142	2235
1949	1567	1759	1625	1381	1220	3245	2834	2720	2955	3825	2808	2270
1950	1304	1065	1183	1546	5425	2907	4315	3535	3464	4636	2160	2358
1951	2549	16608	15957	10029	8052	3491	2702	2781	2649	5149	2166	2272
1952	1364	1698	4474	8937	9323	5970	8238	10806	9856	4592	4095	3241
1953	1545	2415	2558	7047	2031	1556	2823	2710	4875	4634	2185	3698
1954	1551	2553	2257	1703	2916	4264	4095	2695	2652	2649	2207	2244
1955	1304	1102	1237	1118	2083	1521	1568	2722	2650	1875	1345	796
1956	1486	1197	16074	16359	6026	2781	2755	4510	5286	4622	2170	3213
1957	1596	2240	2019	1516	3096	4256	2751	2054	3202	5399	2145	2281
1958	1362	1043	1205	1894	9975	6487	10130	9478	7111	4597	2155	3219
1959	1551	1778	1613	1728	3181	2117	1590	2022	1224	4377	711	838
1960	568	639	882	426	425	3681	2468	2028	2665	2222	1725	1002
1961	1316	1122	1170	900	625	1406	1545	2026	1223	1420	1236	786
1962	570	704	903	629	1649	2886	2707	2691	2648	3820	1756	2252
1963	2353	4172	3222	3793	11666	2075	4559	7670	2580	4898	2147	2242
1964	1602	4213	2534	1935	1803	1376	1525	2033	1233	2900	2607	2249
1965	608	716	20815	12794	5202	2066	4199	3602	2638	5863	2234	2774
1966	1302	2107	1869	1881	1737	2831	1522	2029	1268	3904	716	789
1967	569	775	1829	6785	4181	5905	3732	7821	9885	3305	3732	3976
1968	1546	2827	2521	1911	4582	3251	1514	2029	1232	4668	712	788
1969	585	721	1221	15627	9050	3497	6055	8594	5991	4626	2170	2809
1970	1576	2500	5534	20900	5859	2184	2693	2011	2755	4660	1208	783
1971	1353	1179	4937	4560	3803	3175	2699	2739	4178	4649	2176	2614
1972	1557	2327	2728	1959	2729	3849	1531	2029	4726	3277	1261	804
1973	1381	1139	2195	9249	7001	3235	2712	3037	4444	3835	1228	2317
1974	1361	5991	7137	11469	4214	9183	5674	4250	3598	4689	2159	3551
1975	1569	1911	1741	1368	4184	4463	2735	3624	5695	4117	2175	3228
1976	1631	3532	2544	1873	1369	963	551	786	1242	1435	744	791
1977	571	662	870	250	250	250	188	188	188	188	188	281
1978	1210	375	500	2352	4807	5895	3413	2929	3511	4637	2161	2258
1979	1554	1364	1192	2806	3484	3210	2752	2691	4640	3616	1697	2248
1980	1377	1080	1227	17675	13200	3294	2752	2707	2649	3881	2185	2831
1981	1820	1621	1750	1436	1423	1599	2737	2016	1221	3878	713	795
1982	640	2636	14155	7979	15142	7440	14189	8658	5426	2663	3482	4351
1983	1945	7945	8955	7417	12242	16294	6207	9905	13757	5238	4393	4699
1984	1544	15621	14857	6369	5631	2361	1778	2139	2686	6677	1196	2264
1985	1353	3321	2561	1881	1385	1407	2725	2010	2139	2328	1965	1026
1986	787	755	1209	4148	32848	10726	2161	2364	2742	4654	2170	2366
1987	2017	1235	1550	1392	1250	1424	1527	1253	1403	1422	737	788
1988	642	694	1247	1121	1818	1313	1576	2040	1236	1421	188	281
1989	375	375	919	871	611	7541	2782	3065	4143	2684	2238	1231
1990	1372	1678	1459	1128	1020	1355	1620	827	1496	1462	1235	782
1991	574	664	1183	861	393	779	1547	2027	1394	3147	2233	2246
1992	591	652	899	636	496	1420	1548	2021	1236	1415	1235	617
1993	375	375	500	2006	6028	7320	3080	4856	4890	4628	2728	2238
AVG:	1332	2118	3247	3924	4816	3761	3312	3324	3519	3577	1888	2023
MIN:	375	375	500	250	250	250	188	188	188	188	188	281
MAX:	2615	16608	20815	20900	32848	16294	14189	10806	13757	6677	4393	4699

Table 3.5.4-37. Simulated American River Flow at H Street (CFS)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1333	1070	1626	1915	6198	3238	4059	8972	8770	4141	2170	2645
1923	1950	2246	6820	4381	2893	2896	3051	4051	2676	4650	2165	2558
1924	1568	1243	1164	1428	1094	2484	634	820	1295	1543	808	1039
1925	375	726	987	915	4571	4855	2745	2743	4658	4187	1210	2259
1926	1764	1522	1374	1102	2182	1476	2408	2021	3348	2211	1121	781
1927	1055	901	2022	3473	13327	4258	7398	4222	4785	4629	2164	2244
1928	1883	2918	2572	1894	1465	12673	4303	2466	4655	3167	1213	783
1929	1320	1097	1201	873	622	667	1344	1143	1877	1828	1921	858
1930	816	633	1244	1135	1844	2709	1543	2029	3024	3031	2183	970
1931	1940	1561	1376	665	642	636	1125	799	1260	1417	735	787
1932	1118	689	1014	886	3191	2824	2738	2723	4662	4648	2949	2924
1933	2602	2148	888	430	376	662	2876	809	2600	2058	1562	857
1934	1372	1040	955	886	1006	1362	3045	1094	1852	1424	1205	554
1935	1442	375	910	701	621	1435	7547	3920	3079	4628	3814	2221
1936	1342	1065	1185	5962	13416	3864	5069	3512	4282	4646	2757	2244
1937	1562	1240	1208	1418	5125	4322	3900	3371	2820	4652	2694	2242
1938	1314	1109	6224	2640	9694	10820	7447	9030	8217	3044	3434	3842
1939	1573	2143	1930	1429	1206	1401	1523	801	1425	2966	722	802
1940	599	725	1175	3257	10486	10585	5367	2686	2968	4651	1555	2253
1941	1328	1570	3840	5613	7861	4622	3525	4532	2749	2623	2638	3730
1942	1575	2329	5534	9046	9743	2827	5179	6215	6638	3716	2571	3775
1943	1545	4085	4548	10636	6918	12354	4566	2723	2657	4649	1627	2250
1944	1675	1367	1355	1397	1893	1750	2783	2024	2844	2452	1459	2252
1945	1348	1117	1193	1370	8807	2094	2717	2024	3056	4642	1593	2248
1946	1636	3380	8747	4865	3031	2876	2702	3016	3369	4653	1735	2264
1947	2126	1986	1779	1273	980	1626	2727	2013	1236	2207	1746	2248
1948	627	684	1175	868	1566	1416	1778	3163	4557	4581	2142	2235
1949	1567	1713	1583	1381	1220	3286	2834	2720	2998	3784	2817	2270
1950	1304	1065	1183	1539	5425	2908	4315	3535	3465	4636	2160	2359
1951	2549	16608	15957	10030	8052	3491	2702	2781	2649	5149	2166	2287
1952	1364	1695	4463	8937	9323	5970	8248	10808	9856	4592	4138	3196
1953	1546	2415	2558	7047	2031	1566	2830	2716	4875	4634	2185	3698
1954	1551	2553	2257	1703	2916	4264	4103	2700	2652	2649	2212	2244
1955	1304	1102	1237	1118	2077	1517	1568	2722	2650	1884	1378	795
1956	1475	1188	16056	16359	6026	2781	2755	4510	5286	4632	2170	3203
1957	1596	2240	2019	1516	3096	4256	2751	2054	3251	5352	2145	2281
1958	1362	1043	1205	1894	9975	6487	10143	9487	7118	4597	2155	3219
1959	1551	1778	1613	1728	3189	2122	1595	2022	1224	4377	711	838
1960	568	639	882	426	425	3682	2583	2027	2620	2442	1660	1037
1961	1315	1122	1170	900	625	1406	1545	2026	1223	1420	1236	786
1962	570	704	903	629	1473	2888	2707	2691	2648	3821	2088	2249
1963	2024	4175	3222	3793	11666	2075	4559	7670	2580	4964	2146	2242
1964	1602	4214	2534	1935	1809	1380	1525	2033	1233	2945	2616	2248
1965	608	716	20753	12795	5202	2066	4199	3607	2638	5892	2233	2756
1966	1302	2090	1855	1896	1737	2831	1522	2029	1268	3963	716	789
1967	569	775	1785	6786	4181	5905	3732	7821	9885	3305	3732	3976
1968	1546	2827	2521	1911	4582	3251	1514	2029	1232	4668	712	788
1969	585	721	1221	15627	9050	3497	6055	8594	5991	4626	2170	2809
1970	1576	2500	5534	20900	5859	2184	2693	2011	2755	4660	1208	783
1971	1353	1179	4937	4560	3807	3171	2699	2739	4178	4649	2176	2614
1972	1557	2327	2728	1959	2729	3849	1531	2029	4726	3403	1201	805
1973	1381	1139	2130	9249	7001	3235	2712	3037	4493	3787	1258	2312
1974	1361	5965	7137	11469	4214	9183	5674	4250	3598	4689	2159	3551
1975	1569	1911	1741	1368	4184	4463	2735	3624	5695	4159	2175	3184
1976	1632	3532	2544	1873	1369	963	551	786	1242	1435	744	791
1977	571	662	870	250	250	250	188	188	188	188	188	281
1978	1288	375	500	2274	4807	5895	3413	2929	3511	4637	2161	2258
1979	1554	1364	1192	2806	3484	3209	2752	2691	4640	3749	1828	2247
1980	1377	1080	1227	17413	13203	3294	2752	2707	2649	3930	2237	2727
1981	1821	1621	1750	1436	1423	1599	2737	2016	1221	4021	712	796
1982	640	2493	14156	7979	15142	7440	14189	8658	5426	2698	3447	4351
1983	1945	7945	8955	7417	12242	16294	6207	9905	13757	5238	4393	4699
1984	1544	15621	14857	6395	5651	2375	1791	2145	2686	6677	1196	2264
1985	1353	3321	2561	1881	1385	1407	2725	2010	2146	2334	1970	1012
1986	794	755	1209	4139	32848	10726	2162	2364	2743	4654	2170	2368
1987	2017	1235	1550	1392	1250	1424	1527	1283	1493	1421	737	788
1988	587	696	1247	1121	1816	1313	576	2052	1236	1421	1236	281
1989	375	375	919	871	611	7367	2783	3084	4112	2691	2242	1328
1990	1372	1515	1314	1019	1272	1353	1761	826	1474	1437	1236	782
1991	574	664	1183	836	394	779	1547	2027	1554	3024	2227	2246
1992	591	652	899	636	496	1420	1548	2021	1236	1415	1235	289
1993	375	375	500	2276	6026	7321	3080	4856	4890	4628	2461	2462
AVG:	1331	2106	3231	3916	4810	3762	3309	3330	3533	3588	1917	2016
MIN:	375	375	500	250	250	250	188	188	188	188	188	281
MAX:	2602	16608	20753	20900	32848	16294	14189	10808	13757	6677	4393	4699

Table 3.5.4-38. Simulated American River Flow at H Street (CFS)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	1333	1070	1626	1915	6198	3238	4059	8972	8770	4359	2168	2422
1923	1952	2246	6820	4381	2893	2896	3051	4051	2676	4650	2165	2614
1924	1688	1338	1210	1428	1095	2184	637	820	1295	1543	808	1004
1925	375	726	987	915	4597	4855	2745	2743	4658	4187	1210	2259
1926	1821	1521	1374	1102	2118	1429	2457	2020	3219	2249	991	783
1927	902	780	2507	3468	13327	4258	7398	4222	4785	4629	2164	2244
1928	1883	2918	2572	1894	1465	12672	4303	2403	4732	3055	1266	782
1929	1320	1097	1201	873	622	667	1201	1066	2019	1865	1944	1023
1930	655	637	1243	1135	1882	2708	1543	2029	2833	3051	2037	1054
1931	2051	1650	1456	664	642	636	994	801	1260	1417	735	787
1932	777	693	1013	886	3616	2821	2738	2723	4662	4648	2943	2934
1933	2613	2178	888	430	376	662	2786	781	2579	2065	1552	793
1934	1459	1108	954	886	1006	1334	2953	975	1899	1424	906	806
1935	1260	375	910	951	961	1428	7367	3921	3078	4628	3765	2221
1936	1342	1065	1185	6008	13415	3864	5069	3512	4281	4646	2978	2242
1937	1562	1226	1208	1418	4895	4321	3900	3370	2653	4654	2852	2241
1938	1314	1109	6223	2639	9693	10820	7447	9030	8217	3262	3214	3844
1939	1573	2143	1930	1429	1206	1401	1523	801	1405	2925	723	802
1940	599	736	1175	3303	10486	10584	5366	2686	2808	4653	1720	2252
1941	1328	1557	3839	5613	7861	4622	3525	4532	2659	2623	2723	3729
1942	1575	2329	5534	9046	9743	2827	5179	6215	6638	4121	2165	3779
1943	1545	4085	4548	10636	6918	12354	4568	2725	2659	4649	1627	2250
1944	1675	1367	1355	1397	1893	1750	2784	2024	2844	2451	1511	2252
1945	952	804	1349	1580	9122	2091	2717	2024	2675	4645	1770	2246
1946	1745	3459	8746	4865	3049	2876	2702	2999	3494	4652	1852	2263
1947	1993	1954	1648	1176	981	1785	2725	2013	1236	2202	1747	2248
1948	627	684	1175	868	1574	1416	1787	3162	4557	4582	2142	2235
1949	1567	1711	1582	1381	1220	3288	2834	2720	2996	3784	2841	2270
1950	1304	1065	1183	1513	5425	2908	4315	3535	3465	4636	2236	2280
1951	2550	16608	15957	10030	8052	3491	2702	2781	2649	5149	2166	2340
1952	1363	1705	4403	8938	9323	5970	8250	10809	9856	4592	4325	3002
1953	1548	2415	2558	7047	2031	1567	2831	2716	4875	4634	2185	3698
1954	1551	2553	2257	1703	2916	4264	4103	2701	2652	2649	2212	2244
1955	1304	1102	1237	1118	2074	1515	1568	2722	2650	1883	1368	795
1956	1475	1188	16071	16359	6026	2781	2755	4510	5286	4632	2170	3203
1957	1596	2240	2019	1516	3096	4256	2751	2054	3262	5341	2145	2281
1958	1362	1043	1205	1894	9975	6487	10144	9488	7119	4597	2155	3219
1959	1551	1778	1613	1728	3190	2123	1595	2022	1224	4377	711	838
1960	568	639	882	426	425	3681	2489	2028	2708	2249	1723	1008
1961	1316	1122	1170	900	625	1406	1545	2026	1223	1420	1236	786
1962	570	704	903	629	1625	2886	2707	2691	2648	3820	1852	2251
1963	2257	4173	3222	3793	11666	2075	4559	7670	2580	5216	2144	2242
1964	1602	4214	2534	1935	1807	1379	1525	2033	1233	2908	2618	2248
1965	608	716	20790	12794	5202	2066	4199	3607	2638	5956	2232	2775
1966	1302	2006	1780	1973	1736	2831	1522	2029	1268	3963	716	789
1967	569	775	1786	6786	4181	5905	3732	7821	9885	3305	3732	3976
1968	1546	2827	2521	1911	4582	3251	1514	2029	1232	4668	712	788
1969	585	721	1221	15627	9050	3497	6055	8594	5991	4626	2170	2809
1970	1576	2500	5534	20900	5859	2184	2693	2011	2755	4660	1208	783
1971	1353	1179	4937	4560	3807	3171	2699	2739	4178	4649	2176	2614
1972	1557	2327	2728	1959	2729	3849	1531	2029	4726	3403	1201	805
1973	1381	1139	2130	9249	7001	3235	2712	3037	4306	3968	1341	2273
1974	1361	6004	7136	11469	4214	9183	5674	4250	3598	4689	2159	3551
1975	1569	1911	1741	1368	4184	4463	2735	3624	5695	4287	2174	3053
1976	1633	3532	2544	1873	1369	963	551	786	1242	1435	744	791
1977	571	662	870	250	250	250	188	188	188	188	188	281
1978	1210	375	500	2352	4807	5895	3413	2929	3511	4637	2161	2258
1979	1554	1364	1192	2806	3484	3210	2752	2691	4640	3614	1707	2248
1980	1377	1080	1227	17648	13201	3294	2752	2707	2649	4087	2404	2391
1981	1824	1621	1750	1436	1423	1599	2737	2016	1221	3900	713	795
1982	640	2613	14155	7979	15142	7440	14189	8658	5426	2860	3284	4353
1983	1945	7945	8955	7417	12242	16294	6207	9905	13757	5238	4393	4699
1984	1544	15621	14857	6397	5652	2376	1791	2146	2686	6677	1195	2264
1985	1353	3322	2561	1881	1385	1407	2725	2010	2146	2334	1970	1012
1986	793	755	1209	4140	32848	10726	2162	2364	2743	4654	2170	2368
1987	2017	1235	1550	1392	1250	1424	1527	1262	1422	1422	737	788
1988	629	695	1247	1121	1812	1313	1576	2040	1236	1421	188	281
1989	375	375	919	871	611	7536	2782	3080	4185	2668	2226	1244
1990	1372	1673	1455	1124	1013	1355	1645	827	1496	1461	1235	782
1991	574	664	1183	861	393	779	1547	2027	1438	3172	2198	2246
1992	591	652	899	636	496	1420	1548	2021	1236	1415	1235	617
1993	375	375	500	1968	6029	7320	3080	4856	4890	4628	2815	2238
AVG:	1322	2108	3241	3924	4820	3761	3312	3325	3519	3607	1905	2010
MIN:	375	375	500	250	250	250	188	188	188	188	188	281
MAX:	2613	16608	20790	20900	32848	16294	14189	10809	13757	6677	4393	4699

Table 3.5.4-39. Simulated American River Flow at H Street (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	1	1	1	1	1	1	1	42	0	-43
1923	0	0	2	2	2	1	1	1	1	0	0	-28
1924	0	0	0	2	2	34	1	0	0	0	0	195
1925	-339	7	0	0	158	-1	0	0	0	1	0	0
1926	-30	-1	-1	0	37	27	-28	0	184	-45	150	-1
1927	136	107	-515	5	0	0	0	0	0	0	0	0
1928	0	0	0	0	2	3	3	7	47	-45	2	0
1929	0	0	0	0	0	0	175	104	-146	-38	-22	-150
1930	140	-3	0	0	-46	2	0	0	255	-28	196	-74
1931	-200	-159	-143	1	250	-5	32	0	0	0	0	0
1932	493	-8	0	0	-601	5	0	0	0	0	7	-5
1933	-12	-15	0	0	0	0	81	28	31	-7	10	74
1934	-104	-81	1	0	0	28	112	159	-61	1	389	-253
1935	202	0	0	-250	-340	6	32	0	1	0	85	-1
1936	0	0	0	-81	1	0	0	1	1	0	30	0
1937	0	-27	0	0	1	2	0	0	67	-1	-62	1
1938	0	0	1	0	0	0	0	0	0	40	-40	0
1939	0	0	0	0	0	0	0	0	21	76	-1	0
1940	0	-41	1	-52	1	1	0	0	148	-1	42	0
1941	0	-169	-14	0	0	0	0	0	37	0	-35	0
1942	0	0	0	0	0	0	0	0	0	42	-42	0
1943	0	0	0	0	0	0	7	5	4	0	0	0
1944	0	0	0	0	0	0	5	0	0	4	11	0
1945	0	0	0	0	-17	0	0	0	41	0	41	0
1946	-1	-80	1	0	1	0	0	0	43	0	42	0
1947	-57	2	-56	-42	0	72	-1	0	0	7	1	0
1948	0	0	0	0	20	0	-4	0	0	45	0	0
1949	0	-46	-41	0	0	41	0	0	44	-41	9	0
1950	0	0	0	-7	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	15
1952	0	-3	-11	0	0	0	11	2	0	0	43	-45
1953	0	0	0	0	0	9	7	5	0	0	0	0
1954	0	0	0	0	0	0	7	5	0	0	6	0
1955	0	0	0	0	-6	-4	0	0	0	9	33	0
1956	-11	-9	-18	0	0	0	0	0	0	9	0	-10
1957	0	0	0	0	0	0	0	0	49	-48	0	0
1958	0	0	0	0	0	0	13	9	7	0	0	0
1959	0	0	0	0	8	5	5	0	0	0	0	0
1960	0	0	0	0	0	1	116	-1	-45	220	-64	35
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	-176	2	0	0	0	0	332	-3
1963	-329	3	0	0	0	0	0	0	0	67	-1	0
1964	0	0	0	0	5	4	0	0	0	46	9	0
1965	0	0	-62	1	0	0	0	5	0	29	-1	-17
1966	0	-17	-15	15	0	0	0	0	0	58	-1	0
1967	0	0	-44	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	4	-4	0	0	-1	0	0	0
1972	0	0	0	0	0	0	0	0	0	126	-60	1
1973	0	0	-65	1	0	0	0	0	50	-48	31	-4
1974	0	-27	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	43	0	-44
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	78	0	0	-78	1	0	0	0	0	0	0	0
1979	0	0	0	0	0	-1	0	0	0	132	131	-1
1980	0	0	0	-261	2	0	0	0	0	49	52	-105
1981	1	0	0	0	0	0	0	0	0	143	-1	0
1982	0	-143	1	0	0	0	0	0	0	35	-35	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	26	20	14	13	6	0	0	0	0
1985	0	0	0	0	0	0	0	0	6	6	5	-14
1986	7	0	0	-9	0	0	0	0	1	0	0	1
1987	0	0	0	0	0	0	0	30	90	-1	0	0
1988	-55	1	0	0	-2	0	-1000	12	0	0	1048	0
1989	0	0	0	0	0	-173	2	19	-30	8	5	98
1990	-1	-163	-145	-109	252	-2	141	-1	-22	-25	0	0
1991	0	0	0	-25	1	0	0	0	160	-123	-6	0
1992	0	0	0	0	0	0	0	0	0	0	0	-328
1993	0	0	0	270	-3	1	0	0	0	0	-267	224
AVG:	-1	-12	-16	-8	-6	1	-4	6	14	11	29	-7
MIN:	-339	-169	-515	-261	-601	-173	-1000	-1	-146	-123	-267	-328
MAX:	493	107	2	270	252	72	175	159	255	220	1048	224

Table 3.5.4-40. Simulated American River Flow at H Street (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	1	1	1	1	1	1	1	259	-2	-265
1923	2	0	2	2	2	1	1	1	1	0	0	28
1924	120	95	46	3	3	-266	4	0	0	0	0	159
1925	-339	7	0	0	184	-2	0	0	0	1	0	0
1926	27	-2	-1	0	-26	-19	21	0	55	-8	21	0
1927	-17	-13	-29	1	0	0	0	0	0	0	0	0
1928	0	0	0	0	2	2	2	-56	124	-157	55	0
1929	0	0	0	0	0	0	32	27	-3	-1	1	15
1930	-21	0	0	0	-8	0	0	0	65	-8	50	10
1931	-89	-70	-63	1	250	-5	-98	1	0	0	0	0
1932	152	-3	0	0	-176	2	0	0	0	0	1	4
1933	-1	15	0	0	0	0	-8	0	10	0	1	11
1934	-17	-13	0	0	0	0	20	40	-14	0	90	-1
1935	20	0	0	0	0	0	-149	1	0	0	36	0
1936	0	0	0	-35	0	0	0	0	0	0	250	-2
1937	0	-41	0	0	-229	2	0	0	-100	1	96	-1
1938	0	0	0	0	0	0	0	0	0	259	-260	2
1939	0	0	0	0	0	0	0	0	2	35	0	0
1940	0	-31	1	-6	0	0	0	0	-12	0	207	-2
1941	0	-182	-15	0	0	0	0	0	-53	0	50	0
1942	0	0	0	0	0	0	0	0	0	447	-448	4
1943	0	0	0	0	0	0	10	7	6	0	0	0
1944	0	0	0	0	0	0	6	0	0	3	63	-1
1945	-396	-313	156	210	299	-3	0	0	-339	3	218	-2
1946	108	-1	0	0	19	0	0	-17	168	-1	159	-1
1947	-191	-30	-187	-139	1	231	-2	0	0	2	2	0
1948	0	0	0	0	27	0	5	0	0	47	0	0
1949	0	-48	-43	0	0	43	-1	0	41	-41	33	0
1950	0	0	0	-33	0	0	0	0	0	0	76	-79
1951	1	0	0	0	0	0	0	0	0	0	0	68
1952	-1	7	-72	1	0	0	13	3	0	0	231	-239
1953	2	0	0	0	0	10	8	6	0	0	0	0
1954	0	0	0	0	0	0	8	6	0	0	5	0
1955	0	0	0	0	-8	-6	0	0	0	8	23	0
1956	-11	-9	-3	0	0	0	0	0	0	9	0	-10
1957	0	0	0	0	0	0	0	0	60	-58	1	0
1958	0	0	0	0	0	0	13	10	8	0	0	0
1959	0	0	0	0	8	6	5	0	0	0	0	0
1960	0	0	0	0	0	0	21	0	43	27	-2	6
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	-24	0	0	0	0	0	96	-1
1963	-96	1	0	0	0	0	0	0	0	318	-3	0
1964	0	1	0	0	4	3	0	0	0	8	11	0
1965	0	0	-25	0	0	0	0	5	0	93	-2	1
1966	0	-101	-90	91	-1	0	0	0	0	59	-1	0
1967	0	0	-43	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	4	-4	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	126	-60	1
1973	0	0	-65	1	0	0	0	0	-138	134	114	-44
1974	0	13	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	170	-1	-175
1976	2	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	-2	10	0
1980	0	0	0	-26	0	0	0	0	0	206	219	-440
1981	4	0	0	0	0	0	0	0	0	22	0	0
1982	0	-22	0	0	0	0	0	0	0	198	-198	2
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	28	21	15	14	7	0	0	-1	0
1985	0	1	0	0	0	0	0	0	6	6	5	-14
1986	5	0	0	-8	0	0	0	0	1	0	0	2
1987	0	0	0	0	0	0	0	9	19	0	0	0
1988	-13	0	0	0	-6	0	0	0	0	0	0	0
1989	0	0	0	0	0	-5	0	16	42	-16	-11	13
1990	0	-5	-4	-3	-7	0	25	0	0	-2	0	0
1991	0	0	0	0	0	0	0	0	44	26	-35	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	-38	0	0	0	0	0	0	87	-1
AVG:	-10	-10	-6	1	5	0	-1	1	0	30	16	-13
MIN:	-396	-313	-187	-139	-229	-266	-149	-56	-339	-157	-448	-440
MAX:	152	95	156	210	299	231	32	40	168	447	250	159

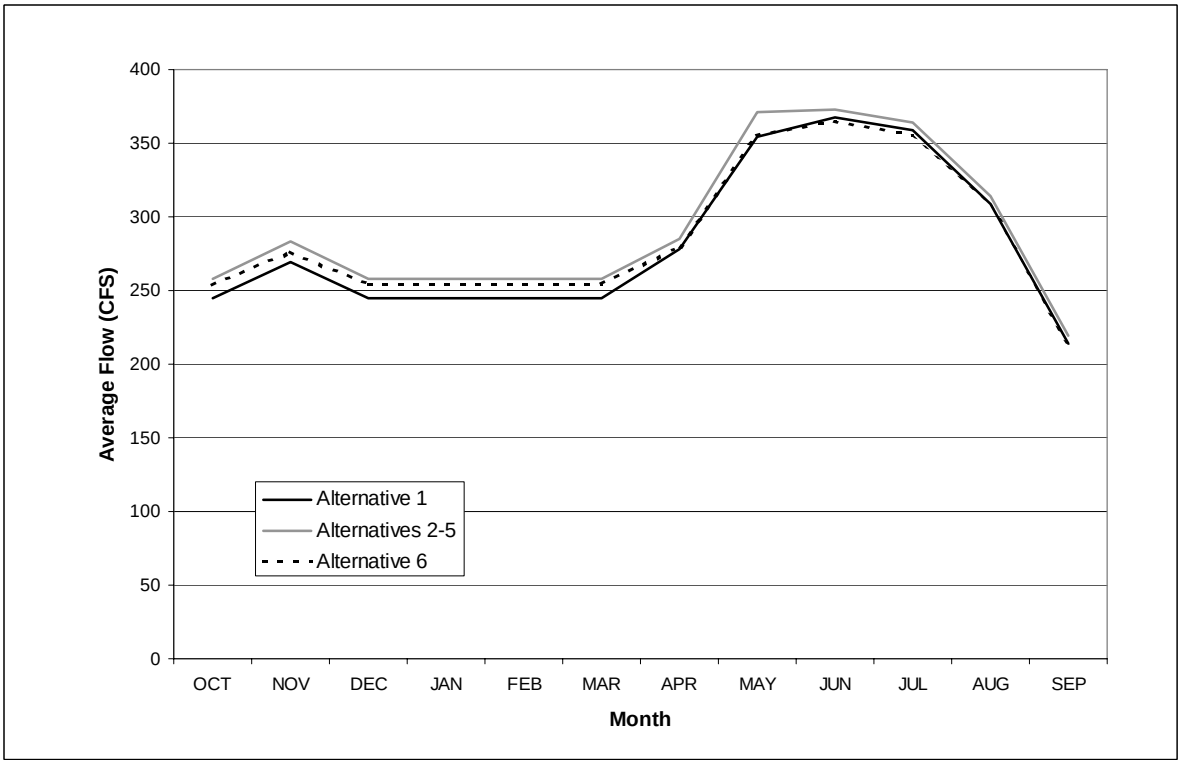


Figure 3.5.4-5 Simulated Average Monthly Mokelumne River Flow Below Camanche Reservoir (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-41. Simulated Camanche Reservoir Release (CFS)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2425	2560	1034	935	800
1923	325	325	421	512	460	325	404	819	973	798	716	580
1924	325	325	325	325	325	325	231	247	309	281	243	177
1925	126	130	130	130	130	130	304	544	649	524	442	306
1926	325	325	325	325	325	325	304	405	369	403	353	239
1927	220	220	220	220	220	220	325	1111	1402	973	884	750
1928	325	423	325	325	325	843	504	483	726	450	380	255
1929	325	413	325	325	325	325	306	374	309	319	266	191
1930	220	220	220	220	220	220	304	405	369	403	353	239
1931	220	220	220	220	220	220	231	247	309	281	243	177
1932	126	130	130	130	130	130	304	455	538	403	353	239
1933	220	220	220	220	220	220	304	405	369	403	353	239
1934	220	220	220	220	220	220	306	374	309	319	266	191
1935	126	130	130	130	130	130	304	455	538	403	353	239
1936	250	250	250	250	1511	535	643	1710	1542	978	880	745
1937	325	325	325	325	325	560	504	988	1143	828	736	600
1938	325	325	1282	325	1187	1786	2453	3026	2297	1183	1081	939
1939	325	325	325	325	325	325	306	374	309	319	266	191
1940	220	220	220	220	220	220	525	1374	1197	791	693	559
1941	325	325	325	574	914	682	504	1248	1578	1030	938	802
1942	325	325	508	1400	1072	325	425	2107	2083	1136	1036	899
1943	325	576	465	1562	1045	1884	775	1746	1330	925	825	688
1944	325	325	325	325	325	325	304	405	369	403	353	239
1945	220	220	220	220	220	220	504	984	1089	914	832	696
1946	325	534	1113	644	325	325	454	739	1044	729	637	501
1947	325	325	325	325	325	325	304	405	369	403	353	239
1948	220	220	220	220	220	220	304	455	538	403	353	239
1949	250	250	250	250	250	250	304	455	538	403	353	239
1950	250	250	250	250	250	250	494	1100	1207	986	897	756
1951	325	3397	4169	1343	1130	444	525	868	973	608	519	385
1952	325	325	711	1434	1327	1147	3124	3221	1962	1431	1328	1183
1953	325	325	325	325	1169	325	304	733	838	713	630	495
1954	325	325	325	325	325	325	304	455	538	403	353	239
1955	250	250	250	250	250	250	304	405	369	403	353	239
1956	220	220	1787	3079	1040	314	536	2139	1923	1163	1062	923
1957	325	325	325	325	325	325	304	581	686	561	479	343
1958	325	325	325	325	1068	1042	1942	2681	1982	1255	1154	1014
1959	325	325	325	325	325	325	304	405	369	403	353	239
1960	220	220	220	220	220	220	304	405	369	403	353	239
1961	220	220	220	220	220	220	231	247	309	319	266	186
1962	126	130	130	130	130	130	304	455	538	403	353	239
1963	220	220	220	220	220	220	304	1385	1449	1038	946	810
1964	325	662	325	325	325	325	304	405	369	403	353	239
1965	220	220	2232	2310	899	220	475	1499	1605	1200	1100	964
1966	325	597	325	325	325	325	304	405	369	403	353	239
1967	220	220	220	288	560	941	1233	3272	1844	1439	1338	1199
1968	325	325	325	325	325	325	304	405	369	403	353	239
1969	220	220	220	983	1677	859	2424	3523	1885	1362	1259	1116
1970	325	325	385	3470	1110	549	525	759	864	643	560	425
1971	325	639	804	723	655	568	504	905	910	785	703	567
1972	325	356	392	325	325	325	354	455	538	403	353	239
1973	250	250	250	432	1294	649	504	934	1039	817	731	595
1974	325	1358	910	1397	325	919	738	1406	1511	1105	1007	872
1975	325	325	325	325	325	325	404	1205	1310	1185	1103	967
1976	325	351	325	325	325	325	231	247	309	281	243	177
1977	126	130	130	130	130	130	231	247	309	281	243	177
1978	126	130	124	127	130	130	231	247	309	281	210	177
1979	126	119	116	130	130	130	229	278	369	403	353	234
1980	163	130	130	130	1249	568	525	1443	1598	1192	1094	960
1981	325	325	325	325	325	325	304	405	369	403	353	239
1982	220	220	220	1377	3030	1842	3722	3096	1922	1518	1413	1264
1983	325	1396	1749	1437	2366	3519	1923	4530	3649	2159	2054	1906
1984	325	2335	2735	1545	1032	416	525	989	1093	872	790	655
1985	325	556	325	325	325	325	304	405	369	403	353	239
1986	220	220	220	220	4889	2761	554	1812	1444	1040	938	796
1987	325	325	325	325	325	325	231	247	309	319	266	186
1988	220	220	220	220	220	220	231	247	309	281	243	177
1989	126	130	130	130	130	130	304	455	538	403	353	239
1990	163	130	130	130	130	130	306	374	309	319	266	191
1991	126	130	130	130	130	130	231	247	309	319	266	186
1992	126	130	130	130	130	130	231	247	309	319	266	186
1993	126	130	130	130	130	130	325	654	759	537	455	321
AVG:	259	384	466	526	599	493	568	989	915	681	610	492
MIN:	126	119	116	127	130	130	229	247	309	281	210	177
MAX:	325	3397	4169	3470	4889	3519	3722	4530	3649	2159	2054	1906

Table 3.5.4-42. Simulated Camanche Reservoir Release (CFS)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2425	2560	1034	935	800
1923	325	325	421	512	460	325	404	819	973	798	716	580
1924	325	325	325	325	325	325	231	247	309	281	243	177
1925	220	220	220	220	220	220	304	642	747	622	540	404
1926	325	325	325	325	325	325	304	405	369	403	353	239
1927	250	250	250	250	432	250	553	1390	1832	979	881	746
1928	325	423	325	325	325	843	504	483	726	450	380	255
1929	325	413	325	325	325	325	306	374	309	319	266	191
1930	220	220	220	220	220	220	304	405	369	403	353	239
1931	250	250	250	250	250	250	231	247	309	281	243	177
1932	126	130	130	130	130	130	304	455	538	403	353	239
1933	250	250	250	250	250	250	304	405	369	403	353	239
1934	250	250	250	250	250	250	306	374	309	319	266	191
1935	220	220	220	220	220	220	304	477	568	437	374	252
1936	325	325	325	325	2302	535	643	1710	1542	979	880	745
1937	325	325	325	325	325	560	504	988	1143	828	736	600
1938	325	325	1282	325	1187	1786	2453	3026	2297	1183	1081	939
1939	325	325	325	325	325	325	306	374	309	319	266	191
1940	220	220	220	220	321	1577	525	1518	1197	791	693	559
1941	325	325	325	574	914	682	504	1248	1578	1030	938	802
1942	325	325	508	1400	1072	325	425	2107	2083	1136	1036	899
1943	325	576	465	1562	1045	1884	775	1746	1330	925	825	688
1944	325	325	325	325	325	325	304	405	369	403	353	239
1945	220	220	220	220	220	220	504	984	1089	914	832	696
1946	325	534	1113	644	325	325	454	739	1044	729	637	501
1947	325	325	325	325	325	325	304	405	369	403	353	239
1948	220	220	220	220	220	220	304	455	538	403	353	239
1949	250	250	250	250	250	250	304	455	538	403	353	239
1950	250	250	250	250	250	250	494	1100	1207	986	897	756
1951	325	3397	4169	1343	1130	444	525	868	973	608	519	385
1952	325	325	711	1434	1327	1147	3124	3221	1962	1431	1328	1183
1953	325	325	325	325	1169	325	304	733	838	713	630	495
1954	325	325	325	325	325	325	304	455	538	403	353	239
1955	250	250	250	250	250	250	304	405	369	403	353	239
1956	220	220	1787	3079	1040	314	536	2139	1923	1163	1062	923
1957	325	325	325	325	325	325	304	581	686	561	479	343
1958	325	325	325	325	1068	1042	1942	2681	1982	1255	1154	1014
1959	325	325	325	325	325	325	304	405	369	403	353	239
1960	220	220	220	220	220	220	304	405	369	403	353	239
1961	220	220	220	220	220	220	231	247	309	319	266	186
1962	126	130	130	130	130	130	304	455	538	403	353	239
1963	250	250	250	250	2390	250	407	1494	1449	1038	946	809
1964	325	662	325	325	325	325	304	405	369	403	353	239
1965	220	220	2975	2310	899	220	475	1499	1605	1200	1100	964
1966	325	597	325	325	325	325	304	405	369	403	353	239
1967	220	220	220	288	560	941	1233	3272	1844	1439	1338	1199
1968	325	325	325	325	325	325	304	405	369	403	353	239
1969	250	250	250	2391	1677	859	2424	3523	1885	1363	1259	1114
1970	325	325	385	3470	1110	549	525	759	864	643	560	425
1971	325	639	804	723	655	568	504	905	910	785	703	567
1972	325	356	392	325	325	325	354	455	538	403	353	239
1973	250	250	250	432	1294	649	504	934	1039	817	731	595
1974	325	1358	910	1397	325	919	738	1406	1511	1105	1007	872
1975	325	325	325	325	325	325	404	1205	1310	1185	1103	967
1976	325	351	325	325	325	325	231	247	309	281	243	177
1977	220	220	220	220	220	220	231	247	309	281	243	177
1978	126	130	130	130	130	130	231	247	309	281	243	177
1979	126	130	130	130	130	130	304	455	538	403	353	239
1980	163	130	130	130	2356	568	525	1443	1598	1193	1094	958
1981	325	325	325	325	325	325	304	405	369	403	353	239
1982	250	250	1221	1499	3030	1842	3722	3096	1922	1518	1413	1264
1983	325	1396	1749	1437	2366	3519	1923	4530	3649	2159	2054	1906
1984	325	2335	2735	1545	1032	416	525	989	1093	872	790	655
1985	325	556	325	325	325	325	304	405	369	403	353	239
1986	220	220	220	220	4889	2761	554	1812	1444	1040	938	796
1987	325	325	325	325	325	325	231	247	309	319	266	186
1988	220	220	220	220	220	220	231	247	309	281	243	177
1989	126	130	130	130	130	130	304	455	538	403	353	239
1990	220	220	220	220	220	220	306	374	309	319	266	191
1991	220	220	220	220	220	220	306	374	309	319	266	191
1992	126	130	130	130	130	130	306	374	309	319	266	191
1993	126	130	130	130	130	130	325	1043	1198	926	844	710
AVG:	269	394	501	556	667	520	576	1009	931	688	617	500
MIN:	126	130	130	130	130	130	231	247	309	281	243	177
MAX:	325	3397	4169	3470	4889	3519	3722	4530	3649	2159	2054	1906

Table 3.5.4-43. Simulated Camanche Reservoir Release (CFS)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	325	325	325	325	325	325	475	2430	3397	743	645	510
1923	325	325	433	517	459	325	404	805	1258	688	605	469
1924	325	325	325	325	325	325	231	247	309	281	243	177
1925	220	220	220	220	220	220	304	455	538	403	353	239
1926	325	325	325	325	325	325	304	405	369	403	353	239
1927	220	220	220	220	220	220	325	981	1706	679	597	462
1928	325	424	325	325	325	856	504	1014	598	471	396	265
1929	325	325	325	325	325	325	306	374	309	319	266	191
1930	220	220	220	220	220	220	304	405	369	403	353	239
1931	220	220	220	220	220	220	231	247	309	281	243	177
1932	126	130	130	130	130	130	304	455	538	403	353	239
1933	220	220	220	220	220	220	304	405	369	403	353	239
1934	220	220	220	220	220	220	306	374	309	319	266	191
1935	220	220	220	220	220	220	304	455	538	403	353	239
1936	220	220	220	220	220	220	325	1653	1905	682	593	458
1937	325	325	325	325	325	587	504	1316	1400	605	523	387
1938	325	325	1286	325	1207	1795	2449	3016	3134	893	791	649
1939	325	325	325	325	325	325	306	374	309	319	266	191
1940	220	220	220	220	220	220	425	2059	996	553	470	336
1941	325	325	325	581	919	686	504	1434	2215	735	649	513
1942	325	325	513	1410	1076	325	425	2102	2920	845	745	608
1943	325	580	466	1571	1050	1894	773	2281	1369	700	616	480
1944	325	325	325	325	325	325	304	405	369	403	353	239
1945	250	250	250	250	250	250	404	894	1708	679	593	457
1946	325	537	1119	643	325	325	454	1344	864	557	475	339
1947	325	325	325	325	325	325	304	405	369	403	353	239
1948	250	250	250	250	250	250	304	455	538	403	353	239
1949	250	250	250	250	250	250	304	455	538	403	353	239
1950	250	250	250	250	250	250	390	995	1751	736	647	506
1951	325	3405	4177	1352	1134	443	525	1326	728	506	424	290
1952	325	325	720	1442	1330	1152	3121	3210	2664	1184	1081	936
1953	325	325	325	325	1176	325	304	718	823	698	616	480
1954	325	325	325	325	325	325	304	455	538	403	353	239
1955	325	325	325	325	325	325	304	405	369	403	353	239
1956	250	250	1185	3090	1042	310	535	2131	2761	873	772	633
1957	325	325	325	325	325	325	304	568	673	548	466	330
1958	325	325	325	325	1083	1053	1946	2673	2819	964	863	723
1959	325	325	325	325	325	325	304	405	369	403	353	239
1960	220	220	220	220	220	220	304	405	369	403	353	239
1961	220	220	220	220	220	220	231	247	309	319	266	186
1962	220	220	220	220	220	220	304	455	538	403	353	239
1963	220	220	220	220	220	220	304	774	914	742	660	524
1964	325	666	325	325	325	325	304	405	369	403	353	239
1965	250	250	2019	2312	898	250	475	1492	2100	1002	913	776
1966	325	600	325	325	325	325	304	405	369	403	353	239
1967	250	250	250	250	439	948	1241	3262	2177	1555	1088	949
1968	325	325	325	325	325	325	304	405	369	403	353	239
1969	250	250	250	838	1691	859	2423	3513	2723	1072	969	826
1970	325	325	389	3481	1111	552	525	744	849	628	545	410
1971	325	646	811	724	655	572	504	890	895	770	688	552
1972	325	355	401	325	325	325	354	455	538	403	353	239
1973	325	325	325	325	1111	653	504	1276	1215	621	538	402
1974	325	1362	919	1401	325	925	738	1658	1870	877	789	654
1975	325	325	325	325	325	325	404	1195	1794	1014	931	795
1976	325	348	325	325	325	325	231	247	309	281	243	177
1977	220	220	220	220	220	220	231	247	309	281	243	177
1978	126	130	130	130	130	130	231	247	309	281	243	177
1979	126	130	130	130	130	130	304	455	538	403	353	239
1980	163	130	130	130	130	130	325	1091	1246	974	892	758
1981	325	325	325	325	325	325	304	405	369	403	353	239
1982	250	250	250	1101	3037	1853	3725	3087	2524	1308	1202	1054
1983	325	1402	1754	1449	2374	3535	1924	4521	3636	2693	1762	1614
1984	325	2346	2746	1542	1037	416	525	974	1183	823	741	607
1985	325	561	325	325	325	325	304	405	369	403	353	239
1986	250	250	250	250	4705	2770	552	2239	1689	790	698	556
1987	325	325	325	325	325	325	231	247	309	319	266	186
1988	220	220	220	220	220	220	231	247	309	281	243	177
1989	126	130	130	130	130	130	304	455	538	403	353	239
1990	220	220	220	220	220	220	306	374	309	319	266	191
1991	126	130	130	130	130	130	231	247	309	319	266	186
1992	126	130	130	130	130	130	231	247	309	319	266	186
1993	126	130	130	130	130	130	325	555	638	406	356	244
AVG:	270	395	467	527	568	493	558	1028	1051	599	515	397
MIN:	126	130	130	130	130	130	231	247	309	281	243	177
MAX:	325	3405	4177	3481	4705	3535	3725	4521	3636	2693	1762	1614

Table 3.5.4-44. Simulated Camanche Reservoir Release (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	94	90	90	90	90	90	0	98	98	98	98	98
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	30	30	30	30	212	30	228	279	430	6	-3	-4
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	30	30	30	30	30	30	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	30	30	30	30	30	30	0	0	0	0	0	0
1934	30	30	30	30	30	30	0	0	0	0	0	0
1935	94	90	90	90	90	90	0	22	30	34	21	13
1936	75	75	75	75	791	0	0	0	0	1	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	101	1357	0	144	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	30	30	30	30	2170	30	103	109	0	0	0	-1
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	743	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	30	30	30	1408	0	0	0	0	0	1	0	-2
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	94	90	90	90	90	90	0	0	0	0	0	0
1978	0	0	6	3	0	0	0	0	0	0	33	0
1979	0	11	14	0	0	0	75	177	169	0	0	5
1980	0	0	0	0	1107	0	0	0	0	1	0	-2
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	30	30	1001	122	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	57	90	90	90	90	90	0	0	0	0	0	0
1991	94	90	90	90	90	90	75	127	0	0	0	5
1992	0	0	0	0	0	0	75	127	0	0	0	5
1993	0	0	0	0	0	0	0	389	439	389	389	389
AVG:	10	10	34	31	68	27	8	20	16	7	7	7
MIN:	0	0	0	0	0	0	0	0	0	0	-3	-4
MAX:	94	90	1001	1408	2170	1357	228	389	439	389	389	389

Table 3.5.4-45. Simulated Camanche Reservoir Release (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	5	837	-291	-290	-290
1923	0	0	12	5	-1	0	0	-14	285	-110	-111	-111
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	94	90	90	90	90	90	0	-89	-111	-121	-89	-67
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	-130	304	-294	-287	-288
1928	0	1	0	0	0	13	0	531	-128	21	16	10
1929	0	-88	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	94	90	90	90	90	90	0	0	0	0	0	0
1936	-30	-30	-30	-30	-1291	-315	-318	-57	363	-296	-287	-287
1937	0	0	0	0	0	27	0	328	257	-223	-213	-213
1938	0	0	4	0	20	9	-4	-10	837	-290	-290	-290
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	-100	685	-201	-238	-223	-223
1941	0	0	0	7	5	4	0	186	637	-295	-289	-289
1942	0	0	5	10	4	0	0	-5	837	-291	-291	-291
1943	0	4	1	9	5	10	-2	535	39	-225	-209	-208
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	30	30	30	30	30	30	-100	-90	619	-235	-239	-239
1946	0	3	6	-1	0	0	0	605	-180	-172	-162	-162
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	30	30	30	30	30	30	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	-104	-105	544	-250	-250	-250
1951	0	8	8	9	4	-1	0	458	-245	-102	-95	-95
1952	0	0	9	8	3	5	-3	-11	702	-247	-247	-247
1953	0	0	0	0	7	0	0	-15	-15	-15	-14	-15
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	75	75	75	75	75	75	0	0	0	0	0	0
1956	30	30	-602	11	2	-4	-1	-8	838	-290	-290	-290
1957	0	0	0	0	0	0	0	-13	-13	-13	-13	-13
1958	0	0	0	0	15	11	4	-8	837	-291	-291	-291
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	94	90	90	90	90	90	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	-611	-535	-296	-286	-286
1964	0	4	0	0	0	0	0	0	0	0	0	0
1965	30	30	-213	2	-1	30	0	-7	495	-198	-187	-188
1966	0	3	0	0	0	0	0	0	0	0	0	0
1967	30	30	30	-38	-121	7	8	-10	333	116	-250	-250
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	30	30	30	-145	14	0	-1	-10	838	-290	-290	-290
1970	0	0	4	11	1	3	0	-15	-15	-15	-15	-15
1971	0	7	7	1	0	4	0	-15	-15	-15	-15	-15
1972	0	-1	9	0	0	0	0	0	0	0	0	0
1973	75	75	75	-107	-183	4	0	342	176	-196	-193	-193
1974	0	4	9	4	0	6	0	252	359	-228	-218	-218
1975	0	0	0	0	0	0	0	-10	484	-171	-172	-172
1976	0	-3	0	0	0	0	0	0	0	0	0	0
1977	94	90	90	90	90	90	0	0	0	0	0	0
1978	0	0	6	3	0	0	0	0	0	0	33	0
1979	0	11	14	0	0	0	75	177	169	0	0	5
1980	0	0	0	0	-1119	-438	-200	-352	-352	-218	-202	-202
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	30	30	30	-276	7	11	3	-9	602	-210	-211	-210
1983	0	6	5	12	8	16	1	-9	-13	534	-292	-292
1984	0	11	11	-3	5	0	0	-15	90	-49	-49	-48
1985	0	5	0	0	0	0	0	0	0	0	0	0
1986	30	30	30	30	-184	9	-2	427	245	-250	-240	-240
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	57	90	90	90	90	90	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	-99	-121	-131	-99	-77
AVG:	11	11	1	1	-31	0	-10	39	136	-82	-95	-95
MIN:	-30	-88	-602	-276	-1291	-438	-318	-611	-535	-296	-292	-292
MAX:	94	90	90	90	90	90	75	685	838	534	33	10

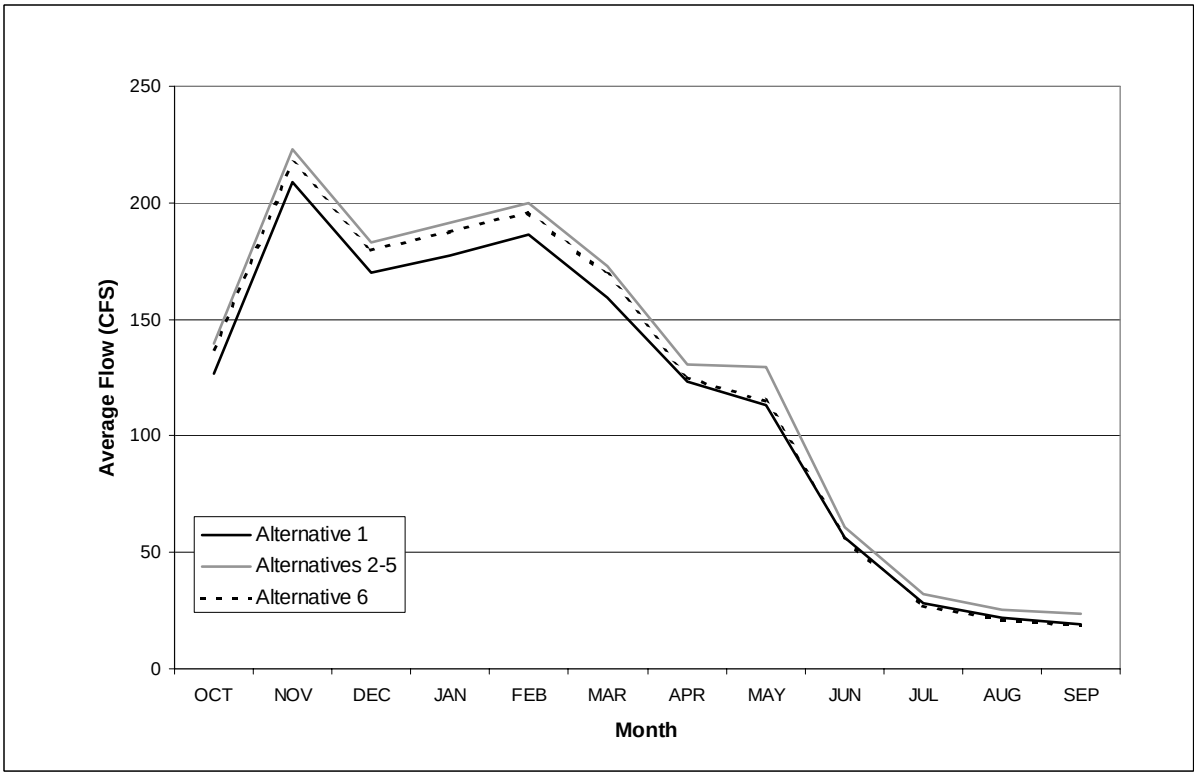


Figure 3.5.4-6 Simulated Average Monthly Mokelumne River Flow at Woodbridge (Dry and Critical Dry Years), 2020 LOD

Table 3.5.4-46. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	181	261	246	255	263	236	317	2110	2141	569	545	545
1923	185	266	347	445	401	239	250	508	558	337	329	328
1924	187	268	254	258	268	240	75	23	31	18	15	15
1925	45	73	59	63	71	44	150	233	233	63	55	53
1926	187	268	254	258	266	239	150	150	31	29	22	20
1927	102	163	149	153	161	134	171	801	987	511	497	497
1928	187	366	254	258	268	757	350	200	350	33	22	20
1929	197	357	254	258	266	240	150	150	31	29	22	20
1930	139	163	149	153	161	134	150	150	31	29	22	20
1931	102	163	149	153	161	135	75	23	31	18	15	15
1932	45	73	59	63	73	44	150	200	200	29	22	20
1933	102	163	149	153	161	134	150	150	31	29	22	20
1934	102	163	149	153	161	135	150	150	31	29	22	20
1935	45	73	59	63	71	44	150	200	200	29	22	20
1936	132	193	179	183	1454	449	489	1399	1127	517	493	493
1937	187	268	254	258	266	474	350	678	728	367	349	348
1938	187	268	1211	215	1088	1653	2248	2662	1825	664	641	641
1939	153	232	210	258	266	240	150	150	31	29	22	20
1940	139	163	149	153	163	134	371	1064	782	330	307	307
1941	187	268	254	507	855	596	350	937	1163	569	551	550
1942	187	268	437	1317	999	222	253	1777	1648	654	630	630
1943	175	506	378	1480	973	1782	604	1417	895	444	420	420
1944	175	255	239	258	268	239	150	150	31	29	22	20
1945	102	163	149	153	161	134	350	673	673	453	445	443
1946	187	477	1042	577	266	239	300	429	629	268	250	249
1947	187	268	254	258	266	239	150	150	31	29	22	20
1948	102	163	149	153	163	134	150	200	200	29	22	20
1949	132	193	179	183	191	164	150	200	200	29	22	20
1950	132	193	179	149	160	127	300	747	747	479	468	467
1951	160	3311	4063	1277	1071	358	371	558	558	147	133	133
1952	187	268	640	1307	1218	996	2900	2837	1470	892	868	868
1953	141	218	194	258	1110	239	150	422	422	252	244	242
1954	187	268	254	258	266	239	150	200	200	29	22	20
1955	132	193	179	183	191	164	150	150	31	29	22	20
1956	102	163	1716	2986	960	198	350	1795	1473	666	643	643
1957	166	245	227	258	266	239	150	271	271	100	92	91
1958	187	268	254	230	983	925	1754	2335	1529	756	732	732
1959	165	244	225	258	266	239	150	150	31	29	22	20
1960	102	163	149	153	163	134	150	150	31	29	22	20
1961	102	163	149	153	161	135	75	23	31	29	22	15
1962	45	73	59	63	71	44	150	200	200	29	22	20
1963	102	163	149	153	161	134	150	1075	1034	577	559	558
1964	187	605	254	258	268	239	150	150	31	29	22	20
1965	102	163	2161	2230	828	120	306	1173	1173	721	698	698
1966	177	529	241	258	266	239	150	150	31	29	22	20
1967	102	163	149	195	477	827	1048	2928	1394	943	919	919
1968	167	246	227	258	268	239	150	150	31	29	22	20
1969	102	163	149	866	1572	718	2211	3150	1404	834	810	810
1970	148	226	263	3397	1045	457	364	441	441	174	166	166
1971	182	577	726	657	596	482	350	595	495	324	316	315
1972	187	299	321	258	268	239	200	200	200	29	22	20
1973	132	193	179	366	1234	563	350	623	623	356	345	343
1974	187	1301	839	1327	263	830	581	1092	1092	640	617	617
1975	185	266	251	258	266	239	250	894	894	724	716	714
1976	187	294	254	258	268	240	75	23	31	18	15	15
1977	45	73	59	63	71	45	75	23	31	18	15	15
1978	45	73	52	60	71	45	75	23	31	18	-18	15
1979	45	62	45	63	71	44	75	23	31	29	22	15
1980	45	73	59	63	1192	482	371	1132	1182	731	707	707
1981	187	268	254	258	266	239	150	150	31	29	22	20
1982	102	163	149	1229	2897	1666	3472	2685	1400	949	925	925
1983	124	1270	1595	1288	2233	3343	1673	4118	3127	1590	1566	1566
1984	124	2209	2582	1478	975	331	371	678	678	411	403	403
1985	187	499	254	258	266	239	150	150	31	29	22	20
1986	102	163	149	110	4792	2629	350	1448	973	522	498	498
1987	154	232	211	258	266	240	75	23	31	29	22	15
1988	139	163	149	153	163	135	75	23	31	18	15	15
1989	45	73	59	63	71	44	150	200	200	29	22	20
1990	45	73	59	63	71	45	150	150	31	29	22	20
1991	45	73	59	63	71	45	75	23	31	29	22	15
1992	45	73	59	63	73	45	75	23	31	29	22	15
1993	45	73	59	63	71	44	171	343	343	76	68	68
AVG:	132	321	388	451	534	399	405	703	541	273	260	259
MIN:	45	62	45	60	71	44	75	23	31	18	-18	15
MAX:	197	3311	4063	3397	4792	3343	3472	4118	3127	1590	1566	1566

Table 3.5.4-47. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	181	261	246	255	263	236	317	2110	2141	569	545	545
1923	185	266	347	445	401	239	250	508	558	337	329	328
1924	187	268	254	258	268	240	75	23	31	18	15	15
1925	139	163	149	153	161	134	150	331	331	161	153	151
1926	187	268	254	258	266	239	150	150	31	29	22	20
1927	132	193	179	183	373	164	399	1079	1416	518	494	494
1928	187	366	254	258	268	757	350	200	350	33	22	20
1929	197	357	254	258	266	240	150	150	31	29	22	20
1930	139	163	149	153	161	134	150	150	31	29	22	20
1931	132	193	179	183	191	165	75	23	31	18	15	15
1932	45	73	59	63	73	44	150	200	200	29	22	20
1933	132	193	179	183	191	164	150	150	31	29	22	20
1934	132	193	179	183	191	165	150	150	31	29	22	20
1935	139	163	149	153	161	134	150	200	200	29	22	20
1936	199	268	254	253	2241	443	483	1393	1120	511	487	487
1937	183	264	249	258	266	474	350	678	728	367	349	348
1938	187	268	1211	215	1088	1653	2248	2662	1825	664	641	641
1939	153	232	210	258	266	240	150	150	31	29	22	20
1940	139	163	149	153	264	1492	371	1207	782	330	307	307
1941	187	268	254	507	855	596	350	937	1163	569	551	550
1942	187	268	437	1317	999	222	253	1777	1648	654	630	630
1943	175	506	378	1480	973	1782	604	1417	895	444	420	420
1944	175	255	239	258	268	239	150	150	31	29	22	20
1945	102	163	149	153	161	134	350	673	673	453	445	443
1946	187	477	1042	577	266	239	300	429	629	268	250	249
1947	187	268	254	258	266	239	150	150	31	29	22	20
1948	102	163	149	153	163	134	150	200	200	29	22	20
1949	132	193	179	183	191	164	150	200	200	29	22	20
1950	132	193	179	149	160	127	300	747	747	479	468	467
1951	160	3311	4063	1277	1071	358	371	558	558	147	133	133
1952	187	268	640	1307	1218	996	2900	2837	1470	892	868	868
1953	141	218	194	258	1110	239	150	422	422	252	244	242
1954	187	268	254	258	266	239	150	200	200	29	22	20
1955	132	193	179	183	191	164	150	150	31	29	22	20
1956	102	163	1716	2986	960	198	350	1795	1473	666	643	643
1957	166	245	227	258	266	239	150	271	271	100	92	91
1958	187	268	254	230	983	925	1754	2335	1529	756	732	732
1959	165	244	225	258	266	239	150	150	31	29	22	20
1960	102	163	149	153	163	134	150	150	31	29	22	20
1961	102	163	149	153	161	135	75	23	31	29	22	15
1962	45	73	59	63	71	44	150	200	200	29	22	20
1963	132	193	179	181	2329	162	250	1181	1031	574	557	555
1964	185	604	252	258	268	239	150	150	31	29	22	20
1965	102	163	2904	2230	828	120	306	1173	1173	721	698	698
1966	177	529	241	258	266	239	150	150	31	29	22	20
1967	102	163	149	195	477	827	1048	2928	1394	943	919	919
1968	167	246	227	258	268	239	150	150	31	29	22	20
1969	132	193	179	2261	1562	705	2197	3136	1389	819	796	796
1970	139	216	251	3397	1045	457	364	441	441	174	166	166
1971	182	577	726	657	596	482	350	595	495	324	316	315
1972	187	299	321	258	268	239	200	200	200	29	22	20
1973	132	193	179	366	1234	563	350	623	623	356	345	343
1974	187	1301	839	1327	263	830	581	1092	1092	640	617	617
1975	185	266	251	258	266	239	250	894	894	724	716	714
1976	187	294	254	258	268	240	75	23	31	18	15	15
1977	139	163	149	153	161	135	75	23	31	18	15	15
1978	45	73	59	63	71	45	75	23	31	18	15	15
1979	45	73	59	63	71	44	150	200	200	29	22	20
1980	45	73	59	56	2293	474	363	1124	1174	723	699	699
1981	182	262	247	258	266	239	150	150	31	29	22	20
1982	132	193	1150	1350	2897	1666	3472	2685	1400	949	925	925
1983	124	1270	1595	1288	2233	3343	1673	4118	3127	1590	1566	1566
1984	124	2209	2582	1478	975	331	371	678	678	411	403	403
1985	187	499	254	258	266	239	150	150	31	29	22	20
1986	102	163	149	110	4792	2629	350	1448	973	522	498	498
1987	154	232	211	258	266	240	75	23	31	29	22	15
1988	139	163	149	153	163	135	75	23	31	18	15	15
1989	45	73	59	63	71	44	150	200	200	29	22	20
1990	102	163	149	153	161	135	150	150	31	29	22	20
1991	139	163	149	153	161	135	150	150	31	29	22	20
1992	45	73	59	63	73	45	150	150	31	29	22	20
1993	45	73	59	63	71	44	171	732	782	465	457	457
AVG:	142	331	422	482	602	426	412	723	556	279	267	266
MIN:	45	73	59	56	71	44	75	23	31	18	15	15
MAX:	199	3311	4063	3397	4792	3343	3472	4118	3127	1590	1566	1566

Table 3.5.4-48. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	187	268	254	256	263	236	318	2116	2978	278	255	255
1923	185	266	359	450	400	239	250	494	843	226	219	217
1924	187	268	254	258	268	240	75	23	31	18	15	15
1925	139	163	149	153	161	134	150	200	200	29	22	20
1926	207	268	254	258	266	239	150	150	31	29	22	20
1927	102	163	149	153	161	134	171	671	1290	218	210	210
1928	187	367	254	258	268	770	350	715	200	29	22	20
1929	191	268	254	258	266	240	150	150	31	29	22	20
1930	139	163	149	153	161	134	150	150	31	29	22	20
1931	102	163	149	153	161	135	75	23	31	18	15	15
1932	45	73	59	63	73	44	150	200	200	29	22	20
1933	102	163	149	153	161	134	150	150	31	29	22	20
1934	102	163	149	153	161	135	150	150	31	29	22	20
1935	139	163	149	153	161	134	150	200	200	29	22	20
1936	102	163	149	153	163	134	171	1342	1489	220	206	206
1937	187	268	254	258	266	502	350	1006	985	144	136	135
1938	187	268	1214	215	1108	1662	2245	2652	2663	375	351	351
1939	154	232	210	258	266	240	150	150	31	29	22	20
1940	139	163	149	153	163	134	271	1748	580	91	84	84
1941	187	268	254	515	860	600	350	1123	1799	274	263	261
1942	187	268	442	1328	1003	223	253	1772	2485	363	340	340
1943	175	511	380	1489	977	1792	602	1952	935	219	212	212
1944	176	256	239	258	268	239	150	150	31	29	22	20
1945	132	193	179	183	191	164	250	584	1292	218	207	205
1946	187	480	1047	576	266	239	300	1033	448	96	88	87
1947	187	268	254	258	266	239	150	150	31	29	22	20
1948	132	193	179	183	193	164	150	200	200	29	22	20
1949	132	193	179	183	191	164	150	200	200	29	22	20
1950	132	193	179	152	163	130	200	646	1295	234	222	221
1951	163	3322	4074	1285	1075	357	371	1015	312	45	37	37
1952	187	268	649	1316	1222	1002	2898	2827	2172	645	621	621
1953	141	219	195	258	1117	239	150	408	408	237	229	228
1954	187	268	254	258	266	239	150	200	200	29	22	20
1955	207	268	254	258	266	239	150	150	31	29	22	20
1956	132	193	1114	2997	962	195	350	1788	2311	377	353	353
1957	167	246	227	258	266	239	150	258	258	87	79	78
1958	187	268	254	230	998	936	1759	2327	2367	465	441	441
1959	165	244	225	258	266	239	150	150	31	29	22	20
1960	102	163	149	153	163	134	150	150	31	29	22	20
1961	102	163	149	153	161	135	75	23	31	29	22	15
1962	139	163	149	153	161	134	150	200	200	29	22	20
1963	102	163	149	153	161	134	150	463	499	281	273	271
1964	187	609	254	258	268	239	150	150	31	29	22	20
1965	132	193	1948	2233	827	151	306	1166	1669	524	510	510
1966	177	533	241	258	266	239	150	150	31	29	22	20
1967	132	193	179	159	358	835	1058	2921	1730	1061	671	671
1968	168	247	229	258	268	239	150	150	31	29	22	20
1969	132	193	179	722	1588	720	2212	3142	2244	546	522	522
1970	149	227	269	3408	1046	460	364	426	426	159	151	151
1971	183	585	734	657	595	487	350	579	479	309	301	299
1972	187	298	330	258	268	239	200	200	200	29	22	20
1973	207	268	254	258	1052	568	350	966	800	160	152	150
1974	187	1305	848	1332	263	836	581	1344	1452	413	399	399
1975	185	266	251	258	266	239	250	884	1379	552	545	543
1976	187	291	254	258	268	240	75	23	31	18	15	15
1977	139	163	149	153	161	135	75	23	31	18	15	15
1978	45	73	59	63	71	45	75	23	31	18	15	15
1979	45	73	59	63	71	44	150	200	200	29	22	20
1980	45	73	59	63	73	44	171	781	831	513	506	506
1981	187	268	254	258	266	239	150	150	31	29	22	20
1982	132	193	179	952	2904	1678	3475	2675	2002	738	714	714
1983	124	1277	1601	1300	2241	3360	1675	4110	3114	2123	1274	1274
1984	124	2220	2593	1476	980	330	371	663	768	362	355	355
1985	187	504	254	258	266	239	150	150	31	29	22	20
1986	132	193	179	142	4609	2640	350	1878	1220	274	260	260
1987	155	234	212	258	266	240	75	23	31	29	22	15
1988	139	163	149	153	163	135	75	23	31	18	15	15
1989	45	73	59	63	71	44	150	200	200	29	22	20
1990	102	163	149	153	161	135	150	150	31	29	22	20
1991	45	73	59	63	71	45	75	23	31	29	22	15
1992	45	73	59	63	73	45	75	23	31	29	22	15
1993	45	73	59	63	71	44	171	300	300	33	25	25
AVG:	144	332	389	453	503	399	395	744	679	193	167	165
MIN:	45	73	59	63	71	44	75	23	31	18	15	15
MAX:	207	3322	4074	3408	4609	3360	3475	4110	3114	2123	1274	1274

Table 3.5.4-49. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	94	90	90	90	90	90	0	98	98	98	98	98
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	30	30	30	30	212	30	228	278	429	7	-3	-3
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	30	30	30	30	30	30	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	30	30	30	30	30	30	0	0	0	0	0	0
1934	30	30	30	30	30	30	0	0	0	0	0	0
1935	94	90	90	90	90	90	0	0	0	0	0	0
1936	67	75	75	70	787	-6	-6	-6	-7	-6	-6	-6
1937	-4	-4	-5	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	101	1358	0	143	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	30	30	30	28	2168	28	100	106	-3	-3	-2	-3
1964	-2	-1	-2	0	0	0	0	0	0	0	0	0
1965	0	0	743	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	30	30	30	1395	-10	-13	-14	-14	-15	-15	-14	-14
1970	-9	-10	-12	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	94	90	90	90	90	90	0	0	0	0	0	0
1978	0	0	7	3	0	0	0	0	0	0	33	0
1979	0	11	14	0	0	0	75	177	169	0	0	5
1980	0	0	0	-7	1101	-8	-8	-8	-8	-8	-8	-8
1981	-5	-6	-7	0	0	0	0	0	0	0	0	0
1982	30	30	1001	121	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	57	90	90	90	90	90	0	0	0	0	0	0
1991	94	90	90	90	90	90	75	127	0	0	0	5
1992	0	0	0	0	0	0	75	127	0	0	0	5
1993	0	0	0	0	0	0	0	389	439	389	389	389
AVG:	10	10	34	30	68	27	7	20	15	6	7	7
MIN:	-9	-10	-12	-7	-10	-13	-14	-14	-15	-15	-14	-14
MAX:	94	90	1001	1395	2168	1358	228	389	439	389	389	389

Table 3.5.4-50. Simulated Mokelumne River Flow at Woodbridge(CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	6	7	8	1	0	0	1	6	837	-291	-290	-290
1923	0	0	12	5	-1	0	0	-14	285	-111	-110	-111
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	94	90	90	90	90	90	0	-33	-33	-34	-33	-33
1926	20	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	-130	303	-293	-287	-287
1928	0	1	0	0	0	13	0	515	-150	-4	0	0
1929	-6	-89	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	94	90	90	90	90	90	0	0	0	0	0	0
1936	-30	-30	-30	-30	-1291	-315	-318	-57	362	-297	-287	-287
1937	0	0	0	0	0	28	0	328	257	-223	-213	-213
1938	0	0	3	0	20	9	-3	-10	838	-289	-290	-290
1939	1	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	-100	684	-202	-239	-223	-223
1941	0	0	0	8	5	4	0	186	636	-295	-288	-289
1942	0	0	5	11	4	1	0	-5	837	-291	-290	-290
1943	0	5	2	9	4	10	-2	535	40	-225	-208	-208
1944	1	1	0	0	0	0	0	0	0	0	0	0
1945	30	30	30	30	30	30	-100	-89	619	-235	-238	-238
1946	0	3	5	-1	0	0	0	604	-181	-172	-162	-162
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	30	30	30	30	30	30	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	3	3	3	-100	-101	548	-245	-246	-246
1951	3	11	11	8	4	-1	0	457	-246	-102	-96	-96
1952	0	0	9	9	4	6	-2	-10	702	-247	-247	-247
1953	0	1	1	0	7	0	0	-14	-14	-15	-15	-14
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	75	75	75	75	75	75	0	0	0	0	0	0
1956	30	30	-602	11	2	-3	0	-7	838	-289	-290	-290
1957	1	1	0	0	0	0	0	-13	-13	-13	-13	-13
1958	0	0	0	0	15	11	5	-8	838	-291	-291	-291
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	94	90	90	90	90	90	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	-612	-535	-296	-286	-287
1964	0	4	0	0	0	0	0	0	0	0	0	0
1965	30	30	-213	3	-1	31	0	-7	496	-197	-188	-188
1966	0	4	0	0	0	0	0	0	0	0	0	0
1967	30	30	30	-36	-119	8	10	-7	336	118	-248	-248
1968	1	1	2	0	0	0	0	0	0	0	0	0
1969	30	30	30	-144	16	2	1	-8	840	-288	-288	-288
1970	1	1	6	11	1	3	0	-15	-15	-15	-15	-15
1971	1	8	8	0	-1	5	0	-16	-16	-15	-15	-16
1972	0	-1	9	0	0	0	0	0	0	0	0	0
1973	75	75	75	-108	-182	5	0	343	177	-196	-193	-193
1974	0	4	9	5	0	6	0	252	360	-227	-218	-218
1975	0	0	0	0	0	0	0	-10	485	-172	-171	-171
1976	0	-3	0	0	0	0	0	0	0	0	0	0
1977	94	90	90	90	90	90	0	0	0	0	0	0
1978	0	0	7	3	0	0	0	0	0	0	33	0
1979	0	11	14	0	0	0	75	177	169	0	0	5
1980	0	0	0	0	-1119	-438	-200	-351	-351	-218	-201	-201
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	30	30	30	-277	7	12	3	-10	602	-211	-211	-211
1983	0	7	6	12	8	17	2	-8	-13	533	-292	-292
1984	0	11	11	-2	5	-1	0	-15	90	-49	-48	-48
1985	0	5	0	0	0	0	0	0	0	0	0	0
1986	30	30	30	32	-183	11	0	430	247	-248	-238	-238
1987	1	2	1	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	57	90	90	90	90	90	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	-43	-43	-43	-43	-43
AVG:	11	11	1	2	-31	0	-10	41	138	-80	-94	-94
MIN:	-30	-89	-602	-277	-1291	-438	-318	-612	-535	-297	-292	-292
MAX:	94	90	90	90	90	90	75	684	840	533	33	5

3.5.5 Delta Flows

This section presents CALSIM II Delta flow results from the FRWP alternatives. Monthly flow data are presented in tabular format for Sacramento River, Mokelumne River, and San Joaquin River flows into the Delta, as well as total Delta inflow and outflow through San Francisco Bay. Data for Georgiana Slough flow and Delta Cross Channel net flow show how the Delta inflow and outflow relate to water movement within the Delta. Simulated results are provided for each flow, followed by a comparison of the flow in each Action alternative to Alternative 1. Figures describing average monthly values are sometimes provided for key flows.

Mokelumne River flows into the Delta are input into CALSIM II from EBMUDSIM. All other flows are calculated within CALSIM II.

Table 3.5.5-1. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	658	618	1090	1005	2007	1812	1363	2903	2128	1333	956	789
1923	701	845	1737	1770	838	928	1382	961	886	1232	989	858
1924	735	608	760	815	941	621	436	482	555	629	666	431
1925	492	504	825	801	3579	1637	1283	854	965	739	525	687
1926	561	506	548	1073	2271	841	1234	776	702	967	693	584
1927	565	1418	1211	1916	4174	2648	2718	1546	1139	1242	981	737
1928	787	1046	953	1393	1364	4577	1551	1180	927	1127	856	734
1929	650	740	770	798	905	740	409	474	591	676	527	369
1930	478	431	1137	1351	1039	1966	750	744	725	1035	827	640
1931	564	506	565	844	625	504	499	457	561	931	691	504
1932	477	421	1212	1320	1007	829	619	713	864	1002	747	672
1933	566	507	545	850	661	810	615	429	577	703	514	413
1934	478	431	908	1156	830	795	681	480	643	659	461	501
1935	478	681	641	1844	780	1664	2837	1422	1252	1109	1033	745
1936	714	551	673	2460	3530	1797	1250	912	899	1126	1005	718
1937	671	552	715	847	1993	2440	1309	950	855	1060	992	721
1938	656	1440	3832	1925	4136	4601	3597	3382	2028	1208	952	1001
1939	924	733	910	831	702	862	547	680	858	1182	984	748
1940	652	510	570	2008	3286	4550	3855	1143	1060	1332	992	749
1941	673	740	2601	4476	4110	4336	3657	2387	1133	1291	941	1054
1942	795	778	3729	4245	4142	1418	2581	2080	1530	1154	948	1028
1943	814	961	1788	4424	2870	4142	1537	1110	987	1019	957	730
1944	633	588	721	886	1426	1331	675	654	919	1135	940	777
1945	690	882	1026	869	2537	1377	731	797	1055	1253	996	739
1946	648	922	3999	3027	1449	1122	705	852	1009	1250	1017	877
1947	771	748	975	706	1014	1252	834	659	816	1195	1053	804
1948	620	614	579	989	938	1027	1562	1680	1237	1288	1054	795
1949	765	690	845	701	703	2934	738	851	984	1126	675	745
1950	566	560	567	1231	1947	1264	1180	1075	1229	1221	1007	737
1951	737	2677	4587	3821	3574	1707	877	1110	782	1399	1035	860
1952	736	929	2432	4518	4164	3429	3590	3634	2224	1107	894	1261
1953	1012	791	2676	4497	1266	1325	978	1531	1377	1296	983	1129
1954	842	960	759	2117	3461	3038	2360	1509	863	1350	1007	907
1955	783	883	1452	1163	803	707	751	816	928	813	581	637
1956	575	723	4559	4635	3992	2131	1148	2300	1169	1270	957	1027
1957	897	701	855	805	1966	2818	1193	966	1033	1249	1005	761
1958	1088	843	1428	2354	4193	4517	4389	2664	1778	1107	937	1141
1959	1054	708	754	2299	2961	1337	605	770	1100	1324	1059	710
1960	731	602	583	815	1669	1269	642	813	856	1181	1064	642
1961	564	725	982	757	1707	1212	664	691	762	1257	1101	750
1962	713	625	1026	631	2620	1542	672	806	1096	1280	1010	844
1963	1992	969	1681	947	3860	1877	4226	1847	1084	1269	974	773
1964	796	1554	798	1346	838	726	1124	700	798	1178	1111	832
1965	563	859	4274	4575	1737	1388	2520	1364	799	1267	964	750
1966	576	1262	948	1824	1409	1713	806	915	1023	1221	948	727
1967	784	870	2205	2510	3008	3351	2252	2662	2184	915	969	1253
1968	1103	813	981	1787	3481	2217	890	695	879	1192	1005	769
1969	756	759	1456	4570	4116	2872	2492	2793	1283	984	962	845
1970	1045	828	3681	4710	3948	2045	877	726	913	1454	1004	817
1971	747	1062	3606	2912	1571	2621	1300	1581	1173	1545	988	1065
1972	889	796	1063	1006	1443	2169	689	690	1144	1205	954	688
1973	700	1127	1593	4518	4065	3191	980	1020	1200	1314	961	783
1974	753	3475	4131	4592	2220	4546	3917	1350	1299	1113	967	1215
1975	896	814	1024	944	3620	4361	1295	1654	1324	1251	936	1150
1976	1107	858	997	844	766	947	553	448	580	859	706	603
1977	480	448	545	523	430	475	528	369	664	898	781	427
1978	477	425	955	3931	2958	3809	2142	1176	986	1034	1024	827
1979	577	630	936	1387	2035	1871	1012	881	1210	1189	980	750
1980	729	794	1158	4566	4278	2748	1078	965	757	1180	1039	783
1981	631	562	893	1316	1486	1963	1005	695	851	1212	1072	788
1982	720	1912	4547	4258	4104	4386	4431	2400	1298	1159	946	1038
1983	1251	2199	3965	4379	4171	4764	3697	3425	3251	1431	1272	1577
1984	1207	3878	4623	3115	1959	2181	1019	780	893	1392	998	857
1985	698	1830	1350	860	868	888	832	792	839	1201	1094	913
1986	712	690	1058	1453	4362	4575	1076	765	835	1176	1024	794
1987	689	560	668	881	1116	1552	792	634	865	1005	830	704
1988	678	528	1171	1768	904	544	644	591	634	751	513	474
1989	478	593	640	814	503	2854	1240	946	857	1173	1056	790
1990	831	646	761	1212	872	835	638	506	490	598	713	500
1991	476	430	432	437	463	1977	791	560	451	715	595	539
1992	469	429	431	675	1934	1257	699	536	641	654	467	621
1993	476	431	853	3517	3151	2725	2226	1842	1549	1369	1017	784
AVG:	733	899	1555	2044	2220	2129	1483	1202	1053	1122	909	792
MIN:	469	421	431	437	430	475	409	369	451	598	461	369
MAX:	1992	3878	4623	4710	4362	4764	4431	3634	3251	1545	1272	1577

Table 3.5.5-2. Simulated Sacramento River Inflow to Delta (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	658	616	1086	1002	2001	1809	1361	2899	2124	1333	956	783
1923	699	843	1729	1768	838	927	1380	958	887	1232	989	859
1924	736	607	768	815	938	621	430	480	561	619	652	413
1925	468	505	825	801	3584	1636	1278	850	962	735	522	686
1926	561	506	548	1073	2270	832	1219	767	704	964	691	587
1927	565	1410	1174	1914	4170	2645	2714	1543	1123	1225	981	734
1928	790	1047	956	1390	1364	4573	1548	1181	924	1123	852	731
1929	647	741	770	798	902	730	409	473	557	675	532	361
1930	478	431	1134	1348	1037	1955	739	735	731	1045	833	624
1931	564	506	560	844	640	502	499	455	557	935	690	455
1932	477	422	1207	1317	969	828	617	710	861	997	744	682
1933	566	507	545	848	658	799	615	418	577	701	513	412
1934	478	431	908	1154	831	786	681	480	643	659	446	414
1935	478	673	641	1826	762	1661	2835	1418	1249	1106	1029	723
1936	713	551	668	2453	3527	1804	1246	907	901	1124	1005	719
1937	668	551	717	848	1990	2437	1305	941	855	1056	984	721
1938	647	1435	3761	1923	4133	4597	3594	3377	2024	1208	952	1006
1939	913	732	907	829	699	848	539	671	865	1176	981	748
1940	660	507	560	1993	3252	4546	3852	1138	1070	1337	992	872
1941	710	729	2589	4472	4102	4333	3653	2383	1134	1291	954	1049
1942	792	776	3708	4243	4139	1415	2577	2075	1526	1150	948	1024
1943	808	952	1784	4421	2867	4139	1534	1107	987	1021	957	727
1944	630	589	718	886	1423	1322	673	651	919	1134	939	776
1945	689	876	1023	869	2530	1376	729	794	1055	1253	996	736
1946	649	913	3996	3019	1457	1113	703	849	1010	1250	1017	877
1947	770	749	976	703	1011	1255	832	657	815	1190	1047	804
1948	620	618	580	990	938	1026	1560	1675	1233	1288	1054	792
1949	749	687	842	700	700	2932	736	848	984	1124	674	742
1950	566	561	566	1229	1944	1261	1178	1072	1226	1218	1007	737
1951	736	2667	4584	3818	3571	1703	875	1107	783	1399	1035	859
1952	736	928	2414	4515	4161	3425	3583	3630	2220	1105	891	1253
1953	1006	789	2672	4494	1266	1324	976	1529	1373	1299	983	1120
1954	840	955	759	2109	3458	3035	2356	1510	860	1351	1007	907
1955	780	883	1442	1161	802	704	755	812	928	809	575	635
1956	576	723	4554	4632	3989	2128	1146	2296	1165	1270	957	1019
1957	891	699	869	805	1944	2815	1193	961	1034	1240	1004	757
1958	1083	843	1423	2351	4190	4514	4385	2660	1774	1106	937	1135
1959	1048	706	753	2296	2959	1332	594	777	1099	1322	1059	659
1960	789	564	575	805	1657	1259	642	799	857	1178	1083	615
1961	564	725	982	757	1668	1209	664	691	753	1256	1101	750
1962	712	632	1026	631	2612	1532	661	799	1083	1267	1035	842
1963	1956	956	1668	935	3814	1869	4223	1843	1082	1277	974	770
1964	793	1550	798	1334	839	704	1156	686	805	1183	1111	821
1965	563	860	4228	4573	1734	1390	2514	1365	799	1267	963	746
1966	575	1245	944	1822	1406	1712	803	913	1024	1220	947	727
1967	784	865	2193	2508	2999	3347	2248	2657	2180	911	965	1248
1968	1097	812	978	1784	3477	2204	891	683	883	1176	1005	769
1969	750	749	1445	4567	4113	2869	2488	2782	1279	985	962	829
1970	1040	826	3677	4708	3945	2042	878	723	915	1451	1004	812
1971	744	1058	3594	2910	1578	2610	1300	1575	1170	1546	988	1060
1972	889	794	1060	993	1440	2164	691	690	1145	1203	953	688
1973	698	1121	1581	4515	4062	3188	979	1017	1201	1314	959	777
1974	751	3462	4128	4589	2217	4542	3914	1347	1296	1114	967	1210
1975	883	813	1021	944	3616	4358	1293	1650	1320	1251	936	1143
1976	1102	852	997	844	763	935	548	434	592	861	712	595
1977	480	444	536	523	424	470	526	369	665	892	780	420
1978	477	425	955	3923	2834	3770	2123	1173	984	1033	1024	824
1979	576	635	935	1385	2016	1858	1001	869	1203	1183	981	750
1980	745	787	1154	4560	4275	2744	1076	962	754	1181	1040	773
1981	629	561	893	1313	1479	1950	994	683	855	1212	1072	771
1982	736	1889	4542	4255	4100	4383	4428	2396	1294	1159	948	1033
1983	1240	2195	3961	4376	4168	4760	3694	3421	3247	1427	1268	1572
1984	1202	3873	4620	3114	1957	2179	1020	778	890	1394	998	853
1985	702	1821	1347	860	865	887	832	792	839	1201	1093	913
1986	711	689	1055	1450	4358	4571	1074	762	835	1174	1023	792
1987	687	559	668	881	1113	1521	798	633	860	1008	830	706
1988	664	519	1161	1759	906	542	573	611	645	753	515	474
1989	478	593	640	814	504	2770	1238	949	858	1167	1053	800
1990	825	635	746	1203	869	822	638	494	493	591	710	530
1991	476	430	431	436	464	1966	777	546	451	698	587	528
1992	469	429	431	675	1931	1244	685	530	642	652	458	574
1993	476	431	847	3532	3148	2703	2222	1816	1546	1346	995	760
AVG:	732	895	1549	2041	2213	2122	1479	1198	1052	1119	909	786
MIN:	468	422	431	436	424	470	409	369	451	591	446	361
MAX:	1956	3873	4620	4708	4358	4760	4428	3630	3247	1546	1268	1572

Table 3.5.5-3. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	658	616	1086	1002	2001	1809	1361	2899	2124	1351	974	770
1923	699	843	1707	1768	838	927	1380	958	870	1239	996	863
1924	752	613	786	815	938	621	436	481	555	628	663	429
1925	471	505	825	801	3586	1627	1280	851	951	737	523	686
1926	561	506	548	1073	2267	838	1215	775	703	968	693	586
1927	565	1412	1206	1914	4170	2645	2714	1543	1133	1295	999	734
1928	788	1027	937	1391	1363	4571	1548	1151	943	1139	855	731
1929	654	743	769	798	902	739	409	474	553	672	529	371
1930	478	431	1134	1348	1039	1964	748	743	726	1044	829	639
1931	564	506	559	844	639	502	499	455	561	933	690	504
1932	477	422	1208	1317	993	828	617	710	861	998	744	672
1933	566	507	545	848	658	809	615	426	577	702	514	413
1934	478	431	908	1154	831	794	681	480	643	659	451	496
1935	478	681	641	1841	781	1660	2824	1420	1249	1106	1032	742
1936	713	551	675	2456	3527	1784	1249	910	880	1128	1022	735
1937	666	550	716	848	1977	2437	1306	947	840	1058	997	733
1938	644	1435	3814	1923	4133	4597	3594	3377	2024	1225	969	984
1939	893	731	906	828	699	857	553	678	855	1177	982	748
1940	652	508	570	2005	3281	4546	3852	1125	1052	1346	1006	885
1941	710	728	2583	4472	4102	4333	3653	2383	1113	1309	975	1049
1942	792	776	3710	4243	4139	1415	2577	2075	1526	1249	966	1024
1943	808	929	1785	4421	2867	4139	1534	1107	984	992	970	727
1944	630	586	720	886	1423	1327	673	651	919	1138	942	778
1945	685	856	1033	875	2538	1376	729	794	1018	1267	1010	736
1946	673	888	3996	3003	1489	1090	704	848	1019	1260	1027	886
1947	772	736	972	698	1011	1265	832	656	794	1182	1044	804
1948	613	610	577	990	936	1026	1561	1676	1234	1288	1054	792
1949	793	686	842	700	700	2932	736	848	984	1115	686	742
1950	566	556	566	1227	1944	1243	1174	1072	1203	1222	1017	732
1951	735	2661	4584	3818	3571	1703	875	1107	796	1445	1041	859
1952	736	933	2363	4515	4161	3425	3592	3630	2220	1113	895	1242
1953	1006	789	2672	4494	1266	1324	976	1529	1373	1302	983	1120
1954	840	955	759	2106	3458	3035	2356	1510	860	1350	1007	907
1955	780	874	1442	1161	801	704	752	813	928	812	577	635
1956	575	722	4555	4632	3989	2128	1146	2296	1165	1288	975	1005
1957	892	698	858	805	1937	2815	1194	961	1035	1239	1004	757
1958	1074	843	1423	2351	4190	4514	4385	2660	1774	1117	955	1116
1959	1048	706	753	2296	2959	1337	604	773	1090	1329	1059	722
1960	728	602	585	815	1666	1268	642	809	857	1178	1083	608
1961	564	725	982	757	1700	1208	663	690	757	1257	1100	750
1962	713	634	1025	632	2618	1541	670	805	1093	1276	1005	848
1963	1980	964	1678	945	3856	1878	4221	1843	1093	1383	991	770
1964	793	1550	798	1334	839	699	1164	696	796	1168	1111	809
1965	562	860	4230	4573	1734	1386	2516	1364	783	1249	975	748
1966	574	1266	939	1827	1406	1712	804	913	1023	1220	947	727
1967	782	865	2195	2508	3000	3347	2248	2657	2180	911	965	1248
1968	1097	812	978	1784	3477	2213	891	693	880	1188	1005	769
1969	753	756	1451	4568	4113	2869	2488	2786	1279	1002	979	819
1970	1021	826	3677	4708	3945	2042	878	723	916	1450	1005	812
1971	744	1058	3592	2910	1579	2610	1300	1575	1170	1547	989	1060
1972	889	794	1060	991	1440	2164	691	690	1145	1203	953	688
1973	698	1121	1581	4515	4062	3188	979	1017	1185	1325	967	768
1974	752	3476	4128	4589	2217	4542	3914	1347	1293	1125	980	1210
1975	867	810	1024	944	3614	4358	1293	1650	1320	1262	947	1135
1976	1102	846	990	844	763	944	553	444	586	858	707	602
1977	480	444	542	523	423	470	520	368	667	883	781	423
1978	477	425	955	3928	2950	3822	2139	1173	984	1031	1024	824
1979	576	630	934	1385	2024	1868	1011	879	1200	1186	976	750
1980	725	793	1154	4563	4275	2745	1076	962	754	1194	1054	753
1981	629	561	893	1313	1459	1959	1003	692	852	1212	1072	783
1982	728	1906	4543	4255	4100	4383	4428	2396	1294	1172	954	1033
1983	1230	2195	3961	4376	4168	4760	3694	3421	3247	1427	1268	1572
1984	1202	3873	4620	3114	1957	2179	1020	778	889	1392	1001	850
1985	707	1821	1347	860	865	887	832	792	839	1201	1093	913
1986	710	689	1055	1450	4358	4571	1074	762	818	1178	1029	791
1987	687	559	668	881	1113	1532	797	634	863	1004	830	704
1988	672	528	1171	1765	904	542	642	592	634	746	511	458
1989	478	593	640	815	504	2832	1238	947	857	1170	1055	786
1990	833	639	751	1210	869	831	638	503	491	584	718	526
1991	476	430	431	437	464	1976	788	556	451	714	595	537
1992	469	429	431	675	1931	1253	696	534	641	653	457	619
1993	476	431	852	3513	3148	2715	2222	1821	1546	1372	1020	786
AVG:	731	895	1550	2041	2217	2125	1481	1199	1049	1127	914	789
MIN:	469	422	431	437	423	470	409	368	451	584	451	371
MAX:	1980	3873	4620	4708	4358	4760	4428	3630	3247	1547	1268	1572

Table 3.5.5-4. Simulated Sacramento River Inflow to Delta (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-6	-3	-2	-4	-4	0	0	-6
1923	-3	-2	-8	-2	0	-1	-2	-3	0	0	0	2
1924	1	-1	8	0	-3	0	-7	-1	6	-10	-13	-18
1925	-24	1	0	0	5	-1	-4	-4	-3	-4	-3	-1
1926	0	0	0	0	-1	-9	-15	-10	2	-3	-1	3
1927	0	-8	-37	-2	-4	-3	-4	-3	-17	-17	0	-3
1928	3	1	2	-3	0	-4	-3	0	-3	-4	-4	-3
1929	-3	1	0	0	-3	-11	-1	-1	-34	0	5	-8
1930	0	0	-2	-3	-3	-12	-12	-9	6	10	5	-16
1931	0	0	-6	1	15	-1	0	-3	-4	3	-1	-49
1932	0	1	-5	-3	-38	-1	-2	-3	-3	-4	-3	10
1933	0	0	0	-2	-3	-11	0	-11	0	-2	-2	-1
1934	0	0	0	-2	0	-9	0	0	0	0	-15	-87
1935	0	-8	0	-18	-18	-3	-2	-4	-3	-3	-4	-22
1936	-1	0	-5	-7	-3	7	-4	-6	1	-2	0	1
1937	-3	-1	2	0	-3	-3	-4	-9	0	-4	-8	0
1938	-10	-5	-71	-2	-3	-3	-4	-5	-4	0	0	5
1939	-11	-2	-3	-2	-3	-14	-8	-8	7	-6	-3	0
1940	9	-4	-10	-15	-34	-4	-3	-5	10	5	0	123
1941	36	-11	-11	-4	-7	-3	-4	-5	1	0	13	-5
1942	-3	-2	-21	-2	-3	-3	-4	-4	-4	-4	0	-5
1943	-6	-9	-3	-3	-3	-3	-3	-2	0	2	0	-3
1944	-3	0	-3	0	-3	-9	-2	-3	0	-2	-1	-1
1945	-1	-5	-4	0	-8	-1	-2	-3	0	0	0	-3
1946	0	-9	-3	-8	8	-9	-2	-3	0	0	0	0
1947	-1	1	1	-3	-3	3	-2	-2	-2	-6	-6	0
1948	0	4	1	0	0	-1	-2	-5	-3	0	0	-3
1949	-16	-4	-3	0	-3	-2	-2	-3	0	-2	-1	-3
1950	0	1	-1	-3	-3	-3	-2	-3	-3	-2	0	-1
1951	-1	-11	-4	-3	-3	-3	-2	-3	0	0	0	-1
1952	0	-1	-18	-2	-3	-3	-7	-4	-4	-2	-3	-7
1953	-6	-2	-4	-2	0	0	-1	-2	-3	2	0	-9
1954	-2	-5	0	-8	-3	-3	-3	1	-3	2	0	0
1955	-3	0	-10	-2	0	-3	3	-3	0	-4	-6	-2
1956	1	0	-5	-2	-3	-3	-2	-4	-4	0	0	-8
1957	-5	-2	14	0	-23	-3	0	-5	1	-9	-1	-4
1958	-5	0	-6	-2	-3	-3	-4	-4	-4	-1	0	-6
1959	-6	-2	-1	-3	-3	-4	-11	7	-1	-1	0	-51
1960	57	-39	-8	-10	-12	-11	0	-14	1	-3	19	-27
1961	0	0	0	0	-39	-4	-1	-1	-9	0	0	0
1962	-1	7	-1	0	-8	-11	-11	-7	-13	-13	24	-2
1963	-35	-13	-13	-12	-46	-8	-2	-5	-2	7	0	-3
1964	-3	-5	-1	-13	0	-22	32	-14	6	5	-1	-10
1965	0	0	-46	-2	-3	2	-7	1	0	0	0	-4
1966	-2	-16	-4	-2	-3	-1	-2	-2	1	-1	-1	0
1967	0	-5	-11	-2	-9	-3	-4	-4	-4	-4	-3	-5
1968	-6	-1	-3	-2	-4	-13	1	-12	5	-15	0	0
1969	-7	-11	-10	-4	-3	-4	-4	-11	-4	1	1	-16
1970	-5	-2	-3	-3	-3	-4	1	-3	2	-3	0	-5
1971	-3	-5	-11	-2	6	-11	0	-6	-3	1	0	-5
1972	0	-2	-3	-14	-3	-4	2	0	0	-2	-1	0
1973	-2	-5	-12	-3	-3	-3	-2	-3	1	0	-2	-6
1974	-2	-13	-3	-3	-3	-3	-4	-3	-3	0	0	-5
1975	-13	-1	-3	0	-4	-3	-2	-4	-3	0	0	-7
1976	-6	-6	0	0	-3	-12	-5	-14	11	1	6	-8
1977	0	-4	-8	1	-6	-6	-2	0	1	-6	-1	-6
1978	0	0	0	-8	-124	-40	-20	-3	-2	0	0	-4
1979	-1	6	-1	-3	-19	-13	-11	-12	-7	-5	1	0
1980	15	-7	-3	-6	-3	-3	-2	-3	-3	1	1	-10
1981	-2	-1	0	-2	-7	-13	-11	-12	4	0	-1	-17
1982	16	-23	-4	-2	-3	-3	-4	-4	-4	0	2	-5
1983	-11	-5	-3	-2	-3	-3	-4	-4	-4	-4	-4	-5
1984	-6	-5	-3	-1	-2	-3	0	-2	-3	2	0	-5
1985	5	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	-1	-1	-3	-3	-4	-4	-2	-3	0	-3	-1	-3
1987	-1	-1	0	0	-3	-31	6	0	-5	3	0	2
1988	-14	-9	-10	-8	3	-1	-71	20	10	1	1	-1
1989	0	0	0	0	0	-84	-2	3	1	-6	-3	10
1990	-6	-10	-15	-9	-3	-13	0	-12	3	-7	-3	30
1991	0	0	0	-1	0	-11	-15	-14	0	-17	-7	-11
1992	0	0	0	0	-3	-13	-14	-6	1	-2	-8	-47
1993	0	0	-6	14	-3	-22	-4	-26	-4	-24	-22	-23
AVG:	-1	-4	-6	-3	-7	-7	-4	-4	-1	-2	-1	-5
MIN:	-35	-39	-71	-18	-124	-84	-71	-26	-34	-24	-22	-87
MAX:	57	7	14	14	15	7	32	20	11	10	24	123

Table 3.5.5-5. Simulated Sacramento River Inflow to Delta (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-6	-3	-2	-4	-4	18	18	-19
1923	-3	-2	-30	-2	0	-1	-2	-3	-16	7	7	5
1924	17	5	26	0	-3	0	0	0	0	-1	-3	-2
1925	-21	0	0	0	7	-10	-2	-3	-14	-2	-2	-1
1926	0	0	0	0	-4	-2	-19	-2	1	1	0	2
1927	0	-6	-5	-2	-4	-3	-4	-3	-6	53	18	-3
1928	2	-19	-16	-2	-1	-6	-3	-29	16	12	-1	-3
1929	5	2	0	0	-3	-1	0	0	-38	-4	2	2
1930	0	0	-3	-3	0	-3	-2	-1	1	9	1	-1
1931	0	0	-6	0	14	-1	0	-2	0	2	-1	0
1932	0	1	-4	-3	-14	-1	-2	-3	-3	-4	-3	0
1933	0	0	0	-2	-3	-1	0	-3	0	0	0	0
1934	0	0	0	-2	0	-1	0	0	0	0	-11	-5
1935	0	0	0	-3	0	-4	-13	-2	-3	-3	-1	-3
1936	-1	0	2	-5	-3	-13	-2	-3	-19	2	18	17
1937	-5	-2	1	0	-16	-3	-3	-3	-14	-1	5	13
1938	-12	-5	-18	-2	-3	-3	-4	-4	-4	18	18	-17
1939	-31	-2	-4	-3	-3	-4	6	-2	-3	-5	-2	0
1940	0	-2	0	-3	-6	-4	-3	-18	-8	14	14	136
1941	36	-12	-17	-4	-7	-3	-4	-5	-20	18	34	-5
1942	-3	-2	-19	-2	-3	-3	-4	-4	-4	95	18	-5
1943	-5	-32	-3	-2	-3	-3	-3	-2	-2	-27	13	-4
1944	-3	-2	-1	0	-3	-4	-2	-3	0	2	2	1
1945	-6	-26	7	6	0	-1	-2	-3	-37	14	15	-3
1946	25	-34	-4	-25	41	-32	-2	-4	10	11	10	10
1947	1	-12	-2	-9	-3	13	-2	-3	-22	-14	-9	0
1948	-8	-5	-2	0	-2	-1	-2	-4	-3	0	0	-3
1949	28	-4	-3	0	-3	-2	-2	-3	0	-11	11	-3
1950	0	-4	0	-4	-3	-21	-7	-3	-26	2	10	-5
1951	-1	-17	-3	-3	-3	-3	-2	-3	13	46	6	-1
1952	0	4	-69	-3	-3	-3	2	-4	-4	6	1	-18
1953	-6	-2	-4	-2	0	0	-1	-2	-3	6	1	-9
1954	-2	-5	0	-11	-3	-3	-3	1	-3	1	0	0
1955	-3	-9	-10	-2	-2	-3	0	-3	0	-1	-4	-2
1956	0	-1	-4	-2	-3	-3	-2	-4	-4	18	18	-21
1957	-4	-2	3	0	-29	-3	0	-5	2	-10	-1	-4
1958	-14	0	-5	-2	-3	-3	-4	-4	-4	10	18	-25
1959	-6	-2	-1	-3	-3	0	-1	3	-11	5	0	12
1960	-3	0	2	0	-3	-1	0	-3	0	-4	19	-34
1961	0	0	0	0	-8	-4	-1	-1	-4	0	-1	0
1962	0	9	-1	1	-2	-1	-2	-1	-3	-4	-5	4
1963	-12	-5	-3	-3	-4	2	-4	-4	9	114	18	-3
1964	-3	-5	0	-13	0	-27	40	-4	-3	-10	0	-22
1965	0	0	-44	-2	-3	-1	-4	0	-16	-18	11	-2
1966	-2	5	-9	3	-3	-1	-2	-2	0	-1	-2	0
1967	-2	-5	-10	-2	-7	-3	-4	-4	-4	-4	-3	-5
1968	-6	-1	-3	-2	-4	-3	0	-3	1	-3	0	0
1969	-3	-3	-5	-3	-3	-3	-4	-7	-4	18	18	-26
1970	-24	-2	-3	-3	-3	-4	1	-3	3	-4	1	-6
1971	-3	-5	-13	-2	7	-11	0	-6	-3	1	1	-5
1972	0	-2	-3	-15	-3	-4	2	0	0	-1	-1	0
1973	-2	-5	-12	-3	-3	-3	-2	-3	-15	11	7	-15
1974	-2	2	-4	-3	-3	-3	-4	-3	-6	12	13	-5
1975	-30	-4	-1	0	-6	-3	-2	-4	-3	11	11	-15
1976	-6	-12	-7	0	-3	-3	-1	-3	5	-2	1	-1
1977	0	-4	-3	0	-8	-5	-7	-1	2	-15	0	-4
1978	0	0	0	-3	-8	13	-4	-3	-2	-3	0	-3
1979	-1	1	-2	-2	-11	-3	-2	-3	-10	-2	-4	0
1980	-4	-1	-3	-3	-3	-3	-2	-3	-3	13	15	-30
1981	-2	-1	0	-2	-27	-4	-2	-3	1	0	0	-5
1982	8	-6	-4	-2	-3	-3	-4	-4	-4	13	8	-5
1983	-21	-5	-3	-2	-3	-3	-4	-4	-4	-4	-4	-5
1984	-6	-5	-3	-1	-2	-2	0	-2	-4	-1	3	-7
1985	10	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	-2	-1	-4	-3	-4	-4	-2	-3	-17	1	6	-3
1987	-1	-1	0	0	-3	-20	5	0	-1	0	-1	0
1988	-6	0	0	-3	0	-1	-2	1	0	-5	-3	-16
1989	0	0	0	0	0	-22	-2	1	0	-3	-1	-4
1990	2	-6	-10	-3	-3	-4	0	-3	1	-14	4	26
1991	0	0	0	0	0	-2	-3	-4	0	-1	0	-2
1992	0	0	0	0	-3	-4	-3	-2	0	-1	-9	-2
1993	0	0	-1	-5	-3	-10	-4	-20	-4	3	3	3
AVG:	-2	-4	-5	-2	-3	-4	-2	-3	-4	5	4	-2
MIN:	-31	-34	-69	-25	-29	-32	-19	-29	-38	-27	-11	-34
MAX:	36	9	26	6	41	13	40	3	16	114	34	136

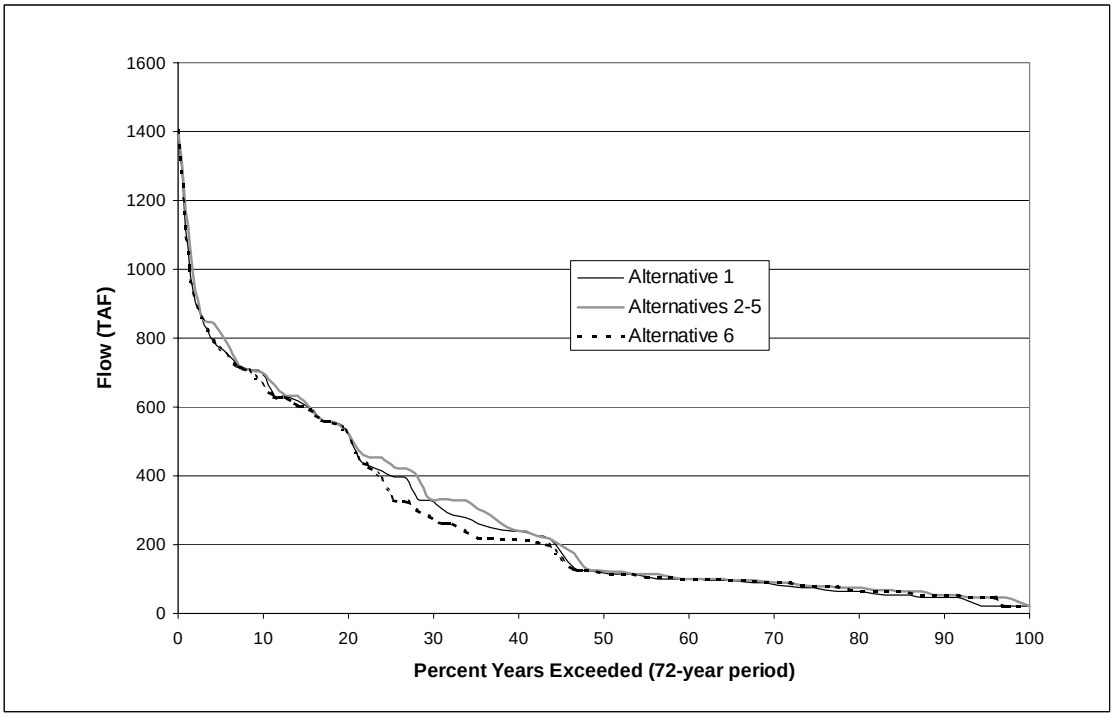


Figure 3.5.5-1 Exceedence for Simulated Annual Mokelumne River Delta Inflow, 2020 LOD

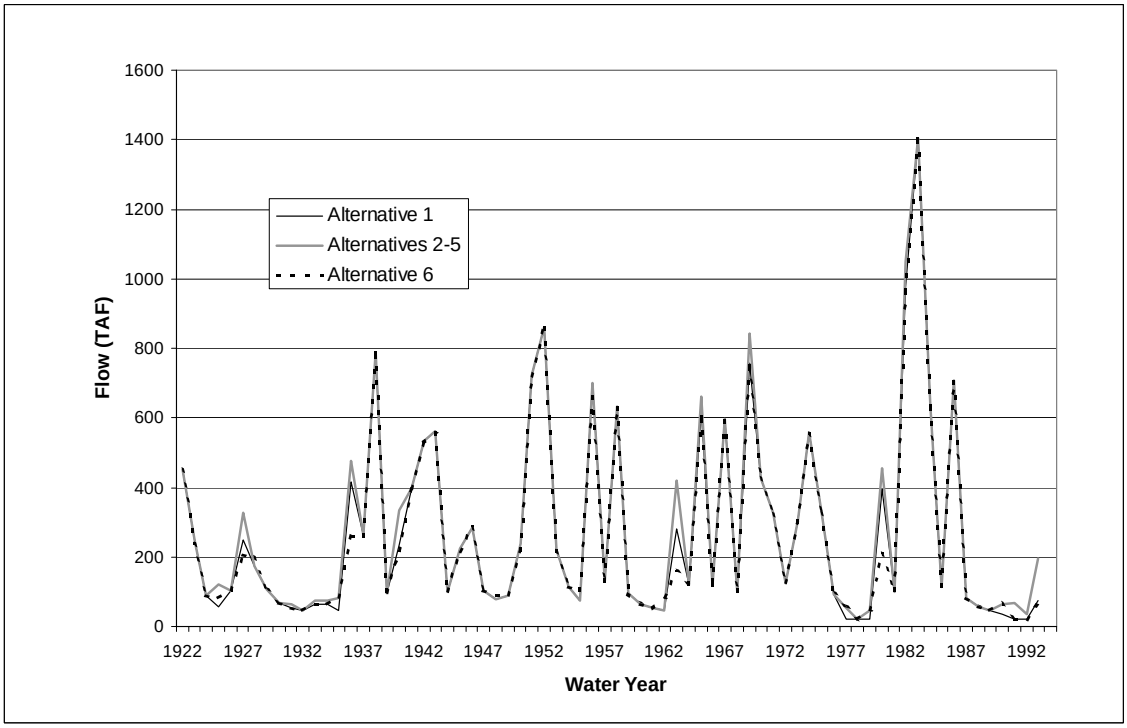


Figure 3.5.5-2 Simulated Annual Mokelumne River Delta Inflow, 2020 LOD

Table 3.5.5-6. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	10	15	15	15	14	14	18	128	126	33	32	32
1923	11	15	21	27	22	14	14	30	31	19	19	19
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	2	4	3	3	4	2	8	13	12	2	2	2
1926	11	15	15	15	14	14	8	8	0	0	0	0
1927	6	9	9	9	9	8	9	48	57	30	29	29
1928	11	21	15	15	15	46	20	11	19	0	0	0
1929	11	21	15	15	14	14	8	8	0	0	0	0
1930	8	9	9	9	9	8	8	8	0	0	0	0
1931	6	9	9	9	9	8	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	6	9	9	9	9	8	8	8	0	0	0	0
1934	6	9	9	9	9	8	8	8	0	0	0	0
1935	2	4	3	3	4	2	8	11	10	0	0	0
1936	7	11	10	11	83	27	28	85	65	30	29	28
1937	11	15	15	15	14	29	20	40	41	21	20	20
1938	11	15	74	13	60	101	133	162	107	39	38	37
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	8	9	9	9	9	8	21	64	45	18	18	17
1941	11	15	15	31	47	36	20	56	67	33	33	32
1942	11	15	26	81	55	13	14	108	96	38	37	37
1943	10	30	23	91	54	109	35	86	51	25	24	24
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	6	9	9	9	9	8	20	40	38	26	26	26
1946	11	28	63	35	14	14	17	25	36	15	14	14
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	6	9	9	9	9	8	8	11	10	0	0	0
1949	7	11	10	11	10	10	8	11	10	0	0	0
1950	7	11	10	9	8	7	17	45	43	28	27	27
1951	9	197	249	78	59	21	21	33	31	7	7	7
1952	11	15	39	80	70	61	172	173	86	53	52	51
1953	8	12	11	15	61	14	8	25	23	14	14	14
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	7	11	10	11	10	10	8	8	0	0	0	0
1956	6	9	105	183	55	12	20	109	86	39	38	37
1957	10	14	13	15	14	14	8	15	14	4	4	5
1958	11	15	15	14	54	56	104	142	89	45	44	43
1959	10	14	13	15	14	14	8	8	0	0	0	0
1960	6	9	9	9	9	8	8	8	0	0	0	0
1961	6	9	9	9	9	8	4	0	0	0	0	0
1962	2	4	3	3	4	2	8	11	10	0	0	0
1963	6	9	9	9	9	8	8	65	60	34	33	32
1964	11	36	15	15	15	14	8	8	0	0	0	0
1965	6	9	132	137	46	7	17	71	68	43	42	41
1966	10	31	14	15	14	14	8	8	0	0	0	0
1967	6	9	9	12	26	50	62	179	81	56	55	54
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	6	9	9	53	87	44	131	192	82	49	48	47
1970	8	13	16	208	58	28	21	26	24	9	9	9
1971	11	34	44	40	33	29	20	35	28	18	18	18
1972	11	17	19	15	15	14	11	11	10	0	0	0
1973	7	11	10	22	68	34	20	37	35	20	20	20
1974	11	77	51	81	14	51	34	66	63	38	37	36
1975	11	15	15	15	14	14	14	54	51	43	43	42
1976	11	17	15	15	15	14	4	0	0	0	0	0
1977	2	4	3	3	4	2	4	0	0	0	0	0
1978	2	4	3	3	4	2	4	0	0	0	0	0
1979	2	3	2	3	4	2	4	0	0	0	0	0
1980	2	4	3	3	68	29	21	68	69	43	42	41
1981	11	15	15	15	14	14	8	8	0	0	0	0
1982	6	9	9	75	160	102	206	164	81	57	56	54
1983	7	75	97	79	124	205	99	252	184	96	95	92
1984	7	131	158	90	56	20	21	40	39	23	23	23
1985	11	29	15	15	14	14	8	8	0	0	0	0
1986	6	9	9	6	266	161	20	88	56	30	29	29
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	4	2	8	11	10	0	0	0
1990	2	4	3	3	4	2	8	8	0	0	0	0
1991	2	4	3	3	4	2	4	0	0	0	0	0
1992	2	4	3	3	4	2	4	0	0	0	0	0
1993	2	4	3	3	4	2	9	20	19	3	3	3
AVG:	7	19	23	27	29	24	23	42	30	15	15	15
MIN:	2	3	2	3	4	2	4	0	0	0	0	0
MAX:	11	197	249	208	266	205	206	252	184	96	95	92

Table 3.5.5-7. Simulated Mokelumne River Delta Inflow (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	11	15	15	15	14	14	18	128	126	33	32	32
1923	11	15	21	27	22	14	14	30	31	19	19	19
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	8	9	9	9	8	8	8	19	18	8	8	8
1926	11	15	15	15	14	14	8	8	0	0	0	0
1927	7	11	10	11	20	10	23	65	82	30	29	29
1928	11	21	15	15	15	46	20	11	19	0	0	0
1929	11	21	15	15	14	14	8	8	0	0	0	0
1930	8	9	9	9	8	8	8	8	0	0	0	0
1931	7	11	10	11	10	10	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	7	11	10	11	10	10	8	8	0	0	0	0
1934	7	11	10	11	10	10	8	8	0	0	0	0
1935	8	9	9	9	8	8	8	11	10	0	0	0
1936	12	15	15	15	128	27	28	84	65	30	29	28
1937	11	15	15	15	14	29	20	40	41	21	20	20
1938	11	15	74	13	60	101	133	162	107	39	38	37
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	8	9	9	9	15	91	21	73	45	19	18	17
1941	11	15	15	31	47	36	20	56	67	33	33	32
1942	11	15	26	81	55	13	14	108	96	38	37	37
1943	10	30	23	91	54	109	35	86	51	25	24	24
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	6	9	9	9	8	8	20	40	38	26	26	26
1946	11	28	63	35	14	14	17	25	36	15	14	14
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	6	9	9	9	9	8	8	11	10	0	0	0
1949	7	11	10	11	10	10	8	11	10	0	0	0
1950	7	11	10	9	8	7	17	45	43	28	27	27
1951	9	197	249	78	59	21	21	33	31	7	7	7
1952	11	15	39	80	70	61	172	173	86	53	52	51
1953	8	12	11	15	61	14	8	25	23	14	14	14
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	7	11	10	11	10	10	8	8	0	0	0	0
1956	6	9	105	183	55	12	20	109	86	39	38	37
1957	10	14	13	15	14	14	8	15	14	4	4	5
1958	11	15	15	14	54	56	104	142	89	45	44	43
1959	10	14	13	15	14	14	8	8	0	0	0	0
1960	6	9	9	9	9	8	8	8	0	0	0	0
1961	6	9	9	9	8	8	4	0	0	0	0	0
1962	2	4	3	3	3	2	8	11	10	0	0	0
1963	7	11	10	11	129	9	14	71	60	34	33	32
1964	11	35	15	15	15	14	8	8	0	0	0	0
1965	6	9	178	137	46	7	17	71	68	43	42	41
1966	10	31	14	15	14	14	8	8	0	0	0	0
1967	6	9	9	12	26	50	62	179	81	56	55	54
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	7	11	10	139	86	43	130	191	81	49	48	46
1970	8	12	15	208	58	28	21	26	24	9	9	9
1971	11	34	44	40	33	29	20	35	28	18	18	18
1972	11	17	19	15	15	14	11	11	10	0	0	0
1973	7	11	10	22	68	34	20	37	35	20	20	20
1974	11	77	51	81	14	51	34	66	63	38	37	36
1975	11	15	15	15	14	14	14	54	51	43	43	42
1976	11	17	15	15	15	14	4	0	0	0	0	0
1977	8	9	9	9	8	8	4	0	0	0	0	0
1978	2	4	3	3	3	2	4	0	0	0	0	0
1979	2	4	3	3	3	2	8	11	10	0	0	0
1980	2	4	3	3	131	29	21	68	68	43	42	41
1981	11	15	15	15	14	14	8	8	0	0	0	0
1982	7	11	70	83	160	102	206	164	81	57	56	54
1983	7	75	98	79	124	205	99	252	184	96	95	92
1984	7	131	158	90	56	20	21	40	38	23	23	23
1985	11	29	15	15	14	14	8	8	0	0	0	0
1986	6	9	9	6	266	161	20	88	56	30	29	29
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	3	2	8	11	10	0	0	0
1990	6	9	9	9	8	8	8	8	0	0	0	0
1991	8	9	9	9	8	8	8	8	0	0	0	0
1992	2	4	3	3	4	2	8	8	0	0	0	0
1993	2	4	3	3	3	2	9	44	45	27	27	26
AVG:	8	19	25	29	33	26	24	43	31	15	15	15
MIN:	2	4	3	3	3	2	4	0	0	0	0	0
MAX:	12	197	249	208	266	205	206	252	184	96	95	92

Table 3.5.5-8. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	11	15	15	15	14	14	18	128	126	33	32	32
1923	11	15	21	27	22	14	14	30	31	19	19	19
1924	11	15	15	15	15	14	4	0	0	0	0	0
1925	8	9	9	9	8	8	8	19	18	8	8	8
1926	11	15	15	15	14	14	8	8	0	0	0	0
1927	7	11	10	11	20	10	23	65	82	30	29	29
1928	11	21	15	15	15	46	20	11	19	0	0	0
1929	11	21	15	15	14	14	8	8	0	0	0	0
1930	8	9	9	9	8	8	8	8	0	0	0	0
1931	7	11	10	11	10	10	4	0	0	0	0	0
1932	2	4	3	3	4	2	8	11	10	0	0	0
1933	7	11	10	11	10	10	8	8	0	0	0	0
1934	7	11	10	11	10	10	8	8	0	0	0	0
1935	8	9	9	9	8	8	8	11	10	0	0	0
1936	12	15	15	15	128	27	28	84	65	30	29	28
1937	11	15	15	15	14	29	20	40	41	21	20	20
1938	11	15	74	13	60	101	133	162	107	39	38	37
1939	9	13	12	15	14	14	8	8	0	0	0	0
1940	8	9	9	9	15	91	21	73	45	19	18	17
1941	11	15	15	31	47	36	20	56	67	33	33	32
1942	11	15	26	81	55	13	14	108	96	38	37	37
1943	10	30	23	91	54	109	35	86	51	25	24	24
1944	10	15	14	15	15	14	8	8	0	0	0	0
1945	6	9	9	9	8	8	20	40	38	26	26	26
1946	11	28	63	35	14	14	17	25	36	15	14	14
1947	11	15	15	15	14	14	8	8	0	0	0	0
1948	6	9	9	9	9	8	8	11	10	0	0	0
1949	7	11	10	11	10	10	8	11	10	0	0	0
1950	7	11	10	9	8	7	17	45	43	28	27	27
1951	9	197	249	78	59	21	21	33	31	7	7	7
1952	11	15	39	80	70	61	172	173	86	53	52	51
1953	8	12	11	15	61	14	8	25	23	14	14	14
1954	11	15	15	15	14	14	8	11	10	0	0	0
1955	7	11	10	11	10	10	8	8	0	0	0	0
1956	6	9	105	183	55	12	20	109	86	39	38	37
1957	10	14	13	15	14	14	8	15	14	4	4	5
1958	11	15	15	14	54	56	104	142	89	45	44	43
1959	10	14	13	15	14	14	8	8	0	0	0	0
1960	6	9	9	9	9	8	8	8	0	0	0	0
1961	6	9	9	9	8	8	4	0	0	0	0	0
1962	2	4	3	3	3	2	8	11	10	0	0	0
1963	7	11	10	11	129	9	14	71	60	34	33	32
1964	11	35	15	15	15	14	8	8	0	0	0	0
1965	6	9	178	137	46	7	17	71	68	43	42	41
1966	10	31	14	15	14	14	8	8	0	0	0	0
1967	6	9	9	12	26	50	62	179	81	56	55	54
1968	10	14	13	15	15	14	8	8	0	0	0	0
1969	7	11	10	139	86	43	130	191	81	49	48	46
1970	8	12	15	208	58	28	21	26	24	9	9	9
1971	11	34	44	40	33	29	20	35	28	18	18	18
1972	11	17	19	15	15	14	11	11	10	0	0	0
1973	7	11	10	22	68	34	20	37	35	20	20	20
1974	11	77	51	81	14	51	34	66	63	38	37	36
1975	11	15	15	15	14	14	14	54	51	43	43	42
1976	11	17	15	15	15	14	4	0	0	0	0	0
1977	8	9	9	9	8	8	4	0	0	0	0	0
1978	2	4	3	3	3	2	4	0	0	0	0	0
1979	2	4	3	3	3	2	8	11	10	0	0	0
1980	2	4	3	3	131	29	21	68	68	43	42	41
1981	11	15	15	15	14	14	8	8	0	0	0	0
1982	7	11	70	83	160	102	206	164	81	57	56	54
1983	7	75	98	79	124	205	99	252	184	96	95	92
1984	7	131	158	90	56	20	21	40	38	23	23	23
1985	11	29	15	15	14	14	8	8	0	0	0	0
1986	6	9	9	6	266	161	20	88	56	30	29	29
1987	9	13	12	15	14	14	4	0	0	0	0	0
1988	8	9	9	9	9	8	4	0	0	0	0	0
1989	2	4	3	3	3	2	8	11	10	0	0	0
1990	6	9	9	9	8	8	8	8	0	0	0	0
1991	8	9	9	9	8	8	8	8	0	0	0	0
1992	2	4	3	3	4	2	8	8	0	0	0	0
1993	2	4	3	3	3	2	9	44	45	27	27	26
AVG:	8	19	25	29	33	26	24	43	31	15	15	15
MIN:	2	4	3	3	3	2	4	0	0	0	0	0
MAX:	12	197	249	208	266	205	206	252	184	96	95	92

Table 3.5.5-9. Simulated Mokelumne River Delta Inflow (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	6	5	6	6	5	6	0	6	6	6	6	6
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	2	2	2	2	12	2	14	17	26	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	2	2	2	2	2	2	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	2	2	2	2	2	2	0	0	0	0	0	0
1934	2	2	2	2	2	2	0	0	0	0	0	0
1935	6	5	6	6	5	6	0	0	0	0	0	0
1936	4	4	5	4	45	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	6	83	0	9	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	2	2	2	2	120	2	6	7	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	46	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	2	2	2	86	-1	-1	-1	-1	-1	-1	-1	-1
1970	-1	-1	-1	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	6	5	6	6	5	6	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	1	1	0	0	0	4	11	10	0	0	0
1980	0	0	0	0	63	0	-1	-1	-1	-1	-1	-1
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	2	2	62	7	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	3	5	6	6	5	6	0	0	0	0	0	0
1991	6	5	6	6	5	6	4	8	0	0	0	0
1992	0	0	0	0	0	0	4	8	0	0	0	0
1993	0	0	0	0	0	0	0	24	26	24	24	23
AVG:	1	1	2	2	4	2	0	1	1	0	0	0
MIN:	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1
MAX:	6	5	62	86	120	83	14	24	26	24	24	23

Table 3.5.5-10. Simulated Mokelumne River Delta Inflow (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	6	5	6	6	5	6	0	6	6	6	6	6
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	2	2	2	2	12	2	14	17	26	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	2	2	2	2	2	2	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	2	2	2	2	2	2	0	0	0	0	0	0
1934	2	2	2	2	2	2	0	0	0	0	0	0
1935	6	5	6	6	5	6	0	0	0	0	0	0
1936	4	4	5	4	45	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	6	83	0	9	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	2	2	2	2	120	2	6	7	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	46	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	2	2	2	86	-1	-1	-1	-1	-1	-1	-1	-1
1970	-1	-1	-1	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	6	5	6	6	5	6	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	1	1	0	0	0	4	11	10	0	0	0
1980	0	0	0	0	63	0	-1	-1	-1	-1	-1	-1
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	2	2	62	7	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	3	5	6	6	5	6	0	0	0	0	0	0
1991	6	5	6	6	5	6	4	8	0	0	0	0
1992	0	0	0	0	0	0	4	8	0	0	0	0
1993	0	0	0	0	0	0	0	24	26	24	24	23
AVG:	1	1	2	2	4	2	0	1	1	0	0	0
MIN:	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1
MAX:	6	5	62	86	120	83	14	24	26	24	24	23

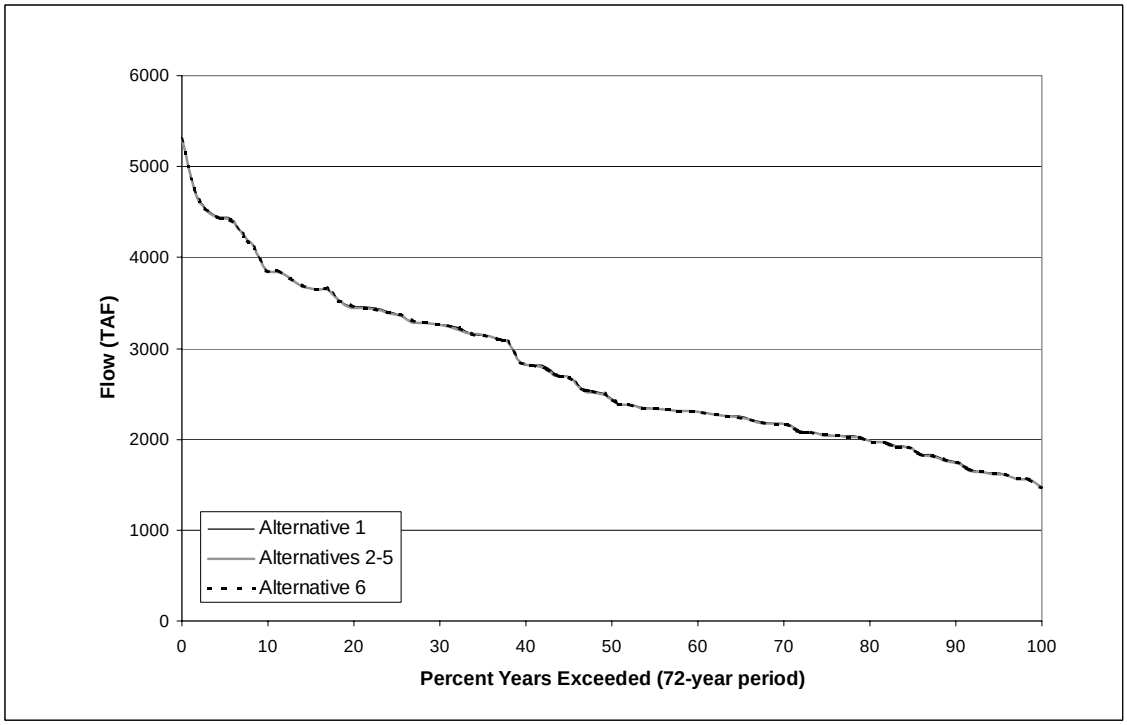


Figure 3.5.5-3 Exceedence for Simulated Annual Georgiana Slough Flow, 2020 LOD

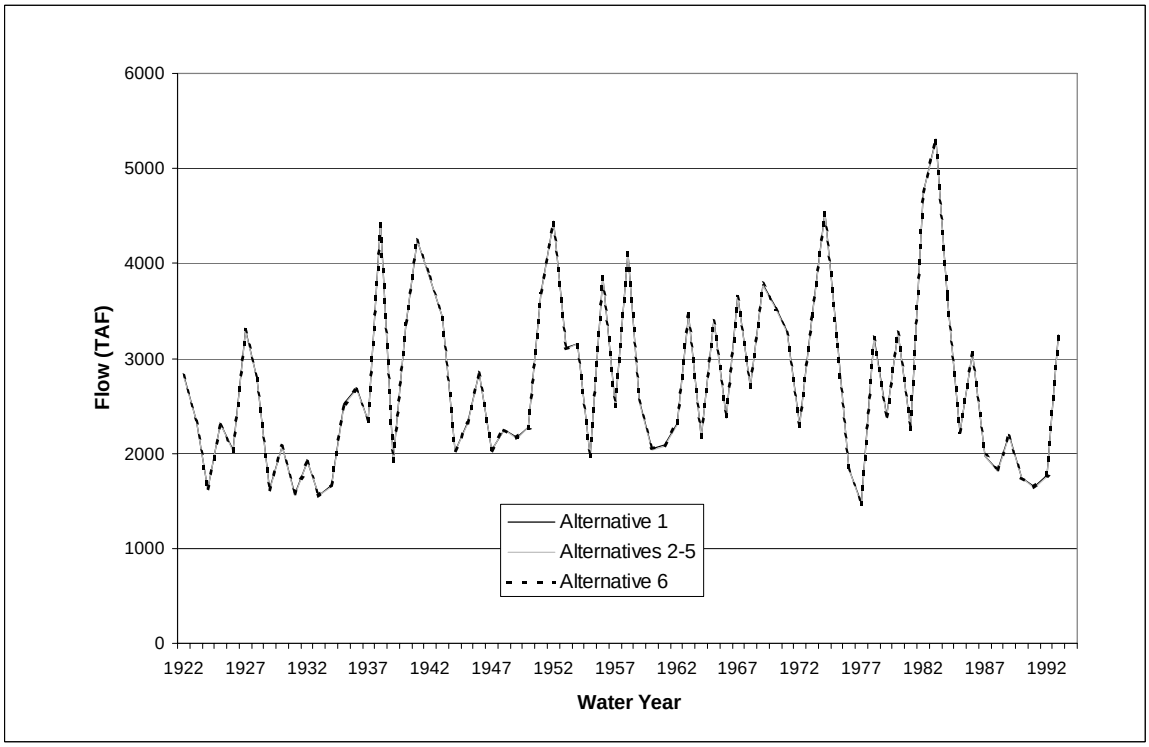


Figure 3.5.5-4 Simulated Annual Georgiana Slough Flow, 2020 LOD

Table 3.5.5-11. Simulated Georgiana Slough Flow (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	139	132	196	185	313	292	231	437	332	228	178	154
1923	144	162	282	286	158	174	233	179	167	215	183	163
1924	149	130	152	159	173	134	107	115	123	135	140	107
1925	116	116	161	157	522	269	220	165	178	149	121	141
1926	126	117	124	194	348	163	214	154	143	180	143	127
1927	126	238	212	306	601	403	411	257	201	216	181	147
1928	156	188	178	236	229	660	256	208	173	201	165	147
1929	137	148	153	157	166	149	104	114	128	141	121	98
1930	114	107	202	231	184	313	149	150	146	189	161	134
1931	126	117	126	163	129	118	116	112	124	175	143	116
1932	114	105	212	227	182	161	132	146	164	184	150	139
1933	126	117	123	164	134	159	131	108	126	144	119	104
1934	115	107	172	205	156	157	140	115	135	139	112	116
1935	115	140	136	296	150	272	427	240	216	198	188	148
1936	146	123	140	378	517	290	216	172	169	201	185	145
1937	140	123	146	164	311	376	223	177	163	192	183	145
1938	138	241	561	307	596	663	528	501	319	212	178	182
1939	174	147	172	161	139	166	122	141	163	208	182	149
1940	138	117	127	318	485	656	562	203	190	228	183	149
1941	141	148	397	646	593	628	536	368	200	223	176	189
1942	157	153	547	616	597	240	393	328	253	204	177	186
1943	159	177	289	639	428	602	254	199	181	186	178	146
1944	135	128	147	169	237	228	139	138	172	202	176	153
1945	143	167	187	167	384	234	147	157	190	218	183	148
1946	137	172	583	454	239	200	143	164	184	217	186	166
1947	154	149	181	145	181	217	160	139	158	210	191	156
1948	133	131	128	183	172	188	257	274	214	222	191	155
1949	153	141	163	144	140	441	147	164	180	201	141	148
1950	126	124	126	215	305	219	206	194	213	213	185	147
1951	149	405	661	559	521	278	166	199	153	237	189	164
1952	149	173	374	652	602	507	527	534	345	198	170	217
1953	186	155	407	649	214	227	179	255	232	223	182	199
1954	163	177	152	333	506	455	363	252	164	230	185	170
1955	155	167	244	206	153	145	149	159	173	159	128	134
1956	128	145	657	667	579	334	202	357	205	220	178	186
1957	170	143	165	158	308	426	208	179	187	217	185	151
1958	196	161	241	364	604	652	633	405	286	198	176	201
1959	191	143	151	357	440	229	130	153	196	227	192	144
1960	148	129	129	159	270	220	135	159	163	208	193	135
1961	126	146	182	152	273	212	138	143	151	218	197	149
1962	146	132	187	135	394	256	139	158	195	221	185	162
1963	316	178	275	177	559	301	611	297	193	220	180	152
1964	157	256	157	230	159	148	199	144	156	208	199	160
1965	126	164	619	659	277	236	385	232	156	219	179	149
1966	128	217	177	294	233	279	156	173	185	213	177	146
1967	155	165	344	385	446	497	349	405	340	173	180	216
1968	198	157	182	289	511	346	168	143	166	209	185	152
1969	152	150	245	659	593	433	381	422	220	182	179	162
1970	190	159	541	677	571	323	166	148	171	244	185	158
1971	150	191	531	438	255	400	222	261	205	257	182	191
1972	169	155	192	185	240	339	141	143	202	211	178	141
1973	144	199	263	652	587	475	180	187	209	226	179	153
1974	151	511	600	662	341	656	570	231	222	199	180	211
1975	170	158	187	176	528	631	222	271	225	217	175	202
1976	198	163	184	163	150	177	123	111	127	165	145	130
1977	115	109	123	120	103	114	119	100	138	170	155	106
1978	114	106	178	574	439	558	334	207	181	188	187	159
1979	128	133	175	235	317	300	184	168	210	209	181	149
1980	148	155	205	658	617	416	193	179	150	208	189	153
1981	135	124	170	226	244	312	183	143	163	212	194	154
1982	147	304	656	617	592	634	639	370	222	205	177	187
1983	217	342	578	633	601	685	541	507	482	241	220	259
1984	212	565	666	465	308	341	185	155	168	236	184	163
1985	144	293	231	165	162	169	160	156	161	211	196	171
1986	146	141	192	244	626	659	192	153	160	207	187	155
1987	143	124	140	168	194	257	155	135	164	185	161	143
1988	141	120	207	286	168	123	135	130	134	151	119	112
1989	115	128	136	159	113	431	214	177	163	207	191	154
1990	161	135	152	212	162	162	134	118	114	130	146	116
1991	114	106	108	109	108	314	155	125	109	146	130	121
1992	113	106	108	141	305	218	142	122	135	138	113	132
1993	114	107	164	519	465	413	345	296	255	233	186	154
AVG:	149	169	258	323	342	334	247	211	189	200	172	155
MIN:	113	105	108	109	103	114	104	100	109	130	112	98
MAX:	316	565	666	677	626	685	639	534	482	257	220	259

Table 3.5.5-12. Simulated Georgiana Slough Flow (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	139	131	195	184	312	292	230	436	332	228	178	153
1923	144	161	281	286	157	174	233	178	167	215	183	164
1924	149	130	153	159	172	134	106	115	124	133	138	104
1925	113	117	161	157	523	269	219	164	177	149	120	141
1926	126	117	124	194	348	162	211	153	143	179	143	127
1927	126	237	207	306	601	403	410	256	199	214	181	147
1928	156	189	178	236	229	659	255	208	172	200	164	147
1929	137	148	153	157	166	148	104	114	123	141	122	97
1930	114	107	202	230	184	311	148	149	147	190	162	132
1931	126	117	125	163	131	118	116	111	123	175	143	110
1932	114	105	212	226	176	161	131	145	164	184	150	140
1933	126	117	123	164	134	157	131	107	126	144	119	104
1934	115	107	172	204	157	156	140	115	135	139	110	104
1935	115	139	136	294	147	272	426	240	215	198	188	146
1936	146	123	140	377	517	291	215	172	169	200	185	145
1937	140	123	146	164	311	375	223	176	163	191	182	145
1938	137	240	551	307	596	662	527	500	319	212	178	183
1939	172	147	172	161	139	164	121	140	164	207	181	149
1940	139	117	125	316	480	656	562	202	192	229	183	165
1941	145	146	395	646	592	627	535	368	200	223	178	189
1942	156	153	544	615	597	239	392	327	252	204	177	185
1943	158	176	288	639	427	601	253	198	181	187	178	146
1944	135	128	147	169	237	227	139	138	172	202	176	153
1945	143	166	187	167	382	234	146	157	190	218	183	147
1946	137	171	582	453	240	199	143	164	184	217	186	166
1947	153	149	181	145	181	218	160	138	158	209	190	156
1948	133	132	128	183	172	187	257	274	213	222	191	155
1949	151	141	163	144	139	441	147	164	180	200	141	148
1950	126	124	126	214	305	219	206	194	212	213	185	147
1951	149	404	661	559	521	278	166	198	153	237	189	164
1952	149	173	372	652	601	507	526	534	345	198	170	216
1953	185	154	406	649	214	227	179	254	232	224	182	198
1954	163	176	152	331	506	455	363	252	164	231	185	170
1955	155	167	243	205	153	145	150	159	173	159	127	134
1956	128	145	657	667	578	334	202	356	204	220	178	185
1957	169	142	167	158	305	425	208	179	187	216	185	150
1958	195	161	240	364	603	651	633	405	285	198	176	200
1959	190	143	151	356	440	228	128	154	196	227	192	137
1960	156	124	128	158	268	218	135	157	163	208	195	131
1961	126	146	182	152	268	212	138	143	149	218	197	149
1962	146	133	187	135	393	255	137	157	193	220	189	161
1963	311	177	273	175	553	300	611	296	193	221	181	152
1964	156	255	157	228	159	145	203	142	156	208	199	159
1965	126	164	613	659	277	236	384	232	156	220	179	149
1966	127	215	176	293	233	279	156	172	186	213	177	146
1967	155	164	343	385	445	496	348	404	339	172	179	215
1968	197	157	181	288	510	344	168	142	167	207	185	152
1969	151	149	243	658	593	433	380	421	219	182	179	160
1970	189	159	540	677	571	323	166	147	171	244	185	157
1971	150	190	529	438	256	398	222	260	205	257	182	190
1972	169	155	192	183	239	339	141	143	202	211	178	141
1973	144	198	261	651	586	475	179	186	209	226	179	153
1974	151	510	600	661	341	655	570	230	222	199	180	210
1975	168	157	187	176	527	631	221	270	225	217	175	201
1976	198	163	184	163	149	175	122	109	128	165	146	128
1977	115	108	122	121	102	113	119	100	138	170	155	105
1978	114	106	178	573	423	552	332	207	180	188	187	159
1979	128	134	175	235	314	298	182	167	209	208	181	149
1980	150	154	204	657	616	416	192	179	150	208	189	152
1981	135	124	170	226	243	310	182	142	163	212	193	152
1982	149	301	655	617	591	634	638	370	221	205	177	187
1983	216	341	578	633	600	684	541	506	481	241	220	258
1984	211	564	665	465	308	341	185	154	168	236	184	163
1985	144	292	230	165	161	169	160	156	161	211	196	171
1986	146	141	191	244	626	659	192	152	160	207	187	155
1987	142	124	140	168	194	253	155	135	164	185	161	143
1988	139	118	205	285	168	123	126	132	135	151	119	112
1989	115	128	136	159	113	419	214	177	163	206	191	156
1990	161	134	150	211	162	160	134	117	115	130	145	120
1991	114	106	108	109	108	312	153	124	109	144	129	119
1992	113	106	108	141	305	216	140	122	135	138	112	126
1993	114	107	164	521	465	410	345	292	255	230	183	150
AVG:	148	168	257	322	341	333	246	210	189	200	172	154
MIN:	113	105	108	109	102	113	104	100	109	130	110	97
MAX:	311	564	665	677	626	684	638	534	481	257	220	258

Table 3.5.5-13. Simulated Georgiana Slough Flow (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	138	131	195	184	312	292	230	436	332	231	180	152
1923	144	161	278	286	157	174	233	178	165	216	183	164
1924	151	131	156	159	172	134	107	115	123	134	139	106
1925	114	116	161	157	523	267	220	164	176	149	121	141
1926	126	117	124	194	348	162	211	154	143	180	143	127
1927	126	237	211	306	601	403	410	256	200	223	184	147
1928	156	186	176	236	229	659	255	204	175	203	165	147
1929	138	148	153	157	166	149	104	114	123	140	121	99
1930	114	107	202	230	184	312	149	150	146	190	161	134
1931	126	117	125	163	131	118	116	111	124	175	143	116
1932	114	105	212	226	180	161	131	145	164	184	150	139
1933	126	117	123	164	134	159	131	108	126	144	119	104
1934	115	107	172	204	157	157	140	115	135	139	111	115
1935	115	140	136	296	150	272	425	240	215	198	188	148
1936	146	123	141	378	517	288	215	172	166	201	187	147
1937	140	122	146	164	309	375	223	177	161	192	184	147
1938	137	240	558	307	596	662	527	500	319	214	180	180
1939	170	147	172	161	139	165	123	141	163	208	182	149
1940	138	117	127	318	484	656	562	201	189	230	185	167
1941	145	146	395	646	592	627	535	368	197	225	181	189
1942	156	153	544	615	597	239	392	327	252	217	179	185
1943	158	173	288	639	427	601	253	198	180	183	180	146
1944	135	127	147	169	237	228	139	138	172	202	176	153
1945	142	163	188	167	384	234	146	157	185	219	185	147
1946	140	167	582	450	244	196	143	164	185	219	188	167
1947	154	147	180	144	181	219	160	138	155	208	190	156
1948	132	130	128	183	172	187	257	274	213	222	191	155
1949	156	141	163	144	139	441	147	164	180	199	142	148
1950	126	123	126	214	305	216	205	194	209	214	186	147
1951	149	403	661	559	521	278	166	198	155	243	189	164
1952	149	173	365	652	601	507	527	534	345	199	170	215
1953	185	154	406	649	214	227	179	254	232	224	182	198
1954	163	176	152	331	506	455	363	252	164	231	185	170
1955	155	166	243	205	153	145	149	159	173	159	128	134
1956	127	145	657	667	578	334	202	356	204	222	181	183
1957	170	142	165	158	304	425	208	179	187	216	185	150
1958	194	161	240	364	603	651	633	405	285	199	178	198
1959	190	143	151	356	440	229	130	154	194	228	192	145
1960	148	129	129	159	269	220	135	159	163	208	195	130
1961	126	146	182	152	272	212	138	143	150	218	197	149
1962	146	134	187	135	394	256	138	158	195	221	185	162
1963	314	178	274	177	559	301	611	296	195	235	183	152
1964	156	255	157	228	159	144	204	144	155	206	199	157
1965	126	164	614	659	277	235	384	232	153	217	181	149
1966	127	218	176	294	233	279	156	172	185	213	177	146
1967	155	164	343	385	445	496	348	404	339	172	179	215
1968	197	157	181	288	510	345	168	143	166	209	185	152
1969	151	150	244	658	593	433	380	422	219	184	181	158
1970	187	159	540	677	571	323	166	147	171	244	185	157
1971	150	190	529	438	256	398	222	260	205	257	183	190
1972	169	155	192	183	239	339	141	143	202	211	178	141
1973	144	198	261	651	586	475	179	186	207	227	180	152
1974	151	512	600	661	341	655	570	230	221	201	181	210
1975	166	157	187	176	527	631	221	270	225	219	177	200
1976	198	162	183	163	149	177	123	110	127	165	145	129
1977	115	108	123	121	102	113	119	100	138	168	155	106
1978	114	106	178	573	438	559	334	207	180	188	187	159
1979	128	133	175	235	315	299	184	168	209	209	181	149
1980	147	155	204	658	616	416	192	179	150	210	191	150
1981	135	124	170	226	240	312	183	143	163	212	194	153
1982	148	303	655	617	591	634	638	370	221	207	178	187
1983	215	341	578	633	600	684	541	506	481	241	220	258
1984	211	564	665	465	308	341	185	154	168	236	184	162
1985	145	292	230	165	161	169	160	156	161	211	196	171
1986	145	141	191	244	626	659	192	152	158	208	188	155
1987	142	124	140	168	194	255	155	135	164	185	161	143
1988	140	120	207	286	168	123	135	130	134	150	119	110
1989	115	128	136	159	113	428	214	177	163	207	191	154
1990	162	134	151	212	162	162	134	118	115	129	146	119
1991	114	106	108	109	108	314	154	125	109	146	130	121
1992	113	106	108	141	305	218	142	122	135	138	112	132
1993	114	107	164	518	465	412	345	293	255	233	187	154
AVG:	148	168	257	322	341	334	246	210	189	201	173	154
MIN:	113	105	108	109	102	113	104	100	109	129	111	99
MAX:	314	564	665	677	626	684	638	534	481	257	220	258

Table 3.5.5-14. Simulated Georgiana Slough Flow (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	-1	0	0	-1	-1	0	0	-1
1923	0	0	-1	0	0	0	0	0	0	0	0	0
1924	0	0	1	0	0	0	-1	0	1	-1	-2	-2
1925	-3	0	0	0	1	0	-1	-1	0	-1	0	0
1926	0	0	0	0	0	-1	-2	-1	0	0	0	0
1927	0	-1	-5	0	-1	0	0	0	-2	-2	0	0
1928	0	0	0	0	0	-1	0	0	0	-1	-1	0
1929	0	0	0	0	0	-1	0	0	-5	0	1	-1
1930	0	0	0	0	0	-2	-2	-1	1	1	1	-2
1931	0	0	-1	0	2	0	0	0	0	0	0	-7
1932	0	0	-1	0	-5	0	0	0	0	-1	0	1
1933	0	0	0	0	0	-1	0	-1	0	0	0	0
1934	0	0	0	0	0	-1	0	0	0	0	-2	-12
1935	0	-1	0	-2	-2	0	0	-1	0	0	0	-3
1936	0	0	-1	-1	0	1	-1	-1	0	0	0	0
1937	0	0	0	0	0	0	-1	-1	0	0	-1	0
1938	-1	-1	-9	0	0	0	0	-1	-1	0	0	1
1939	-1	0	0	0	0	-2	-1	-1	1	-1	0	0
1940	1	0	-1	-2	-5	-1	0	-1	1	1	0	16
1941	5	-2	-2	0	-1	0	-1	-1	0	0	2	-1
1942	0	0	-3	0	0	0	-1	-1	-1	-1	0	-1
1943	-1	-1	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	-1	0	0	0	0	0	0
1945	0	-1	0	0	-1	0	0	0	0	0	0	0
1946	0	-1	0	-1	1	-1	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	-1	-1	0
1948	0	1	0	0	0	0	0	-1	0	0	0	0
1949	-2	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	-1	0	0	0	0	0	0	0	0	0	0
1952	0	0	-2	0	0	0	-1	-1	-1	0	0	-1
1953	-1	0	-1	0	0	0	0	0	0	0	0	-1
1954	0	-1	0	-1	0	0	0	0	0	0	0	0
1955	0	0	-1	0	0	0	0	0	0	0	-1	0
1956	0	0	-1	0	0	0	0	-1	-1	0	0	-1
1957	-1	0	2	0	-3	0	0	-1	0	-1	0	-1
1958	-1	0	-1	0	0	0	0	-1	-1	0	0	-1
1959	-1	0	0	0	0	-1	-1	1	0	0	0	-7
1960	8	-5	-1	-1	-2	-1	0	-2	0	0	2	-4
1961	0	0	0	0	-5	0	0	0	-1	0	0	0
1962	0	1	0	0	-1	-1	-1	-1	-2	-2	3	0
1963	-5	-2	-2	-2	-6	-1	0	-1	0	1	0	0
1964	0	-1	0	-2	0	-3	4	-2	1	1	0	-1
1965	0	0	-6	0	0	0	-1	0	0	0	0	-1
1966	0	-2	-1	0	0	0	0	0	0	0	0	0
1967	0	-1	-1	0	-1	0	-1	-1	-1	-1	0	-1
1968	-1	0	0	0	-1	-2	0	-2	1	-2	0	0
1969	-1	-1	-1	-1	0	0	0	-1	-1	0	0	-2
1970	-1	0	0	0	0	0	0	0	0	0	0	-1
1971	0	-1	-2	0	1	-1	0	-1	0	0	0	-1
1972	0	0	0	-2	0	-1	0	0	0	0	0	0
1973	0	-1	-2	0	0	0	0	0	0	0	0	-1
1974	0	-2	0	0	0	0	0	0	0	0	0	-1
1975	-2	0	0	0	-1	0	0	-1	0	0	0	-1
1976	-1	-1	0	0	0	-2	-1	-2	1	0	1	-1
1977	0	0	-1	0	-1	-1	0	0	0	-1	0	-1
1978	0	0	0	-1	-16	-5	-3	0	0	0	0	0
1979	0	1	0	0	-3	-2	-1	-2	-1	-1	0	0
1980	2	-1	0	-1	0	0	0	0	0	0	0	-1
1981	0	0	0	0	-1	-2	-1	-2	1	0	0	-2
1982	2	-3	-1	0	0	0	-1	-1	-1	0	0	-1
1983	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-1
1984	-1	-1	0	0	0	0	0	0	0	0	0	-1
1985	1	-1	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	-1	0	0	0	0	0	0
1987	0	0	0	0	0	-4	1	0	-1	0	0	0
1988	-2	-1	-1	-1	0	0	-9	3	1	0	0	0
1989	0	0	0	0	0	-11	0	0	0	-1	0	1
1990	-1	-1	-2	-1	0	-2	0	-2	0	-1	0	4
1991	0	0	0	0	0	-1	-2	-2	0	-2	-1	-1
1992	0	0	0	0	0	-2	-2	-1	0	0	-1	-6
1993	0	0	-1	2	0	-3	-1	-3	0	-3	-3	-3
AVG:	0	-1	-1	0	-1	-1	-1	-1	0	0	0	-1
MIN:	-5	-5	-9	-2	-16	-11	-9	-3	-5	-3	-3	-12
MAX:	8	1	2	2	2	1	4	3	1	1	3	16

Table 3.5.5-15. Simulated Georgiana Slough Flow (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	-1	0	0	-1	-1	2	2	-3
1923	0	0	-4	0	0	0	0	0	-2	1	1	1
1924	2	1	3	0	0	0	0	0	0	0	0	0
1925	-3	0	0	0	1	-1	0	0	-2	0	0	0
1926	0	0	0	0	-1	0	-3	0	0	0	0	0
1927	0	-1	-1	0	0	0	0	0	-1	7	2	0
1928	0	-3	-2	0	0	-1	0	-4	2	2	0	0
1929	1	0	0	0	0	0	0	0	-5	0	0	0
1930	0	0	0	0	0	0	0	0	0	1	0	0
1931	0	0	-1	0	2	0	0	0	0	0	0	0
1932	0	0	-1	0	-2	0	0	0	0	-1	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	-1	-1
1935	0	0	0	0	0	0	-2	0	0	0	0	0
1936	0	0	0	-1	0	-2	0	0	-3	0	2	2
1937	-1	0	0	0	-2	0	0	0	-2	0	1	2
1938	-2	-1	-2	0	0	0	0	-1	-1	2	2	-2
1939	-4	0	0	0	0	-1	1	0	0	-1	0	0
1940	0	0	0	0	-1	0	0	-2	-1	2	2	18
1941	5	-2	-2	0	-1	0	-1	-1	-3	2	4	-1
1942	0	0	-3	0	0	0	-1	-1	-1	13	2	-1
1943	-1	-4	0	0	0	0	0	0	0	-4	2	0
1944	0	0	0	0	0	-1	0	0	0	0	0	0
1945	-1	-3	1	1	0	0	0	0	-5	2	2	0
1946	3	-5	0	-3	5	-4	0	-1	1	1	1	1
1947	0	-2	0	-1	0	2	0	0	-3	-2	-1	0
1948	-1	-1	0	0	0	0	0	-1	0	0	0	0
1949	4	-1	0	0	0	0	0	0	0	-1	1	0
1950	0	0	0	-1	0	-3	-1	0	-3	0	1	-1
1951	0	-2	0	0	0	0	0	0	2	6	1	0
1952	0	1	-9	0	0	0	0	-1	-1	1	0	-2
1953	-1	0	-1	0	0	0	0	0	0	1	0	-1
1954	0	-1	0	-1	0	0	0	0	0	0	0	0
1955	0	-1	-1	0	0	0	0	0	0	0	-1	0
1956	0	0	-1	0	0	0	0	-1	-1	2	2	-3
1957	-1	0	0	0	-4	0	0	-1	0	-1	0	-1
1958	-2	0	-1	0	0	0	0	-1	0	1	2	-3
1959	-1	0	0	0	0	0	0	0	-1	1	0	2
1960	0	0	0	0	0	0	0	0	0	0	2	-4
1961	0	0	0	0	-1	-1	0	0	-1	0	0	0
1962	0	1	0	0	0	0	0	0	0	0	-1	0
1963	-2	-1	0	0	0	0	-1	-1	1	15	2	0
1964	0	-1	0	-2	0	-4	5	-1	0	-1	0	-3
1965	0	0	-6	0	0	0	-1	0	-2	-2	1	0
1966	0	1	-1	0	0	0	0	0	0	0	0	0
1967	0	-1	-1	0	-1	0	-1	-1	-1	-1	0	-1
1968	-1	0	0	0	-1	0	0	0	0	0	0	0
1969	0	0	-1	0	0	0	0	-1	-1	2	2	-3
1970	-3	0	0	0	0	0	0	0	0	0	0	-1
1971	0	-1	-2	0	1	-1	0	-1	0	0	0	-1
1972	0	0	0	-2	0	-1	0	0	0	0	0	0
1973	0	-1	-2	0	0	0	0	0	-2	2	1	-2
1974	0	0	0	0	0	0	0	0	-1	2	2	-1
1975	-4	-1	0	0	-1	0	0	-1	0	1	1	-2
1976	-1	-2	-1	0	0	0	0	0	1	0	0	0
1977	0	-1	0	0	-1	-1	-1	0	0	-2	0	-1
1978	0	0	0	0	-1	2	-1	0	0	0	0	0
1979	0	0	0	0	-1	0	0	0	-1	0	-1	0
1980	-1	0	0	0	0	0	0	0	0	2	2	-4
1981	0	0	0	0	-4	-1	0	0	0	0	0	-1
1982	1	-1	-1	0	0	0	-1	-1	-1	2	1	-1
1983	-3	-1	0	0	0	0	0	-1	-1	-1	-1	-1
1984	-1	-1	0	0	0	0	0	0	-1	0	0	-1
1985	1	-1	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	-1	0	0	-2	0	1	0
1987	0	0	0	0	0	-3	1	0	0	0	0	0
1988	-1	0	0	0	0	0	0	0	0	-1	0	-2
1989	0	0	0	0	0	-3	0	0	0	0	0	-1
1990	0	-1	-1	0	0	-1	0	0	0	-2	1	3
1991	0	0	0	0	0	0	0	-1	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	-1	0
1993	0	0	0	-1	0	-1	-1	-3	0	0	0	0
AVG:	0	0	-1	0	0	-1	0	0	-1	1	1	0
MIN:	-4	-5	-9	-3	-4	-4	-3	-4	-5	-4	-1	-4
MAX:	5	1	3	1	5	2	5	0	2	15	4	18

Table 3.5.5-16. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	140	104	163	172	359	340	375	361	315	131	125	117
1923	199	103	211	256	245	172	338	321	154	130	124	114
1924	138	91	101	99	106	101	102	96	72	72	60	64
1925	101	83	86	79	155	153	264	247	124	109	101	99
1926	117	83	91	80	107	107	208	185	91	84	60	72
1927	105	107	122	109	256	230	336	300	136	114	105	97
1928	110	113	130	133	142	192	304	220	106	98	94	91
1929	113	84	90	87	99	102	141	134	77	76	52	65
1930	90	71	72	77	88	111	142	133	74	72	49	63
1931	92	71	72	71	75	77	82	71	68	57	44	56
1932	74	73	193	211	426	281	282	240	116	108	102	99
1933	121	85	88	100	107	124	146	137	75	67	63	67
1934	85	72	81	81	103	100	100	91	63	60	47	58
1935	73	82	90	223	183	219	374	341	175	128	110	108
1936	110	87	98	115	549	354	408	341	136	119	109	109
1937	129	92	110	149	646	466	498	603	157	128	115	114
1938	146	96	279	295	1031	1671	1047	1290	1158	214	138	151
1939	505	108	130	137	168	197	265	231	111	110	107	94
1940	125	89	94	249	303	566	390	328	152	127	122	115
1941	158	107	173	301	729	676	578	590	381	146	134	119
1942	232	110	268	469	478	352	409	418	337	171	143	130
1943	285	123	200	761	587	1058	479	460	183	156	139	131
1944	159	112	121	123	184	203	309	285	133	133	129	110
1945	136	116	120	114	336	443	402	348	158	142	137	120
1946	197	119	245	293	281	271	347	327	152	135	130	116
1947	144	116	135	120	140	117	150	144	98	97	64	75
1948	107	81	79	73	78	112	226	215	132	110	105	101
1949	118	85	86	80	93	162	212	200	105	106	102	97
1950	105	84	86	123	152	144	209	193	102	96	94	95
1951	110	218	408	368	482	330	327	315	146	114	107	110
1952	150	106	173	341	304	691	588	826	782	196	134	150
1953	444	109	160	398	268	192	275	267	138	115	110	101
1954	136	94	100	104	127	161	271	262	115	116	111	100
1955	132	90	99	114	109	107	148	145	99	98	68	77
1956	96	83	641	808	687	387	353	345	339	145	125	135
1957	243	96	109	108	135	253	266	270	138	113	106	100
1958	142	98	107	122	190	454	872	766	572	164	141	137
1959	336	97	106	126	266	195	238	191	99	99	96	92
1960	114	80	82	85	124	114	148	140	87	83	50	68
1961	96	76	83	74	76	78	91	81	82	64	50	68
1962	84	74	77	74	304	278	280	237	99	94	90	92
1963	102	82	83	113	190	169	347	324	175	136	115	110
1964	126	102	107	102	96	103	143	136	84	81	57	70
1965	105	97	206	348	381	292	399	337	173	126	111	109
1966	157	153	307	290	262	209	238	198	106	108	104	96
1967	131	97	176	198	176	326	747	852	948	546	129	157
1968	321	94	118	126	229	199	251	195	102	103	99	93
1969	124	94	119	721	1345	1084	1107	1447	1463	246	132	149
1970	479	117	214	1050	519	453	338	324	150	123	118	114
1971	149	111	149	145	128	145	263	262	131	121	116	102
1972	132	92	110	105	110	99	145	147	90	92	90	88
1973	117	86	92	148	284	458	391	336	130	122	116	112
1974	148	95	126	357	261	392	447	425	204	135	123	122
1975	169	105	118	118	298	499	408	367	310	145	127	124
1976	194	102	111	105	111	109	145	139	87	86	86	75
1977	198	124	103	80	76	78	101	97	74	54	42	58
1978	94	80	93	229	436	558	764	721	675	151	115	129
1979	257	92	106	234	502	531	370	367	127	114	109	110
1980	151	102	113	680	1137	806	449	418	309	236	123	154
1981	275	98	110	130	140	214	257	212	102	103	100	93
1982	130	102	108	384	719	912	1466	990	581	227	134	210
1983	757	459	1118	1440	1726	2300	1189	1258	2045	1090	124	357
1984	718	781	1272	888	555	373	328	310	156	136	130	116
1985	145	114	121	110	122	135	192	212	104	101	97	94
1986	135	100	109	134	748	1385	717	514	388	147	133	129
1987	170	99	105	103	113	121	147	140	90	92	84	71
1988	104	79	79	79	76	77	102	97	75	69	42	61
1989	96	71	80	73	75	98	102	88	77	81	57	69
1990	82	73	71	73	76	81	93	80	69	62	56	64
1991	70	70	69	64	63	147	133	104	68	65	56	61
1992	78	70	70	70	126	116	114	81	64	72	51	64
1993	92	80	135	366	291	285	284	389	261	129	118	107
AVG:	171	111	165	236	315	349	349	337	240	136	100	105
MIN:	70	70	69	64	63	77	82	71	63	54	42	56
MAX:	757	781	1272	1440	1726	2300	1466	1447	2045	1090	143	357

Table 3.5.5-17. Simulated San Joaquin River Inflow to Delta (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	140	104	163	172	359	340	375	361	315	131	125	117
1923	199	103	211	256	245	172	338	321	154	130	124	114
1924	138	91	101	99	106	101	102	96	72	72	60	64
1925	101	83	86	79	155	153	264	247	124	109	101	99
1926	117	83	91	80	107	107	208	185	91	84	60	72
1927	105	107	122	109	256	230	336	300	136	114	105	97
1928	110	113	130	133	142	192	304	220	106	98	94	91
1929	113	84	90	87	99	102	141	134	77	76	52	65
1930	90	71	72	77	88	111	142	133	74	72	49	63
1931	92	71	72	71	75	77	82	71	68	57	44	56
1932	74	73	193	211	426	281	282	240	116	108	102	99
1933	121	85	88	100	107	124	146	137	75	67	63	67
1934	85	72	81	81	103	100	100	91	63	60	47	58
1935	73	82	90	223	183	219	374	341	175	128	110	108
1936	110	87	98	115	549	354	408	341	136	119	109	109
1937	129	92	110	149	646	466	498	603	157	128	115	114
1938	146	96	279	295	1031	1671	1047	1290	1158	214	138	151
1939	505	108	130	137	168	197	265	231	111	110	107	94
1940	125	89	94	249	303	566	390	328	152	127	122	115
1941	158	107	173	301	729	676	578	590	381	146	134	119
1942	232	110	268	469	478	352	409	418	337	171	143	130
1943	285	123	200	761	587	1058	479	460	183	156	139	131
1944	159	112	121	123	184	203	309	285	133	133	129	110
1945	136	116	120	114	336	443	402	348	158	142	137	120
1946	197	119	245	293	281	271	347	327	152	135	130	116
1947	144	116	135	120	140	117	150	144	98	97	64	75
1948	107	81	79	73	78	112	226	215	132	110	105	101
1949	118	85	86	80	93	162	212	200	105	106	102	97
1950	105	84	86	123	152	144	209	193	102	96	94	95
1951	110	218	408	368	482	330	327	315	146	114	107	110
1952	150	106	173	341	304	691	588	826	782	196	134	150
1953	444	109	160	398	268	192	275	267	138	115	110	101
1954	136	94	100	104	127	161	271	262	115	116	111	100
1955	132	90	99	114	109	107	148	145	99	98	68	77
1956	96	83	641	808	687	387	353	345	339	145	125	135
1957	243	96	109	108	135	253	266	270	138	113	106	100
1958	142	98	107	122	190	454	872	766	572	164	141	137
1959	336	97	106	126	266	195	238	191	99	99	96	92
1960	114	80	82	85	124	114	148	140	87	83	50	68
1961	96	76	83	74	76	78	91	81	82	64	50	68
1962	84	74	77	74	304	278	280	237	99	94	90	92
1963	102	82	83	113	190	169	347	324	175	136	115	110
1964	126	102	107	102	96	103	143	136	84	81	57	70
1965	105	97	206	348	381	292	399	337	173	126	111	109
1966	157	153	307	290	262	209	238	198	106	108	104	96
1967	131	97	176	198	176	326	747	852	948	546	129	157
1968	321	94	118	126	229	199	251	195	102	103	99	93
1969	124	94	119	721	1345	1084	1107	1447	1463	246	132	149
1970	479	117	214	1050	519	453	338	324	150	123	118	114
1971	149	111	149	145	128	145	263	262	131	121	116	102
1972	132	92	110	105	110	99	145	147	90	92	90	88
1973	117	86	92	148	284	458	391	336	130	122	116	112
1974	148	95	126	357	261	392	447	425	204	135	123	122
1975	169	105	118	118	298	499	408	367	310	145	127	124
1976	194	102	111	105	111	109	145	139	87	86	86	75
1977	198	124	103	80	76	78	101	97	74	54	42	58
1978	94	80	93	229	436	558	764	721	675	151	115	129
1979	257	92	106	234	502	531	370	367	127	114	109	110
1980	151	102	113	680	1137	806	449	418	309	236	123	154
1981	275	98	110	130	140	214	257	212	102	103	100	93
1982	130	102	108	384	719	912	1466	990	581	227	134	210
1983	757	459	1118	1440	1726	2300	1189	1258	2045	1090	124	357
1984	718	781	1272	888	555	373	328	310	156	136	130	116
1985	145	114	121	110	122	135	192	212	104	101	97	94
1986	135	100	109	134	748	1385	717	514	388	147	133	129
1987	170	99	105	103	113	121	147	140	90	92	84	71
1988	104	79	79	79	76	77	102	97	75	69	42	61
1989	96	71	80	73	75	98	102	88	77	81	57	69
1990	82	73	71	73	76	81	93	80	69	62	56	64
1991	70	70	69	64	63	147	133	104	68	65	56	61
1992	78	70	70	70	126	116	114	81	64	72	51	64
1993	92	80	135	366	291	285	284	389	261	129	118	107
AVG:	171	111	165	236	315	349	349	337	240	136	100	105
MIN:	70	70	69	64	63	77	82	71	63	54	42	56
MAX:	757	781	1272	1440	1726	2300	1466	1447	2045	1090	143	357

Table 3.5.5-18. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	140	104	163	172	359	340	375	361	315	131	125	117
1923	199	103	211	256	245	172	338	321	154	130	124	114
1924	138	91	101	99	106	101	102	96	72	72	60	64
1925	101	83	86	79	155	153	264	247	124	109	101	99
1926	116	83	91	80	107	107	208	185	91	84	60	72
1927	105	107	122	109	256	230	336	300	136	114	105	97
1928	110	113	130	133	142	192	304	220	106	98	94	91
1929	113	84	90	87	99	102	141	134	77	76	52	65
1930	90	71	72	77	88	111	142	133	74	72	49	63
1931	92	71	72	71	75	77	82	71	68	57	44	56
1932	74	73	193	211	426	281	282	240	116	108	102	99
1933	121	85	88	100	107	124	146	137	75	67	63	67
1934	85	72	81	81	103	100	100	91	63	60	47	58
1935	69	82	90	223	183	219	374	341	175	128	110	108
1936	109	87	98	115	549	354	408	341	136	119	109	109
1937	129	92	110	149	646	466	499	604	157	128	115	114
1938	146	96	279	295	1031	1671	1047	1290	1159	214	138	151
1939	505	108	130	137	168	197	265	231	111	110	107	94
1940	125	89	94	249	303	566	390	328	152	127	122	115
1941	158	107	173	301	729	676	578	590	381	146	134	119
1942	232	110	268	469	478	352	409	418	337	171	143	130
1943	285	123	200	761	587	1058	479	460	183	156	139	131
1944	159	112	121	123	184	203	309	285	133	133	129	110
1945	136	116	120	114	336	443	402	348	158	142	137	120
1946	197	119	245	293	281	271	347	327	152	135	130	116
1947	144	116	135	120	140	117	150	144	98	97	64	75
1948	107	81	79	73	78	112	226	215	133	110	105	101
1949	119	85	86	80	93	162	212	200	105	106	102	97
1950	105	84	86	123	152	144	209	193	102	96	94	95
1951	110	218	408	369	482	330	327	315	146	114	107	110
1952	150	106	173	341	304	691	588	826	782	196	134	150
1953	444	109	160	398	268	192	275	267	138	115	110	101
1954	136	94	100	104	127	161	271	262	115	116	111	100
1955	132	90	99	114	109	107	148	145	99	98	68	77
1956	96	83	641	808	687	387	353	345	339	145	125	135
1957	243	96	109	108	135	253	266	270	138	113	106	100
1958	142	98	107	122	190	454	872	766	572	164	141	137
1959	310	106	115	133	266	195	238	191	99	99	96	92
1960	114	80	82	85	124	114	148	140	87	83	50	68
1961	96	76	83	74	76	78	91	81	82	64	50	68
1962	78	74	77	74	304	278	280	237	99	94	90	92
1963	102	82	83	113	190	169	347	324	175	136	115	110
1964	126	102	107	102	96	103	143	136	84	81	57	70
1965	103	97	206	348	381	292	399	337	174	126	111	109
1966	159	153	307	291	262	209	238	198	106	108	104	96
1967	131	97	176	198	176	326	747	852	948	546	129	157
1968	322	94	118	126	229	199	251	195	102	103	99	93
1969	124	94	119	721	1345	1084	1107	1447	1463	246	132	149
1970	479	117	214	1050	519	453	338	324	150	123	118	114
1971	149	111	149	145	128	145	263	262	131	121	116	102
1972	132	92	110	105	110	99	145	147	90	92	90	88
1973	117	86	92	148	284	458	391	336	130	122	116	112
1974	148	95	126	357	261	392	447	425	204	135	123	122
1975	169	105	118	118	298	499	408	367	310	145	127	124
1976	194	102	111	105	111	109	145	139	87	86	86	75
1977	198	124	103	80	76	78	101	97	74	54	42	58
1978	94	80	93	229	436	558	764	721	675	151	115	129
1979	257	92	106	234	502	531	370	367	127	114	109	110
1980	151	102	113	680	1137	806	449	418	309	236	123	154
1981	275	98	110	130	140	214	257	212	102	103	100	93
1982	130	102	108	384	719	912	1466	990	581	227	134	210
1983	757	459	1118	1440	1726	2300	1189	1258	2045	1090	124	357
1984	718	781	1272	888	555	373	328	310	156	136	130	116
1985	145	114	121	110	122	135	192	212	104	101	97	94
1986	135	100	109	134	748	1385	717	514	388	147	133	129
1987	170	99	105	103	113	121	147	140	90	92	84	71
1988	104	79	79	79	76	77	102	97	75	69	42	61
1989	96	71	80	73	75	98	102	88	76	81	57	69
1990	82	73	71	73	76	81	93	80	69	62	56	64
1991	72	70	69	64	63	147	133	104	68	65	56	61
1992	78	70	70	70	126	116	114	81	64	72	51	64
1993	87	80	135	366	291	285	284	389	261	129	118	107
AVG:	170	111	165	236	315	349	349	337	240	136	100	105
MIN:	69	70	69	64	63	77	82	71	63	54	42	56
MAX:	757	781	1272	1440	1726	2300	1466	1447	2045	1090	143	357

Table 3.5.5-19. Simulated San Joaquin River Inflow to Delta (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	0	0	0	0	0	0
MAX:	0	0	0	0	0	0	0	0	0	0	0	0

Table 3.5.5-20. Simulated San Joaquin River Inflow to Delta (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0
1935	-4	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	1	0	0	0	0
1938	0	0	0	0	0	0	0	0	1	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0
1959	-26	9	10	7	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	-6	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	-2	0	0	0	0	0	0	0	0	0	0	0
1966	2	0	0	0	0	0	0	1	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	1	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	2	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	-5	0	0	0	0	0	0	1	0	0	0	0
AVG:	-1	0	0	0	0	0	0	0	0	0	0	0
MIN:	-26	0	0	0	0	0	0	0	0	0	0	0
MAX:	2	9	10	7	0	0	0	1	1	0	0	0

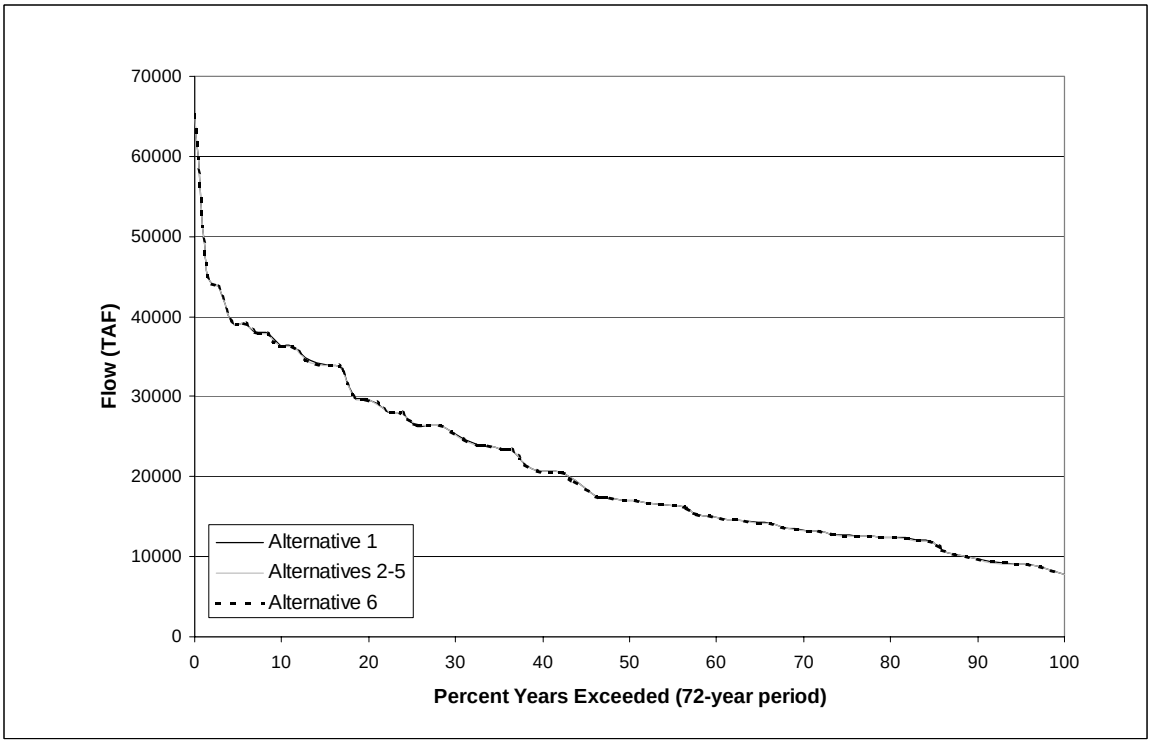


Figure 3.5.5-5 Exceedence for Simulated Annual Total Delta Inflow, 2020 LOD

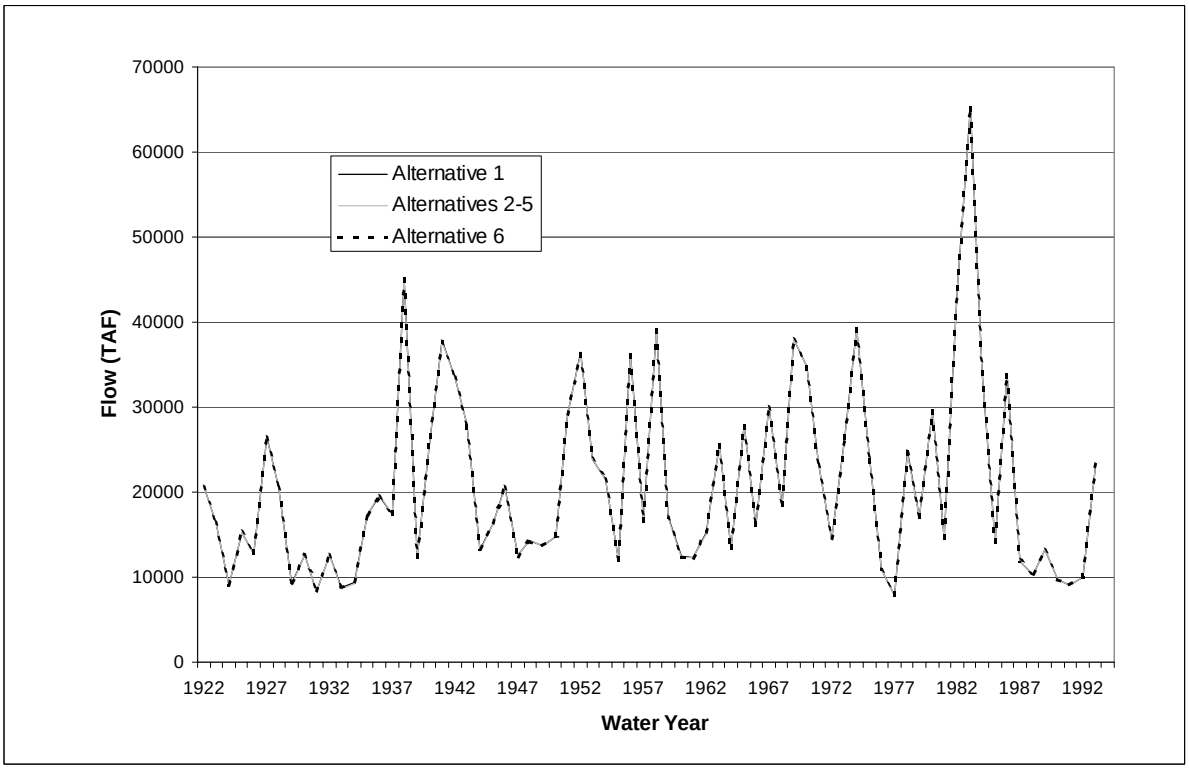


Figure 3.5.5-6 Simulated Annual Total Delta Inflow, 2020 LOD

Table 3.5.5-21. Simulated Total Delta Inflow (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	818	745	1330	1242	2671	2313	1861	3504	2611	1510	1125	951
1923	918	993	2232	2184	1172	1167	1856	1365	1097	1394	1145	1002
1924	895	721	885	940	1091	749	562	589	637	709	734	547
1925	600	603	960	902	4046	1840	1683	1178	1124	861	639	801
1926	700	614	663	1199	2607	990	1697	988	802	1059	761	667
1927	681	1622	1370	2102	7674	3037	3242	1947	1357	1398	1127	876
1928	916	1201	1147	1587	1592	6680	1969	1443	1067	1237	961	839
1929	785	864	907	912	1057	879	596	643	684	760	587	525
1930	586	515	1279	1482	1184	2217	940	911	811	1115	885	714
1931	669	595	651	958	725	607	604	539	637	996	743	571
1932	563	511	1548	1572	1544	1162	958	1025	1013	1119	857	783
1933	704	608	656	1001	788	967	801	613	677	778	585	533
1934	577	518	1067	1307	1005	935	809	592	715	726	516	570
1935	560	788	762	2212	1003	2016	3496	1845	1461	1246	1151	864
1936	838	656	792	2718	4693	2273	1811	1386	1129	1286	1154	868
1937	819	665	864	1040	2913	3197	1938	1673	1076	1220	1139	867
1938	822	1588	4377	2263	8216	10696	4955	4955	3358	1477	1140	1202
1939	1447	866	1067	1005	903	1112	857	936	979	1300	1100	854
1940	795	614	680	2458	3945	7043	4495	1573	1274	1489	1144	896
1941	850	869	2993	6332	7229	6190	4828	3120	1607	1483	1121	1218
1942	1044	915	4193	5272	8154	2005	3372	2719	2010	1379	1141	1209
1943	1118	1149	2109	5727	3707	5827	2170	1701	1245	1215	1133	900
1944	812	722	870	1046	1705	1652	1035	996	1073	1280	1081	900
1945	839	1041	1193	1014	3093	1922	1240	1236	1280	1434	1171	898
1946	865	1090	4642	3478	1777	1480	1151	1253	1217	1412	1174	1021
1947	937	899	1147	855	1197	1437	1030	829	925	1302	1126	891
1948	739	713	676	1091	1040	1191	1899	1992	1417	1410	1169	908
1949	899	792	962	833	835	3271	1033	1115	1117	1242	787	855
1950	690	663	672	1431	2232	1478	1516	1371	1396	1356	1139	872
1951	865	3305	6288	4567	4329	2236	1287	1517	981	1534	1161	991
1952	907	1068	2772	5814	4881	4594	4510	4767	3144	1377	1095	1477
1953	1476	924	2986	6643	1642	1577	1321	1878	1578	1441	1119	1258
1954	1001	1079	885	2291	3668	3389	2777	1818	1005	1478	1131	1021
1955	934	993	1624	1350	958	862	945	1016	1044	920	658	727
1956	687	823	6203	10465	5397	2818	1583	2845	1624	1468	1133	1212
1957	1158	819	985	945	2163	3213	1515	1312	1209	1379	1128	879
1958	1248	963	1568	2527	10351	6295	6221	3677	2484	1331	1135	1336
1959	1412	848	919	2471	3297	1594	881	986	1209	1433	1164	813
1960	865	697	682	926	1886	1460	834	987	955	1273	1123	721
1961	679	829	1088	852	1817	1333	779	792	855	1328	1159	828
1962	809	713	1121	717	3059	1960	1028	1093	1222	1382	1109	948
1963	2213	1067	1810	1134	4367	2152	5630	2332	1347	1452	1133	928
1964	942	1724	936	1553	969	867	1312	880	898	1268	1178	918
1965	680	983	5091	7582	2304	1748	3135	1833	1071	1450	1130	914
1966	756	1475	1331	2227	1761	2011	1102	1144	1142	1340	1082	847
1967	931	1015	2509	3167	3395	4098	3580	3841	3280	1539	1168	1479
1968	1447	944	1169	2026	3872	2569	1189	921	993	1304	1114	882
1969	896	887	1656	7590	7832	4376	3878	4529	2863	1294	1155	1070
1970	1545	971	3958	13145	5145	2782	1279	1114	1106	1599	1172	961
1971	916	1252	4077	3332	1787	2937	1664	1933	1360	1699	1135	1202
1972	1044	915	1233	1154	1624	2350	898	880	1259	1306	1075	793
1973	836	1278	1724	5299	5372	4048	1473	1452	1386	1468	1134	936
1974	923	3692	4456	8412	2672	7220	4594	1905	1590	1302	1141	1387
1975	1084	942	1184	1097	4074	5904	1881	2175	1726	1454	1120	1332
1976	1320	988	1133	973	913	1099	725	603	677	954	801	696
1977	690	581	657	614	520	574	649	477	747	959	831	539
1978	583	516	1082	4335	3550	4612	3079	1966	1692	1197	1150	971
1979	847	735	1051	1740	2700	2549	1470	1333	1355	1315	1101	874
1980	888	910	1316	6775	7912	4005	1614	1504	1158	1473	1217	992
1981	927	681	1029	1523	1671	2255	1304	937	963	1325	1183	893
1982	863	2099	5669	5078	6040	5886	8602	3656	1993	1458	1149	1317
1983	2033	2867	5637	6626	9996	15637	5541	5143	5570	2648	1508	2042
1984	1944	5102	9748	4563	2666	2664	1423	1168	1107	1564	1164	1011
1985	936	2048	1508	1000	1039	1086	1080	1034	955	1312	1200	1020
1986	861	817	1215	1649	11648	9588	1902	1403	1297	1366	1199	965
1987	879	677	792	1012	1275	1740	959	787	965	1106	924	787
1988	797	622	1269	1895	1001	649	769	702	720	829	564	547
1989	587	678	735	904	601	3069	1393	1066	955	1262	1121	870
1990	924	732	843	1306	973	959	767	612	574	668	777	575
1991	558	508	511	509	553	2244	964	691	535	788	658	610
1992	557	508	515	760	2151	1428	840	629	714	734	525	696
1993	576	519	1017	4132	3569	3184	2647	2307	1857	1509	1146	905
AVG:	924	1055	1898	2762	3156	2972	2020	1635	1347	1284	1036	927
MIN:	557	508	511	509	520	574	562	477	535	668	516	525
MAX:	2213	5102	9748	13145	11648	15637	8602	5143	5570	2648	1508	2042

Table 3.5.5-22. Simulated Total Delta Inflow (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	818	743	1327	1239	2665	2310	1860	3500	2607	1510	1125	945
1923	915	991	2224	2182	1172	1166	1854	1363	1097	1394	1145	1004
1924	897	720	893	940	1088	749	555	588	643	699	721	530
1925	581	609	966	908	4056	1844	1679	1179	1126	862	642	806
1926	700	614	663	1200	2606	981	1682	979	804	1056	760	671
1927	683	1616	1335	2102	7636	3036	3252	1961	1366	1381	1127	873
1928	920	1203	1149	1585	1592	6680	1966	1444	1064	1232	957	836
1929	782	864	907	912	1054	869	595	642	650	760	592	517
1930	586	515	1277	1479	1181	2205	928	902	817	1125	890	698
1931	671	597	647	961	742	607	604	536	634	999	742	554
1932	562	512	1543	1569	1506	1161	956	1022	1011	1114	854	792
1933	706	610	658	1000	787	958	801	602	677	775	584	531
1934	578	520	1069	1306	1007	927	809	591	715	726	501	523
1935	562	786	768	2200	997	2018	3495	1841	1459	1242	1148	842
1936	841	661	792	2715	4735	2279	1807	1380	1130	1284	1154	868
1937	816	663	865	1040	2910	3194	1934	1663	1077	1216	1131	867
1938	813	1582	4306	2262	8213	10692	4951	4951	3353	1477	1140	1208
1939	1436	865	1064	1002	900	1098	848	928	986	1295	1098	854
1940	803	611	670	2443	3916	7094	4492	1577	1284	1494	1144	1019
1941	886	858	2981	6323	7062	6188	4824	3116	1608	1483	1134	1214
1942	1042	913	4172	5269	8151	2001	3368	2715	2006	1375	1141	1205
1943	1113	1140	2105	5724	3704	5824	2166	1698	1245	1217	1133	896
1944	810	723	868	1046	1702	1643	1034	993	1073	1278	1080	900
1945	838	1036	1189	1014	3085	1921	1238	1234	1280	1434	1171	895
1946	865	1082	4639	3470	1784	1471	1150	1251	1217	1412	1174	1021
1947	936	899	1148	852	1194	1441	1028	827	923	1296	1120	891
1948	739	717	677	1091	1040	1190	1897	1988	1413	1410	1169	905
1949	883	788	959	833	832	3270	1031	1112	1117	1240	786	852
1950	690	664	671	1428	2229	1474	1514	1368	1392	1353	1139	871
1951	864	3295	6281	4564	4326	2233	1285	1514	981	1534	1161	990
1952	907	1067	2754	5812	4878	4590	4503	4763	3140	1375	1093	1470
1953	1470	923	2982	6641	1642	1577	1319	1876	1574	1443	1119	1249
1954	999	1074	885	2283	3665	3385	2774	1818	1001	1480	1130	1021
1955	931	993	1614	1348	958	859	949	1013	1044	916	652	725
1956	687	823	6187	10463	5394	2814	1581	2840	1620	1468	1133	1204
1957	1153	817	1000	945	2140	3209	1516	1308	1210	1370	1127	875
1958	1243	963	1562	2524	10348	6291	6218	3673	2481	1330	1135	1330
1959	1406	846	919	2469	3294	1590	871	994	1208	1431	1164	761
1960	922	658	674	916	1874	1449	834	973	956	1270	1142	694
1961	679	830	1088	852	1778	1330	778	791	846	1328	1159	828
1962	808	720	1120	717	3051	1949	1017	1086	1209	1369	1133	946
1963	2179	1056	1799	1123	4442	2146	5639	2334	1345	1459	1133	924
1964	939	1719	935	1540	970	845	1344	867	904	1273	1177	908
1965	680	984	5090	7580	2300	1750	3128	1833	1071	1450	1130	910
1966	754	1459	1327	2226	1757	2010	1100	1142	1143	1339	1081	847
1967	931	1010	2497	3165	3387	4095	3576	3837	3276	1535	1164	1474
1968	1441	943	1165	2023	3868	2556	1190	909	998	1289	1114	882
1969	891	878	1647	7623	7829	4371	3874	4517	2858	1294	1155	1053
1970	1540	968	3954	13142	5142	2779	1279	1111	1108	1596	1172	956
1971	913	1247	4066	3330	1793	2926	1665	1927	1357	1700	1135	1197
1972	1044	913	1229	1140	1621	2346	900	880	1259	1304	1074	793
1973	834	1273	1712	5291	5369	4045	1471	1450	1387	1468	1132	930
1974	921	3679	4452	8409	2669	7217	4591	1902	1587	1302	1141	1382
1975	1071	941	1180	1097	4070	5900	1879	2171	1723	1454	1120	1324
1976	1315	982	1133	973	910	1086	720	589	689	955	807	687
1977	696	583	654	620	519	574	647	476	747	953	830	533
1978	583	516	1082	4327	3426	4572	3059	1963	1690	1197	1150	967
1979	846	741	1051	1738	2681	2535	1464	1331	1359	1309	1102	874
1980	903	903	1312	6709	7972	4001	1612	1501	1155	1473	1217	982
1981	925	680	1028	1520	1664	2242	1293	924	967	1325	1183	876
1982	880	2077	5695	5083	6037	5883	8598	3652	1989	1458	1151	1312
1983	2022	2863	5633	6623	9993	15633	5537	5139	5566	2644	1504	2037
1984	1939	5098	9745	4562	2664	2662	1424	1166	1104	1566	1164	1006
1985	941	2039	1505	1000	1036	1084	1080	1034	955	1312	1200	1020
1986	860	816	1212	1646	11619	9584	1901	1400	1297	1363	1198	962
1987	878	676	792	1012	1272	1709	965	787	960	1109	924	789
1988	782	613	1259	1887	1003	648	697	722	731	830	566	546
1989	587	677	735	904	601	2985	1392	1068	956	1256	1118	880
1990	921	728	833	1303	976	952	767	600	577	662	774	605
1991	560	514	517	514	559	2238	954	685	535	771	651	599
1992	557	508	515	761	2148	1415	830	631	715	732	517	649
1993	563	519	1011	4146	3566	3162	2642	2314	1880	1509	1148	905
AVG:	923	1052	1894	2759	3149	2966	2016	1631	1346	1283	1036	924
MIN:	557	508	515	514	519	574	555	476	535	662	501	517
MAX:	2179	5098	9745	13142	11619	15633	8598	5139	5566	2644	1504	2037

Table 3.5.5-23. Simulated Total Delta Inflow (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	818	744	1327	1239	2666	2310	1860	3500	2657	1510	1125	915
1923	915	991	2203	2182	1172	1166	1854	1362	1097	1394	1144	1001
1924	912	726	911	940	1088	749	562	589	637	708	731	546
1925	585	609	966	908	4057	1835	1681	1172	1108	856	635	798
1926	701	614	663	1200	2603	988	1678	987	803	1060	761	670
1927	681	1616	1364	2100	7652	3034	3238	1936	1369	1432	1127	856
1928	918	1182	1131	1585	1591	6619	1965	1446	1073	1248	960	836
1929	789	861	907	912	1054	878	596	643	646	757	589	527
1930	586	515	1276	1479	1183	2214	938	909	812	1124	886	713
1931	669	595	645	959	739	605	604	536	638	997	742	571
1932	562	512	1543	1569	1531	1161	956	1022	1011	1115	855	783
1933	704	608	656	998	785	965	801	610	677	777	585	532
1934	576	518	1067	1304	1005	933	809	592	715	726	506	565
1935	562	794	768	2215	1008	2018	3484	1843	1459	1242	1151	861
1936	835	654	793	2712	4615	2241	1790	1380	1131	1270	1154	868
1937	814	663	865	1040	2898	3196	1936	1691	1077	1205	1131	867
1938	811	1582	4360	2261	8215	10693	4951	4950	3405	1477	1140	1169
1939	1415	864	1064	1002	900	1107	863	934	977	1296	1099	854
1940	795	612	680	2455	3939	7030	4486	1598	1254	1489	1144	1019
1941	886	857	2975	6324	7063	6188	4824	3127	1625	1483	1137	1196
1942	1042	913	4174	5270	8151	2001	3368	2714	2056	1456	1141	1187
1943	1113	1117	2105	5725	3704	5825	2167	1731	1245	1174	1133	884
1944	810	720	870	1046	1702	1648	1034	993	1073	1282	1083	902
1945	835	1018	1201	1022	3095	1923	1232	1228	1280	1434	1171	881
1946	890	1056	4638	3453	1817	1448	1150	1287	1216	1412	1174	1021
1947	938	886	1145	847	1194	1450	1028	826	903	1288	1117	891
1948	734	710	675	1093	1040	1191	1897	1988	1414	1410	1169	905
1949	927	788	959	833	832	3270	1031	1112	1117	1231	798	852
1950	690	660	672	1426	2229	1457	1503	1362	1402	1342	1135	852
1951	864	3289	6295	4565	4326	2233	1285	1542	980	1574	1161	984
1952	908	1072	2704	5811	4878	4591	4511	4762	3181	1368	1081	1444
1953	1470	923	2982	6641	1643	1577	1319	1875	1573	1446	1119	1248
1954	999	1074	885	2280	3665	3385	2774	1818	1001	1479	1130	1021
1955	936	989	1619	1353	961	863	946	1013	1044	919	653	725
1956	688	824	6159	10464	5394	2814	1581	2840	1669	1468	1133	1173
1957	1154	817	988	945	2133	3209	1516	1307	1210	1369	1127	874
1958	1233	963	1563	2524	10353	6292	6218	3672	2531	1323	1135	1294
1959	1380	855	928	2476	3294	1594	880	989	1199	1438	1164	824
1960	862	697	684	926	1883	1459	834	984	955	1269	1142	688
1961	679	830	1088	852	1810	1329	778	791	851	1328	1158	828
1962	810	728	1125	723	3063	1964	1026	1091	1219	1378	1104	951
1963	2201	1062	1807	1131	4363	2154	5623	2290	1324	1547	1133	907
1964	939	1719	935	1540	970	840	1351	876	895	1257	1177	896
1965	679	985	5034	7580	2301	1749	3131	1832	1084	1419	1130	901
1966	756	1480	1322	2230	1757	2010	1101	1142	1143	1339	1081	847
1967	931	1012	2501	3162	3382	4096	3577	3836	3296	1543	1149	1460
1968	1442	943	1165	2023	3868	2566	1189	918	994	1301	1114	882
1969	894	886	1653	7572	7830	4372	3875	4521	2908	1294	1155	1027
1970	1521	968	3955	13143	5142	2779	1279	1110	1109	1594	1172	954
1971	913	1248	4064	3330	1794	2927	1665	1926	1356	1699	1135	1196
1972	1044	913	1230	1139	1621	2346	900	880	1259	1304	1074	793
1973	839	1277	1717	5284	5359	4045	1471	1471	1382	1467	1128	910
1974	921	3694	4453	8409	2669	7217	4591	1917	1606	1300	1141	1369
1975	1055	938	1183	1097	4068	5900	1879	2170	1751	1454	1120	1306
1976	1315	975	1126	973	910	1096	724	599	683	952	803	695
1977	696	582	660	620	518	574	642	476	749	944	831	535
1978	583	516	1082	4332	3542	4625	3075	1963	1690	1195	1150	967
1979	846	736	1050	1738	2689	2545	1473	1341	1356	1312	1097	874
1980	883	909	1312	6775	7844	3974	1600	1480	1134	1473	1219	951
1981	925	680	1028	1520	1644	2251	1303	934	964	1325	1183	888
1982	873	2095	5655	5058	6037	5883	8598	3652	2025	1458	1144	1300
1983	2012	2863	5634	6624	9994	15634	5537	5139	5565	2676	1486	2019
1984	1939	5098	9745	4562	2665	2662	1424	1165	1109	1560	1164	1000
1985	946	2040	1505	1000	1036	1084	1080	1034	955	1312	1200	1020
1986	861	818	1214	1648	11608	9585	1901	1426	1295	1352	1190	948
1987	878	676	792	1012	1272	1720	964	787	964	1106	923	786
1988	791	622	1269	1892	1001	648	766	703	720	824	562	542
1989	587	678	735	904	601	3047	1391	1067	955	1259	1119	865
1990	929	732	838	1309	976	960	767	609	575	655	781	601
1991	560	508	511	510	553	2242	961	687	535	787	659	608
1992	557	508	515	761	2148	1424	837	627	714	733	516	694
1993	571	519	1017	4127	3566	3174	2643	2285	1851	1509	1146	905
AVG:	922	1052	1893	2759	3148	2966	2018	1634	1350	1285	1035	920
MIN:	557	508	511	510	518	574	562	476	535	655	506	527
MAX:	2201	5098	9745	13143	11608	15634	8598	5139	5565	2676	1486	2019

Table 3.5.5-24. Simulated Total Delta Inflow (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-6	-3	-2	-4	-4	0	0	-6
1923	-3	-2	-8	-2	0	-1	-2	-3	0	0	0	2
1924	1	-1	8	0	-3	0	-7	-1	6	-10	-13	-18
1925	-18	6	6	6	10	4	-4	2	2	2	3	5
1926	0	0	0	0	-1	-9	-15	-10	2	-3	-1	3
1927	2	-6	-35	0	-38	-1	10	14	9	-16	0	-4
1928	3	1	2	-3	0	0	-3	0	-3	-4	-4	-3
1929	-3	1	0	0	-3	-11	-1	-1	-34	0	5	-8
1930	0	0	-2	-3	-3	-12	-12	-9	6	10	5	-16
1931	2	2	-4	2	16	1	0	-3	-4	3	-1	-17
1932	0	1	-5	-3	-38	-1	-2	-3	-3	-5	-3	10
1933	2	2	2	-1	-1	-9	0	-11	0	-2	-2	-1
1934	2	2	2	0	2	-7	0	0	0	0	-15	-46
1935	2	-3	6	-13	-6	2	-2	-4	-3	-4	-4	-22
1936	3	4	0	-3	42	6	-4	-6	1	-3	0	0
1937	-3	-2	1	0	-3	-3	-5	-9	0	-4	-8	0
1938	-10	-5	-71	-2	-3	-4	-4	-4	-5	0	0	5
1939	-11	-2	-3	-2	-3	-14	-8	-9	7	-6	-3	0
1940	9	-4	-10	-15	-28	51	-3	4	10	5	0	123
1941	36	-11	-11	-9	-167	-3	-4	-5	1	0	13	-5
1942	-3	-2	-21	-2	-3	-3	-4	-4	-4	-4	0	-5
1943	-6	-9	-3	-3	-3	-3	-3	-2	0	2	0	-3
1944	-3	0	-3	0	-3	-9	-2	-3	0	-2	-1	-1
1945	-2	-5	-4	0	-8	-1	-2	-3	0	0	0	-3
1946	0	-9	-3	-8	8	-9	-2	-3	0	0	0	0
1947	-1	1	1	-3	-3	3	-2	-2	-2	-6	-6	0
1948	0	4	1	0	0	-1	-2	-5	-3	0	0	-3
1949	-16	-4	-3	0	-3	-2	-2	-3	0	-2	-1	-3
1950	0	1	-1	-3	-3	-3	-2	-3	-3	-2	0	-1
1951	-1	-11	-7	-2	-3	-3	-2	-3	0	0	0	-1
1952	0	-1	-18	-2	-3	-3	-7	-4	-4	-2	-3	-7
1953	-6	-1	-4	-2	0	0	-1	-2	-3	2	0	-9
1954	-2	-5	0	-8	-3	-3	-3	1	-3	2	0	0
1955	-3	0	-10	-2	0	-3	3	-3	0	-4	-6	-2
1956	1	0	-16	-2	-3	-3	-2	-4	-4	0	0	-8
1957	-5	-2	14	0	-23	-3	0	-5	1	-8	-1	-4
1958	-5	0	-6	-2	-3	-3	-3	-4	-4	-1	0	-7
1959	-6	-2	-1	-2	-3	-4	-11	7	-1	-1	0	-51
1960	57	-39	-8	-10	-12	-11	0	-14	1	-3	19	-27
1961	0	0	0	0	-39	-4	-1	-1	-9	0	0	0
1962	-1	7	-1	0	-8	-11	-11	-7	-13	-13	24	-2
1963	-34	-11	-11	-10	75	-6	9	2	-2	7	0	-3
1964	-3	-5	-1	-13	0	-22	32	-14	6	5	-1	-10
1965	0	0	-1	-2	-3	2	-7	1	0	0	-1	-4
1966	-2	-16	-4	-2	-3	-1	-2	-2	1	-1	-1	0
1967	0	-5	-11	-2	-9	-3	-4	-4	-4	-4	-3	-5
1968	-6	-1	-3	-2	-4	-13	1	-12	5	-15	0	0
1969	-5	-9	-8	34	-3	-4	-4	-12	-5	0	0	-17
1970	-6	-3	-4	-3	-3	-4	1	-3	2	-3	0	-5
1971	-3	-5	-11	-2	6	-11	0	-6	-3	1	0	-5
1972	0	-2	-3	-14	-3	-4	2	0	0	-2	-1	0
1973	-2	-5	-12	-8	-3	-3	-2	-3	1	0	-2	-6
1974	-2	-13	-3	-3	-3	-3	-4	-3	-3	0	0	-5
1975	-13	-1	-4	0	-4	-3	-2	-4	-3	0	0	-7
1976	-6	-6	-1	0	-3	-13	-5	-14	11	1	6	-8
1977	6	2	-3	6	-1	0	-2	0	1	-6	-1	-6
1978	0	0	0	-8	-124	-40	-20	-3	-2	0	0	-4
1979	-1	6	0	-2	-19	-13	-7	-2	3	-5	1	0
1980	15	-7	-3	-66	61	-4	-2	-3	-4	0	0	-10
1981	-2	-1	-1	-2	-7	-13	-11	-12	4	0	-1	-17
1982	17	-22	26	5	-3	-3	-4	-4	-4	0	2	-5
1983	-11	-5	-3	-2	-3	-3	-4	-4	-4	-4	-4	-5
1984	-6	-5	-3	-1	-2	-2	0	-2	-3	2	0	-5
1985	5	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	-1	-1	-3	-3	-28	-4	-2	-3	0	-3	-1	-3
1987	-1	-1	0	0	-3	-31	6	0	-5	3	0	2
1988	-14	-9	-10	-8	3	-1	-71	20	10	1	1	-1
1989	0	0	0	0	0	-84	-2	3	1	-6	-3	10
1990	-2	-5	-10	-4	2	-7	0	-12	3	-7	-3	30
1991	2	5	5	5	7	-6	-10	-6	0	-17	-7	-11
1992	0	0	0	0	-3	-13	-10	2	0	-2	-8	-47
1993	-13	0	-6	14	-4	-22	-4	7	23	1	2	0
AVG:	-1	-3	-4	-3	-6	-6	-3	-3	0	-2	0	-4
MIN:	-34	-39	-71	-66	-167	-84	-71	-14	-34	-17	-15	-51
MAX:	57	7	26	34	75	51	32	20	23	10	24	123

Table 3.5.5-25. Simulated Total Delta Inflow (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-2	-3	-2	-5	-3	-2	-4	46	0	0	-37
1923	-3	-2	-29	-2	0	-1	-2	-3	1	0	0	-2
1924	17	5	26	0	-3	0	0	0	0	-1	-3	-2
1925	-15	6	6	6	12	-5	-2	-6	-16	-4	-4	-3
1926	1	0	0	0	-5	-2	-19	-2	1	1	0	2
1927	0	-6	-5	-2	-22	-3	-4	-11	12	35	0	-21
1928	2	-19	-16	-2	-1	-61	-3	3	7	12	-1	-3
1929	4	-3	0	0	-3	-1	0	0	-38	-4	2	2
1930	0	0	-3	-3	0	-3	-2	-1	1	9	1	-1
1931	0	0	-6	0	14	-2	0	-2	0	2	-1	0
1932	0	1	-4	-3	-14	-1	-2	-3	-3	-4	-3	0
1933	0	0	0	-2	-3	-1	0	-3	0	-1	0	0
1934	0	0	0	-2	0	-1	0	0	0	0	-10	-5
1935	2	6	6	3	5	2	-12	-2	-3	-3	-1	-3
1936	-3	-2	0	-6	-77	-32	-21	-7	2	-16	0	0
1937	-5	-2	1	0	-16	-1	-3	19	1	-15	-8	0
1938	-12	-5	-17	-2	-2	-3	-4	-5	47	0	0	-34
1939	-31	-2	-4	-3	-3	-4	6	-2	-3	-5	-2	0
1940	0	-2	0	-3	-6	-13	-9	24	-20	0	0	123
1941	36	-12	-17	-8	-166	-2	-4	7	18	0	16	-22
1942	-3	-2	-19	-2	-3	-3	-4	-5	46	77	0	-22
1943	-5	-32	-3	-2	-3	-3	-3	31	0	-41	0	-16
1944	-3	-2	-1	0	-3	-4	-1	-3	0	2	2	1
1945	-4	-24	9	8	2	1	-8	-8	0	0	0	-17
1946	25	-34	-3	-25	40	-32	-1	33	-1	0	0	0
1947	1	-12	-2	-9	-3	13	-2	-3	-23	-14	-9	0
1948	-6	-3	-1	2	0	1	-2	-4	-3	0	0	-3
1949	28	-4	-3	0	-3	-2	-2	-3	0	-11	11	-3
1950	0	-4	0	-4	-3	-21	-13	-9	7	-14	-5	-20
1951	-1	-16	6	-2	-3	-4	-2	25	-1	40	0	-7
1952	0	4	-68	-3	-3	-3	1	-5	38	-9	-14	-33
1953	-6	-2	-4	-2	0	0	-1	-3	-4	5	0	-10
1954	-2	-5	0	-11	-3	-3	-3	1	-3	1	0	0
1955	2	-4	-5	2	2	1	0	-3	0	-1	-4	-2
1956	1	1	-44	-2	-3	-4	-2	-5	46	0	0	-39
1957	-4	-2	3	0	-29	-3	0	-5	1	-10	-1	-5
1958	-14	0	-5	-2	2	-3	-3	-4	46	-8	0	-43
1959	-32	7	9	5	-3	0	-1	3	-11	5	0	12
1960	-3	0	2	0	-3	-1	0	-3	0	-4	19	-34
1961	0	0	0	0	-8	-4	-1	-1	-4	0	-1	0
1962	0	15	4	6	3	4	-2	-1	-3	-4	-5	4
1963	-12	-5	-3	-2	-4	2	-7	-42	-22	95	0	-20
1964	-3	-4	0	-13	0	-27	40	-4	-3	-10	0	-22
1965	0	2	-57	-2	-3	1	-4	0	14	-30	-1	-13
1966	0	5	-9	3	-3	-1	-2	-1	0	-1	-2	0
1967	0	-3	-8	-4	-14	-3	-3	-5	16	3	-19	-20
1968	-4	-1	-3	-2	-4	-3	0	-3	1	-3	0	0
1969	-1	-1	-3	-18	-2	-3	-3	-7	46	0	0	-43
1970	-24	-2	-3	-2	-3	-3	1	-4	3	-5	0	-6
1971	-3	-4	-13	-2	7	-11	0	-7	-4	0	0	-6
1972	0	-2	-3	-15	-3	-4	2	0	0	-1	-1	0
1973	3	-1	-8	-15	-13	-3	-2	18	-5	-1	-5	-26
1974	-2	2	-3	-2	-3	-3	-4	13	16	-2	0	-18
1975	-30	-4	-1	0	-6	-3	-2	-5	26	0	0	-25
1976	-6	-13	-7	0	-3	-3	-1	-3	5	-2	1	-1
1977	6	2	3	6	-3	0	-7	-1	2	-15	0	-4
1978	0	0	0	-3	-8	13	-4	-3	-2	-3	0	-3
1979	-1	2	-1	-2	-11	-3	3	8	0	-2	-4	0
1980	-4	-1	-3	0	-67	-30	-14	-24	-24	0	2	-42
1981	-2	-1	0	-2	-27	-4	-2	-3	1	0	0	-5
1982	10	-4	-14	-19	-3	-3	-4	-5	32	0	-5	-17
1983	-21	-4	-3	-2	-3	-2	-4	-5	-5	29	-22	-22
1984	-6	-4	-3	-1	-2	-2	0	-3	2	-4	0	-10
1985	10	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	0	1	-2	-1	-39	-3	-2	24	-3	-14	-9	-17
1987	-1	0	0	0	-3	-20	5	0	-2	0	-1	0
1988	-6	0	0	-3	0	-1	-2	1	0	-5	-3	-5
1989	0	0	0	0	0	-22	-2	1	0	-3	-1	-4
1990	5	-1	-5	3	2	1	0	-3	1	-14	4	26
1991	2	0	0	0	0	-2	-3	-4	0	-1	0	-2
1992	0	0	0	0	-3	-4	-3	-3	0	-1	-9	-2
1993	-5	0	-1	-5	-3	-10	-4	-22	-6	0	0	0
AVG:	-2	-3	-5	-2	-8	-5	-2	-1	4	0	-1	-8
MIN:	-32	-34	-68	-25	-166	-61	-21	-42	-38	-41	-22	-43
MAX:	36	15	26	8	40	13	40	33	47	95	19	123

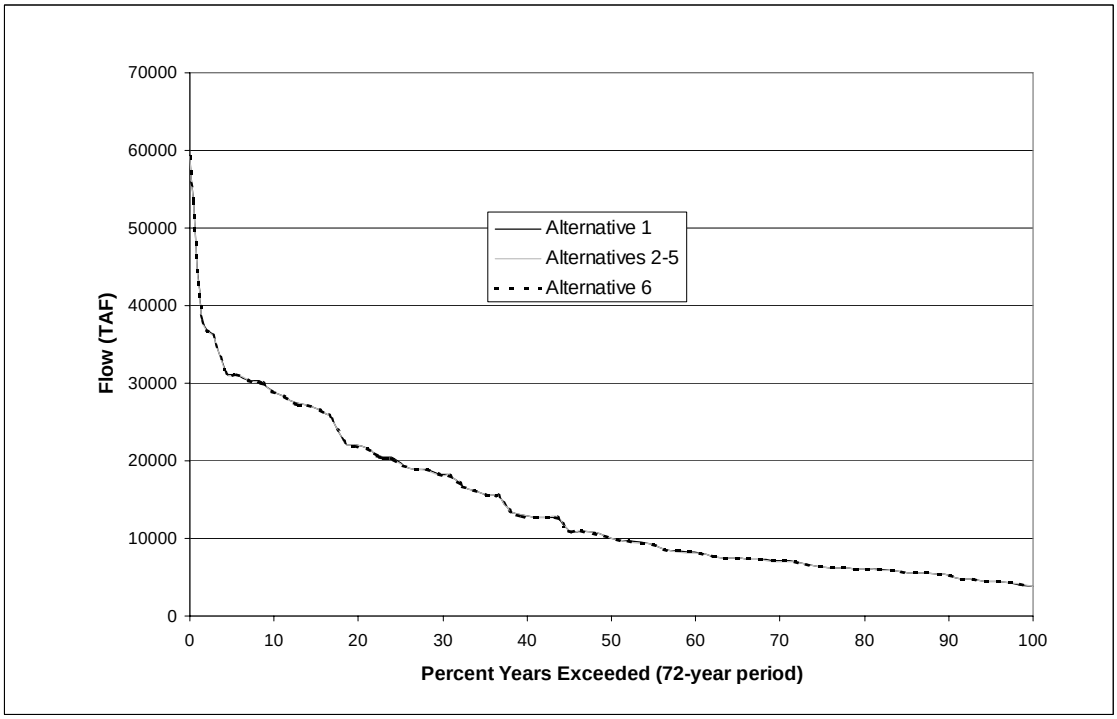


Figure 3.5.5-7 Exceedence for Simulated Annual Delta Outflow, 2020 LOD

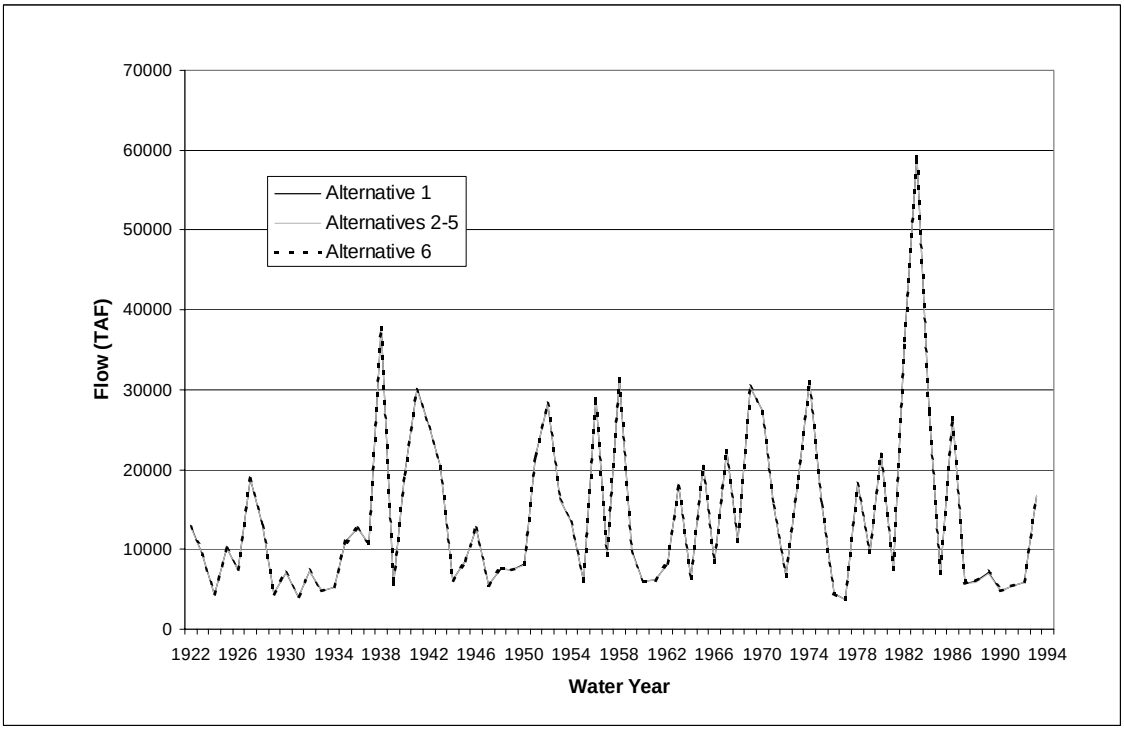


Figure 3.5.5-8 Simulated Annual Delta Outflow, 2020 LOD

Table 3.5.5-26. Simulated Delta Outflow (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	724	683	2127	1551	1397	3041	1771	492	246	212
1923	246	397	1782	1653	736	744	1497	1021	486	400	246	252
1924	246	366	277	435	650	620	379	248	315	406	200	179
1925	236	303	481	449	3638	1672	1321	828	513	307	314	185
1926	249	302	295	785	2174	611	1356	666	301	307	255	179
1927	286	943	722	1452	7201	2379	2815	1437	669	532	246	193
1928	282	497	423	905	973	6003	1545	1010	451	492	246	179
1929	292	355	339	359	633	637	410	400	359	246	288	179
1930	219	329	789	1098	775	1523	655	623	341	307	252	179
1931	299	286	395	465	428	396	404	283	300	406	194	179
1932	259	301	1069	1011	1141	692	708	672	607	307	338	179
1933	246	315	402	578	577	596	597	353	359	246	311	179
1934	196	363	475	823	710	701	595	345	410	246	227	179
1935	260	342	351	1717	633	1434	3179	1615	651	400	246	179
1936	313	311	289	2087	4237	1614	1413	1039	481	400	246	179
1937	288	330	297	454	2396	2784	1568	1209	567	400	246	179
1938	246	884	3958	1771	8004	10238	4657	4542	2501	492	246	388
1939	686	268	477	446	603	750	642	572	355	307	253	179
1940	355	268	287	1994	3477	6352	4037	1082	533	492	246	199
1941	250	446	2359	5773	6681	5459	4497	2669	884	492	248	403
1942	280	268	3468	4668	7555	1596	3007	2280	1155	492	246	396
1943	343	447	1358	5213	3074	5340	1770	1354	547	528	246	188
1944	246	337	300	453	1291	1009	738	617	441	307	215	182
1945	381	346	593	369	2451	1273	877	900	542	400	246	186
1946	248	473	4080	2716	1359	916	754	799	520	400	246	232
1947	290	350	515	369	741	911	692	550	399	307	279	179
1948	337	269	328	528	645	752	1539	1636	681	400	246	200
1949	322	324	426	303	490	2776	767	777	446	307	254	185
1950	321	268	374	1042	1584	922	1120	1002	637	400	246	196
1951	281	2631	5780	4043	3803	1567	945	1097	369	605	246	225
1952	246	447	2129	5316	4153	3912	4077	4286	2361	492	246	658
1953	691	268	2431	6208	1193	965	965	1475	793	568	246	441
1954	251	365	297	1819	3012	2680	2339	1322	393	492	246	238
1955	283	386	909	754	633	517	701	651	419	307	231	179
1956	335	270	5765	10251	4660	2059	1215	2388	870	492	246	413
1957	396	268	300	441	1578	2558	1119	1085	517	530	246	196
1958	498	268	904	2034	9953	5684	5879	3230	1664	492	246	521
1959	630	268	277	1927	2973	1253	539	558	498	436	246	217
1960	285	363	363	417	1281	899	678	676	333	307	289	179
1961	305	353	504	453	1271	924	604	577	371	307	305	179
1962	325	314	503	409	2583	1237	675	789	507	400	246	212
1963	1499	351	1205	649	3777	1577	5352	1890	638	631	246	212
1964	251	1028	277	915	644	512	933	615	355	307	299	207
1965	269	380	4548	6909	1570	1151	2717	1408	446	651	246	207
1966	246	784	606	1513	1248	1239	724	695	473	400	246	179
1967	384	334	2083	2826	2706	3407	3289	3441	2472	526	246	666
1968	669	268	444	1582	3376	1982	816	518	420	425	246	184
1969	338	323	1044	7099	7328	3601	3468	4036	2070	492	246	250
1970	788	274	3388	12923	4664	2162	915	681	451	718	246	208
1971	246	593	3481	2638	1421	2198	1241	1669	622	716	246	383
1972	267	268	504	453	1094	1565	596	479	669	400	246	179
1973	315	662	1157	4979	4834	3324	1031	992	605	492	246	209
1974	250	3023	3924	7712	1949	6499	4208	1495	762	492	246	563
1975	316	268	435	383	3471	5371	1438	1688	930	492	246	509
1976	575	275	369	337	546	674	530	260	238	246	246	179
1977	263	255	438	300	382	376	422	267	309	390	184	179
1978	267	288	524	4166	2936	3980	2737	1551	853	492	246	213
1979	246	297	446	1115	2248	1894	1055	861	641	400	246	179
1980	306	349	723	6147	7381	3248	1257	1153	501	492	334	231
1981	246	297	413	988	1274	1654	919	527	329	307	291	199
1982	311	1425	5240	4628	5355	5329	8213	3175	1172	492	268	545
1983	1285	2288	5151	6497	9913	15587	5308	4909	4889	1650	593	1241
1984	1187	4782	9536	4127	2163	2036	997	737	523	655	246	221
1985	255	1406	1022	369	621	717	747	610	333	307	292	254
1986	278	317	617	1015	11263	8923	1494	1043	570	492	306	242
1987	246	300	317	422	842	1388	630	486	360	307	215	179
1988	397	268	844	1391	623	484	503	379	410	246	239	179
1989	262	313	339	465	436	2484	989	641	350	307	289	231
1990	289	377	277	705	633	581	585	396	238	295	265	179
1991	207	343	304	277	398	1678	770	454	238	246	279	179
1992	227	317	215	439	1702	983	649	351	397	246	237	179
1993	276	243	520	4034	3052	2464	2198	1901	1053	492	246	179
AVG:	361	553	1364	2259	2693	2438	1686	1264	717	437	259	260
MIN:	196	243	215	277	382	376	379	248	238	246	184	179
MAX:	1499	4782	9536	12923	11263	15587	8213	4909	4889	1650	593	1241

Table 3.5.5-27. Simulated Delta Outflow (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	721	680	2121	1548	1395	3036	1767	492	246	210
1923	246	398	1774	1648	736	743	1495	1018	486	400	246	252
1924	246	367	277	437	647	620	373	247	321	397	206	179
1925	232	313	483	450	3648	1672	1317	829	513	307	316	187
1926	247	304	295	785	2173	608	1342	657	302	307	256	179
1927	287	936	687	1451	7179	2378	2824	1450	682	521	246	192
1928	288	498	425	903	974	6003	1542	1010	451	492	246	179
1929	290	356	338	360	630	656	409	399	359	246	290	179
1930	215	335	787	1096	774	1511	645	615	346	307	247	179
1931	302	287	394	466	442	395	404	280	301	408	193	179
1932	256	307	1064	1007	1113	692	710	669	607	307	337	179
1933	246	317	405	578	578	590	597	351	360	246	311	179
1934	197	362	477	829	712	701	595	345	410	246	249	179
1935	241	372	334	1704	629	1451	3183	1613	649	400	246	179
1936	311	314	284	2084	4307	1623	1412	1034	482	400	246	179
1937	288	329	298	454	2425	2784	1565	1201	568	400	246	179
1938	246	878	3900	1769	8001	10234	4654	4538	2496	492	246	394
1939	675	268	473	444	600	738	634	564	359	307	251	179
1940	358	268	282	1979	3449	6403	4034	1086	541	492	246	242
1941	259	408	2346	5765	6515	5457	4493	2664	885	492	261	398
1942	278	268	3447	4666	7552	1593	3004	2275	1151	492	246	391
1943	337	438	1355	5230	3071	5337	1767	1354	547	529	246	186
1944	246	338	299	453	1288	1002	737	614	441	307	215	182
1945	381	341	589	369	2443	1273	875	898	542	400	246	185
1946	249	469	4077	2708	1360	910	752	796	520	400	246	232
1947	289	351	515	369	739	913	690	550	399	307	277	179
1948	338	268	330	528	645	751	1537	1631	679	400	246	200
1949	319	328	423	303	484	2775	766	776	446	307	252	184
1950	324	268	373	1039	1582	920	1119	999	634	400	246	196
1951	281	2620	5773	4045	3800	1564	944	1095	369	605	246	225
1952	246	447	2111	5314	4150	3908	4069	4282	2357	492	246	651
1953	686	268	2430	6205	1193	964	964	1473	790	570	246	433
1954	251	360	305	1811	3009	2676	2336	1323	390	492	246	238
1955	283	386	900	752	633	514	704	649	419	307	231	179
1956	334	270	5749	10248	4657	2056	1214	2384	867	492	246	405
1957	390	268	309	433	1560	2555	1119	1080	518	529	246	195
1958	493	268	898	2031	9950	5680	5876	3226	1660	492	246	515
1959	624	268	277	1924	2971	1254	530	564	497	435	246	199
1960	316	338	366	412	1269	892	678	664	334	307	295	179
1961	296	366	495	453	1232	930	604	577	374	307	305	179
1962	323	317	505	409	2575	1230	666	789	499	400	246	211
1963	1466	340	1193	639	3852	1571	5362	1892	638	633	246	211
1964	250	1023	277	902	644	492	960	601	359	307	298	204
1965	273	377	4548	6907	1566	1152	2710	1409	446	651	246	206
1966	246	768	601	1511	1245	1239	723	693	474	400	246	179
1967	384	329	2072	2823	2697	3403	3285	3437	2468	521	246	661
1968	663	268	441	1580	3373	1969	817	508	425	420	246	184
1969	339	319	1036	7133	7325	3595	3458	4025	2065	492	246	242
1970	783	273	3377	12920	4661	2159	915	678	452	717	246	206
1971	246	588	3469	2635	1422	2187	1241	1663	620	717	246	378
1972	267	268	500	440	1091	1561	598	479	669	400	246	179
1973	315	656	1144	4971	4831	3320	1029	989	606	492	246	207
1974	250	3010	3921	7709	1946	6496	4204	1492	760	492	246	558
1975	303	268	432	383	3471	5368	1436	1684	929	492	246	501
1976	569	273	368	341	543	668	525	247	244	246	246	179
1977	267	256	435	301	382	376	422	267	309	388	184	179
1978	267	289	523	4158	2812	3941	2718	1548	851	492	246	212
1979	246	299	445	1113	2227	1878	1049	859	641	400	246	179
1980	310	344	719	6081	7442	3245	1255	1150	499	492	334	227
1981	246	298	410	985	1267	1641	909	516	331	307	291	193
1982	323	1403	5266	4633	5352	5326	8209	3171	1168	492	271	541
1983	1275	2285	5148	6495	9910	15584	5305	4904	4885	1646	589	1236
1984	1180	4777	9533	4126	2161	2033	997	735	521	656	246	219
1985	257	1396	1018	369	618	716	747	610	333	307	292	254
1986	277	318	614	1012	11235	8919	1492	1041	570	492	305	241
1987	246	301	317	423	839	1357	634	486	361	307	215	179
1988	395	268	839	1383	624	484	443	395	410	246	239	179
1989	263	312	339	465	436	2400	988	644	351	307	288	235
1990	289	371	277	702	633	574	585	385	238	303	261	179
1991	216	335	320	277	396	1672	759	448	238	246	277	179
1992	225	317	215	439	1699	973	639	352	398	246	263	179
1993	234	306	467	4049	3048	2441	2194	1907	1075	492	246	179
AVG:	359	552	1359	2257	2688	2434	1683	1261	717	437	259	259
MIN:	197	256	215	277	382	376	373	247	238	246	184	179
MAX:	1466	4777	9533	12920	11235	15584	8209	4904	4885	1646	589	1236

Table 3.5.5-28. Simulated Delta Outflow (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	246	268	721	680	2122	1548	1395	3037	1817	492	246	199
1923	246	407	1753	1635	736	743	1495	1017	486	400	246	251
1924	246	373	277	437	647	620	379	248	315	406	208	179
1925	231	310	483	450	3649	1672	1319	823	514	307	312	185
1926	251	300	295	785	2170	610	1338	665	301	307	255	179
1927	286	936	717	1449	7191	2376	2811	1427	678	525	246	186
1928	299	478	407	904	973	5942	1542	1010	450	492	246	179
1929	294	350	344	355	630	640	410	400	359	246	291	179
1930	215	334	787	1096	775	1520	653	622	341	307	245	179
1931	305	280	396	465	442	395	404	281	301	407	193	179
1932	259	301	1065	1008	1131	691	706	669	607	307	337	179
1933	246	315	403	575	575	595	597	352	359	246	311	179
1934	196	363	475	822	710	701	595	345	410	246	233	179
1935	257	352	348	1720	637	1455	3168	1614	649	400	246	179
1936	310	316	284	2080	4159	1582	1395	1033	483	400	246	179
1937	287	328	301	452	2373	2782	1566	1226	568	400	246	179
1938	246	878	3921	1768	8002	10235	4654	4537	2548	492	246	355
1939	654	268	473	444	600	746	641	570	353	307	253	179
1940	354	268	285	1991	3472	6339	4028	1105	517	492	246	242
1941	259	407	2340	5765	6515	5457	4493	2676	884	492	264	380
1942	279	268	3449	4666	7552	1593	3004	2275	1200	492	246	374
1943	337	415	1355	5218	3071	5337	1767	1355	547	503	246	182
1944	246	342	295	459	1288	1006	737	614	441	307	215	183
1945	382	322	602	369	2452	1274	870	893	542	400	246	180
1946	255	464	4076	2691	1363	895	753	829	520	400	246	232
1947	296	338	512	369	739	920	690	549	397	307	278	179
1948	336	269	327	529	645	752	1537	1632	679	400	246	200
1949	330	317	427	303	487	2775	766	776	446	307	265	184
1950	312	273	373	1038	1582	909	1110	993	641	400	246	189
1951	287	2615	5787	4046	3800	1563	944	1120	368	610	246	222
1952	246	455	2061	5313	4150	3909	4078	4281	2399	492	246	625
1953	686	268	2461	6205	1192	964	964	1472	790	570	246	432
1954	251	360	305	1809	3009	2676	2336	1323	390	492	246	238
1955	287	382	904	756	633	518	701	649	419	307	232	179
1956	336	270	5721	10249	4658	2055	1214	2383	899	492	246	374
1957	391	268	313	426	1565	2556	1119	1079	518	528	246	194
1958	484	268	898	2031	9955	5681	5877	3226	1710	492	246	478
1959	598	268	277	1930	2972	1254	538	561	491	441	246	221
1960	280	367	363	417	1278	898	678	673	333	307	294	179
1961	295	367	494	453	1263	925	604	576	373	307	304	179
1962	325	323	498	412	2586	1240	674	789	505	400	246	213
1963	1488	346	1201	647	3772	1578	5346	1848	640	635	246	205
1964	250	1024	277	903	644	487	966	611	354	307	299	199
1965	275	379	4491	6907	1566	1152	2713	1409	455	631	246	202
1966	246	789	597	1516	1245	1239	723	694	473	400	246	179
1967	384	331	2075	2821	2692	3404	3286	3436	2488	529	246	647
1968	665	268	442	1580	3373	1979	817	516	421	424	246	184
1969	339	322	1041	7081	7326	3597	3465	4029	2116	492	246	233
1970	764	273	3368	12921	4661	2159	915	677	453	716	246	206
1971	246	589	3468	2635	1422	2187	1241	1662	619	716	246	377
1972	267	268	501	438	1091	1561	598	479	669	400	246	179
1973	319	661	1149	4964	4821	3321	1029	1009	602	492	246	199
1974	250	3025	3921	7710	1946	6496	4204	1506	773	492	246	545
1975	287	268	436	383	3524	5368	1436	1683	946	492	246	483
1976	569	271	361	350	543	671	529	257	239	246	246	179
1977	269	252	440	301	381	376	422	267	311	385	184	179
1978	268	287	526	4163	2927	3995	2733	1549	851	492	246	212
1979	246	298	444	1113	2235	1888	1057	868	639	400	246	179
1980	305	349	719	6147	7314	3219	1244	1130	486	492	336	216
1981	246	307	400	985	1247	1650	917	524	329	307	291	197
1982	317	1420	5226	4609	5352	5327	8209	3170	1204	492	263	528
1983	1265	2284	5148	6495	9910	15585	5305	4904	4884	1679	571	1219
1984	1181	4778	9534	4126	2162	2034	997	734	524	651	246	217
1985	259	1397	1018	369	618	716	747	610	333	307	292	254
1986	277	320	616	1014	11224	8919	1492	1065	569	492	297	236
1987	246	306	310	429	825	1367	634	487	359	307	215	179
1988	397	268	846	1388	623	484	501	379	410	246	240	179
1989	261	314	338	466	436	2462	988	642	351	307	289	230
1990	295	370	277	708	633	580	585	393	238	296	265	179
1991	212	331	319	277	399	1676	767	450	238	246	279	179
1992	227	317	215	439	1699	980	646	351	397	246	249	179
1993	263	260	505	4030	3049	2454	2194	1878	1046	492	246	179
AVG:	358	552	1358	2257	2686	2434	1684	1263	722	437	259	254
MIN:	196	252	215	277	381	376	379	248	238	246	184	179
MAX:	1488	4778	9534	12921	11224	15585	8209	4904	4884	1679	571	1219

Table 3.5.5-29. Simulated Delta Outflow (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	-3	-2	-6	-3	-2	-4	-4	0	0	-2
1923	0	1	-8	-5	0	-1	-2	-2	0	0	0	1
1924	0	1	0	2	-3	0	-7	-1	6	-10	6	0
1925	-4	10	2	1	10	0	-4	1	0	0	1	2
1926	-2	2	0	0	-1	-2	-14	-9	2	0	1	0
1927	1	-6	-35	0	-23	-1	10	13	13	-11	0	-1
1928	6	1	2	-3	0	0	-3	0	0	0	0	0
1929	-2	2	-1	1	-3	19	-1	-1	0	0	1	0
1930	-4	6	-2	-3	-2	-12	-10	-8	6	0	-5	0
1931	3	1	-1	1	14	-1	0	-3	1	2	-1	0
1932	-3	6	-5	-3	-28	-1	2	-3	0	0	-1	0
1933	0	2	2	1	1	-6	0	-2	0	0	0	0
1934	1	-1	2	6	1	0	0	0	0	0	22	0
1935	-20	30	-17	-13	-4	17	4	-2	-2	0	0	0
1936	-2	3	-5	-3	70	9	-1	-6	1	0	0	0
1937	0	-1	1	0	29	0	-3	-9	1	0	0	0
1938	0	-5	-58	-2	-3	-4	-4	-4	-5	0	0	5
1939	-11	0	-3	-2	-3	-12	-8	-8	5	0	-2	0
1940	3	0	-5	-15	-28	51	-3	3	8	0	0	43
1941	10	-38	-13	-8	-167	-3	-4	-5	1	0	13	-5
1942	-1	0	-21	-2	-3	-3	-4	-4	-4	0	0	-5
1943	-6	-9	-3	17	-3	-3	-3	0	0	1	0	-1
1944	0	1	-1	0	-3	-6	-1	-3	0	0	0	0
1945	0	-5	-4	0	-8	-1	-1	-3	0	0	0	-1
1946	1	-3	-3	-8	2	-6	-1	-3	0	0	0	0
1947	-1	1	1	0	-3	2	-2	0	0	0	-2	0
1948	1	-1	2	0	0	-1	-2	-5	-2	0	0	-1
1949	-3	4	-3	0	-6	-2	-2	-1	0	0	-2	-1
1950	2	0	-1	-3	-3	-2	-2	-3	-2	0	0	0
1951	0	-11	-7	1	-3	-3	-1	-3	0	1	0	0
1952	0	0	-18	-2	-3	-3	-7	-4	-4	0	0	-7
1953	-6	0	-2	-2	0	0	-1	-2	-2	1	0	-9
1954	-1	-5	8	-8	-3	-3	-3	1	-2	0	0	0
1955	-1	0	-10	-2	0	-3	3	-3	0	0	0	0
1956	0	0	-16	-2	-3	-3	-2	-4	-3	0	0	-8
1957	-5	0	9	-7	-18	-3	0	-5	1	-1	0	-1
1958	-5	0	-6	-2	-3	-3	-3	-4	-4	0	0	-7
1959	-6	0	0	-2	-2	0	-9	6	-1	-1	0	-18
1960	31	-25	3	-5	-12	-7	0	-13	1	0	7	0
1961	-10	13	-9	0	-39	6	0	-1	3	0	1	0
1962	-2	3	3	0	-8	-7	-9	0	-8	0	0	-1
1963	-34	-11	-11	-10	74	-6	9	2	0	1	0	-1
1964	-1	-5	0	-13	0	-20	27	-14	4	0	-1	-4
1965	5	-2	-1	-2	-3	1	-7	1	0	0	0	-1
1966	0	-16	-4	-2	-3	-1	-2	-2	1	0	0	0
1967	0	-5	-11	-2	-9	-3	-4	-4	-4	-4	0	-5
1968	-6	0	-3	-2	-4	-13	1	-10	5	-5	0	0
1969	1	-4	-8	34	-3	-5	-10	-12	-5	0	0	-8
1970	-6	-1	-11	-3	-3	-4	0	-3	1	-1	0	-2
1971	0	-5	-11	-2	1	-11	0	-6	-2	1	0	-5
1972	0	0	-3	-14	-3	-4	1	0	0	0	0	0
1973	-1	-5	-12	-8	-3	-3	-1	-3	1	0	0	-2
1974	-1	-13	-3	-3	-3	-3	-4	-2	-2	0	0	-5
1975	-13	0	-4	0	0	-3	-2	-4	0	0	0	-7
1976	-6	-2	0	4	-3	-5	-5	-12	6	0	0	0
1977	4	1	-3	2	0	0	0	0	0	-1	0	0
1978	-1	1	0	-8	-124	-40	-20	-3	-2	0	0	-1
1979	0	2	-1	-2	-21	-15	-6	-1	0	0	0	0
1980	4	-5	-3	-66	61	-3	-2	-3	-2	0	0	-4
1981	0	2	-2	-2	-7	-13	-9	-10	3	0	-1	-6
1982	12	-22	26	5	-3	-3	-4	-4	-4	0	2	-5
1983	-10	-3	-3	-2	-2	-3	-4	-4	-4	-4	-4	-5
1984	-7	-5	-4	-1	-2	-2	0	-2	-2	2	0	-2
1985	2	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	-1	1	-3	-3	-28	-4	-2	-3	0	0	-1	-1
1987	0	0	-1	1	-2	-31	5	0	1	0	0	0
1988	-2	0	-5	-8	2	0	-60	16	0	0	0	0
1989	1	-1	0	0	0	-84	-1	3	1	0	-1	3
1990	0	-7	0	-4	0	-6	0	-11	0	8	-4	0
1991	9	-9	15	0	-2	-6	-10	-6	0	0	-2	0
1992	-2	1	0	0	-3	-10	-10	1	1	0	25	0
1993	-42	63	-53	14	-3	-22	-4	7	23	0	0	0
AVG:	-2	-1	-5	-2	-5	-5	-3	-3	0	0	1	-1
MIN:	-42	-38	-58	-66	-167	-84	-60	-14	-8	-11	-5	-18
MAX:	31	63	26	34	74	51	27	16	23	8	25	43

Table 3.5.5-30. Simulated Delta Outflow (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	0	-3	-2	-5	-3	-2	-4	46	0	0	-13
1923	0	10	-29	-18	0	-1	-2	-3	0	0	0	-1
1924	0	6	0	2	-3	0	0	0	0	-1	8	0
1925	-5	7	2	1	12	0	-2	-5	1	0	-2	-1
1926	2	-2	0	1	-4	-1	-18	-2	1	0	0	0
1927	1	-6	-5	-2	-10	-3	-4	-10	8	-6	0	-7
1928	16	-19	-16	-2	0	-61	-3	0	-1	0	0	0
1929	2	-5	5	-4	-3	3	0	0	0	0	3	0
1930	-4	5	-3	-3	0	-3	-2	-1	1	0	-8	0
1931	7	-6	0	0	14	-1	0	-2	1	1	-1	0
1932	0	0	-4	-3	-11	-1	-2	-3	0	0	-1	0
1933	0	0	0	-2	-2	-1	0	-2	0	0	0	0
1934	0	0	0	-1	0	0	0	0	0	0	6	0
1935	-3	10	-3	3	3	21	-11	-1	-2	0	0	0
1936	-3	5	-5	-6	-78	-32	-18	-6	1	0	0	0
1937	-1	-3	4	-3	-24	-1	-2	17	1	0	0	0
1938	0	-5	-37	-2	-2	-3	-4	-5	47	0	0	-34
1939	-31	0	-3	-2	-3	-4	-1	-2	-2	0	0	0
1940	0	0	-1	-3	-6	-13	-9	22	-16	0	0	43
1941	10	-39	-19	-8	-166	-2	-4	7	0	0	16	-22
1942	-1	0	-19	-2	-3	-3	-4	-5	46	0	0	-22
1943	-5	-32	-3	6	-3	-3	-3	0	0	-25	0	-6
1944	0	4	-6	6	-3	-3	-1	-3	0	0	0	1
1945	0	-24	9	0	2	1	-6	-8	0	0	0	-6
1946	7	-8	-3	-25	5	-21	-1	30	0	0	0	0
1947	6	-12	-2	0	-3	9	-2	0	-2	0	-1	0
1948	-1	0	-1	2	0	1	-1	-4	-2	0	0	-1
1949	8	-7	0	0	-3	-2	-2	-1	0	0	11	-1
1950	-9	5	-2	-4	-3	-13	-11	-8	4	0	0	-7
1951	6	-16	6	2	-2	-4	-1	23	-1	5	0	-2
1952	0	8	-68	-3	-3	-3	1	-5	38	0	0	-33
1953	-6	0	30	-2	-1	0	-1	-3	-3	2	0	-10
1954	-1	-5	9	-11	-3	-3	-3	1	-2	0	0	0
1955	4	-3	-5	2	0	0	0	-2	0	0	0	0
1956	1	0	-44	-2	-3	-4	-2	-5	29	0	0	-39
1957	-4	0	13	-15	-13	-2	0	-5	1	-2	0	-2
1958	-14	0	-5	-2	2	-3	-3	-4	46	0	0	-43
1959	-32	0	0	3	-1	0	-1	2	-7	5	0	4
1960	-5	5	0	0	-3	-1	0	-3	0	0	6	0
1961	-10	14	-10	0	-8	1	0	-1	2	0	0	0
1962	0	9	-4	2	3	3	-1	0	-2	0	0	1
1963	-12	-5	-3	-2	-5	2	-7	-42	2	4	0	-7
1964	-1	-4	0	-13	0	-24	33	-4	-2	0	0	-8
1965	6	-1	-57	-2	-3	1	-4	1	9	-20	0	-5
1966	0	5	-9	3	-3	-1	-1	-1	0	0	0	0
1967	0	-3	-8	-5	-14	-3	-3	-5	16	3	0	-20
1968	-4	0	-2	-2	-4	-3	0	-2	1	-1	0	0
1969	1	-1	-3	-18	-2	-3	-3	-7	46	0	0	-17
1970	-24	-1	-20	-2	-3	-3	0	-3	2	-2	0	-2
1971	0	-4	-13	-2	1	-11	0	-7	-3	0	0	-6
1972	0	0	-3	-15	-3	-4	1	0	0	0	0	0
1973	4	-1	-8	-15	-13	-3	-1	17	-3	0	0	-9
1974	-1	2	-3	-2	-3	-3	-4	12	10	0	0	-18
1975	-30	0	1	0	53	-3	-2	-5	17	0	0	-25
1976	-6	-4	-7	13	-3	-2	-1	-3	1	0	0	0
1977	6	-2	3	1	0	0	0	-1	2	-5	0	0
1978	1	-2	2	-3	-8	15	-4	-3	-2	0	0	-1
1979	0	1	-1	-2	-13	-6	2	7	-1	0	0	0
1980	-1	0	-3	0	-67	-29	-13	-22	-16	0	2	-15
1981	0	10	-13	-2	-27	-4	-1	-2	1	0	0	-2
1982	6	-4	-14	-19	-3	-3	-4	-5	32	0	-5	-17
1983	-21	-4	-3	-1	-2	-2	-4	-5	-5	29	-22	-22
1984	-6	-4	-3	-1	-2	-2	0	-3	1	-4	0	-4
1985	3	-9	-3	0	-3	-1	0	0	0	0	0	0
1986	-1	4	-2	-1	-39	-3	-2	21	-2	0	-9	-6
1987	0	6	-7	7	-17	-20	4	0	-1	0	0	0
1988	-1	0	1	-3	0	0	-2	0	0	0	1	0
1989	-1	1	-1	1	0	-22	-2	1	0	0	-1	-2
1990	6	-8	0	3	0	0	0	-3	0	1	0	0
1991	6	-12	15	0	0	-2	-3	-4	0	0	0	0
1992	-1	1	0	0	-3	-3	-3	0	0	0	11	0
1993	-13	17	-15	-5	-3	-10	-4	-22	-6	0	0	0
AVG:	-2	-2	-6	-3	-7	-4	-2	-1	5	0	0	-5
MIN:	-32	-39	-68	-25	-166	-61	-18	-42	-16	-25	-22	-43
MAX:	16	17	30	13	53	21	33	30	47	29	16	43

Table 3.5.5-31. Simulated Delta Cross Channel Position (Days Open)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	26	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	0	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	11	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	0	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.5.5-32. Simulated Delta Cross Channel Position (Days Open)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	26	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	0	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	11	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	0	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.5.5-33. Simulated Delta Cross Channel Position (Days Open)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	31	20	16	11	0	0	0	0	0	31	31	30
1923	31	20	0	0	0	0	0	0	26	31	31	30
1924	31	20	16	11	0	0	0	0	26	31	31	30
1925	31	20	16	11	0	0	0	0	26	31	31	30
1926	31	20	16	11	0	0	0	0	26	31	31	30
1927	31	20	16	0	0	0	0	0	26	31	31	30
1928	31	20	16	11	0	0	0	0	26	31	31	30
1929	31	20	16	11	0	0	0	0	26	31	31	30
1930	31	20	16	11	0	0	0	0	26	31	31	30
1931	31	20	16	11	0	0	0	0	26	31	31	30
1932	31	20	16	11	0	0	0	0	26	31	31	30
1933	31	20	16	11	0	0	0	0	26	31	31	30
1934	31	20	16	11	0	0	0	0	26	31	31	30
1935	31	20	16	0	0	0	0	0	26	31	31	30
1936	31	20	16	0	0	0	0	0	26	31	31	30
1937	31	20	16	11	0	0	0	0	26	31	31	30
1938	31	20	0	0	0	0	0	0	0	31	31	30
1939	31	20	16	11	0	0	0	0	26	31	31	30
1940	31	20	16	0	0	0	0	0	26	31	31	30
1941	31	20	0	0	0	0	0	0	26	31	31	30
1942	31	20	0	0	0	0	0	0	0	31	31	30
1943	31	20	0	0	0	0	0	0	26	31	31	30
1944	31	20	16	11	0	0	0	0	26	31	31	30
1945	31	20	16	11	0	0	0	0	26	31	31	30
1946	31	20	0	0	0	0	0	0	26	31	31	30
1947	31	20	16	11	0	0	0	0	26	31	31	30
1948	31	20	16	11	0	0	0	0	26	31	31	30
1949	31	20	16	11	0	0	0	0	26	31	31	30
1950	31	20	16	11	0	0	0	0	26	31	31	30
1951	31	0	0	0	0	0	0	0	26	31	31	30
1952	31	20	0	0	0	0	0	0	0	31	31	30
1953	31	20	0	0	0	0	0	0	26	31	31	30
1954	31	20	16	0	0	0	0	0	26	31	31	30
1955	31	20	16	11	0	0	0	0	26	31	31	30
1956	31	20	0	0	0	0	0	0	26	31	31	30
1957	31	20	16	11	0	0	0	0	26	31	31	30
1958	31	20	16	0	0	0	0	0	0	31	31	30
1959	31	20	16	0	0	0	0	0	26	31	31	30
1960	31	20	16	11	0	0	0	0	26	31	31	30
1961	31	20	16	11	0	0	0	0	26	31	31	30
1962	31	20	16	11	0	0	0	0	26	31	31	30
1963	0	20	0	11	0	0	0	0	26	31	31	30
1964	31	0	16	11	0	0	0	0	26	31	31	30
1965	31	20	0	0	0	0	0	0	26	31	31	30
1966	31	20	16	0	0	0	0	0	26	31	31	30
1967	31	20	0	0	0	0	0	0	0	31	31	30
1968	31	20	16	0	0	0	0	0	26	31	31	30
1969	31	20	16	0	0	0	0	0	26	31	31	30
1970	31	20	0	0	0	0	0	0	26	31	31	30
1971	31	20	0	0	0	0	0	0	26	0	31	30
1972	31	20	16	11	0	0	0	0	26	31	31	30
1973	31	20	0	0	0	0	0	0	26	31	31	30
1974	31	0	0	0	0	0	0	0	26	31	31	30
1975	31	20	16	11	0	0	0	0	26	31	31	30
1976	31	20	16	11	0	0	0	0	26	31	31	30
1977	31	20	16	11	0	0	0	0	26	31	31	30
1978	31	20	16	0	0	0	0	0	26	31	31	30
1979	31	20	16	11	0	0	0	0	26	31	31	30
1980	31	20	16	0	0	0	0	0	26	31	31	30
1981	31	20	16	11	0	0	0	0	26	31	31	30
1982	31	0	0	0	0	0	0	0	26	31	31	30
1983	31	0	0	0	0	0	0	0	0	31	31	0
1984	31	0	0	0	0	0	0	0	26	31	31	30
1985	31	0	16	11	0	0	0	0	26	31	31	30
1986	31	20	16	11	0	0	0	0	26	31	31	30
1987	31	20	16	11	0	0	0	0	26	31	31	30
1988	31	20	16	0	0	0	0	0	26	31	31	30
1989	31	20	16	11	0	0	0	0	26	31	31	30
1990	31	20	16	11	0	0	0	0	26	31	31	30
1991	31	20	16	11	0	0	0	0	26	31	31	30
1992	31	20	16	11	0	0	0	0	26	31	31	30
1993	31	20	16	0	0	0	0	0	0	31	31	30
AVG:	31	18	12	6	0	0	0	0	23	31	31	30
MIN:	0	0	0	0	0	0	0	0	0	0	31	0
MAX:	31	20	16	11	0	0	0	0	26	31	31	30

Table 3.5.5-34. Simulated Delta Cross Channel Net Flow (CFS)
Alternative 1, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5226	4159	5301	4377	5634	4749	3875	7108	5586	8444	6645	5975
1923	5432	5072	4586	4658	2836	2837	3918	2907	5969	7963	6804	6313
1924	5593	4120	4146	3791	3004	2172	1804	1871	4456	5086	5262	4211
1925	4432	3701	4372	3748	9401	4370	3696	2677	6327	5613	4592	5473
1926	4766	3709	3400	4589	6268	2647	3588	2508	5126	6696	5390	4963
1927	4783	7381	5726	4974	10824	6558	6904	4174	7124	8009	6766	5721
1928	5839	5883	4823	5575	3982	10729	4296	3382	6155	7463	6168	5704
1929	5186	4652	4178	3739	2997	2430	1744	1855	4618	5310	4601	3906
1930	4366	3404	5465	5447	3318	5083	2506	2439	5231	7021	6032	5240
1931	4777	3710	3461	3881	2326	1919	1945	1818	4482	6529	5384	4572
1932	4363	3367	5729	5350	3157	2623	2212	2372	5864	6863	5649	5400
1933	4789	3712	3390	3900	2413	2581	2203	1756	4554	5439	4542	4126
1934	4367	3405	4664	4845	2818	2549	2352	1867	4857	5231	4289	4556
1935	4367	4412	3727	4818	2698	4428	7170	3905	7639	7375	7011	5758
1936	5490	3890	3838	6150	8991	4717	3624	2803	6028	7455	6878	5626
1937	5288	3894	3987	3892	5602	6108	3755	2883	5824	7140	6817	5638
1938	5218	7470	9118	4993	10734	10781	8869	8144	5363	7845	6625	7017
1939	6493	4624	4670	3841	2510	2693	2052	2299	5839	7720	6777	5775
1940	5196	3726	3477	5172	8428	10671	9446	3301	6762	8437	6817	5778
1941	5298	4651	6454	10510	10671	10209	9003	5993	7094	8240	6575	7279
1942	5880	4802	8895	10011	10749	3896	6597	5328	4249	7589	6608	7153
1943	5968	5541	4696	10397	7703	9789	4264	3230	6426	6944	6651	5686
1944	5106	4039	4008	4011	4127	3709	2337	2243	6119	7500	6570	5914
1945	5379	5222	5078	3959	6906	3808	2462	2552	6738	8059	6834	5727
1946	5180	5384	9480	7377	4299	3255	2405	2672	6531	8045	6938	6407
1947	5764	4683	4898	3456	3257	3537	2693	2254	5649	7787	7109	6051
1948	5045	4144	3512	4330	2998	3050	4321	4463	7567	8227	7111	6004
1949	5735	4450	4441	3439	2512	7174	2479	2669	6413	7457	5305	5760
1950	4787	3924	3467	5077	5491	3564	3467	3154	7533	7906	6887	5721
1951	5600	6813	10751	9093	9389	4521	2789	3230	5494	8759	7020	6325
1952	5596	5411	6091	10601	10457	8245	8853	8690	5799	7365	6350	8298
1953	6910	4855	6616	10555	3861	3694	3014	4141	8207	8268	6772	7649
1954	6103	5537	4142	5408	9117	7401	6103	4094	5862	8521	6890	6555
1955	5821	5226	6571	4866	2751	2358	2509	2593	6158	5963	4858	5226
1956	4832	4580	10690	10854	10059	5439	3394	5804	7260	8141	6649	7146
1957	6363	4491	4476	3762	5538	6925	3496	2919	6640	8040	6879	5838
1958	7275	5064	6488	5920	10870	10600	10639	6591	4803	7364	6555	7710
1959	7111	4520	4123	5801	7921	3720	2181	2494	6945	8397	7134	5588
1960	5575	4095	3524	3792	4688	3574	2264	2587	5832	7719	7162	5251
1961	4778	4589	4922	3613	4918	3451	2314	2324	5400	8079	7336	5782
1962	5487	4188	5079	3224	7103	4165	2331	2573	6926	8189	6905	6248
1963	5137	5574	4466	4200	10072	4888	10274	4824	6870	8139	6730	5896
1964	5883	4304	4278	5432	2767	2400	3342	2344	5567	7704	7386	6184
1965	4771	5131	10075	10726	4989	3831	6462	3780	5571	8128	6682	5783
1966	4837	6751	4803	4774	4203	4535	2629	2808	6592	7907	6609	5669
1967	5826	5173	5598	6259	8032	8076	5862	6586	5711	6451	6706	8260
1968	7345	4942	4921	4693	8877	5624	2818	2333	5933	7768	6877	5876
1969	5694	4728	6583	10715	10685	7042	6398	6870	7781	6778	6672	6251
1970	7071	5004	8791	11018	10284	5253	2790	2399	6090	9019	6875	6114
1971	5647	5948	8628	7128	4592	6498	3735	4249	7277	4172	6800	7336
1972	6328	4874	5208	4382	4166	5520	2369	2322	7146	7830	6637	5478
1973	5425	6207	4275	10601	10563	7731	3020	3035	7400	8352	6668	5946
1974	5679	8595	9765	10761	6146	10662	9585	3749	7853	7395	6698	8073
1975	6362	4949	5071	4189	9499	10262	3723	4408	7964	8052	6551	7754
1976	7367	5127	4977	3882	2600	2878	2066	1797	4572	6185	5454	5060
1977	4378	3474	3389	2889	1860	1857	2008	1627	4955	6369	5811	4191
1978	4361	3382	4829	9331	7913	9069	5618	3372	6425	7015	6968	6162
1979	4839	4206	4761	5558	5702	4876	3092	2735	7446	7754	6759	5784
1980	5565	4869	5539	10705	10721	6773	3238	2916	5378	7714	7042	5944
1981	5095	3932	4612	5337	4387	5075	3076	2332	5807	7867	7199	5969
1982	5522	5103	10664	10039	10656	10316	10734	6021	7849	7613	6598	7201
1983	8050	5745	9405	10301	10817	11133	9093	8238	8096	8910	8153	4353
1984	7844	9496	10830	7566	5359	5547	3107	2516	5998	8724	6847	6312
1985	5414	4920	6215	3932	2908	2749	2689	2542	5751	7815	7301	6586
1986	5480	4448	5190	5760	11274	10725	3234	2484	5733	7695	6968	6001
1987	5371	3925	3822	3994	3502	4187	2599	2200	5870	6877	6047	5556
1988	5321	3796	5584	4652	2918	2005	2269	2108	4817	5671	4536	4425
1989	4368	4060	3724	3790	2034	7002	3600	2874	5833	7679	7123	5982
1990	6049	4270	4149	5018	2917	2636	2255	1924	4158	4939	5489	4553
1991	4357	3400	2993	2625	1938	5106	2598	2040	3982	5498	4923	4743
1992	4326	3398	2991	3359	5301	3548	2391	1989	4848	5207	4314	5148
1993	4359	3404	4471	8437	8375	6723	5805	4812	4292	8614	6937	5950
AVG:	5495	4773	5515	5970	6103	5434	4144	3429	6070	7362	6424	5911
MIN:	4326	3367	2991	2625	1860	1857	1744	1627	3982	4172	4289	3906
MAX:	8050	9496	10830	11018	11274	11133	10734	8690	8207	9019	8153	8298

Table 3.5.5-35. Simulated Delta Cross Channel Net Flow (CFS)
Alternatives 2-5, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5226	4151	5289	4370	5620	4742	3871	7099	5577	8444	6646	5945
1923	5419	5064	4568	4653	2836	2835	3914	2901	5971	7963	6804	6321
1924	5598	4116	4174	3791	2998	2172	1789	1868	4485	5039	5199	4124
1925	4318	3704	4373	3748	9413	4367	3686	2667	6312	5593	4575	5470
1926	4766	3709	3401	4589	6266	2628	3554	2487	5135	6684	5384	4979
1927	4783	7348	5598	4969	10814	6551	6895	4167	7047	7930	6766	5704
1928	5854	5887	4830	5567	3982	10720	4289	3383	6142	7442	6149	5689
1929	5171	4655	4178	3739	2990	2407	1742	1853	4463	5308	4627	3868
1930	4366	3404	5457	5438	3312	5057	2480	2420	5259	7068	6057	5162
1931	4777	3710	3442	3883	2361	1916	1945	1812	4466	6543	5379	4329
1932	4363	3370	5712	5340	3068	2621	2208	2366	5852	6842	5634	5447
1933	4788	3712	3391	3893	2406	2558	2203	1733	4555	5428	4532	4120
1934	4367	3405	4665	4838	2818	2530	2352	1867	4858	5232	4215	4128
1935	4366	4379	3728	4779	2655	4421	7166	3897	7626	7359	6993	5651
1936	5487	3890	3821	6134	8984	4731	3615	2791	6035	7445	6879	5629
1937	5274	3888	3992	3892	5594	6101	3745	2864	5825	7122	6779	5638
1938	5172	7449	8964	4989	10727	10773	8861	8134	5353	7845	6625	7043
1939	6443	4617	4659	3834	2502	2663	2033	2281	5871	7694	6765	5774
1940	5237	3711	3443	5140	8349	10662	9438	3290	6808	8460	6817	6384
1941	5471	4605	6430	10502	10653	10202	8995	5983	7097	8240	6636	7255
1942	5866	4794	8850	10006	10742	3889	6588	5318	4240	7571	6608	7130
1943	5942	5504	4689	10392	7696	9781	4257	3224	6426	6955	6651	5670
1944	5093	4041	3998	4011	4120	3688	2334	2237	6120	7492	6564	5910
1945	5372	5200	5065	3960	6887	3805	2459	2546	6739	8059	6835	5714
1946	5181	5348	9473	7360	4318	3236	2401	2665	6531	8045	6938	6407
1947	5761	4686	4900	3448	3251	3544	2689	2250	5641	7760	7079	6051
1948	5046	4159	3514	4331	2998	3048	4316	4453	7552	8227	7111	5990
1949	5658	4435	4431	3438	2505	7171	2475	2663	6413	7447	5300	5746
1950	4787	3927	3465	5069	5484	3557	3463	3147	7517	7895	6887	5718
1951	5595	6789	10743	9088	9382	4513	2786	3223	5495	8758	7020	6321
1952	5596	5407	6051	10596	10450	8238	8837	8681	5790	7356	6337	8262
1953	6884	4849	6608	10550	3860	3693	3011	4135	8192	8278	6772	7606
1954	6092	5517	4141	5391	9110	7394	6096	4095	5847	8529	6888	6555
1955	5807	5224	6537	4859	2751	2351	2515	2586	6158	5946	4831	5215
1956	4835	4580	10679	10849	10052	5432	3390	5794	7240	8141	6649	7108
1957	6337	4483	4526	3761	5483	6917	3497	2909	6643	8000	6875	5819
1958	7250	5063	6468	5915	10863	10592	10631	6583	4794	7358	6555	7678
1959	7085	4513	4121	5796	7915	3711	2158	2510	6940	8392	7134	5336
1960	5849	3940	3497	3761	4660	3551	2264	2557	5836	7705	7252	5118
1961	4777	4591	4923	3614	4824	3443	2312	2323	5358	8077	7338	5783
1962	5481	4215	5076	3225	7083	4142	2307	2558	6868	8130	7020	6237
1963	5061	5521	4438	4163	9963	4872	10269	4814	6860	8174	6731	5880
1964	5870	4293	4277	5392	2768	2352	3413	2314	5595	7728	7382	6133
1965	4770	5133	9974	10720	4981	3835	6447	3781	5572	8129	6680	5763
1966	4828	6684	4788	4770	4196	4532	2624	2804	6597	7902	6603	5668
1967	5824	5153	5573	6253	8012	8069	5854	6577	5701	6431	6690	8236
1968	7319	4938	4909	4688	8868	5596	2821	2306	5955	7694	6877	5876
1969	5662	4685	6548	10707	10678	7035	6390	6847	7762	6782	6676	6173
1970	7047	4995	8783	11012	10277	5245	2791	2393	6099	9004	6876	6089
1971	5635	5929	8603	7122	4607	6474	3735	4236	7262	4174	6800	7311
1972	6328	4867	5196	4340	4159	5511	2373	2322	7148	7823	6631	5477
1973	5417	6185	4249	10596	10556	7724	3016	3029	7405	8352	6659	5918
1974	5667	8567	9758	10756	6139	10654	9577	3743	7840	7397	6698	8049
1975	6299	4945	5059	4189	9489	10255	3719	4398	7950	8052	6551	7718
1976	7340	5102	4975	3882	2593	2851	2055	1768	4622	6191	5483	5019
1977	4378	3459	3360	2892	1845	1845	2004	1626	4958	6341	5809	4160
1978	4361	3382	4829	9314	7616	8983	5574	3366	6415	7014	6968	6145
1979	4833	4229	4757	5550	5656	4848	3067	2708	7414	7729	6763	5782
1980	5638	4840	5527	10693	10714	6765	3234	2910	5363	7716	7046	5897
1981	5085	3929	4611	5329	4370	5047	3051	2305	5825	7867	7196	5887
1982	5596	5051	10654	10033	10649	10309	10725	6012	7830	7612	6609	7178
1983	8000	5735	9398	10295	10809	11126	9085	8228	8086	8890	8134	4342
1984	7817	9485	10822	7564	5355	5541	3108	2511	5985	8733	6847	6289
1985	5437	4900	6203	3932	2901	2747	2689	2542	5751	7815	7301	6586
1986	5477	4444	5178	5751	11265	10716	3230	2477	5733	7683	6965	5987
1987	5366	3923	3821	3995	3495	4119	2612	2199	5846	6891	6046	5566
1988	5253	3760	5550	4634	2924	2002	2109	2150	4864	5677	4543	4423
1989	4368	4058	3724	3790	2035	6820	3597	2881	5839	7649	7110	6031
1990	6021	4229	4094	4989	2911	2608	2255	1898	4172	4908	5473	4699
1991	4357	3400	2993	2622	1939	5082	2565	2010	3982	5415	4889	4688
1992	4326	3398	2992	3360	5294	3520	2360	1976	4852	5199	4274	4917
1993	4358	3404	4448	8468	8367	6675	5795	4756	4284	8502	6830	5835
AVG:	5490	4759	5499	5963	6086	5418	4135	3420	6064	7351	6420	5885
MIN:	4318	3370	2992	2622	1845	1845	1742	1626	3982	4174	4215	3868
MAX:	8000	9485	10822	11012	11265	11126	10725	8681	8192	9004	8134	8262

Table 3.5.5-36. Simulated Delta Cross Channel Net Flow (CFS)
Alternative 6, 2020 LOD

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	5225	4151	5289	4370	5621	4742	3871	7099	5577	8529	6730	5880
1923	5419	5064	4521	4653	2836	2835	3914	2901	5894	7995	6836	6337
1924	5672	4138	4237	3791	2998	2172	1804	1870	4458	5082	5250	4202
1925	4333	3703	4372	3748	9416	4348	3691	2669	6262	5602	4582	5470
1926	4765	3709	3401	4589	6257	2642	3545	2505	5130	6701	5392	4974
1927	4783	7356	5708	4969	10816	6551	6895	4167	7097	8261	6850	5704
1928	5847	5806	4766	5569	3981	10717	4289	3320	6227	7520	6164	5689
1929	5208	4661	4178	3740	2990	2428	1744	1855	4446	5293	4613	3914
1930	4366	3404	5456	5438	3317	5077	2502	2436	5234	7066	6039	5236
1931	4777	3710	3440	3882	2360	1915	1945	1813	4484	6536	5379	4574
1932	4363	3370	5714	5341	3125	2620	2208	2366	5852	6845	5636	5399
1933	4788	3712	3391	3893	2406	2579	2203	1750	4555	5436	4541	4123
1934	4367	3405	4664	4837	2818	2546	2352	1867	4857	5232	4238	4533
1935	4366	4413	3728	4812	2698	4420	7142	3900	7626	7359	7007	5742
1936	5487	3890	3846	6140	8984	4688	3620	2796	5940	7465	6962	5710
1937	5264	3884	3989	3892	5564	6101	3748	2877	5758	7134	6840	5700
1938	5161	7448	9080	4988	10727	10773	8861	8134	5353	7929	6710	6935
1939	6344	4616	4658	3833	2502	2684	2066	2295	5827	7698	6769	5774
1940	5195	3716	3477	5166	8415	10663	9438	3263	6727	8505	6882	6449
1941	5471	4602	6417	10502	10653	10202	8995	5983	7005	8327	6735	7255
1942	5866	4795	8853	10006	10742	3889	6589	5318	4240	8041	6694	7131
1943	5942	5411	4689	10392	7696	9781	4257	3225	6415	6816	6712	5669
1944	5093	4031	4005	4011	4120	3700	2334	2237	6119	7511	6578	5921
1945	5352	5119	5101	3977	6906	3806	2459	2546	6571	8128	6904	5713
1946	5297	5246	9472	7324	4396	3186	2402	2663	6576	8095	6985	6454
1947	5769	4634	4889	3429	3251	3566	2689	2249	5546	7722	7065	6050
1948	5009	4126	3503	4330	2994	3048	4318	4454	7554	8227	7111	5990
1949	5868	4434	4431	3438	2505	7171	2474	2663	6413	7403	5357	5745
1950	4786	3909	3465	5064	5484	3518	3452	3147	7415	7913	6937	5695
1951	5593	6776	10744	9087	9382	4513	2786	3223	5555	8978	7048	6318
1952	5596	5428	5941	10596	10450	8238	8857	8681	5790	7392	6355	8208
1953	6884	4849	6608	10550	3860	3693	3012	4136	8192	8294	6776	7606
1954	6093	5517	4141	5385	9110	7394	6096	4095	5847	8525	6888	6555
1955	5806	5190	6536	4859	2747	2351	2509	2587	6158	5959	4838	5215
1956	4830	4576	10682	10849	10052	5432	3390	5794	7240	8226	6734	7040
1957	6341	4482	4486	3761	5468	6918	3497	2909	6647	7995	6876	5816
1958	7206	5063	6469	5914	10863	10592	10631	6583	4795	7411	6640	7585
1959	7085	4512	4121	5796	7915	3720	2178	2501	6897	8421	7134	5645
1960	5559	4096	3530	3791	4680	3572	2264	2580	5832	7701	7251	5085
1961	4777	4590	4923	3613	4899	3442	2312	2322	5380	8079	7332	5783
1962	5489	4225	5075	3226	7099	4163	2327	2570	6911	8172	6880	6265
1963	5112	5553	4459	4192	10064	4892	10264	4815	6913	8681	6814	5880
1964	5868	4293	4277	5392	2768	2342	3430	2334	5555	7654	7386	6074
1965	4770	5132	9979	10720	4982	3828	6453	3780	5498	8042	6734	5772
1966	4827	6769	4772	4780	4196	4532	2626	2803	6594	7902	6602	5668
1967	5817	5154	5576	6253	8015	8069	5854	6577	5701	6431	6690	8236
1968	7319	4938	4909	4688	8869	5617	2819	2327	5938	7753	6877	5876
1969	5679	4717	6566	10709	10678	7035	6390	6855	7762	6863	6757	6122
1970	6955	4995	8783	11012	10277	5245	2791	2393	6106	9001	6880	6087
1971	5635	5930	8599	7123	4610	6474	3735	4236	7262	4175	6805	7311
1972	6328	4867	5196	4336	4159	5511	2373	2322	7148	7824	6632	5477
1973	5417	6185	4249	10596	10556	7724	3016	3029	7331	8406	6700	5873
1974	5671	8599	9758	10756	6139	10654	9577	3743	7826	7453	6762	8049
1975	6221	4934	5069	4189	9484	10255	3719	4398	7950	8102	6601	7679
1976	7340	5077	4951	3882	2593	2871	2064	1790	4595	6178	5461	5056
1977	4378	3459	3379	2890	1841	1845	1992	1626	4966	6300	5811	4172
1978	4361	3382	4830	9325	7894	9097	5609	3366	6415	7003	6968	6145
1979	4835	4209	4754	5550	5675	4868	3088	2729	7401	7743	6740	5782
1980	5544	4866	5527	10699	10714	6766	3234	2910	5363	7777	7111	5799
1981	5086	3929	4611	5329	4322	5067	3072	2326	5812	7867	7198	5944
1982	5561	5089	10655	10033	10649	10309	10725	6012	7830	7674	6635	7178
1983	7952	5735	9398	10295	10809	11126	9085	8228	8086	8890	8134	4342
1984	7817	9485	10822	7564	5355	5542	3108	2511	5981	8721	6861	6275
1985	5461	4900	6203	3932	2901	2747	2689	2542	5751	7815	7301	6586
1986	5472	4444	5177	5751	11265	10716	3230	2477	5655	7701	6995	5987
1987	5366	3923	3821	3995	3495	4144	2610	2199	5863	6875	6043	5555
1988	5292	3796	5584	4646	2919	2002	2264	2109	4817	5647	4523	4346
1989	4368	4060	3725	3791	2035	6955	3596	2877	5834	7664	7116	5961
1990	6059	4245	4112	5010	2910	2627	2255	1918	4163	4874	5510	4679
1991	4357	3400	2992	2626	1939	5102	2591	2031	3982	5493	4924	4733
1992	4326	3398	2991	3359	5294	3540	2385	1984	4849	5201	4269	5139
1993	4359	3404	4468	8427	8367	6702	5796	4768	4284	8627	6951	5962
AVG:	5486	4759	5503	5964	6095	5425	4140	3422	6050	7387	6445	5901
MIN:	4326	3370	2991	2626	1841	1845	1744	1626	3982	4175	4238	3914
MAX:	7952	9485	10822	11012	11265	11126	10725	8681	8192	9001	8134	8236

Table 3.5.5-37. Simulated Delta Cross Channel Net Flow (CFS)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0	-8	-12	-8	-14	-7	-4	-9	-9	0	0	-29
1923	-14	-8	-17	-5	0	-2	-4	-6	2	0	0	8
1924	6	-4	28	0	-7	0	-15	-3	29	-47	-63	-87
1925	-115	3	1	1	12	-3	-10	-9	-15	-20	-16	-3
1926	0	0	1	1	-2	-19	-34	-21	10	-13	-7	15
1927	0	-33	-129	-5	-10	-6	-8	-6	-76	-80	1	-17
1928	15	5	7	-8	1	-9	-7	1	-13	-20	-19	-15
1929	-15	3	0	1	-7	-23	-2	-2	-155	-2	26	-38
1930	0	0	-8	-9	-6	-26	-26	-19	28	47	25	-78
1931	0	0	-20	2	35	-3	-1	-6	-17	15	-4	-243
1932	0	3	-17	-10	-89	-2	-4	-6	-13	-21	-15	47
1933	0	0	1	-7	-7	-23	0	-23	1	-10	-9	-6
1934	0	0	1	-7	1	-19	0	0	1	1	-73	-428
1935	0	-33	1	-39	-43	-7	-4	-8	-13	-17	-17	-107
1936	-3	0	-17	-16	-7	14	-9	-12	6	-10	1	3
1937	-15	-6	6	1	-7	-7	-10	-19	1	-17	-38	0
1938	-45	-21	-154	-4	-7	-7	-8	-10	-9	0	0	27
1939	-51	-7	-12	-8	-7	-30	-18	-18	32	-27	-12	-1
1940	41	-14	-34	-32	-79	-9	-8	-11	46	23	0	605
1941	173	-46	-25	-8	-17	-7	-9	-10	4	0	61	-24
1942	-14	-8	-45	-5	-7	-8	-8	-10	-9	-18	0	-23
1943	-26	-36	-7	-5	-7	-7	-7	-5	0	11	0	-17
1944	-13	2	-10	0	-7	-20	-3	-6	1	-8	-7	-4
1945	-7	-22	-12	0	-19	-2	-4	-6	0	0	0	-14
1946	1	-36	-7	-17	19	-19	-4	-6	0	0	0	0
1947	-3	4	3	-8	-7	7	-4	-5	-8	-27	-30	0
1948	0	15	3	1	0	-2	-5	-10	-16	0	0	-13
1949	-77	-15	-10	0	-7	-4	-4	-6	0	-10	-5	-15
1950	0	3	-2	-9	-7	-7	-4	-6	-16	-11	0	-3
1951	-5	-24	-8	-5	-7	-7	-4	-6	1	-1	0	-4
1952	0	-4	-39	-5	-7	-8	-16	-9	-10	-8	-13	-37
1953	-26	-6	-9	-5	0	-1	-3	-5	-15	10	0	-43
1954	-10	-20	-1	-17	-7	-8	-7	2	-15	8	-2	0
1955	-14	-2	-34	-7	0	-7	7	-7	1	-17	-27	-11
1956	3	0	-11	-5	-7	-7	-4	-10	-19	0	0	-37
1957	-26	-8	50	-1	-55	-7	0	-10	3	-41	-3	-19
1958	-25	0	-20	-5	-7	-7	-8	-8	-8	-6	0	-32
1959	-26	-8	-2	-5	-6	-9	-24	16	-5	-5	0	-252
1960	274	-155	-27	-31	-27	-23	0	-30	5	-14	89	-133
1961	-1	2	1	1	-94	-8	-1	-1	-42	-1	2	1
1962	-6	27	-3	1	-19	-23	-24	-15	-58	-60	115	-11
1963	-77	-53	-28	-37	-109	-16	-5	-10	-10	35	1	-16
1964	-14	-11	-2	-39	1	-47	72	-30	28	24	-4	-51
1965	0	2	-100	-5	-8	4	-15	1	0	1	-2	-21
1966	-9	-66	-15	-3	-7	-2	-5	-4	5	-6	-7	0
1967	-2	-19	-24	-5	-21	-7	-8	-9	-9	-20	-16	-24
1968	-26	-4	-12	-5	-9	-28	3	-27	22	-73	0	0
1969	-32	-43	-35	-8	-7	-8	-8	-23	-19	4	4	-78
1970	-24	-9	-7	-5	-7	-8	1	-6	9	-15	0	-25
1971	-12	-19	-25	-5	15	-24	0	-13	-15	2	0	-26
1972	0	-8	-12	-42	-7	-9	4	0	2	-7	-5	0
1973	-8	-22	-26	-6	-7	-8	-4	-6	4	-1	-9	-28
1974	-12	-29	-7	-5	-7	-7	-8	-6	-13	2	0	-24
1975	-63	-4	-12	0	-9	-7	-4	-9	-15	0	0	-37
1976	-27	-25	-2	0	-7	-27	-11	-29	51	6	29	-41
1977	0	-15	-30	2	-15	-12	-4	-1	3	-28	-3	-31
1978	0	0	0	-17	-297	-86	-44	-7	-9	-2	0	-17
1979	-6	23	-4	-8	-45	-28	-25	-27	-32	-24	4	-2
1980	73	-29	-12	-12	-7	-7	-4	-6	-15	3	4	-47
1981	-10	-4	-1	-8	-17	-28	-25	-27	18	0	-2	-82
1982	74	-53	-9	-5	-8	-7	-8	-9	-19	0	11	-23
1983	-50	-11	-7	-5	-7	-7	-8	-9	-9	-20	-19	-11
1984	-26	-11	-7	-2	-4	-5	1	-5	-13	9	0	-23
1985	22	-21	-12	0	-7	-2	0	0	0	0	0	0
1986	-3	-4	-12	-9	-9	-9	-4	-6	0	-12	-3	-14
1987	-6	-2	-2	1	-7	-68	13	-1	-23	14	-1	10
1988	-68	-37	-34	-18	6	-3	-160	42	47	6	7	-2
1989	0	-2	0	0	0	-182	-4	6	6	-30	-13	49
1990	-28	-41	-54	-28	-6	-28	0	-26	14	-31	-15	146
1991	0	0	0	-3	1	-24	-33	-30	0	-83	-34	-56
1992	0	0	1	1	-7	-28	-32	-13	4	-8	-39	-232
1993	0	0	-23	31	-8	-48	-10	-56	-8	-112	-107	-115
AVG:	-5	-13	-15	-7	-16	-16	-9	-10	-5	-11	-4	-26
MIN:	-115	-155	-154	-42	-297	-182	-160	-56	-155	-112	-107	-428
MAX:	274	27	50	31	35	14	72	42	51	47	115	605

Table 3.5.5-38. Simulated Delta Cross Channel Net Flow (CFS)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	-2	-8	-12	-8	-13	-7	-4	-9	-9	85	85	-95
1923	-13	-8	-65	-5	0	-2	-4	-6	-75	32	32	24
1924	79	19	90	0	-7	0	0	0	2	-4	-12	-9
1925	-99	2	1	1	16	-22	-5	-7	-65	-11	-10	-3
1926	0	0	1	1	-11	-5	-43	-4	4	4	2	11
1927	0	-25	-19	-5	-8	-7	-8	-6	-27	252	84	-17
1928	8	-77	-57	-6	-1	-12	-7	-63	72	57	-3	-15
1929	22	9	-1	1	-7	-3	0	0	-172	-17	12	8
1930	0	0	-9	-9	-1	-5	-4	-3	3	45	7	-3
1931	0	0	-21	1	34	-3	-1	-5	1	7	-4	1
1932	0	3	-15	-9	-32	-2	-4	-7	-12	-19	-12	-1
1933	0	0	1	-8	-7	-3	0	-7	1	-2	0	-2
1934	0	0	1	-8	0	-3	0	0	0	0	-50	-23
1935	0	1	1	-6	0	-8	-28	-5	-13	-16	-4	-16
1936	-4	0	8	-10	-7	-28	-4	-6	-88	10	84	84
1937	-24	-9	2	1	-38	-7	-7	-6	-65	-6	24	63
1938	-57	-22	-38	-5	-7	-7	-8	-10	-9	85	85	-82
1939	-149	-8	-12	-8	-7	-9	14	-4	-12	-22	-8	-1
1940	0	-9	0	-6	-13	-8	-8	-39	-35	68	65	670
1941	173	-49	-38	-8	-17	-7	-9	-10	-89	86	161	-24
1942	-14	-8	-41	-5	-7	-7	-8	-10	-9	453	85	-23
1943	-26	-130	-7	-5	-7	-7	-7	-5	-11	-127	61	-17
1944	-13	-9	-3	0	-7	-9	-3	-6	0	11	8	7
1945	-27	-103	23	18	1	-2	-4	-6	-167	69	70	-14
1946	117	-137	-8	-53	97	-69	-3	-8	45	50	47	48
1947	5	-49	-8	-27	-7	28	-4	-6	-102	-65	-44	-1
1948	-36	-18	-8	1	-4	-2	-4	-9	-14	0	0	-13
1949	133	-16	-10	0	-7	-3	-4	-7	0	-53	52	-16
1950	-1	-15	-1	-14	-7	-45	-15	-6	-118	7	50	-26
1951	-7	-37	-7	-6	-7	-7	-4	-6	61	219	28	-7
1952	0	17	-149	-5	-7	-8	4	-9	-9	28	5	-90
1953	-26	-6	-9	-5	0	-1	-3	-5	-15	27	4	-43
1954	-10	-20	-1	-23	-7	-7	-7	2	-15	4	-2	0
1955	-15	-35	-34	-7	-4	-7	1	-6	1	-4	-20	-11
1956	-2	-4	-8	-5	-7	-7	-4	-10	-19	85	85	-105
1957	-21	-9	10	-1	-70	-7	0	-10	7	-45	-3	-21
1958	-68	0	-19	-5	-7	-7	-8	-8	-8	47	85	-125
1959	-26	-8	-2	-5	-6	0	-3	6	-48	24	0	57
1960	-16	0	6	0	-7	-2	0	-7	0	-17	89	-166
1961	-1	1	1	1	-18	-9	-2	-2	-20	0	-3	0
1962	1	37	-4	2	-4	-2	-4	-3	-15	-17	-25	17
1963	-25	-21	-7	-8	-9	4	-10	-9	43	542	84	-16
1964	-15	-10	-2	-39	1	-58	89	-9	-12	-50	-1	-111
1965	-1	1	-95	-5	-8	-3	-9	0	-74	-86	52	-11
1966	-9	18	-31	7	-7	-2	-4	-4	2	-5	-7	0
1967	-9	-19	-21	-5	-18	-7	-8	-9	-9	-20	-16	-24
1968	-26	-4	-12	-5	-9	-7	1	-6	5	-15	0	0
1969	-15	-11	-17	-6	-7	-8	-8	-15	-19	84	85	-129
1970	-116	-9	-8	-5	-7	-8	1	-6	15	-18	4	-27
1971	-13	-19	-29	-5	18	-24	0	-13	-15	3	5	-26
1972	0	-8	-12	-46	-7	-9	4	0	2	-6	-4	0
1973	-8	-22	-26	-6	-7	-7	-4	-6	-70	54	32	-73
1974	-8	4	-8	-5	-7	-7	-8	-6	-26	57	64	-23
1975	-141	-15	-2	0	-15	-7	-4	-9	-15	50	50	-75
1976	-26	-50	-26	0	-7	-6	-2	-7	24	-7	6	-4
1977	0	-15	-10	1	-19	-12	-16	-1	11	-70	0	-20
1978	0	0	0	-7	-19	28	-8	-6	-10	-12	0	-17
1979	-4	4	-6	-8	-26	-7	-4	-6	-45	-11	-19	-2
1980	-21	-4	-12	-6	-7	-7	-4	-6	-15	64	69	-146
1981	-9	-4	-1	-8	-65	-8	-4	-6	5	0	-1	-25
1982	39	-14	-8	-5	-8	-7	-8	-9	-19	62	38	-23
1983	-98	-10	-7	-5	-7	-7	-8	-9	-9	-20	-19	-11
1984	-26	-11	-7	-2	-4	-5	1	-5	-17	-3	14	-37
1985	47	-20	-12	0	-7	-2	0	0	0	0	0	-1
1986	-9	-4	-12	-9	-9	-9	-4	-6	-78	6	26	-14
1987	-5	-2	-2	1	-7	-43	11	0	-7	-2	-4	-1
1988	-29	0	0	-6	1	-3	-5	1	0	-24	-13	-79
1989	0	0	1	1	0	-47	-4	2	1	-15	-7	-21
1990	10	-25	-36	-8	-7	-9	0	-6	5	-65	21	126
1991	0	0	0	1	1	-4	-7	-9	0	-5	1	-10
1992	0	0	1	1	-7	-8	-6	-5	1	-6	-45	-10
1993	0	0	-3	-10	-8	-21	-9	-44	-8	13	14	12
AVG:	-9	-14	-12	-6	-7	-9	-4	-7	-19	25	21	-11
MIN:	-149	-137	-149	-53	-70	-69	-43	-63	-172	-127	-50	-166
MAX:	173	37	90	18	97	28	89	6	72	542	161	670

3.5.6 Delta Exports

This section presents CALSIM II Delta export results. The Banks Pumping Plant is the SWP facility for pumping export water from the Delta, while Tracy Pumping Plant supplies water for CVP contractors south of the Delta.

An exceedence plot and a time series plot for each pumping plant convey overall exports over the 72 year hydrologic period, and tables list monthly results and comparisons.

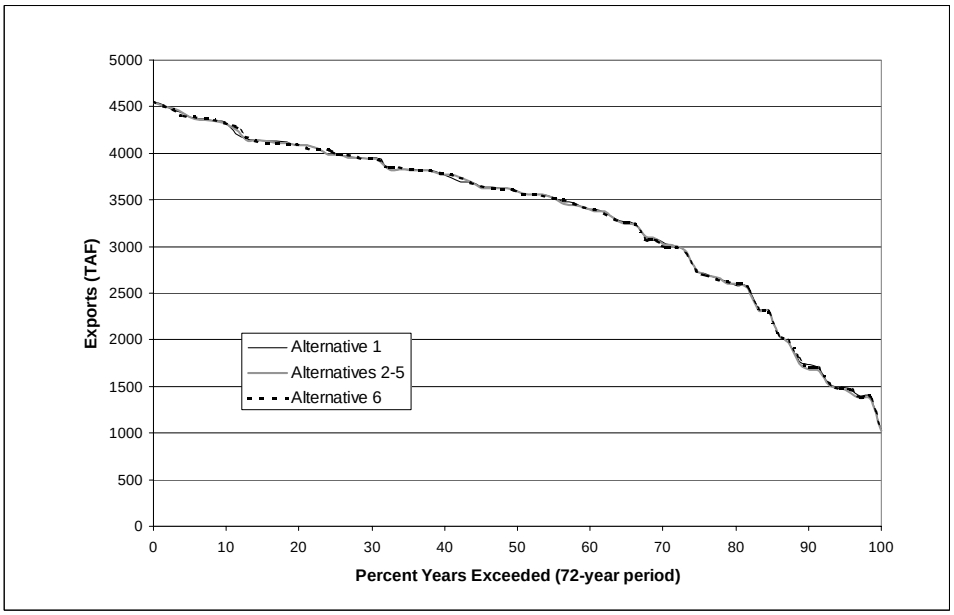


Figure 3.5.6-1 Exceedence for Simulated Annual Delta Exports at Banks Pumping Plant, 2020 LOD

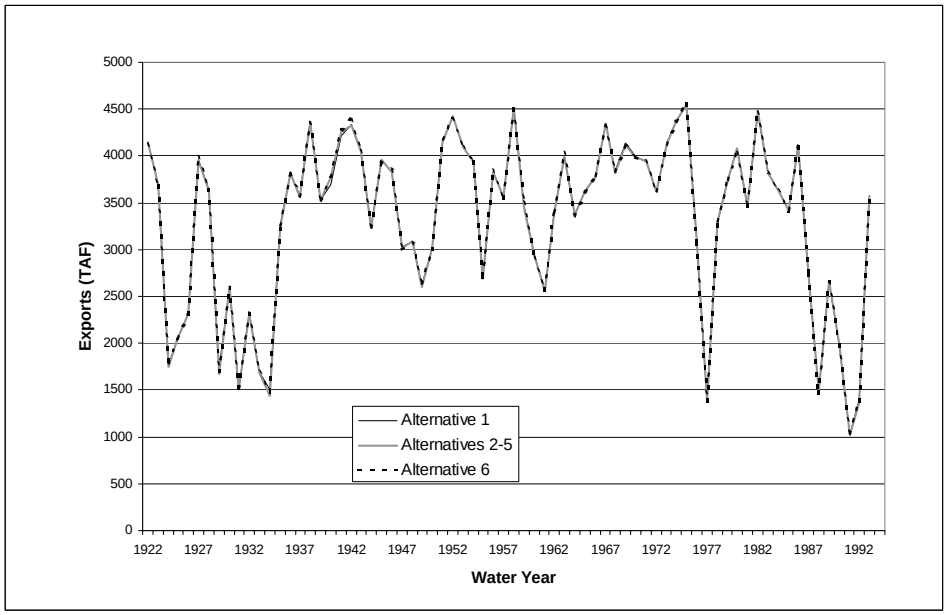


Figure 3.5.6-2 Simulated Annual Delta Exports at Banks Pumping Plant, 2020 LOD

Table 3.5.6-1. Simulated Delta Exports at Banks Pumping Plant (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	214.0	177.4	327.0	468.1	472.1	464.9	199.6	223.6	397.5	441.5	415.0	352.2	4152.7
1923	323.6	297.2	333.6	496.1	269.3	183.9	175.4	145.6	205.3	441.5	441.5	385.6	3698.6
1924	301.1	138.6	347.1	246.6	212.8	18.4	17.9	75.6	17.9	18.4	266.6	111.4	1772.4
1925	134.4	144.7	241.6	242.8	313.9	18.4	173.1	139.9	266.4	105.4	20.4	258.5	2059.4
1926	135.2	81.8	153.5	255.3	301.6	148.3	162.4	111.6	140.4	377.0	261.2	183.7	2312.0
1927	205.9	397.5	321.5	446.9	456.4	447.9	204.2	220.5	253.4	292.1	410.7	302.8	3959.8
1928	299.9	397.5	434.4	455.2	360.5	441.7	180.4	147.8	164.2	180.1	273.7	299.3	3634.6
1929	195.1	207.4	281.5	311.6	206.1	116.5	41.7	18.4	56.2	190.3	38.4	69.7	1733.0
1930	87.1	17.9	258.6	263.4	219.0	428.6	100.5	104.6	112.4	412.0	334.6	240.9	2579.5
1931	69.2	69.0	122.4	269.2	126.2	75.7	17.9	43.0	53.2	234.2	301.3	138.0	1519.5
1932	118.8	55.3	331.2	357.6	255.0	261.1	40.6	126.0	17.9	381.2	159.4	221.6	2325.8
1933	128.7	121.2	151.5	444.0	133.0	301.4	41.7	77.0	17.9	171.3	38.4	65.5	1691.5
1934	102.2	17.9	296.4	281.2	320.8	76.2	17.9	18.4	17.9	153.9	55.2	143.9	1501.8
1935	112.8	194.2	189.0	360.6	237.0	446.1	204.2	19.9	356.2	441.4	410.1	289.8	3261.3
1936	307.7	168.2	244.9	449.0	485.3	464.9	171.7	147.5	216.7	441.5	415.0	301.2	3813.7
1937	233.3	123.7	262.9	387.8	472.1	464.9	204.2	195.7	104.7	393.8	420.2	304.5	3567.7
1938	235.4	397.5	260.4	509.1	472.1	464.9	180.4	201.3	397.5	410.7	410.7	427.2	4367.3
1939	410.7	374.6	434.5	456.4	173.5	176.7	17.9	118.0	223.1	422.6	402.1	318.1	3528.2
1940	227.9	144.1	182.9	366.8	481.7	464.9	204.2	186.7	261.0	441.5	415.0	317.6	3694.3
1941	248.5	166.3	442.4	511.0	472.1	464.9	180.4	201.3	281.2	410.7	410.7	427.2	4216.9
1942	410.7	330.0	459.6	522.6	395.6	205.1	204.2	223.6	397.5	345.1	410.7	427.2	4332.1
1943	410.7	397.5	447.3	495.1	422.5	422.9	180.4	131.5	302.9	115.0	410.7	318.6	4055.1
1944	201.9	114.6	259.3	342.6	280.0	333.2	132.1	134.6	237.0	441.5	441.5	322.7	3240.9
1945	232.0	397.5	321.1	396.2	472.1	409.6	125.1	134.0	269.5	441.5	441.5	318.2	3958.1
1946	280.5	303.2	338.2	508.5	252.2	315.8	141.6	157.8	247.5	441.5	441.5	397.5	3825.9
1947	283.5	246.6	323.1	223.9	229.6	251.5	107.9	36.7	155.8	441.5	410.7	316.3	3027.1
1948	207.8	204.4	150.0	292.9	120.5	208.4	178.9	201.3	317.3	441.5	441.5	325.2	3089.6
1949	224.3	180.8	244.7	281.6	172.8	286.0	108.2	123.0	269.3	369.0	72.0	290.2	2621.9
1950	50.4	104.1	105.0	269.5	421.6	258.6	147.6	146.2	342.5	441.5	415.0	309.4	3011.4
1951	309.1	397.5	350.8	522.6	472.1	464.0	128.9	159.3	164.9	356.2	441.5	377.8	4144.6
1952	309.5	314.4	442.4	522.6	482.0	464.9	204.2	223.6	363.0	313.3	361.6	427.2	4428.9
1953	410.7	345.9	434.6	389.1	272.7	403.6	143.5	203.1	380.6	268.4	410.7	427.2	4090.3
1954	383.7	397.5	259.2	237.8	412.6	436.7	192.3	197.6	201.5	406.0	420.9	397.5	3943.3
1955	296.0	322.9	428.9	448.6	123.7	142.8	93.0	114.1	191.4	257.3	82.9	198.6	2700.3
1956	89.9	242.6	350.8	295.9	485.3	464.9	153.0	201.3	297.5	410.7	410.7	427.2	3829.9
1957	410.7	225.3	353.4	245.4	416.0	451.6	159.5	69.2	243.6	273.5	408.0	304.7	3560.7
1958	410.7	372.7	430.3	451.4	434.3	464.9	204.2	223.6	397.5	283.5	410.7	427.2	4511.2
1959	410.7	255.4	360.9	452.7	251.0	107.3	107.7	122.5	244.7	410.7	441.5	299.1	3464.3
1960	260.1	115.1	182.2	351.5	424.2	274.8	17.9	111.5	226.9	383.6	359.6	234.1	2941.5
1961	85.1	197.5	263.4	238.4	294.2	205.7	35.3	18.4	95.9	441.5	385.5	302.3	2563.4
1962	199.0	193.6	297.9	153.5	472.1	423.9	119.6	65.3	287.3	413.4	418.6	353.0	3397.3
1963	410.7	397.5	316.1	332.8	431.0	438.0	180.4	201.3	270.1	262.6	410.7	336.1	3987.5
1964	343.5	397.5	332.3	444.9	124.2	144.0	130.9	43.0	211.6	441.5	410.7	347.4	3371.4
1965	187.3	299.7	333.0	522.6	472.1	293.5	204.2	122.1	196.2	240.6	429.2	327.4	3628.0
1966	137.2	397.5	466.9	507.6	281.6	441.1	125.7	136.8	221.3	397.2	355.5	313.0	3781.4
1967	230.4	397.5	266.0	476.7	429.6	463.3	180.4	201.3	397.5	441.5	435.2	427.2	4346.7
1968	410.7	357.6	432.3	393.3	381.4	401.8	132.8	116.7	143.4	299.7	441.5	322.7	3833.9
1969	242.0	258.0	320.9	522.6	472.1	464.9	204.2	223.6	362.6	222.9	410.7	427.2	4131.8
1970	410.7	377.7	439.6	384.3	370.7	402.9	128.2	122.9	233.5	300.0	441.5	379.4	3991.5
1971	325.5	397.5	437.9	459.1	101.4	434.1	171.6	69.2	297.6	410.7	410.7	427.2	3942.6
1972	410.7	327.3	430.8	445.9	263.9	426.8	97.2	101.8	132.0	343.1	355.9	283.4	3618.9
1973	207.1	397.5	317.2	460.0	465.6	464.9	167.9	175.8	319.3	409.1	409.9	342.0	4136.3
1974	332.2	397.5	321.8	522.6	458.1	464.9	180.4	194.4	393.6	263.0	410.7	427.2	4366.5
1975	410.7	353.7	432.4	450.1	470.4	426.9	201.2	223.6	334.1	410.7	410.7	427.2	4551.8
1976	410.7	389.1	431.1	361.0	182.8	174.9	41.7	76.8	89.1	384.2	323.9	232.2	3097.5
1977	184.0	172.5	110.2	156.2	55.5	71.8	35.3	43.0	86.2	102.9	281.5	97.3	1396.3
1978	38.5	84.2	277.5	282.4	472.1	464.9	180.4	199.9	397.5	125.2	410.7	364.8	3298.2
1979	214.2	174.4	430.1	488.6	348.6	464.9	167.7	165.0	244.9	352.9	385.8	301.6	3738.7
1980	237.7	277.5	320.1	522.6	485.3	464.9	155.6	158.2	226.9	441.5	415.0	378.8	4084.2
1981	309.3	92.3	327.2	454.1	236.7	445.3	142.2	118.1	168.5	441.5	410.7	330.9	3476.9
1982	269.4	397.5	261.5	522.6	472.1	464.9	204.2	223.6	397.5	410.7	410.7	427.2	4462.0
1983	410.7	397.5	472.1	357.8	200.5	218.6	180.4	43.0	230.7	441.5	441.5	427.2	3821.6
1984	394.6	207.0	248.8	346.8	375.6	408.0	163.8	150.1	169.5	336.5	441.5	390.6	3632.9
1985	340.7	397.5	234.6	390.0	203.1	146.7	112.0	115.7	196.9	441.5	441.5	397.5	3417.7
1986	290.9	287.6	319.6	455.4	472.1	464.9	179.2	149.0	316.8	410.7	410.7	361.4	4118.2
1987	265.1	66.0	152.2	330.2	243.0	234.8	102.2	18.4	225.1	422.9	405.9	278.1	2743.9
1988	163.5	120.4	197.7	324.4	106.9	42.8	86.6	85.7	19.4	233.6	19.6	78.5	1479.0
1989	53.1	163.3	173.9	218.0	69.0	316.6	137.6	118.6	197.1	441.5	412.2	353.8	2654.5
1990	340.9	108.8	256.9	435.2	129.9	156.6	17.9	77.6	17.9	32.8	257.8	134.2	1966.4
1991	79.5	17.9	80.8	105.9	61.5	322.4	41.7	43.0	17.9	181.7	18.4	60.9	1031.4
1992	73.0	17.9	116.2	161.2	315.5	218.2	41.7	18.4	18.7	159.7	26.6	223.4	1390.4
1993	29.4	84.0	254.9	295.9	468.1	456.7	192.3	212.5	397.5	441.5	408.4	322.4	3563.6
AVG:	251.8	243.9	304.6	379.9	324.5	329.6	134.8	131.5	224.0	337.5	349.9	309.8	3322.1
MIN:	29.4	17.9	80.8	105.9	55.5	18.4	17.9	18.4	17.9	18.4	18.4	60.9	1031.4
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4551.8

Table 3.5.6-2. Simulated Delta Exports at Banks Pumping Plant (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	214.0	176.5	327.0	468.1	472.1	464.9	199.5	223.6	397.5	441.5	415.0	348.3	4147.7
1923	320.7	294.6	333.6	496.1	269.4	183.8	175.2	145.4	205.4	441.5	441.5	386.6	3693.8
1924	302.9	137.9	355.2	244.7	212.8	18.4	17.9	75.4	17.9	18.4	260.0	83.9	1745.4
1925	134.5	137.5	243.4	245.0	313.8	18.4	172.8	140.0	267.4	104.9	19.9	262.0	2059.7
1926	137.4	81.4	153.6	255.7	301.6	145.0	161.2	110.7	140.8	374.3	258.6	192.2	2312.3
1927	203.9	397.5	321.5	446.9	456.4	447.9	204.2	221.8	249.2	286.9	410.7	300.4	3947.4
1928	301.5	397.5	434.4	455.2	360.5	441.7	180.4	148.0	161.2	177.8	273.2	297.9	3629.3
1929	194.0	206.4	282.4	310.9	206.1	107.0	41.7	18.4	17.9	185.3	38.4	62.0	1670.6
1930	91.4	43.1	258.6	263.4	218.5	428.6	99.6	103.8	111.9	413.6	337.9	235.3	2605.7
1931	67.5	65.4	123.0	270.4	127.3	76.5	17.9	43.0	48.1	235.1	301.2	133.8	1509.3
1932	121.3	53.0	331.2	357.6	245.2	257.0	38.2	125.7	17.9	378.6	157.3	231.4	2314.4
1933	129.9	128.6	152.4	444.0	131.8	298.3	41.7	68.4	17.9	169.1	36.4	64.4	1682.9
1934	102.1	17.9	296.2	279.4	321.6	72.3	17.9	18.4	17.9	153.8	18.4	118.3	1434.1
1935	109.7	179.5	200.2	360.6	248.7	446.1	204.2	19.9	356.3	440.3	406.6	268.4	3240.6
1936	312.8	168.0	244.5	449.0	485.3	464.9	171.3	147.0	217.0	441.5	415.0	301.8	3818.0
1937	230.5	124.0	262.8	388.5	472.1	464.9	204.2	194.9	103.5	392.5	418.3	304.7	3560.9
1938	231.5	397.5	256.9	509.1	472.1	464.9	180.4	201.3	397.5	410.7	410.7	427.2	4359.9
1939	410.7	371.0	434.5	456.4	173.5	175.4	17.9	117.3	224.9	422.3	401.5	324.4	3529.7
1940	227.8	142.2	183.4	366.8	481.7	464.9	204.2	187.1	262.7	441.5	415.0	397.5	3774.6
1941	283.0	176.2	442.4	511.0	472.1	464.9	180.4	201.3	281.4	410.7	410.7	427.2	4261.4
1942	408.8	328.0	459.6	522.6	395.4	205.1	204.2	223.6	397.5	341.3	410.7	427.2	4324.2
1943	410.7	397.5	447.3	495.1	422.5	422.9	180.4	128.9	302.9	116.3	410.7	316.3	4051.6
1944	199.1	115.4	256.7	342.2	280.0	329.9	132.0	134.3	237.0	441.5	441.5	322.2	3231.8
1945	231.5	397.5	321.1	396.3	472.1	409.3	124.9	133.7	269.5	441.5	441.5	316.4	3955.2
1946	279.6	297.7	338.2	508.5	259.2	313.4	141.5	157.6	247.5	441.5	441.5	397.5	3823.6
1947	283.5	246.5	323.1	221.2	229.6	252.1	107.8	34.3	153.8	441.5	410.7	316.4	3020.5
1948	207.4	207.3	149.8	293.3	120.5	208.2	178.7	201.3	316.1	441.5	441.5	323.3	3088.8
1949	211.6	178.8	244.9	281.6	174.1	286.0	108.0	121.2	269.3	367.0	72.8	288.3	2603.6
1950	49.2	103.9	105.5	269.5	421.6	258.0	147.5	145.9	341.6	441.5	415.0	309.1	3008.2
1951	309.0	397.5	350.8	522.6	472.1	464.0	128.7	159.1	165.0	355.3	441.5	377.3	4142.8
1952	309.5	313.5	442.4	522.6	482.0	464.9	204.2	223.6	363.0	311.6	359.0	427.2	4423.5
1953	410.7	344.5	439.8	389.1	272.2	403.6	143.4	202.9	379.8	269.3	410.7	427.2	4093.3
1954	382.3	397.5	250.4	237.8	412.6	436.7	192.3	197.7	200.6	407.8	420.5	397.5	3933.7
1955	295.2	320.7	428.9	448.6	123.6	142.7	92.4	113.8	191.7	255.4	77.4	197.8	2688.3
1956	89.5	242.4	350.8	295.9	485.3	464.9	152.9	201.3	296.8	410.7	410.7	427.2	3828.4
1957	410.7	223.3	358.4	252.4	416.0	451.6	159.5	69.2	243.7	266.4	407.3	302.2	3560.7
1958	410.7	372.7	430.3	451.4	434.3	464.9	204.2	223.6	397.5	282.3	410.7	427.2	4509.9
1959	410.7	253.5	363.1	452.7	250.8	102.5	106.8	123.2	244.4	410.7	441.5	282.4	3442.4
1960	273.4	120.8	178.5	347.1	424.2	272.9	17.9	110.2	227.1	381.5	372.7	208.4	2934.7
1961	89.2	192.0	272.7	238.4	294.2	205.8	34.7	18.4	84.0	441.5	385.4	304.1	2560.5
1962	200.6	195.1	294.5	153.7	472.1	420.1	118.7	58.5	284.0	400.9	432.1	351.5	3381.8
1963	410.7	397.5	316.1	332.8	431.0	438.0	180.4	201.3	267.9	268.3	410.7	333.9	3988.7
1964	341.5	397.5	331.6	444.9	124.4	142.8	133.5	43.0	226.5	441.5	410.7	338.2	3376.2
1965	189.0	302.7	333.0	522.6	472.1	292.7	204.2	121.7	196.2	240.8	428.6	324.7	3628.5
1966	134.9	397.5	466.9	507.6	281.5	440.7	125.6	136.6	221.7	396.1	354.1	313.1	3776.2
1967	230.2	397.5	266.0	476.7	429.6	463.3	180.4	201.3	397.5	441.5	431.8	427.2	4343.1
1968	410.7	356.7	432.3	393.3	381.4	401.8	132.9	115.6	143.3	289.1	441.5	322.7	3821.3
1969	238.7	252.8	320.9	522.6	472.1	464.9	204.2	223.6	362.8	222.9	410.7	418.1	4114.4
1970	410.7	375.9	441.0	384.3	370.7	402.9	128.3	122.7	234.0	297.6	441.5	376.2	3985.8
1971	324.6	397.5	437.9	459.1	106.4	434.1	171.6	69.2	296.5	410.7	410.7	427.2	3945.5
1972	410.7	325.4	430.8	445.9	263.9	426.8	97.3	101.8	132.2	341.6	355.1	283.4	3614.9
1973	206.9	397.5	317.2	460.0	465.6	464.9	167.8	175.6	319.5	408.9	408.1	338.3	4130.2
1974	330.6	397.5	321.8	522.6	458.1	464.9	180.4	194.1	392.8	263.4	410.7	427.2	4364.3
1975	410.7	352.7	432.4	450.1	470.4	426.9	201.1	223.6	331.3	410.7	410.7	427.2	4547.9
1976	410.7	385.0	431.1	357.2	182.8	173.6	41.7	75.5	93.6	385.5	341.4	230.5	3108.5
1977	180.9	171.9	110.2	158.6	54.4	71.7	33.4	43.0	86.2	94.3	281.3	90.9	1376.8
1978	38.1	82.4	278.1	282.4	472.1	464.9	180.4	199.7	397.5	124.8	410.7	362.5	3293.7
1979	213.0	180.9	430.1	488.6	350.6	464.9	167.1	164.9	248.0	347.7	386.6	301.6	3744.1
1980	249.0	275.5	320.1	522.6	485.3	464.9	155.4	157.9	225.6	441.5	415.0	372.2	4085.1
1981	306.9	91.2	324.3	454.1	236.7	445.3	141.3	117.0	169.2	441.5	410.7	320.2	3458.3
1982	286.4	397.5	261.5	522.6	472.1	464.9	204.2	223.6	397.5	410.7	410.7	427.2	4479.0
1983	410.7	397.5	472.1	356.9	200.5	218.6	180.4	43.0	230.7	441.5	441.5	427.2	3820.7
1984	396.2	207.0	248.8	346.8	375.6	408.0	163.9	149.9	169.2	336.8	441.5	387.5	3631.2
1985	343.7	397.5	234.6	390.0	203.1	147.0	112.0	115.7	195.6	441.5	441.5	397.5	3419.6
1986	290.9	286.9	319.6	455.4	472.1	464.9	179.0	148.8	316.8	410.7	410.7	359.6	4115.4
1987	264.0	65.6	152.4	329.9	243.1	234.7	102.6	18.4	219.6	426.4	406.3	280.2	2743.3
1988	163.4	120.7	195.5	324.4	107.7	41.5	80.7	87.5	29.6	235.0	22.9	76.8	1485.7
1989	52.3	163.1	173.6	218.2	69.0	316.6	137.5	118.8	202.6	441.5	414.1	360.3	2667.6
1990	338.2	113.6	253.6	435.2	132.3	156.1	17.9	76.5	17.9	18.4	264.1	151.8	1975.5
1991	71.9	17.9	81.6	108.8	65.6	322.4	41.7	43.0	17.9	176.3	18.4	55.9	1021.2
1992	74.6	17.9	116.4	161.4	315.5	216.9	41.7	18.4	18.6	157.9	18.6	202.2	1359.9
1993	63.0	17.9	297.0	295.9	468.1	456.7	192.3	212.5	397.5	441.5	409.7	322.2	3574.1
AVG:	252.8	242.8	305.5	379.9	324.9	328.9	134.6	131.1	223.4	336.3	349.6	308.3	3318.1
MIN:	38.1	17.9	81.6	108.8	54.4	18.4	17.9	18.4	17.9	18.4	18.4	55.9	1021.2
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4547.9

Table 3.5.6-3. Simulated Delta Exports at Banks Pumping Plant (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	214.0	176.6	327.0	468.1	472.1	464.9	199.5	223.6	397.5	441.5	415.0	328.4	4128.0
1923	320.8	285.9	333.6	496.1	269.4	183.8	175.2	145.3	205.5	441.5	441.5	384.5	3683.1
1924	311.0	135.2	370.2	244.6	212.8	18.4	17.9	75.5	17.9	18.4	262.9	100.1	1784.9
1925	136.7	141.5	243.5	245.0	313.8	18.4	173.0	139.4	254.2	105.1	20.1	256.9	2047.5
1926	134.3	82.3	153.6	254.9	301.6	147.4	160.8	111.4	140.5	377.9	261.7	186.0	2312.5
1927	206.5	397.5	321.5	446.9	456.4	447.9	204.2	219.5	257.0	333.2	410.7	289.4	3990.8
1928	296.9	397.5	434.4	455.2	360.2	441.7	180.4	150.2	171.5	191.8	272.5	298.0	3650.4
1929	198.1	209.5	275.9	316.3	206.1	115.2	41.7	18.4	17.9	186.8	38.4	71.4	1695.8
1930	91.4	31.5	258.6	263.4	218.9	428.6	100.4	104.5	112.1	413.7	336.7	240.6	2600.4
1931	62.7	75.2	120.2	269.4	126.3	75.6	17.9	43.0	52.3	234.7	301.2	138.0	1516.5
1932	123.9	55.1	331.2	357.6	252.2	262.3	40.6	125.7	17.9	379.4	158.4	221.6	2325.8
1933	128.7	120.3	151.6	444.0	132.6	300.9	41.7	75.6	17.9	170.8	38.4	65.1	1687.7
1934	102.3	17.9	296.6	280.7	321.0	75.7	17.9	18.4	17.9	153.9	38.9	139.5	1480.6
1935	112.2	189.6	193.1	360.6	235.7	446.1	204.2	19.9	356.0	440.7	409.4	286.7	3254.2
1936	307.1	169.7	248.0	449.0	485.3	464.9	170.0	147.0	217.5	441.5	415.0	301.3	3816.2
1937	228.9	124.9	259.9	390.7	472.1	464.9	204.2	197.4	104.4	391.7	418.5	304.5	3562.1
1938	224.3	397.5	265.8	509.2	472.1	464.9	180.4	201.3	397.5	410.7	410.7	427.2	4361.7
1939	410.7	356.8	434.5	456.4	173.5	176.6	25.5	117.9	222.4	418.5	400.7	319.5	3513.0
1940	226.8	145.6	182.3	366.8	481.7	464.9	204.2	188.9	257.4	441.5	415.0	397.5	3772.6
1941	282.4	183.4	442.4	511.0	472.1	464.9	180.4	201.3	299.8	410.7	410.7	427.2	4286.4
1942	408.8	328.0	459.6	522.6	395.6	205.1	204.2	223.6	397.5	410.7	410.7	427.2	4393.9
1943	410.7	397.5	447.3	494.0	422.5	422.9	180.4	161.9	302.9	99.9	410.7	308.2	4059.0
1944	199.1	110.9	258.7	336.8	280.0	331.7	132.0	134.3	237.0	441.5	441.5	323.5	3227.2
1945	227.4	397.5	321.1	403.8	472.1	410.0	124.4	133.2	269.5	441.5	441.5	307.1	3949.1
1946	297.7	291.7	338.2	508.5	280.1	305.7	141.5	160.8	247.2	441.5	441.5	397.5	3851.8
1947	278.8	246.2	323.1	215.3	229.7	253.8	107.8	34.5	137.3	441.5	410.7	316.5	2995.2
1948	205.3	200.6	149.0	293.3	120.5	208.5	178.7	201.3	316.2	441.5	441.5	323.3	3079.7
1949	244.1	183.6	243.1	281.6	172.9	286.0	108.0	121.0	269.3	357.9	72.0	288.2	2627.6
1950	56.8	98.3	106.6	269.5	421.6	255.0	146.6	145.3	344.3	441.5	410.3	296.5	2992.3
1951	306.4	397.5	350.8	522.6	472.1	464.0	128.7	161.6	164.5	391.2	441.5	373.2	4174.1
1952	309.5	310.9	442.4	522.6	482.0	464.9	204.2	223.6	363.0	304.0	347.4	427.2	4401.9
1953	410.7	344.4	440.0	389.1	274.0	403.6	143.4	202.8	379.5	271.5	410.7	427.2	4097.2
1954	382.3	397.5	250.1	237.8	412.6	436.7	192.3	197.7	200.6	406.9	420.5	397.5	3932.6
1955	297.3	318.6	428.9	448.6	125.5	143.3	93.3	113.9	191.3	257.3	79.5	197.8	2695.3
1956	88.8	243.2	350.8	295.9	485.3	464.9	152.9	201.3	314.2	410.7	410.7	427.2	3846.0
1957	410.7	223.0	343.3	260.2	416.0	451.6	159.5	69.2	243.7	265.6	406.6	301.4	3550.7
1958	410.7	372.6	430.3	451.4	434.3	464.9	204.2	223.6	397.5	275.6	410.7	427.2	4503.2
1959	410.7	262.6	394.8	455.1	250.5	106.9	107.6	122.8	241.1	410.7	441.5	302.8	3507.0
1960	261.2	112.7	184.0	351.5	424.2	274.6	17.9	111.2	226.9	380.2	372.5	200.7	2917.6
1961	89.1	191.2	273.6	238.4	294.2	205.7	34.5	18.4	89.7	441.5	384.9	302.4	2563.7
1962	199.7	194.3	306.5	156.3	472.1	425.4	119.5	63.8	286.5	409.7	410.0	355.3	3399.0
1963	410.7	397.5	316.1	332.8	431.0	438.0	180.4	201.3	246.0	354.4	410.7	322.9	4041.9
1964	341.4	397.5	331.8	444.9	124.4	142.8	134.2	43.0	212.2	441.5	410.7	326.2	3350.7
1965	187.3	302.4	333.0	522.6	472.1	293.5	204.2	121.4	201.0	230.2	428.6	318.8	3615.1
1966	137.2	397.5	466.9	507.6	281.5	440.8	125.6	136.6	221.4	396.2	353.9	313.1	3778.4
1967	230.7	397.5	266.0	476.8	429.6	463.3	180.4	201.3	397.5	441.5	416.5	427.2	4328.5
1968	410.7	356.7	432.3	393.3	381.4	401.8	132.8	116.4	143.3	297.6	441.5	322.7	3830.6
1969	239.5	257.8	320.9	522.6	472.1	464.9	204.2	223.6	362.7	222.9	410.7	400.9	4102.9
1970	410.7	376.3	440.4	384.3	370.7	402.9	128.3	122.6	234.1	297.1	441.5	375.3	3984.3
1971	324.6	397.5	437.9	459.1	107.5	434.1	171.6	69.2	296.1	410.7	410.7	427.2	3946.3
1972	410.7	325.4	430.8	445.9	263.9	426.8	97.3	101.8	132.2	341.8	355.3	283.4	3615.4
1973	204.3	397.5	317.2	460.0	465.6	464.9	167.8	177.5	318.1	408.3	404.7	324.9	4110.8
1974	331.1	397.5	321.8	522.6	458.1	464.9	180.4	195.5	397.5	261.1	410.7	427.2	4368.5
1975	410.7	349.9	431.1	450.1	470.3	426.9	201.1	223.6	343.0	410.7	410.7	427.2	4555.6
1976	410.7	380.9	431.1	347.9	182.8	174.8	41.7	76.5	92.8	382.7	325.3	231.2	3078.2
1977	182.8	172.4	110.2	158.4	52.9	72.0	28.3	43.0	86.4	105.3	281.7	93.2	1386.6
1978	38.9	84.6	276.1	282.4	472.1	464.9	180.4	199.7	397.5	122.6	410.7	362.6	3292.5
1979	213.3	176.2	430.1	488.6	350.6	464.9	167.9	165.8	246.6	350.6	381.8	301.6	3737.9
1980	234.5	277.0	320.1	522.6	485.3	464.9	154.5	156.0	218.5	441.5	415.0	351.8	4041.7
1981	307.4	87.3	321.4	454.1	236.7	445.3	142.1	117.8	168.7	441.5	410.7	327.6	3460.7
1982	277.4	397.5	261.5	522.6	472.1	464.9	204.2	223.6	397.5	410.7	410.7	427.2	4470.0
1983	410.7	397.5	472.1	357.5	200.5	218.6	180.4	43.0	230.7	441.5	441.5	427.2	3821.3
1984	395.1	207.0	248.8	346.8	375.6	408.0	163.9	149.9	169.5	336.5	441.5	383.9	3626.4
1985	347.0	397.5	234.6	390.0	203.1	147.0	112.0	115.7	195.7	441.5	441.5	397.4	3422.9
1986	291.8	287.6	319.6	455.4	472.1	464.9	179.0	151.2	316.1	410.7	410.7	350.3	4109.4
1987	264.1	63.3	159.1	323.7	243.1	234.9	102.6	18.4	225.2	423.0	405.6	278.0	2740.9
1988	161.6	120.6	197.1	324.4	107.0	41.6	86.4	85.8	19.3	228.6	18.4	73.7	1464.5
1989	52.7	162.5	174.4	217.6	69.1	316.6	137.4	118.7	197.4	441.5	412.2	351.2	2651.1
1990	344.4	113.0	256.0	435.2	132.2	157.3	17.9	77.3	17.9	18.4	263.5	155.7	1988.7
1991	74.7	17.9	79.5	106.1	61.4	322.4	41.7	43.0	17.9	181.6	18.4	59.8	1024.4
1992	73.5	17.9	116.3	161.4	315.5	218.1	41.7	18.4	18.6	158.4	22.6	222.5	1384.9
1993	39.3	60.9	264.4	295.9	468.1	456.7	192.3	212.5	397.5	441.5	408.6	322.4	3560.1
AVG:	252.7	242.9	305.6	379.9	325.0	329.4	134.8	132.0	223.2	339.4	348.9	307.3	3321.2
MIN:	38.9	17.9	79.5	106.1	52.9	18.4	17.9	18.4	17.9	18.4	18.4	59.8	1024.4
MAX:	410.7	397.5	472.1	522.6	485.3	464.9	204.2	223.6	397.5	441.5	441.5	427.2	4555.6

Table 3.5.6-4. Simulated Delta Exports at Banks Pumping Plant (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.9	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-3.9	-4.9
1923	-2.9	-2.7	0.0	0.0	0.1	-0.1	-0.1	-0.2	0.2	0.0	0.0	1.1	-4.7
1924	1.8	-0.7	8.1	-2.0	0.0	0.0	0.0	-0.1	0.0	0.0	-6.6	-27.6	-27.0
1925	0.1	-7.2	1.7	2.2	0.0	0.0	-0.4	0.1	1.0	-0.4	-0.4	3.6	0.3
1926	2.2	-0.4	0.1	0.4	0.0	-3.3	-1.3	-0.9	0.4	-2.7	-2.6	8.5	0.3
1927	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	-4.2	-5.2	0.0	-2.4	-12.4
1928	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.2	-2.9	-2.3	-0.5	-1.4	-5.3
1929	-1.1	-1.0	0.9	-0.6	0.0	-9.5	0.0	0.0	-38.4	-5.0	0.0	-7.7	-62.3
1930	4.4	25.2	0.0	0.0	-0.5	0.0	-1.0	-0.8	-0.5	1.6	3.3	-5.6	26.1
1931	-1.8	-3.6	0.6	1.2	1.1	0.8	0.0	0.0	-5.1	0.9	-0.1	-4.2	-10.2
1932	2.5	-2.4	0.0	0.0	-9.8	-4.1	-2.4	-0.3	0.0	-2.6	-2.1	9.8	-11.4
1933	1.2	7.5	0.8	0.0	-1.2	-3.1	0.0	-8.6	0.0	-2.2	-2.1	-1.1	-8.7
1934	-0.2	0.0	-0.2	-1.8	0.8	-3.9	0.0	0.0	0.0	-0.1	-36.8	-25.6	-67.7
1935	-3.0	-14.7	11.2	0.0	11.7	0.0	0.0	0.0	0.1	-1.1	-3.5	-21.4	-20.7
1936	5.0	-0.2	-0.5	0.0	0.0	0.0	-0.4	-0.5	0.3	0.0	0.0	0.6	4.4
1937	-2.8	0.3	-0.1	0.7	0.0	0.0	0.0	-0.9	-1.2	-1.3	-1.9	0.3	-6.8
1938	-4.0	0.0	-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.5
1939	0.0	-3.6	0.0	0.0	0.0	-1.3	0.0	-0.8	1.8	-0.3	-0.6	6.2	1.5
1940	-0.1	-1.9	0.5	0.0	0.0	0.0	0.0	0.3	1.7	0.0	0.0	79.9	80.4
1941	34.4	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	44.5
1942	-1.9	-2.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-3.8	0.0	0.0	-7.8
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	0.0	1.3	0.0	-2.3	-3.5
1944	-2.8	0.8	-2.6	-0.5	0.0	-3.3	-0.1	-0.3	0.0	0.0	0.0	-0.5	-9.1
1945	-0.5	0.0	0.0	0.1	0.0	-0.4	-0.1	-0.3	0.0	0.0	0.0	-1.8	-2.9
1946	-0.9	-5.5	0.0	0.0	6.9	-2.5	-0.1	-0.3	0.0	0.0	0.0	0.0	-2.3
1947	0.0	-0.1	0.0	-2.7	0.0	0.6	-0.2	-2.4	-2.0	0.0	0.0	0.1	-6.6
1948	-0.5	2.9	-0.3	0.4	0.0	-0.2	-0.2	0.0	-1.2	0.0	0.0	-1.8	-0.8
1949	-12.7	-2.1	0.2	-0.1	1.3	0.0	-0.1	-1.8	0.0	-2.0	0.9	-1.9	-18.3
1950	-1.2	-0.3	0.5	0.0	0.0	-0.6	-0.2	-0.3	-0.9	0.0	0.0	-0.3	-3.2
1951	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	0.1	-0.8	0.0	-0.5	-1.8
1952	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	-2.7	0.0	-5.4
1953	0.0	-1.5	5.2	0.0	-0.5	0.0	-0.1	-0.2	-0.9	0.9	0.0	0.0	2.9
1954	-1.4	0.0	-8.8	0.0	0.0	0.0	0.0	0.1	-0.9	1.8	-0.4	0.0	-9.6
1955	-0.8	-2.2	0.0	0.0	-0.1	-0.1	-0.6	-0.3	0.3	-1.9	-5.5	-0.9	-12.1
1956	-0.4	-0.2	0.0	0.0	0.0	0.0	-0.1	0.0	-0.8	0.0	0.0	0.0	-1.5
1957	0.0	-2.0	5.0	7.1	0.0	0.0	0.0	0.0	0.1	-7.0	-0.7	-2.5	-0.1
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.0	0.0	-1.3
1959	0.0	-1.9	2.2	0.0	-0.2	-4.8	-0.9	0.7	-0.3	0.0	0.0	-16.7	-21.9
1960	13.2	5.6	-3.7	-4.5	0.0	-1.8	0.0	-1.3	0.2	-2.2	13.1	-25.7	-6.8
1961	4.1	-5.5	9.3	0.1	0.0	0.0	-0.6	0.0	-11.9	0.0	-0.1	1.7	-2.9
1962	1.6	1.5	-3.4	0.2	0.0	-3.7	-0.9	-6.8	-3.3	-12.5	13.4	-1.5	-15.6
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	5.6	0.0	-2.2	1.2
1964	-2.0	0.0	-0.7	0.0	0.2	-1.2	2.6	0.0	14.9	0.0	0.0	-9.2	4.8
1965	1.7	3.0	0.0	0.0	0.0	-0.8	0.0	-0.5	0.0	0.3	-0.5	-2.7	0.5
1966	-2.3	0.0	0.0	0.0	0.0	-0.4	-0.2	-0.2	0.4	-1.2	-1.4	0.0	-5.2
1967	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	0.0	-3.6
1968	0.0	-1.0	0.0	0.0	0.0	0.0	0.1	-1.1	-0.1	-10.6	0.0	0.0	-12.7
1969	-3.3	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-9.1	-17.4
1970	0.0	-1.8	1.3	0.0	0.0	0.0	0.0	-0.2	0.5	-2.4	0.0	-3.2	-5.7
1971	-0.9	0.0	0.0	0.0	5.0	0.0	0.0	0.0	-1.2	0.0	0.0	0.0	3.0
1972	0.0	-2.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	-1.5	-0.8	0.0	-3.9
1973	-0.2	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	0.2	-0.2	-1.9	-3.8	-6.1
1974	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.7	0.4	0.0	0.0	-2.2
1975	0.0	-1.0	0.0	0.0	0.0	0.0	-0.1	0.0	-2.7	0.0	0.0	0.0	-3.8
1976	0.0	-4.1	0.0	-3.8	0.0	-1.4	0.0	-1.2	4.5	1.2	17.5	-1.7	11.0
1977	-3.1	-0.6	0.0	2.4	-1.1	-0.1	-1.9	0.0	0.0	-8.6	-0.2	-6.3	-19.5
1978	-0.4	-1.7	0.6	0.0	0.0	0.0	0.0	-0.3	0.0	-0.4	0.0	-2.3	-4.4
1979	-1.2	6.5	0.0	0.0	2.0	0.0	-0.5	-0.1	3.1	-5.2	0.8	0.0	5.5
1980	11.3	-2.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-1.3	0.0	0.0	-6.6	1.0
1981	-2.4	-1.1	-2.9	0.0	0.0	0.0	-0.9	-1.1	0.7	0.0	0.0	-10.8	-18.5
1982	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1983	0.0	0.0	0.0	-0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9
1984	1.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.4	0.3	0.0	-3.1	-1.7
1985	3.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-1.3	0.0	0.0	0.0	1.9
1986	0.1	-0.7	0.0	0.0	0.0	0.0	-0.1	-0.3	0.0	0.0	0.0	-1.8	-2.8
1987	-1.1	-0.4	0.2	-0.3	0.0	-0.1	0.5	0.0	-5.5	3.5	0.4	2.2	-0.7
1988	-0.1	0.3	-2.2	0.0	0.9	-1.2	-5.8	1.8	10.2	1.4	3.2	-1.7	6.7
1989	-0.8	-0.3	-0.2	0.2	0.1	0.0	-0.1	0.3	5.5	0.0	2.0	6.5	13.1
1990	-2.7	4.8	-3.3	0.0	2.4	-0.5	0.0	-1.1	0.0	-14.4	6.3	17.6	9.1
1991	-7.6	0.0	0.8	2.9	4.1	0.0	0.0	0.0	0.0	-5.4	0.0	-5.0	-10.3
1992	1.6	0.0	0.2	0.2	0.0	-1.3	0.0	0.0	-0.1	-1.8	-8.0	-21.2	-30.5
1993	33.6	-66.2	42.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	1.3	-0.2	10.5
AVG:	1.0	-1.2	0.8	0.0	0.3	-0.7	-0.2	-0.4	-0.6	-1.2	-0.3	-1.5	-4.0
MIN:	-12.7	-66.2	-8.8	-4.5	-9.8	-9.5	-5.8	-8.6	-38.4	-14.4	-36.8	-27.6	-67.7
MAX:	34.4	25.2	42.1	7.1	11.7	0.8	2.6	1.8	14.9	5.6	17.5	79.9	80.4

Table 3.5.6-5. Simulated Delta Exports at Banks Pumping Plant (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.7	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-23.8	-24.6
1923	-2.7	-11.3	0.0	0.0	0.0	-0.1	-0.1	-0.3	0.2	0.0	0.0	-1.1	-15.5
1924	9.9	-3.4	23.1	-2.1	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-11.3	12.6
1925	2.3	-3.2	1.8	2.2	0.0	0.0	-0.2	-0.5	-12.2	-0.3	-0.3	-1.6	-11.9
1926	-0.9	0.5	0.1	-0.4	0.0	-0.9	-1.6	-0.1	0.1	0.8	0.5	2.4	0.5
1927	0.6	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	3.6	41.1	0.0	-13.4	31.0
1928	-3.0	0.0	0.0	0.0	-0.2	0.0	0.0	2.4	7.4	11.7	-1.2	-1.3	15.7
1929	3.0	2.1	-5.6	4.8	0.1	-1.3	0.0	0.0	-38.4	-3.5	0.0	1.7	-37.1
1930	4.3	13.6	0.0	0.0	-0.1	0.0	-0.2	-0.1	-0.3	1.7	2.2	-0.3	20.8
1931	-6.5	6.2	-2.3	0.2	0.1	-0.2	0.0	0.0	-0.9	0.5	-0.1	0.0	-3.0
1932	5.2	-0.3	0.0	0.0	-2.8	1.2	0.0	-0.3	0.0	-1.8	-1.1	-0.1	0.0
1933	0.0	-0.8	0.1	0.0	-0.4	-0.4	0.0	-1.4	0.0	-0.5	0.0	-0.4	-3.9
1934	0.1	0.0	0.2	-0.5	0.2	-0.6	0.0	0.0	0.0	0.0	-16.3	-4.3	-21.3
1935	-0.6	-4.6	4.1	0.0	-1.3	0.0	0.0	0.0	-0.2	-0.8	-0.7	-3.1	-7.1
1936	-0.6	1.5	3.1	0.0	0.0	0.0	-1.7	-0.6	0.8	0.0	0.0	0.1	2.5
1937	-4.4	1.2	-3.0	2.9	0.0	0.0	0.0	1.7	-0.4	-2.1	-1.7	0.1	-5.6
1938	-11.1	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.6
1939	0.0	-17.7	0.0	0.0	0.0	-0.1	7.6	-0.2	-0.7	-4.1	-1.4	1.3	-15.2
1940	-1.1	1.5	-0.6	0.0	0.0	0.0	0.0	2.2	-3.6	0.0	0.0	79.9	78.3
1941	33.9	17.1	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.0	0.0	0.0	69.5
1942	-1.9	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.7	0.0	0.0	61.8
1943	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	30.4	0.0	-15.1	0.0	-10.3	3.9
1944	-2.8	-3.6	-0.6	-5.8	0.0	-1.4	-0.1	-0.3	0.0	0.0	0.0	0.8	-13.8
1945	-4.6	0.0	0.0	7.7	0.0	0.4	-0.6	-0.7	0.1	0.0	0.0	-11.1	-9.0
1946	17.2	-11.6	0.0	0.0	27.8	-10.1	-0.1	3.0	-0.3	0.0	0.0	0.0	26.0
1947	-4.7	-0.4	0.0	-8.6	0.1	2.3	-0.2	-2.3	-18.5	0.0	0.0	0.2	-31.9
1948	-2.5	-3.8	-1.1	0.4	0.0	0.2	-0.1	0.0	-1.1	0.0	0.0	-1.9	-9.9
1949	19.8	2.7	-1.6	0.0	0.1	0.0	-0.2	-2.0	0.0	-11.1	0.0	-2.0	5.7
1950	6.4	-5.9	1.6	0.0	0.0	-3.6	-1.0	-0.8	1.8	0.0	-4.7	-12.9	-19.1
1951	-2.7	0.0	0.0	0.0	0.0	0.0	-0.1	2.3	-0.4	35.0	0.0	-4.6	29.4
1952	0.0	-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.3	-14.2	0.0	-27.0
1953	0.0	-1.5	5.4	0.0	1.3	0.0	-0.1	-0.3	-1.1	3.1	0.0	0.0	6.8
1954	-1.4	0.0	-9.0	0.0	0.0	0.0	0.0	0.1	-0.9	0.9	-0.4	0.0	-10.7
1955	1.3	-4.4	0.0	0.0	1.8	0.5	0.3	-0.3	-0.1	0.1	-3.4	-0.9	-5.1
1956	-1.0	0.6	0.0	0.0	0.0	0.0	-0.1	0.0	16.7	0.0	0.0	0.0	16.1
1957	0.0	-2.2	-10.1	14.8	0.0	0.0	0.0	0.0	0.1	-7.9	-1.4	-3.3	-10.0
1958	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.9	0.0	0.0	-8.0
1959	0.0	7.1	33.9	2.4	-0.5	-0.5	-0.1	0.3	-3.7	0.0	0.0	3.8	42.7
1960	1.1	-2.4	1.8	0.0	0.0	-0.2	0.0	-0.3	0.0	-3.4	13.0	-33.4	-23.9
1961	4.0	-6.4	10.2	0.1	0.0	0.0	-0.8	0.0	-6.2	0.0	-0.6	0.0	0.3
1962	0.7	0.7	8.5	2.8	0.0	1.5	-0.1	-1.5	-0.9	-3.7	-8.6	2.2	1.7
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-24.1	91.7	0.0	-13.2	54.4
1964	-2.0	0.0	-0.5	0.0	0.3	-1.2	3.2	0.0	0.6	0.0	0.0	-21.1	-20.7
1965	0.0	2.6	0.0	0.0	0.0	-0.1	0.0	-0.7	4.8	-10.4	-0.5	-8.7	-12.9
1966	0.0	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.1	0.1	-1.0	-1.6	0.0	-3.0
1967	0.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-18.7	0.0	-18.3
1968	0.0	-0.9	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-2.1	0.0	0.0	-3.3
1969	-2.4	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-26.4	-28.9
1970	0.0	-1.4	0.8	0.0	0.0	0.0	0.0	-0.3	0.7	-2.9	0.0	-4.1	-7.2
1971	-0.9	0.0	0.0	0.0	6.1	0.0	0.0	0.0	-1.5	0.0	0.0	0.0	3.8
1972	0.0	-1.9	0.0	0.0	0.0	0.0	0.1	0.0	0.2	-1.3	-0.6	0.0	-3.4
1973	-2.7	0.0	0.0	0.0	0.0	0.0	-0.1	1.7	-1.2	-0.8	-5.2	-17.1	-25.5
1974	-1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.9	-1.9	0.0	0.0	2.1
1975	0.0	-3.8	-1.2	0.0	0.0	0.0	-0.1	0.0	9.0	0.0	0.0	0.0	3.8
1976	0.0	-8.2	0.0	-13.1	0.0	-0.1	0.0	-0.3	3.7	-1.5	1.3	-1.0	-19.3
1977	-1.1	-0.1	0.0	2.2	-2.6	0.1	-7.0	0.0	0.2	2.4	0.2	-4.1	-9.7
1978	0.3	0.4	-1.4	0.0	0.0	0.0	0.0	-0.3	0.0	-2.6	0.0	-2.2	-5.7
1979	-0.9	1.8	0.0	0.0	2.0	0.0	0.2	0.7	1.7	-2.3	-4.0	0.0	-0.7
1980	-3.3	-0.4	0.0	0.0	0.0	0.0	-1.1	-2.2	-8.5	0.0	0.0	-27.0	-42.5
1981	-1.8	-5.0	-5.8	0.0	0.0	0.0	-0.1	-0.3	0.2	0.0	0.0	-3.3	-16.2
1982	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
1983	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
1984	0.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	-0.1	0.0	-6.7	-6.5
1985	6.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-1.3	0.0	0.0	-0.1	5.2
1986	1.0	0.0	0.0	0.0	0.0	0.0	-0.1	2.1	-0.7	0.0	0.0	-11.0	-8.8
1987	-1.1	-2.8	6.9	-6.5	0.1	0.1	0.4	0.0	0.1	0.1	-0.4	-0.1	-3.1
1988	-2.0	0.2	-0.5	0.0	0.2	-1.2	-0.2	0.1	-0.1	-4.9	-1.2	-4.8	-14.5
1989	-0.4	-0.8	0.5	-0.4	0.1	0.0	-0.2	0.1	0.3	0.0	0.0	-2.6	-3.4
1990	3.6	4.2	-0.9	0.0	2.3	0.7	0.0	-0.3	0.0	-14.4	5.6	21.5	22.3
1991	-4.8	0.0	-1.3	0.3	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-1.0	-7.0
1992	0.5	0.0	0.1	0.2	0.0	-0.1	0.0	0.0	0.0	-1.3	-4.0	-0.9	-5.4
1993	9.9	-23.1	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	-3.5
AVG:	0.9	-1.0	1.0	0.0	0.5	-0.2	-0.1	0.4	-0.7	1.9	-1.0	-2.5	-0.9
MIN:	-11.1	-23.1	-10.1	-13.1	-2.8	-10.1	-7.0	-2.3	-38.4	-15.1	-18.7	-33.4	-42.5
MAX:	33.9	17.1	33.9	14.8	27.8	2.3	7.6	30.4	18.6	91.7	13.0	79.9	78.3

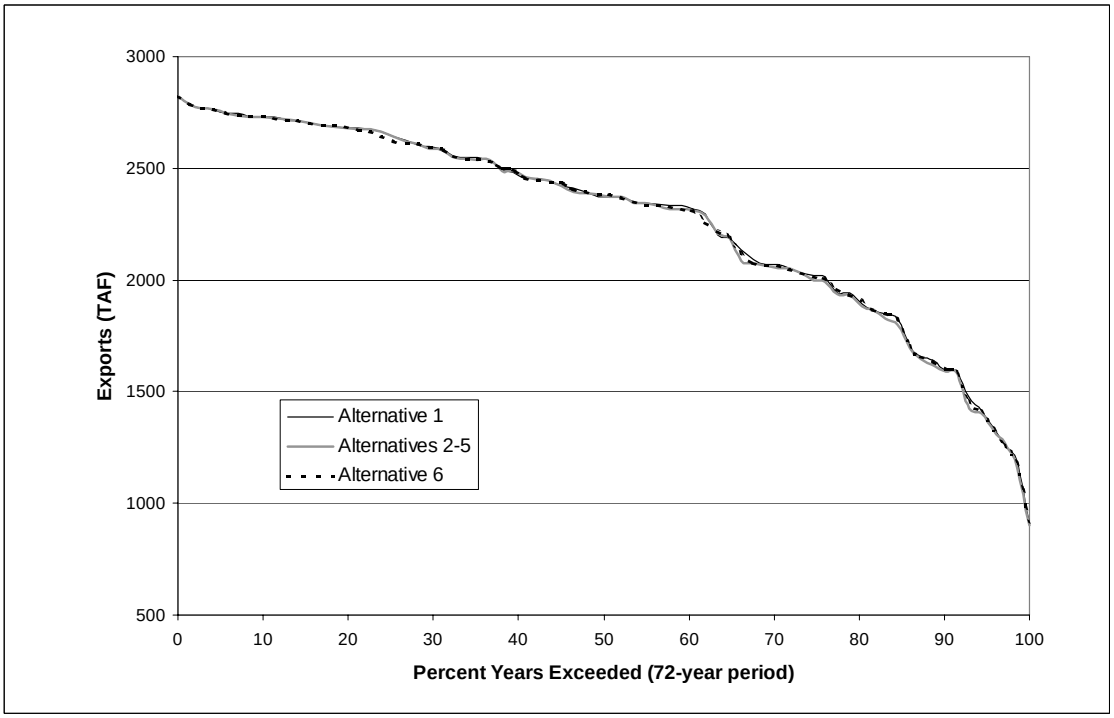


Figure 3.5.6-3 Exceedence for Simulated Annual Delta Exports at Tracy Pumping Plant, 2020 LOD

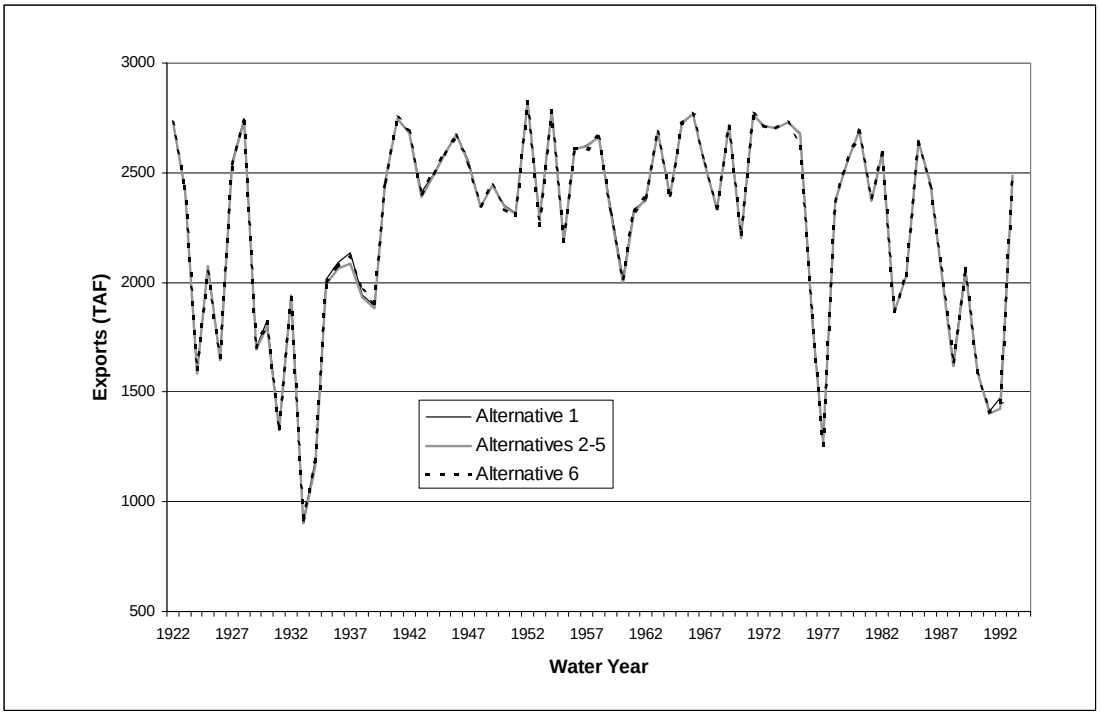


Figure 3.5.6-4. 3.5.6-4 Simulated Annual Delta Exports at Tracy Pumping Plant, 2020 LOD

Table 3.5.6-6. Simulated Delta Exports at Tracy Pumping Plant (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	242.7	259.9	185.2	236.3	262.9	173.6	92.2	178.5	282.0	279.2	266.3	2728.8
1923	267.7	253.1	259.7	133.6	141.0	162.0	151.5	49.2	178.5	281.2	278.6	265.9	2422.0
1924	258.0	147.1	194.2	259.9	212.8	49.2	47.6	75.6	47.6	36.9	100.9	158.4	1588.0
1925	176.5	100.9	241.6	242.8	234.3	106.9	163.4	128.7	101.7	172.0	140.5	262.2	2071.6
1926	227.5	170.3	153.5	184.5	235.2	148.3	151.5	49.2	47.6	49.2	49.2	189.7	1655.8
1927	109.2	250.9	258.9	259.1	186.5	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2550.8
1928	260.9	253.4	259.8	260.1	244.4	262.7	151.5	117.5	178.5	279.6	240.4	240.4	2749.1
1929	199.2	252.5	259.5	259.7	206.1	71.6	47.6	49.2	60.8	55.1	75.2	166.5	1703.1
1930	190.6	107.2	183.8	184.0	219.0	260.4	100.5	49.2	94.8	120.2	125.5	189.9	1825.1
1931	217.4	179.5	62.2	259.2	167.8	65.9	47.6	49.2	47.6	49.2	48.5	141.1	1335.3
1932	90.7	99.6	258.8	259.0	242.6	145.7	106.5	69.2	109.2	143.6	163.0	254.4	1942.3
1933	228.8	102.9	44.8	41.1	53.7	36.9	47.6	49.2	47.6	49.2	36.9	172.7	911.3
1934	187.4	68.1	258.8	211.2	40.9	72.2	47.6	49.2	47.6	36.9	36.9	130.9	1187.6
1935	95.9	203.5	189.0	259.1	114.2	178.5	125.7	56.7	155.3	101.8	274.6	259.7	2013.9
1936	132.9	111.2	200.4	259.4	208.9	144.9	142.6	49.2	178.5	126.3	276.0	262.7	2092.9
1937	204.0	139.0	259.3	259.6	199.0	114.7	79.3	92.2	138.8	129.6	258.9	259.2	2133.8
1938	247.2	251.6	150.8	49.2	44.4	102.4	47.6	49.2	178.5	280.6	278.2	265.7	1945.5
1939	266.6	155.8	88.8	105.2	111.6	154.5	66.9	69.2	119.1	274.8	243.3	237.3	1893.3
1940	120.6	132.6	144.2	259.7	243.7	261.4	175.3	139.8	178.5	255.6	276.9	264.6	2453.0
1941	255.6	194.6	259.4	259.7	235.4	263.4	151.5	117.5	178.5	282.7	279.8	266.5	2744.7
1942	268.2	253.3	259.7	260.0	235.9	167.1	175.3	92.2	178.5	244.7	279.3	266.3	2680.6
1943	267.8	253.1	259.7	166.9	217.1	85.8	151.5	49.2	132.7	281.7	279.0	266.1	2410.6
1944	267.5	202.9	250.4	259.9	226.6	245.1	89.3	92.2	138.5	244.5	213.1	262.6	2492.5
1945	138.3	252.1	259.3	259.6	235.2	263.2	125.1	49.2	178.5	280.4	278.1	265.6	2584.6
1946	266.5	252.7	259.6	259.8	146.8	202.0	141.6	139.8	178.5	281.6	279.0	266.1	2674.1
1947	267.4	253.0	259.6	259.9	229.6	251.5	107.9	49.2	104.8	264.8	242.7	262.9	2553.3
1948	129.1	175.5	129.9	259.6	243.6	208.4	151.5	49.2	178.5	279.2	277.1	265.1	2346.6
1949	265.5	217.1	244.7	259.7	172.8	243.8	47.6	49.2	121.5	280.0	277.7	265.5	2445.0
1950	221.6	227.9	134.7	184.8	235.6	258.6	147.6	49.2	145.9	213.3	273.5	257.4	2349.9
1951	201.7	251.3	259.1	110.7	76.4	162.6	128.9	117.5	178.5	282.6	279.7	266.5	2315.3
1952	268.1	253.2	259.7	260.0	244.3	263.0	175.3	92.2	178.5	282.1	279.3	266.3	2822.0
1953	267.7	253.1	158.1	116.2	141.7	148.4	143.5	69.2	171.5	281.3	278.7	266.0	2295.4
1954	267.1	252.9	259.6	237.8	235.7	263.1	163.4	128.7	150.2	282.3	279.4	266.4	2786.6
1955	251.5	229.3	259.7	260.0	194.0	142.8	101.0	114.1	173.9	83.6	140.1	236.7	2186.6
1956	168.0	251.8	259.2	184.5	243.4	221.4	151.5	117.5	178.5	282.8	280.2	266.7	2605.7
1957	268.6	253.4	259.8	260.0	181.4	165.5	159.5	69.2	178.5	282.8	280.0	266.6	2625.2
1958	268.4	253.3	184.7	185.0	236.0	262.4	175.3	92.2	178.5	281.3	278.7	266.0	2662.0
1959	267.2	252.9	211.8	110.9	135.4	161.0	107.7	122.5	178.5	282.4	279.5	229.1	2339.0
1960	218.9	146.5	72.0	185.0	226.7	236.2	47.6	49.2	107.4	272.9	269.4	185.4	2017.2
1961	189.6	239.0	259.0	238.4	234.6	182.0	47.6	49.2	98.6	280.5	278.1	235.8	2332.4
1962	186.7	156.7	259.6	157.5	235.6	262.0	119.6	69.2	140.4	277.9	246.6	263.1	2374.8
1963	264.6	252.1	259.4	259.6	210.6	161.4	151.5	117.5	178.5	282.8	280.2	266.8	2685.1
1964	268.7	253.4	259.8	260.1	165.9	144.0	130.9	49.2	102.7	236.2	275.4	249.5	2395.9
1965	147.9	251.9	259.3	259.5	235.2	252.8	175.3	139.8	178.5	282.8	280.6	266.9	2730.5
1966	269.0	253.5	259.8	260.1	236.1	262.8	125.7	128.7	178.5	280.7	278.3	237.6	2770.8
1967	214.7	252.8	184.6	184.8	235.7	262.4	151.5	49.2	178.5	279.7	277.5	265.4	2536.7
1968	265.9	252.5	227.9	97.9	121.2	161.8	132.8	116.7	143.4	282.7	279.8	250.7	2333.3
1969	223.3	253.3	259.7	260.0	235.9	261.9	122.0	92.2	178.5	282.4	279.6	266.4	2715.3
1970	268.0	253.2	109.3	100.4	105.5	160.5	128.2	117.5	153.6	281.8	279.1	245.1	2202.3
1971	253.3	253.0	259.7	259.9	235.8	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2764.6
1972	268.1	253.2	259.7	260.0	244.2	262.8	97.2	101.8	178.5	279.9	276.8	231.8	2714.0
1973	254.1	252.6	259.5	184.8	235.6	263.4	167.9	92.2	165.9	282.0	279.3	266.3	2703.6
1974	267.7	253.1	259.7	259.9	235.9	263.2	151.5	49.2	162.9	281.4	278.8	266.0	2729.4
1975	267.2	253.0	259.6	259.9	202.1	163.3	175.3	92.2	178.5	282.1	279.3	266.3	2678.9
1976	267.8	253.1	259.7	260.0	150.2	147.4	47.6	49.2	83.1	49.2	99.7	183.0	1849.9
1977	145.7	96.3	49.2	156.2	44.4	49.2	47.6	49.2	89.2	181.5	182.8	166.7	1257.9
1978	181.2	88.6	258.9	184.0	234.4	253.2	121.6	49.2	171.8	281.8	279.1	266.2	2369.9
1979	267.5	208.2	102.6	259.9	235.8	160.6	167.7	139.8	178.5	282.8	280.1	266.7	2550.3
1980	268.5	223.4	259.8	260.0	244.3	260.7	122.0	49.2	178.5	281.8	279.1	266.2	2693.6
1981	267.5	220.9	227.9	114.2	139.4	161.4	142.2	118.1	168.5	282.5	279.6	249.4	2371.6
1982	208.2	253.2	184.7	185.0	235.9	262.0	175.3	92.2	178.5	280.0	277.8	265.5	2598.4
1983	266.2	230.5	49.2	49.2	69.3	102.7	47.6	49.2	178.5	280.3	277.9	265.6	1866.1
1984	266.4	98.7	69.3	84.8	125.1	161.5	163.8	92.2	141.5	282.0	279.2	266.3	2030.9
1985	267.7	253.1	234.6	259.9	203.1	233.2	112.0	115.7	137.1	280.0	277.7	265.5	2639.7
1986	199.6	173.3	259.5	259.8	235.6	262.6	151.5	49.2	137.3	182.0	278.0	265.6	2454.0
1987	266.4	239.4	257.5	259.8	202.7	113.9	102.2	86.1	106.4	108.3	106.9	205.3	2054.8
1988	150.8	183.7	197.7	259.4	243.3	49.2	86.6	85.7	47.6	49.2	113.0	176.4	1642.6
1989	173.5	147.5	173.9	218.0	83.4	259.3	137.6	117.5	137.1	197.7	211.2	211.5	2068.2
1990	212.7	185.3	236.3	184.5	217.7	145.5	47.6	49.2	50.7	49.2	64.4	147.3	1590.5
1991	181.5	80.1	63.2	113.2	60.3	259.9	47.6	49.2	70.6	69.3	176.9	241.8	1413.4
1992	181.2	107.3	119.6	161.2	242.8	218.2	47.6	69.4	47.6	49.2	62.4	169.1	1475.6
1993	187.2	123.9	254.9	184.4	235.0	262.7	163.4	69.2	178.5	280.2	277.9	265.6	2482.8
AVG:	223.8	204.9	210.1	208.7	191.8	189.9	120.3	81.2	141.0	221.1	232.5	241.7	2266.9
MIN:	90.7	68.1	44.8	41.1	40.9	36.9	47.6	49.2	47.6	36.9	36.9	130.9	911.3
MAX:	270.0	253.5	259.9	260.1	244.4	263.4	175.3	139.8	178.5	282.8	280.6	266.9	2822.0

Table 3.5.6-7. Simulated Delta Exports at Tracy Pumping Plant (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	241.6	259.9	185.2	236.3	262.9	174.5	92.2	178.5	282.0	279.2	266.2	2728.5
1923	267.7	253.1	259.7	135.8	140.9	162.0	151.5	49.2	178.5	281.2	278.6	265.9	2424.0
1924	257.4	146.3	194.0	259.9	212.8	49.2	47.6	75.4	47.6	36.9	88.4	168.2	1583.7
1925	162.4	104.5	243.4	245.0	234.3	111.0	163.4	128.7	103.4	174.3	142.0	262.0	2074.3
1926	227.5	168.9	153.6	184.5	235.2	145.0	151.5	49.2	47.6	49.2	49.2	184.4	1645.8
1927	111.5	250.9	258.9	259.1	171.3	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2537.9
1928	256.5	253.4	259.8	260.1	244.4	262.6	151.5	117.5	178.5	277.4	236.8	238.8	2737.3
1929	199.0	252.5	259.5	259.7	206.1	51.2	47.6	49.2	65.1	59.8	79.1	166.5	1695.3
1930	190.5	75.6	183.8	184.0	218.5	260.3	99.6	49.2	95.3	128.3	133.0	179.7	1797.8
1931	218.1	184.3	58.9	259.2	169.0	66.3	47.6	49.2	47.6	49.2	48.5	128.7	1326.5
1932	91.3	97.2	258.8	258.9	242.6	149.5	105.1	69.2	106.3	141.7	163.0	254.2	1937.9
1933	229.4	94.9	44.1	40.0	52.4	36.9	47.6	49.2	47.6	49.2	36.9	172.7	900.8
1934	187.9	70.9	258.8	206.6	40.8	69.1	47.6	49.2	47.6	36.9	36.9	110.4	1162.8
1935	120.4	185.3	200.2	259.1	100.4	163.3	119.7	54.8	154.1	99.4	274.4	259.3	1990.5
1936	133.1	112.0	205.6	259.4	181.1	141.7	139.5	49.2	178.5	123.7	275.7	262.2	2061.7
1937	203.5	137.8	259.3	259.5	167.1	111.8	77.7	92.2	138.8	127.1	252.8	258.9	2086.6
1938	241.6	251.6	141.5	49.2	44.4	102.4	47.6	49.2	178.5	280.6	278.2	265.7	1930.4
1939	266.6	157.7	88.6	104.9	111.3	154.5	66.9	69.2	119.8	269.4	243.3	231.0	1883.3
1940	126.2	133.7	139.0	259.7	243.7	261.4	175.3	139.8	178.5	260.4	276.9	264.6	2459.2
1941	248.3	204.9	259.4	259.7	235.4	263.4	151.5	117.5	178.5	282.7	279.8	266.5	2747.7
1942	268.2	253.2	259.7	260.0	235.9	167.1	175.3	92.2	178.5	244.7	279.3	266.3	2680.6
1943	267.8	253.1	259.7	147.2	217.1	85.8	151.5	49.2	132.7	281.7	279.0	266.1	2390.9
1944	267.5	201.9	251.4	259.9	226.6	245.1	89.3	92.2	138.5	242.7	211.7	262.5	2489.2
1945	137.3	252.1	259.3	259.6	235.2	263.2	124.9	49.2	178.5	280.4	278.1	265.6	2583.4
1946	266.5	252.7	259.6	259.8	146.2	201.4	141.5	139.8	178.5	281.6	279.0	266.1	2672.6
1947	267.4	253.0	259.6	259.9	229.6	252.1	107.8	49.2	104.6	259.1	238.4	262.7	2543.4
1948	128.1	177.9	128.9	259.6	243.6	208.2	151.5	49.2	178.5	279.2	277.1	265.2	2347.0
1949	265.6	211.9	244.9	259.7	174.1	243.7	47.6	49.2	121.5	280.0	277.7	265.5	2441.4
1950	220.5	229.0	134.6	184.8	235.6	258.0	147.5	49.2	145.6	210.9	273.5	257.2	2346.3
1951	201.1	251.3	259.1	107.0	75.8	162.6	128.7	117.5	178.5	282.6	279.7	266.5	2310.3
1952	268.1	253.2	259.7	260.0	244.3	263.0	175.3	92.2	178.5	282.1	279.3	266.3	2822.0
1953	267.7	253.1	150.5	116.2	141.7	148.2	143.4	69.2	171.2	281.2	278.7	266.0	2287.2
1954	267.1	252.9	259.6	237.8	235.7	263.1	163.4	128.7	149.9	282.3	279.4	266.4	2786.3
1955	250.0	230.7	259.7	260.0	193.9	142.7	101.3	113.8	173.6	81.9	140.0	235.4	2183.0
1956	169.1	251.8	259.2	184.5	243.4	221.2	151.5	117.5	178.5	282.8	280.2	266.7	2606.6
1957	268.6	253.4	259.8	260.0	176.5	165.2	159.5	69.2	178.5	282.8	280.0	266.6	2620.1
1958	268.4	253.3	184.8	185.0	236.0	262.4	175.3	92.2	178.5	281.3	278.7	266.0	2662.0
1959	267.1	252.9	209.1	110.5	135.0	161.0	106.8	123.2	178.5	282.4	279.5	212.5	2318.5
1960	232.4	127.1	65.3	185.0	226.7	234.3	47.6	49.2	107.4	272.0	268.8	184.1	2000.1
1961	194.9	232.3	259.0	238.4	234.6	172.7	47.6	49.2	97.8	280.2	277.9	234.2	2318.7
1962	185.6	159.1	259.5	157.6	235.6	262.0	118.7	69.2	139.3	278.0	257.3	263.1	2385.0
1963	264.6	252.1	259.4	259.6	211.1	161.4	151.5	117.5	178.5	282.8	280.2	266.8	2685.6
1964	268.7	253.4	259.8	260.1	165.9	142.8	133.5	49.2	90.0	241.2	275.4	251.9	2391.8
1965	142.0	251.9	259.3	259.5	235.1	254.7	175.3	139.8	178.5	282.8	280.5	266.9	2726.5
1966	269.0	253.5	259.8	260.1	236.1	262.8	125.6	128.7	178.5	280.7	278.3	237.6	2770.6
1967	214.7	252.8	184.6	184.8	235.7	262.4	151.5	49.2	178.5	279.7	277.5	265.4	2536.7
1968	265.9	252.5	226.9	97.9	121.2	161.8	132.9	115.6	143.3	282.7	279.8	250.7	2331.2
1969	220.9	253.3	259.7	260.0	235.9	263.0	127.4	92.2	178.5	282.4	279.6	266.4	2719.4
1970	268.0	253.2	114.7	100.4	105.5	160.5	128.3	117.5	153.8	281.8	279.1	245.1	2207.9
1971	251.6	253.0	259.7	259.9	235.8	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2762.9
1972	268.1	253.2	259.7	260.0	244.2	262.8	97.3	101.8	178.5	279.9	276.6	231.7	2713.8
1973	253.2	252.6	259.5	184.8	235.6	263.4	167.8	92.2	166.0	282.0	279.3	266.3	2702.7
1974	267.7	253.1	259.7	259.9	235.9	263.2	151.5	49.2	162.7	281.4	278.8	266.0	2729.1
1975	267.2	253.0	259.6	259.9	198.4	163.1	175.3	92.2	178.5	282.1	279.3	266.3	2675.1
1976	267.8	253.1	259.7	260.0	150.2	141.6	47.6	49.2	84.0	49.2	88.4	176.5	1827.3
1977	150.7	97.6	49.2	158.6	44.4	49.2	47.6	49.2	89.2	185.5	182.4	166.7	1270.4
1978	182.2	89.5	258.9	184.0	234.4	253.2	121.6	49.2	171.6	281.8	279.1	266.2	2371.7
1979	267.5	205.7	103.6	259.9	235.8	162.9	167.1	139.8	178.5	282.8	280.1	266.7	2550.6
1980	268.5	222.9	259.8	260.0	244.3	259.5	122.0	49.2	178.5	281.8	279.1	266.2	2691.8
1981	267.5	219.2	232.2	114.2	139.4	161.4	141.3	117.0	169.2	282.5	279.6	249.4	2372.9
1982	196.4	253.2	184.7	185.0	235.9	262.0	175.3	92.2	178.5	279.9	277.7	265.5	2586.3
1983	266.1	228.5	49.2	49.2	68.3	102.7	47.6	49.2	178.5	280.3	277.9	265.6	1863.1
1984	266.4	99.0	69.4	84.9	125.3	161.5	163.9	92.2	141.3	282.0	279.2	266.3	2031.4
1985	267.7	253.1	234.6	259.9	203.1	232.6	112.0	115.7	138.5	280.0	277.7	265.5	2640.4
1986	200.1	171.7	259.5	259.8	235.6	262.6	151.5	49.2	137.3	179.4	277.9	265.6	2450.2
1987	266.4	238.9	257.4	259.8	201.9	113.8	102.6	85.7	105.8	107.7	106.3	205.1	2051.3
1988	139.1	178.5	195.5	259.4	243.3	49.2	80.7	87.5	47.6	49.2	111.3	177.5	1618.8
1989	173.4	148.2	173.6	218.2	83.4	259.3	137.5	117.5	132.1	191.4	208.0	211.5	2054.0
1990	213.1	181.7	229.9	184.5	217.7	144.8	47.6	49.2	53.9	49.2	58.9	159.4	1589.9
1991	182.2	94.0	52.4	114.9	65.3	259.8	47.6	49.2	70.6	57.1	171.5	235.9	1400.5
1992	181.2	106.8	119.7	161.4	242.8	216.9	47.6	70.8	47.6	49.2	36.9	143.4	1424.2
1993	182.9	127.1	259.1	184.3	234.9	262.7	163.4	69.2	178.5	280.8	278.3	265.8	2487.1
AVG:	223.6	204.0	209.7	208.4	190.5	189.0	120.2	81.2	140.9	220.8	231.7	240.4	2260.3
MIN:	91.3	70.9	44.1	40.0	40.8	36.9	47.6	49.2	47.6	36.9	36.9	110.4	900.8
MAX:	270.0	253.5	259.9	260.1	244.4	263.4	175.3	139.8	178.5	282.8	280.5	266.9	2822.0

Table 3.5.6-8. Simulated Delta Exports at Tracy Pumping Plant (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	270.0	241.8	259.9	185.2	236.3	262.9	174.3	92.2	178.5	282.0	279.2	266.2	2728.6
1923	267.7	252.5	259.7	149.7	140.9	162.0	151.5	49.2	178.5	281.2	278.6	265.9	2437.4
1924	264.7	148.7	196.9	259.9	212.8	49.2	47.6	75.5	47.6	36.9	94.0	167.8	1601.7
1925	163.8	103.2	243.5	245.0	234.3	102.1	163.4	128.7	96.9	168.0	138.5	262.1	2049.6
1926	227.9	171.9	153.6	184.5	235.2	147.4	151.5	49.2	47.6	49.2	49.2	189.5	1656.7
1927	108.0	250.9	258.9	259.1	174.6	162.5	175.3	139.8	178.5	282.8	280.4	266.8	2537.7
1928	249.3	253.4	259.8	260.1	244.4	262.7	151.5	117.5	178.5	279.5	240.7	238.7	2736.1
1929	198.7	252.5	259.5	259.7	206.1	68.8	47.6	49.2	61.4	55.1	74.8	166.5	1700.0
1930	190.5	88.2	183.8	184.0	218.9	260.4	100.4	49.2	94.8	127.8	132.4	189.6	1819.9
1931	217.4	178.8	58.1	259.2	167.9	65.1	47.6	49.2	47.6	49.2	48.3	141.4	1329.9
1932	85.3	100.3	258.8	258.9	242.6	144.1	106.2	69.2	106.5	141.6	162.3	254.4	1930.2
1933	228.8	104.1	44.6	40.9	53.4	36.9	47.6	49.2	47.6	49.2	36.9	172.7	911.8
1934	187.4	68.0	258.8	209.9	40.8	71.5	47.6	49.2	47.6	36.9	36.9	130.6	1185.2
1935	101.7	203.3	193.1	259.1	117.3	159.6	124.1	55.4	154.5	99.1	274.6	259.6	2001.3
1936	133.9	107.6	202.2	259.4	209.3	144.4	142.0	49.2	178.5	110.0	276.0	262.6	2075.1
1937	204.0	138.1	259.3	259.6	206.9	114.8	78.9	92.2	138.9	116.8	252.4	259.2	2121.1
1938	246.4	251.6	165.2	49.2	44.4	102.4	47.6	49.2	178.5	280.6	278.2	265.7	1959.1
1939	266.6	171.5	88.8	105.2	111.6	154.5	66.9	69.2	118.9	274.3	243.0	235.9	1906.3
1940	121.9	130.6	146.3	259.7	243.7	261.4	175.3	139.8	178.5	255.2	276.9	264.6	2453.9
1941	248.3	204.6	259.4	259.7	235.4	263.4	151.5	117.5	178.5	282.7	279.8	266.5	2747.4
1942	268.2	253.3	259.7	260.0	235.9	167.1	175.3	92.2	178.5	256.1	279.3	266.3	2692.1
1943	267.8	253.1	259.7	160.5	217.1	85.8	151.5	49.2	132.7	281.7	279.0	266.1	2404.2
1944	267.5	199.9	256.1	259.9	226.6	245.1	89.3	92.2	138.5	246.8	214.9	262.7	2499.4
1945	138.7	252.1	259.3	259.6	235.3	263.1	124.4	49.2	178.5	280.4	278.0	265.6	2584.3
1946	266.5	238.6	259.6	259.8	155.0	200.9	141.5	139.8	178.5	281.6	279.0	266.1	2666.9
1947	267.4	253.0	259.6	259.9	229.7	253.8	107.8	49.2	102.8	251.0	234.3	262.5	2530.9
1948	127.0	177.0	131.6	259.6	243.6	208.5	151.5	49.2	178.5	279.3	277.2	265.2	2348.1
1949	265.6	217.6	243.1	259.7	172.9	243.8	47.6	49.2	121.5	280.0	277.7	265.5	2444.0
1950	224.1	225.3	134.6	184.8	235.6	255.0	146.6	49.2	146.5	199.6	273.5	257.2	2331.9
1951	197.5	251.3	259.1	106.6	75.8	162.6	128.7	117.5	178.5	282.6	279.7	266.5	2306.3
1952	268.1	253.2	259.7	260.0	244.3	263.0	175.3	92.2	178.5	282.1	279.3	266.3	2822.0
1953	267.7	253.1	119.2	116.2	141.7	148.3	143.4	69.2	171.1	281.2	278.7	266.0	2255.8
1954	267.1	252.9	259.6	237.8	235.7	263.1	163.4	128.7	149.9	282.3	279.4	266.4	2786.3
1955	247.9	232.8	259.7	260.0	194.6	143.3	101.0	113.9	174.0	82.8	139.1	235.4	2184.5
1956	169.2	251.8	259.2	184.5	243.4	221.4	151.5	117.5	178.5	282.8	280.2	266.7	2606.8
1957	268.6	253.4	259.8	260.0	165.3	164.2	159.5	69.2	178.5	282.8	280.1	266.7	2608.1
1958	268.5	253.4	184.8	185.0	236.0	262.4	175.3	92.2	178.5	281.2	278.6	265.9	2661.9
1959	267.1	252.9	186.9	109.8	134.2	161.0	107.6	122.8	178.5	282.4	279.5	232.9	2315.5
1960	219.9	144.5	71.8	185.0	226.7	236.0	47.6	49.2	107.4	272.7	269.3	185.2	2015.2
1961	195.7	231.8	259.0	238.4	234.6	177.0	47.6	49.2	98.2	280.5	278.1	235.8	2325.8
1962	186.7	161.2	259.6	158.5	235.6	262.1	119.5	69.2	140.1	278.0	249.9	263.1	2383.5
1963	264.6	252.2	259.4	259.6	212.2	161.4	151.5	117.5	178.5	282.8	280.2	266.8	2686.8
1964	268.7	253.4	259.8	260.1	165.9	142.8	134.2	49.2	101.2	225.9	275.4	256.1	2392.6
1965	141.4	251.9	259.3	259.5	235.2	252.4	175.3	139.8	178.5	282.8	280.6	266.9	2723.6
1966	269.0	253.5	259.8	260.1	236.1	262.8	125.6	128.7	178.5	280.7	278.2	237.6	2770.6
1967	214.7	252.8	184.6	184.8	235.7	262.4	151.5	49.2	178.5	279.7	277.5	265.4	2536.7
1968	265.9	252.5	227.0	97.9	121.2	161.8	132.8	116.4	143.3	282.7	279.8	250.7	2332.2
1969	223.3	253.3	259.7	260.0	235.9	261.9	122.0	92.2	178.5	282.4	279.6	266.4	2715.3
1970	268.0	253.2	125.0	100.4	105.5	160.5	128.3	117.5	153.9	281.8	279.1	245.1	2218.3
1971	251.5	253.0	259.7	259.9	235.8	263.2	163.4	69.2	178.5	282.5	279.6	266.4	2762.7
1972	268.1	253.2	259.7	260.0	244.2	262.8	97.3	101.8	178.5	279.9	276.6	231.7	2713.8
1973	255.7	252.6	259.5	184.8	235.6	263.5	167.8	92.2	165.5	282.0	279.3	266.3	2704.7
1974	267.7	253.1	259.7	259.9	235.9	263.1	151.5	49.2	164.3	281.3	278.7	266.0	2730.4
1975	267.2	252.9	259.6	259.9	142.8	162.5	175.3	92.2	178.5	282.1	279.3	266.3	2618.7
1976	267.8	253.1	259.7	260.0	150.2	146.8	47.6	49.2	83.5	49.2	99.9	183.2	1850.2
1977	146.8	100.0	49.2	158.4	44.4	49.2	47.6	49.2	89.4	169.5	182.5	166.7	1252.8
1978	180.4	89.8	258.9	184.0	234.4	251.1	121.6	49.2	171.6	281.8	279.1	266.2	2368.0
1979	267.5	206.6	103.1	259.9	235.8	162.8	167.9	139.8	178.5	282.8	280.1	266.7	2551.7
1980	268.5	222.8	259.8	260.0	244.3	259.5	122.0	49.2	178.5	281.8	279.1	266.2	2691.7
1981	267.5	215.0	245.9	114.2	139.4	161.4	142.1	117.8	168.7	282.5	279.6	249.4	2383.5
1982	204.5	253.2	184.7	185.0	235.9	262.0	175.3	92.2	178.5	280.0	277.7	265.5	2594.6
1983	266.2	229.8	49.2	49.2	69.0	102.7	47.6	49.2	178.5	280.3	277.9	265.6	1865.2
1984	266.4	98.8	69.3	84.8	125.2	161.5	163.9	92.2	141.6	282.0	279.2	266.3	2031.2
1985	267.7	253.1	234.6	259.9	203.1	232.6	112.0	115.7	138.4	280.0	277.7	265.5	2640.3
1986	200.1	170.6	259.5	259.8	235.6	262.6	151.5	49.2	137.1	168.1	277.9	265.6	2437.5
1987	266.4	235.9	257.4	259.8	216.6	114.3	102.6	85.7	105.9	107.7	106.4	205.1	2063.8
1988	147.5	183.5	197.1	259.4	243.3	49.2	86.4	85.8	47.6	49.2	111.0	176.1	1636.1
1989	175.1	147.1	174.4	217.6	83.5	259.3	137.4	117.5	136.9	194.5	210.5	211.3	2065.1
1990	209.1	186.3	233.4	184.5	217.6	146.4	47.6	49.2	51.9	49.2	62.7	151.4	1589.4
1991	182.0	92.4	49.2	113.4	60.2	259.8	47.6	49.2	70.6	68.2	176.9	240.8	1410.2
1992	181.2	106.7	119.7	161.4	242.8	218.1	47.6	66.7	47.6	49.2	45.6	168.0	1454.5
1993	185.7	129.8	259.2	184.4	235.0	262.7	163.4	69.2	178.5	280.3	278.0	265.6	2491.7
AVG:	223.3	204.8	209.8	208.8	191.0	189.3	120.3	81.1	140.9	219.8	232.0	241.9	2263.2
MIN:	85.3	68.0	44.6	40.9	40.8	36.9	47.6	49.2	47.6	36.9	36.9	130.6	911.8
MAX:	270.0	253.5	259.9	260.1	244.4	263.5	175.3	139.8	178.5	282.8	280.6	266.9	2822.0

Table 3.5.6-9. Simulated Delta Exports at Tracy Pumping Plant (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-1.1	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	-0.2
1923	0.0	0.0	0.0	2.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
1924	-0.6	-0.8	-0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-12.4	9.8	-4.3
1925	-14.1	3.6	1.7	2.2	0.0	4.1	0.0	0.0	1.6	2.3	1.5	-0.2	2.7
1926	0.0	-1.4	0.1	0.0	0.0	-3.3	0.0	0.0	0.0	0.0	0.0	-5.3	-10.0
1927	2.3	0.0	0.0	0.0	-15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12.9
1928	-4.4	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-2.1	-3.6	-1.6	-11.8
1929	-0.2	0.0	0.0	0.0	0.0	-20.4	0.0	0.0	4.3	4.7	3.9	0.0	-7.8
1930	0.0	-31.6	0.0	0.0	-0.5	-0.1	-1.0	0.0	0.5	8.1	7.5	-10.2	-27.3
1931	0.7	4.8	-3.3	0.0	1.2	0.3	0.0	0.0	0.0	0.0	-0.1	-12.4	-8.8
1932	0.6	-2.5	0.0	0.0	0.0	3.8	-1.4	0.0	-2.8	-1.9	0.1	-0.2	-4.4
1933	0.6	-8.0	-0.7	-1.1	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.5
1934	0.6	2.8	0.0	-4.6	-0.1	-3.1	0.0	0.0	0.0	0.0	0.0	-20.5	-24.9
1935	24.5	-18.1	11.2	0.0	-13.8	-15.2	-5.9	-1.8	-1.1	-2.4	-0.2	-0.4	-23.3
1936	0.2	0.8	5.2	0.0	-27.8	-3.1	-3.1	0.0	0.0	-2.6	-0.3	-0.6	-31.3
1937	-0.5	-1.3	0.0	0.0	-32.0	-2.9	-1.5	0.0	0.0	-2.5	-6.1	-0.3	-47.2
1938	-5.6	0.0	-9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-15.1
1939	0.0	1.9	-0.2	-0.3	-0.3	-0.1	0.0	0.0	0.6	-5.4	0.1	-6.2	-10.0
1940	5.6	1.1	-5.2	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	6.3
1941	-7.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	-19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-19.7
1944	0.0	-1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	-1.4	-0.1	-3.3
1945	-1.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-1.2
1946	0.0	0.0	0.0	0.0	-0.6	-0.7	-0.1	0.0	0.0	0.0	0.0	0.0	-1.5
1947	0.0	0.0	0.0	0.0	0.0	0.6	-0.2	0.0	-0.2	-5.7	-4.3	-0.2	-9.9
1948	-1.0	2.3	-1.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.4
1949	0.0	-5.2	0.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7
1950	-1.1	1.1	-0.1	0.0	0.0	-0.6	-0.2	0.0	-0.3	-2.4	0.0	-0.1	-3.6
1951	-0.6	0.0	0.0	-3.8	-0.5	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-5.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	-7.6	0.0	0.0	-0.2	-0.1	0.0	-0.3	0.0	0.0	0.0	-8.2
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	-0.3
1955	-1.4	1.4	0.0	0.0	0.0	-0.1	0.3	-0.3	-0.3	-1.7	-0.1	-1.3	-3.6
1956	1.2	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.9
1957	0.0	0.0	0.0	0.0	-4.9	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-5.1
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1959	0.0	0.0	-2.7	-0.4	-0.4	0.0	-0.9	0.7	0.0	0.0	0.0	-16.7	-20.4
1960	13.5	-19.4	-6.6	0.0	0.0	-1.9	0.0	0.0	0.1	-0.8	-0.6	-1.3	-17.1
1961	5.3	-6.7	0.0	0.1	0.0	-9.4	0.0	0.0	-0.8	-0.2	-0.2	-1.6	-13.6
1962	-1.1	2.4	0.0	0.1	0.0	0.0	-0.9	0.0	-1.1	0.0	10.7	0.0	10.1
1963	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
1964	0.0	0.0	0.0	0.0	0.0	-1.2	2.6	0.0	-12.7	4.9	0.0	2.4	-4.1
1965	-5.9	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-1.0	0.0	0.0	0.0	0.1	-1.1	-0.1	0.0	0.0	0.0	-2.1
1969	-2.3	0.0	0.0	0.0	0.0	1.1	5.4	0.0	0.0	0.0	0.0	0.0	4.2
1970	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	5.6
1971	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.3	-0.1	-0.2
1973	-0.9	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	-1.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.3
1975	0.0	0.0	0.0	0.0	-3.6	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-3.9
1976	0.0	0.0	0.0	0.0	0.0	-5.8	0.0	0.0	1.0	0.0	-11.3	-6.5	-22.6
1977	5.0	1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	4.0	-0.3	0.0	12.5
1978	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	1.7
1979	0.0	-2.5	1.0	0.0	0.0	2.4	-0.5	0.0	0.0	0.0	0.0	0.0	0.3
1980	0.0	-0.5	0.0	0.0	0.0	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	-1.8
1981	0.0	-1.7	4.3	0.0	0.0	0.0	-0.9	-1.1	0.7	0.0	0.0	0.0	1.2
1982	-11.8	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	-12.1
1983	-0.1	-2.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.0
1984	0.0	0.4	0.1	0.1	0.1	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.5
1985	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	1.4	0.0	0.0	0.0	0.7
1986	0.5	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	0.0	0.0	-3.7
1987	0.0	-0.5	-0.2	0.0	-0.8	-0.2	0.5	-0.4	-0.5	-0.5	-0.6	-0.2	-3.5
1988	-11.8	-5.2	-2.2	0.0	0.0	0.0	-5.8	1.8	0.0	0.0	-1.7	1.1	-23.8
1989	-0.1	0.7	-0.2	0.2	0.0	0.0	-0.1	0.0	-5.0	-6.3	-3.2	0.0	-14.2
1990	0.4	-3.6	-6.4	0.0	0.0	-0.8	0.0	0.0	3.2	0.0	-5.5	12.1	-0.6
1991	0.7	13.9	-10.8	1.7	5.0	0.0	0.0	0.0	0.0	-12.1	-5.4	-5.9	-12.9
1992	0.0	-0.5	0.1	0.2	0.0	-1.3	0.0	1.3	0.0	0.0	-25.5	-25.6	-51.4
1993	-4.3	3.2	4.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.6	0.4	0.2	4.3
AVG:	-0.2	-0.9	-0.3	-0.3	-1.3	-0.8	-0.2	0.0	-0.2	-0.3	-0.8	-1.3	-6.6
MIN:	-14.1	-31.6	-10.8	-19.7	-32.0	-20.4	-5.9	-1.8	-12.7	-12.1	-25.5	-25.6	-51.4
MAX:	24.5	13.9	11.2	2.4	5.0	4.1	5.4	1.8	4.3	8.1	10.7	12.1	12.5

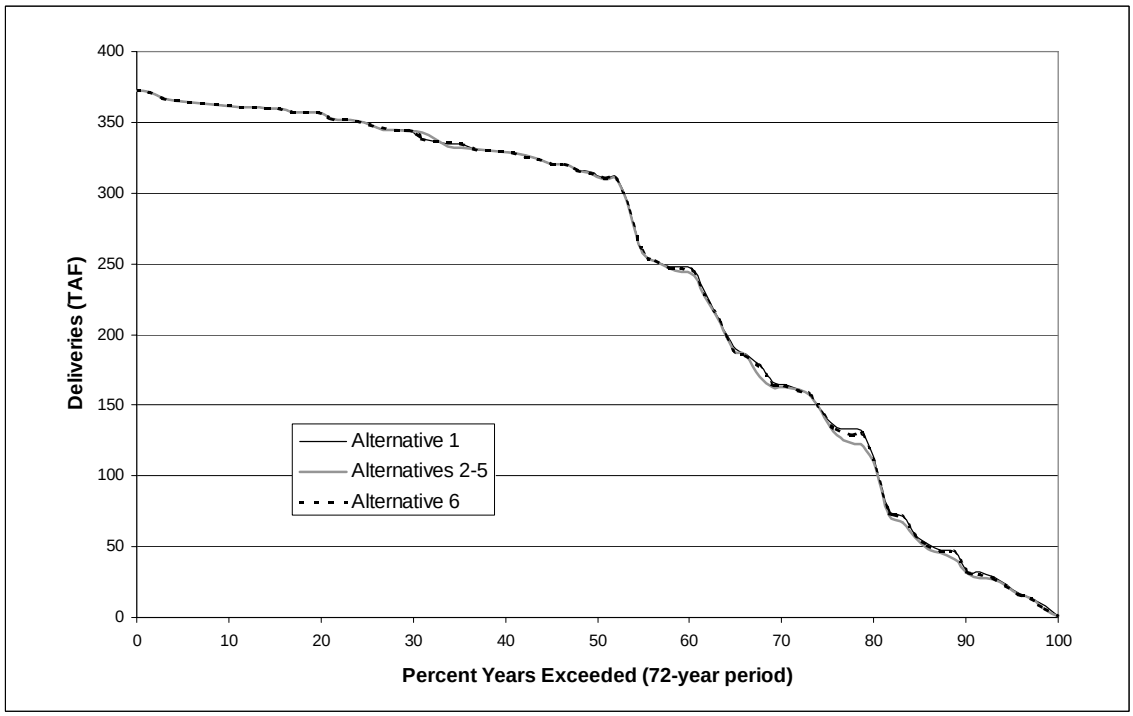
Table 3.5.6-10. Simulated Delta Exports at Tracy Pumping Plant (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0.0	-0.9	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	-0.2
1923	0.0	-0.6	0.0	16.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
1924	6.8	1.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.9	9.5	13.7
1925	-12.7	2.3	1.8	2.2	0.0	-4.7	0.0	0.0	-4.8	-4.0	-1.9	-0.1	-22.0
1926	0.4	1.5	0.1	0.0	0.0	-0.9	0.0	0.0	0.0	0.0	0.0	-0.2	0.9
1927	-1.2	0.0	0.0	0.0	-11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-13.1
1928	-11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.4	-1.7	-13.1
1929	-0.5	0.0	0.0	0.0	0.1	-2.8	0.0	0.0	0.6	-0.1	-0.4	0.0	-3.1
1930	0.0	-19.1	0.0	0.0	-0.1	0.0	-0.2	0.0	0.1	7.6	6.8	-0.3	-5.2
1931	0.1	-0.7	-4.1	0.0	0.1	-0.8	0.0	0.0	0.0	0.0	-0.2	0.3	-5.4
1932	-5.4	0.7	0.0	0.0	0.0	-1.6	-0.3	0.0	-2.7	-2.1	-0.7	0.0	-12.1
1933	0.0	1.2	-0.2	-0.2	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
1934	0.0	-0.1	0.0	-1.3	-0.1	-0.7	0.0	0.0	0.0	0.0	0.0	-0.2	-2.4
1935	5.8	-0.2	4.1	0.0	3.1	-18.9	-1.6	-1.2	-0.8	-2.6	0.0	-0.1	-12.5
1936	1.0	-3.6	1.8	0.0	0.4	-0.5	-0.6	0.0	0.0	-16.2	0.0	-0.1	-17.8
1937	0.1	-0.9	0.0	0.0	7.9	0.0	-0.4	0.0	0.1	-12.8	-6.5	-0.1	-12.7
1938	-0.8	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
1939	0.0	15.6	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.2	-0.5	-0.2	-1.4	13.0
1940	1.2	-2.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	1.0
1941	-7.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	11.5
1943	0.0	0.0	0.0	-6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.4
1944	0.0	-3.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.7	0.1	6.9
1945	0.3	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	0.0	-0.3
1946	0.0	-14.1	0.0	0.0	8.2	-1.1	-0.1	0.0	0.0	0.0	0.0	0.0	-7.2
1947	0.0	0.0	0.0	0.0	0.1	2.3	-0.2	0.0	-2.0	-13.8	-8.4	-0.4	-22.4
1948	-2.1	1.5	1.7	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.1	1.5
1949	0.1	0.5	-1.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0
1950	2.5	-2.6	0.0	0.0	0.0	-3.6	-1.0	0.0	0.6	-13.7	0.0	-0.1	-18.0
1951	-4.2	0.0	0.0	-4.1	-0.5	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-9.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	-38.9	0.0	0.0	-0.1	-0.1	0.0	-0.4	0.0	0.0	0.0	-39.6
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	-0.3
1955	-3.5	3.5	0.0	0.0	0.7	0.5	0.0	-0.3	0.1	-0.9	-1.0	-1.3	-2.1
1956	1.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1
1957	0.0	0.0	0.0	0.0	-16.0	-1.3	0.0	0.0	0.0	0.0	0.1	0.1	-17.1
1958	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
1959	-0.1	0.0	-24.9	-1.1	-1.2	0.0	-0.1	0.3	0.0	0.0	0.0	3.8	-23.4
1960	0.9	-2.1	-0.2	0.0	0.0	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.2	-2.0
1961	6.1	-7.3	0.0	0.1	0.0	-5.0	0.0	0.0	-0.4	0.0	0.0	0.0	-6.6
1962	0.0	4.5	0.0	1.0	0.0	0.0	-0.1	0.0	-0.3	0.0	3.4	0.1	8.6
1963	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
1964	0.0	0.0	0.0	0.0	0.0	-1.2	3.2	0.0	-1.5	-10.4	0.0	6.6	-3.3
1965	-6.5	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	-6.9
1966	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	-0.9	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-1.1
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	16.0
1971	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.3	-0.1	-0.2
1973	1.6	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.4	0.0	0.0	0.0	1.1
1974	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	1.4	-0.1	-0.1	0.0	1.0
1975	-0.1	0.0	0.0	0.0	-59.3	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	-60.2
1976	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	0.5	0.0	0.1	0.3	0.3
1977	1.1	3.8	0.0	2.2	0.0	0.0	0.0	0.0	0.2	-12.1	-0.3	0.0	-5.1
1978	-0.8	1.2	0.0	0.0	0.0	-2.1	0.0	0.0	-0.2	0.0	0.0	0.0	-1.9
1979	0.0	-1.6	0.5	0.0	0.0	2.3	0.2	0.0	0.0	0.0	0.0	0.0	1.4
1980	0.0	-0.6	0.0	0.0	0.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0	-1.9
1981	0.0	-5.9	18.0	0.0	0.0	0.0	-0.1	-0.3	0.2	0.0	0.0	0.0	11.9
1982	-3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.8
1983	0.0	-0.6	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0
1984	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
1985	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	1.3	0.0	0.0	0.0	0.6
1986	0.4	-2.7	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-13.9	0.0	0.0	-16.5
1987	0.0	-3.5	-0.1	0.0	14.0	0.4	0.4	-0.4	-0.5	-0.5	-0.5	-0.1	9.0
1988	-3.3	-0.1	-0.5	0.0	0.0	0.0	-0.2	0.1	0.0	0.0	-2.1	-0.3	-6.5
1989	1.6	-0.4	0.5	-0.4	0.1	0.0	-0.2	0.0	-0.2	-3.2	-0.7	-0.2	-3.1
1990	-3.7	1.0	-2.9	0.0	0.0	0.9	0.0	0.0	1.1	0.0	-1.8	4.1	-1.1
1991	0.5	12.3	-14.0	0.2	-0.1	0.0	0.0	0.0	0.0	-1.1	-0.1	-1.0	-3.2
1992	0.0	-0.6	0.1	0.2	0.0	-0.1	0.0	-2.7	0.0	0.0	-16.9	-1.1	-21.1
1993	-1.5	5.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	8.8
AVG:	-0.5	-0.1	-0.2	0.1	-0.7	-0.6	0.0	-0.1	-0.1	-1.2	-0.5	0.2	-3.8
MIN:	-12.7	-19.1	-38.9	-6.4	-59.3	-18.9	-1.6	-2.7	-4.8	-16.2	-16.9	-1.7	-60.2
MAX:	6.8	15.6	18.0	16.1	14.0	2.3	3.2	0.3	1.4	11.5	6.8	9.5	16.0

3.5.7 CVP Deliveries

This section presents Central Valley Project deliveries to both agricultural and municipal and industrial (M&I) contractors. Delivery results are separated into North-of-Delta and South-of-Delta categories. Figures illustrate overall trends and compare each action alternative to Alternative 1. Monthly results and action alternative comparisons to Alternative 1 are provided in tables.

Figure 3.5.7-1. Exceedence for Simulated Annual CVP North-of-Delta Agricultural Water Service Deliveries, 2020 LOD



The bar charts depicting deliveries (see the two graphs below) shown in this appendix show Alternative 1 deliveries and changes from these deliveries in the action alternatives. Decreases in deliveries are shown as negative values below the x-axis, while increases in deliveries are stacked above the Alternative 1 delivery bars.

Figure 3.5.7-2. Simulated Annual CVP North-of-Delta Agricultural Deliveries, 2020 LOD (Alternative 2-5 comparison to Alternative 1)

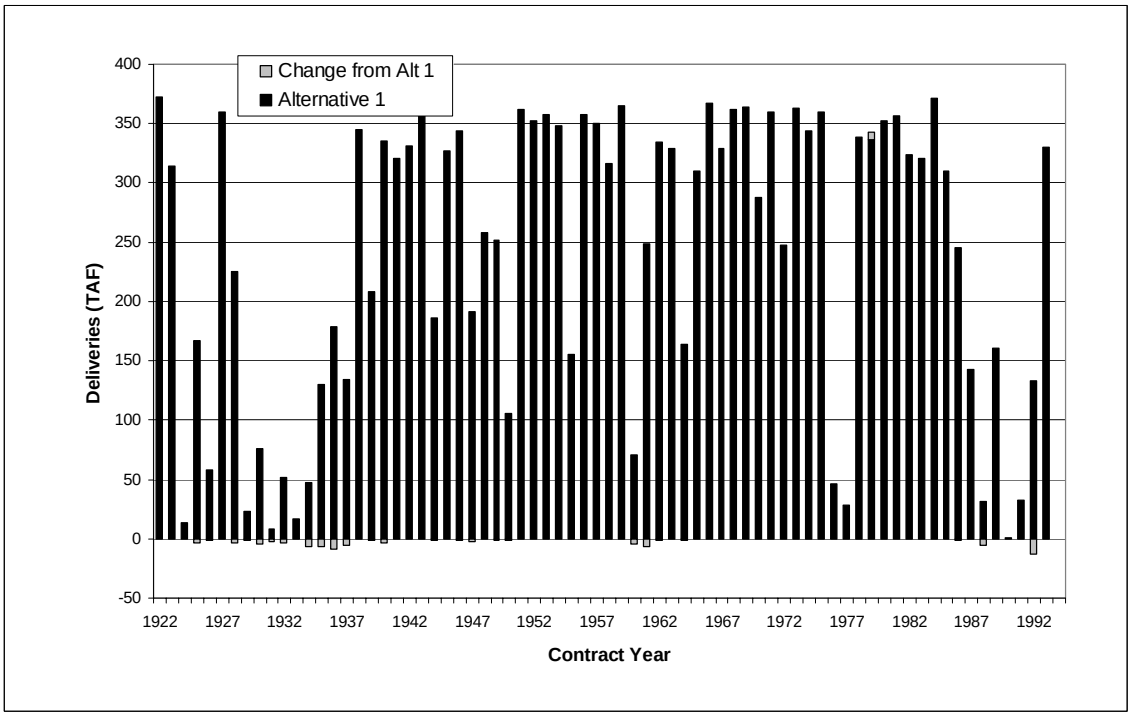


Figure 3.5.7-3. Simulated Annual CVP North-of-Delta Agricultural Water Service Deliveries, 2020 LOD (Alternative 6 comparison to Alternative 1)

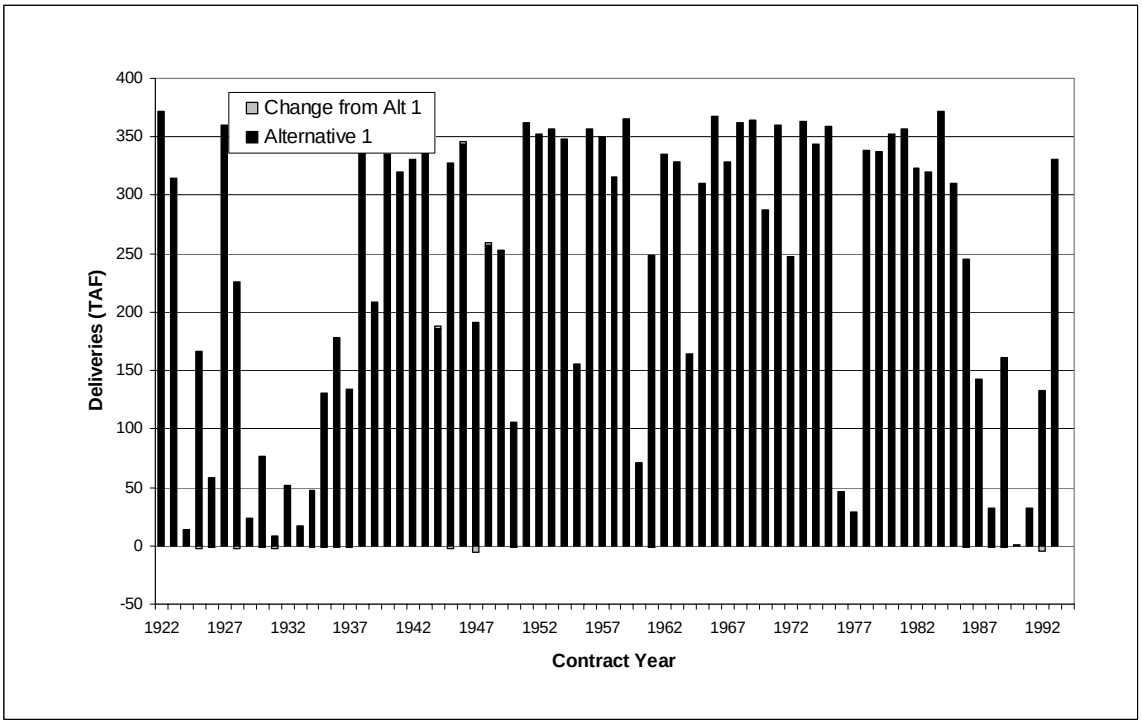


Table 3.5.7-1. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF) Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	54	62	73	74	66	34	372
1923	1	0	0	0	0	8	35	60	63	69	62	17	315
1924	6	1	0	0	0	0	1	1	1	1	1	0	14
1925	0	0	0	0	0	0	13	25	36	41	36	15	167
1926	5	0	0	0	0	1	3	9	12	12	10	6	58
1927	1	0	0	0	0	1	45	62	71	77	68	34	360
1928	2	0	0	0	0	0	23	42	47	48	43	22	226
1929	6	0	0	0	0	0	3	3	3	4	3	2	23
1930	0	0	0	0	0	0	8	13	17	17	15	7	76
1931	2	0	0	0	0	0	1	1	1	1	1	0	8
1932	0	0	0	0	0	1	7	8	10	11	10	5	52
1933	1	0	0	0	0	0	3	3	3	3	3	1	17
1934	0	0	0	0	0	0	7	9	10	10	8	4	47
1935	1	0	0	0	0	0	3	24	31	31	28	14	130
1936	1	0	0	0	0	0	19	31	33	40	36	18	178
1937	5	1	0	0	0	0	13	24	25	28	25	13	134
1938	1	0	0	0	0	0	31	61	77	78	69	28	345
1939	3	0	0	0	2	7	35	31	40	40	36	15	209
1940	3	1	0	0	0	0	35	51	73	75	66	32	335
1941	1	0	0	0	0	0	17	45	75	79	69	35	320
1942	2	0	0	0	0	0	18	52	76	79	69	34	331
1943	8	0	0	0	0	0	32	64	75	78	68	35	361
1944	8	0	0	0	0	1	22	29	36	38	34	18	186
1945	3	0	0	0	0	0	41	49	65	73	64	32	327
1946	0	0	0	0	0	1	52	60	69	68	62	31	344
1947	8	0	0	0	0	0	23	32	34	40	35	19	191
1948	0	0	0	0	0	0	6	35	57	71	62	27	258
1949	5	0	0	0	0	0	30	40	52	53	47	24	252
1950	7	0	0	0	0	0	14	18	20	20	18	9	106
1951	0	0	0	0	0	2	53	53	76	76	68	34	362
1952	1	0	0	0	0	0	40	65	68	77	68	34	352
1953	10	0	0	0	0	4	38	59	71	78	63	35	357
1954	8	0	0	0	0	0	30	64	74	78	60	34	348
1955	9	0	0	0	0	3	18	27	30	30	27	12	156
1956	3	0	0	0	0	5	49	51	72	78	68	31	357
1957	4	2	0	0	0	3	48	56	77	78	69	14	351
1958	0	0	0	0	0	0	19	49	69	75	69	34	316
1959	9	2	0	0	0	2	58	68	73	74	65	15	365
1960	10	2	0	0	0	0	7	10	13	13	11	6	71
1961	1	0	0	0	0	0	30	44	50	54	47	21	248
1962	7	0	0	0	0	0	44	59	65	69	61	30	334
1963	0	0	0	0	0	0	16	54	76	79	69	35	329
1964	2	0	0	0	0	3	27	29	30	32	28	13	164
1965	1	0	0	0	0	2	18	62	71	72	53	32	310
1966	10	0	0	0	0	2	53	65	71	71	63	32	367
1967	10	0	0	0	0	0	17	60	62	78	68	34	329
1968	9	0	0	0	0	0	49	65	70	77	58	34	362
1969	4	0	0	0	0	0	44	68	72	75	67	34	364
1970	4	0	0	0	0	0	39	53	53	58	52	27	288
1971	4	0	0	0	0	3	58	54	70	74	66	32	360
1972	9	0	0	0	0	9	37	40	45	47	42	17	247
1973	0	0	0	0	0	0	44	65	76	77	68	32	363
1974	1	0	0	0	0	0	33	66	76	66	68	35	344
1975	2	0	0	0	0	0	37	67	77	75	66	35	359
1976	0	0	0	0	2	2	6	8	8	8	6	3	46
1977	1	0	0	0	0	1	5	4	6	6	5	1	28
1978	1	0	0	0	0	0	24	62	77	78	69	27	338
1979	11	0	0	0	0	0	36	60	70	71	61	29	337
1980	1	0	0	0	0	0	40	60	70	77	69	34	352
1981	8	1	0	0	0	0	35	58	78	79	69	30	357
1982	0	0	0	0	0	0	25	64	66	78	69	21	324
1983	0	0	0	0	0	0	19	57	73	79	66	27	320
1984	8	0	0	0	0	2	54	68	72	74	62	33	372
1985	2	0	0	0	0	0	41	59	65	66	58	19	310
1986	5	0	0	0	0	0	25	43	53	54	48	16	245
1987	7	1	0	0	0	0	18	25	27	27	25	13	143
1988	3	0	0	0	0	1	4	4	6	6	6	3	32
1989	1	0	0	0	0	0	20	33	35	37	33	2	161
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	3	6	7	7	6	3	32
1992	1	0	0	0	0	0	14	25	25	29	26	14	133
1993	0	0	0	0	0	0	38	44	65	79	68	35	330
AVG:	4	0	0	0	0	1	27	41	50	52	46	21	242
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	1
MAX:	11	2	0	0	2	9	58	68	78	79	69	35	372

Table 3.5.7-2. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	54	62	73	74	66	34	372
1923	1	0	0	0	0	8	35	60	63	69	62	17	314
1924	6	1	0	0	0	0	1	1	1	1	1	0	13
1925	0	0	0	0	0	0	12	25	36	40	35	15	163
1926	5	0	0	0	0	1	3	9	12	12	10	5	57
1927	1	0	0	0	0	1	45	62	71	77	68	34	360
1928	2	0	0	0	0	0	23	41	46	47	42	22	222
1929	6	0	0	0	0	0	2	3	3	3	3	2	22
1930	0	0	0	0	0	0	7	12	16	16	14	6	72
1931	2	0	0	0	0	0	1	1	1	1	1	0	5
1932	0	0	0	0	0	0	7	7	10	10	9	5	48
1933	1	0	0	0	0	0	3	3	3	3	3	1	16
1934	0	0	0	0	0	0	6	7	8	9	7	3	41
1935	1	0	0	0	0	0	2	23	29	29	26	13	124
1936	1	0	0	0	0	0	18	30	32	38	34	17	170
1937	5	1	0	0	0	0	13	23	24	27	24	13	129
1938	1	0	0	0	0	0	31	61	77	78	69	28	345
1939	3	0	0	0	2	7	35	31	39	39	36	15	207
1940	3	1	0	0	0	0	35	50	72	74	65	32	332
1941	1	0	0	0	0	0	17	45	75	79	69	35	320
1942	2	0	0	0	0	0	18	52	76	79	69	34	331
1943	8	0	0	0	0	0	32	64	75	78	68	35	361
1944	8	0	0	0	0	1	22	28	35	38	34	18	185
1945	3	0	0	0	0	0	41	49	65	73	64	32	327
1946	0	0	0	0	0	1	52	60	69	67	62	31	343
1947	8	0	0	0	0	0	23	32	33	39	35	18	189
1948	0	0	0	0	0	0	6	35	57	71	62	27	258
1949	5	0	0	0	0	0	30	40	52	52	47	24	251
1950	7	0	0	0	0	0	14	18	19	20	18	9	104
1951	0	0	0	0	0	2	53	53	76	76	68	34	362
1952	1	0	0	0	0	0	40	65	68	77	68	34	352
1953	10	0	0	0	0	4	38	59	71	78	63	35	357
1954	8	0	0	0	0	0	30	64	74	78	60	34	348
1955	9	0	0	0	0	3	18	27	30	30	27	12	156
1956	3	0	0	0	0	5	49	51	72	78	68	31	357
1957	4	2	0	0	0	3	48	56	77	78	69	14	351
1958	0	0	0	0	0	0	19	49	69	75	69	34	316
1959	9	2	0	0	0	2	58	68	73	74	65	15	365
1960	10	2	0	0	0	0	7	9	12	12	10	5	67
1961	1	0	0	0	0	0	29	43	49	52	46	21	241
1962	6	0	0	0	0	0	43	58	65	69	61	30	333
1963	0	0	0	0	0	0	16	54	76	79	69	35	329
1964	2	0	0	0	0	3	27	29	29	32	28	13	163
1965	1	0	0	0	0	2	18	62	71	71	53	32	310
1966	10	0	0	0	0	2	53	65	71	71	63	32	367
1967	10	0	0	0	0	0	17	60	62	78	68	34	329
1968	9	0	0	0	0	0	49	65	70	77	58	34	362
1969	4	0	0	0	0	0	44	68	72	75	67	34	364
1970	4	0	0	0	0	0	39	53	53	58	52	27	288
1971	4	0	0	0	0	3	58	54	70	74	66	32	360
1972	9	0	0	0	0	9	37	40	45	47	42	17	247
1973	0	0	0	0	0	0	44	65	76	77	68	32	363
1974	1	0	0	0	0	0	33	66	76	66	68	35	344
1975	2	0	0	0	0	0	37	67	77	75	66	35	359
1976	0	0	0	0	2	2	6	8	8	8	6	3	46
1977	1	0	0	0	0	1	5	3	6	6	5	1	28
1978	1	0	0	0	0	0	24	62	77	78	69	27	338
1979	11	0	0	0	0	0	36	61	72	72	62	29	343
1980	1	0	0	0	0	0	40	60	70	77	69	34	352
1981	8	1	0	0	0	0	35	58	78	79	69	30	357
1982	0	0	0	0	0	0	25	64	66	78	69	21	324
1983	0	0	0	0	0	0	19	57	73	79	66	27	320
1984	8	0	0	0	0	2	54	68	72	74	62	33	372
1985	2	0	0	0	0	0	41	59	65	66	58	19	310
1986	5	0	0	0	0	0	25	43	53	54	48	16	244
1987	7	1	0	0	0	0	18	25	27	27	24	13	142
1988	3	0	0	0	0	1	3	4	5	5	5	2	27
1989	1	0	0	0	0	0	20	33	35	37	33	2	161
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	3	5	7	7	6	3	32
1992	1	0	0	0	0	0	12	23	23	26	23	12	121
1993	0	0	0	0	0	0	38	44	65	79	68	35	330
AVG:	4	0	0	0	0	1	26	41	49	52	46	21	241
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	1
MAX:	11	2	0	0	2	9	58	68	78	79	69	35	372

Table 3.5.7-3. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF) Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	6	0	0	0	0	1	54	62	73	74	66	34	372
1923	1	0	0	0	0	8	35	60	63	69	62	17	314
1924	6	1	0	0	0	0	1	1	1	1	1	0	14
1925	0	0	0	0	0	0	13	25	36	40	36	15	164
1926	5	0	0	0	0	1	3	9	12	12	10	5	57
1927	1	0	0	0	0	1	45	62	71	77	68	34	360
1928	2	0	0	0	0	0	23	41	46	47	42	22	223
1929	6	0	0	0	0	0	2	3	3	4	3	2	23
1930	0	0	0	0	0	0	7	13	16	17	15	7	75
1931	2	0	0	0	0	0	1	1	1	1	1	0	6
1932	0	0	0	0	0	0	7	8	10	11	9	5	51
1933	1	0	0	0	0	0	3	3	3	3	3	1	16
1934	0	0	0	0	0	0	6	8	9	10	8	4	46
1935	1	0	0	0	0	0	3	24	30	30	27	14	129
1936	1	0	0	0	0	0	19	31	33	39	35	18	177
1937	5	1	0	0	0	0	13	24	24	27	25	13	133
1938	1	0	0	0	0	0	31	61	77	78	69	28	345
1939	3	0	0	0	2	7	35	31	40	39	36	15	208
1940	3	1	0	0	0	0	35	51	73	74	65	32	334
1941	1	0	0	0	0	0	17	45	75	79	69	35	320
1942	2	0	0	0	0	0	18	52	76	79	69	34	331
1943	8	0	0	0	0	0	32	64	75	78	68	35	361
1944	8	0	0	0	0	1	22	29	36	38	34	18	188
1945	3	0	0	0	0	0	41	49	65	72	63	32	325
1946	0	0	0	0	0	1	53	61	69	68	62	31	346
1947	8	0	0	0	0	0	23	31	33	38	34	18	186
1948	0	0	0	0	0	0	6	35	57	71	62	27	259
1949	5	0	0	0	0	0	30	40	53	53	47	24	253
1950	7	0	0	0	0	0	14	18	19	20	18	9	104
1951	0	0	0	0	0	2	53	53	76	76	68	34	362
1952	1	0	0	0	0	0	40	65	68	77	68	34	352
1953	10	0	0	0	0	4	38	59	71	78	63	35	357
1954	8	0	0	0	0	0	30	64	74	78	60	34	348
1955	9	0	0	0	0	3	18	27	30	30	27	12	156
1956	3	0	0	0	0	5	49	51	72	78	68	31	357
1957	4	2	0	0	0	3	48	56	77	78	69	14	351
1958	0	0	0	0	0	0	19	49	69	75	69	34	316
1959	9	2	0	0	0	2	58	68	73	74	65	15	365
1960	10	2	0	0	0	0	7	10	12	12	11	6	70
1961	1	0	0	0	0	0	30	44	50	53	47	21	247
1962	7	0	0	0	0	0	44	59	65	69	62	30	335
1963	0	0	0	0	0	0	16	54	76	79	69	35	329
1964	2	0	0	0	0	3	27	29	29	32	28	13	164
1965	1	0	0	0	0	2	18	62	71	72	53	32	310
1966	10	0	0	0	0	2	53	65	71	71	63	32	367
1967	10	0	0	0	0	0	17	60	62	78	68	34	329
1968	9	0	0	0	0	0	49	65	70	77	58	34	362
1969	4	0	0	0	0	0	44	68	72	75	67	34	364
1970	4	0	0	0	0	0	39	53	53	58	52	27	288
1971	4	0	0	0	0	3	58	54	70	74	66	32	360
1972	9	0	0	0	0	9	37	40	45	47	42	17	247
1973	0	0	0	0	0	0	44	65	76	77	68	32	363
1974	1	0	0	0	0	0	33	66	76	66	68	35	344
1975	2	0	0	0	0	0	37	67	77	75	66	35	359
1976	0	0	0	0	2	2	6	8	8	8	6	3	46
1977	1	0	0	0	0	1	5	3	6	6	5	1	28
1978	1	0	0	0	0	0	24	62	77	78	69	27	338
1979	11	0	0	0	0	0	36	60	70	71	61	29	336
1980	1	0	0	0	0	0	40	60	70	77	69	34	352
1981	8	1	0	0	0	0	35	58	78	79	69	30	357
1982	0	0	0	0	0	0	25	64	66	78	69	21	324
1983	0	0	0	0	0	0	19	57	73	79	66	27	320
1984	8	0	0	0	0	2	54	68	72	74	62	33	372
1985	2	0	0	0	0	0	41	59	65	66	58	19	310
1986	5	0	0	0	0	0	25	43	53	54	48	16	244
1987	7	1	0	0	0	0	18	25	27	27	24	13	142
1988	3	0	0	0	0	1	4	4	5	6	5	3	31
1989	1	0	0	0	0	0	20	33	34	37	33	2	160
1990	1	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	3	5	7	7	6	3	32
1992	1	0	0	0	0	0	13	24	24	28	25	13	129
1993	0	0	0	0	0	0	38	44	65	79	68	35	330
AVG:	4	0	0	0	0	1	26	41	50	52	46	21	241
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	1
MAX:	11	2	0	0	2	9	58	68	78	79	69	35	372

Table 3.5.7-4. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-1
1925	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-3
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1931	0	0	0	0	0	0	0	0	0	-1	0	0	-3
1932	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-4
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-6
1935	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-7
1936	0	0	0	0	0	0	-1	-2	-2	-2	-2	-1	-9
1937	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-5
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	-1
1940	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-1
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	-1
1947	0	0	0	0	0	0	0	0	0	-1	0	0	-2
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	-1
1950	0	0	0	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-4
1961	0	0	0	0	0	0	-1	-1	-1	-2	-1	-1	-7
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	-1
1965	0	0	0	0	0	0	0	0	0	0	0	0	-1
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	1	1	1	1	1	1	6
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	-1
1987	0	0	0	0	0	0	0	0	0	0	0	0	-1
1988	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-5
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	-1	-2	-2	-3	-2	-1	-13
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	0	0	0	0	0	0	-1	-2	-2	-3	-2	-1	-13
MAX:	0	0	0	0	0	0	1	1	1	1	1	1	6

Table 3.5.7-5. Simulated CVP North-of-Delta Agricultural Water Service Deliveries (TAF) Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	-1	0	0	-2
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-3
1929	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	-1
1931	0	0	0	0	0	0	0	0	0	0	0	0	-2
1932	0	0	0	0	0	0	0	0	0	0	0	0	-1
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	-1
1935	0	0	0	0	0	0	0	0	0	0	0	0	-2
1936	0	0	0	0	0	0	0	0	0	0	0	0	-2
1937	0	0	0	0	0	0	0	0	0	0	0	0	-1
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	2
1945	0	0	0	0	0	0	0	0	0	-1	0	0	-2
1946	0	0	0	0	0	0	0	0	1	1	1	0	3
1947	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-6
1948	0	0	0	0	0	0	0	0	0	0	0	0	1
1949	0	0	0	0	0	0	0	0	0	0	0	0	1
1950	0	0	0	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	-1
1961	0	0	0	0	0	0	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	0	0	0	0	0	1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	-1
1987	0	0	0	0	0	0	0	0	0	0	0	0	-1
1988	0	0	0	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	0	0	0	0	-1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-5
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-6
MAX:	0	0	0	0	0	0	0	0	1	1	1	0	3

Figure 3.5.7-4. Exceedence for Simulated Annual CVP North-of-Delta M&I Deliveries, 2020 LOD

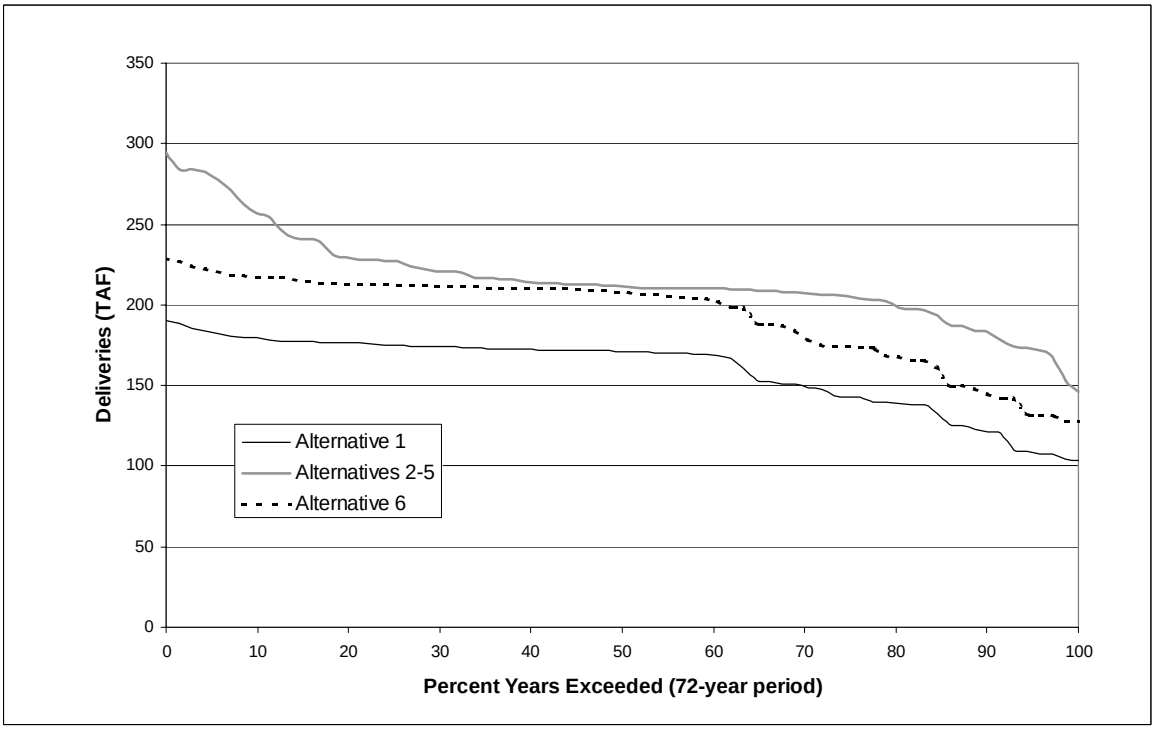


Figure 3.5.7-5. Simulated Annual CVP North-of-Delta M&I Deliveries, 2020 LOD (Alternative 2-5 comparison to Alternative 1)

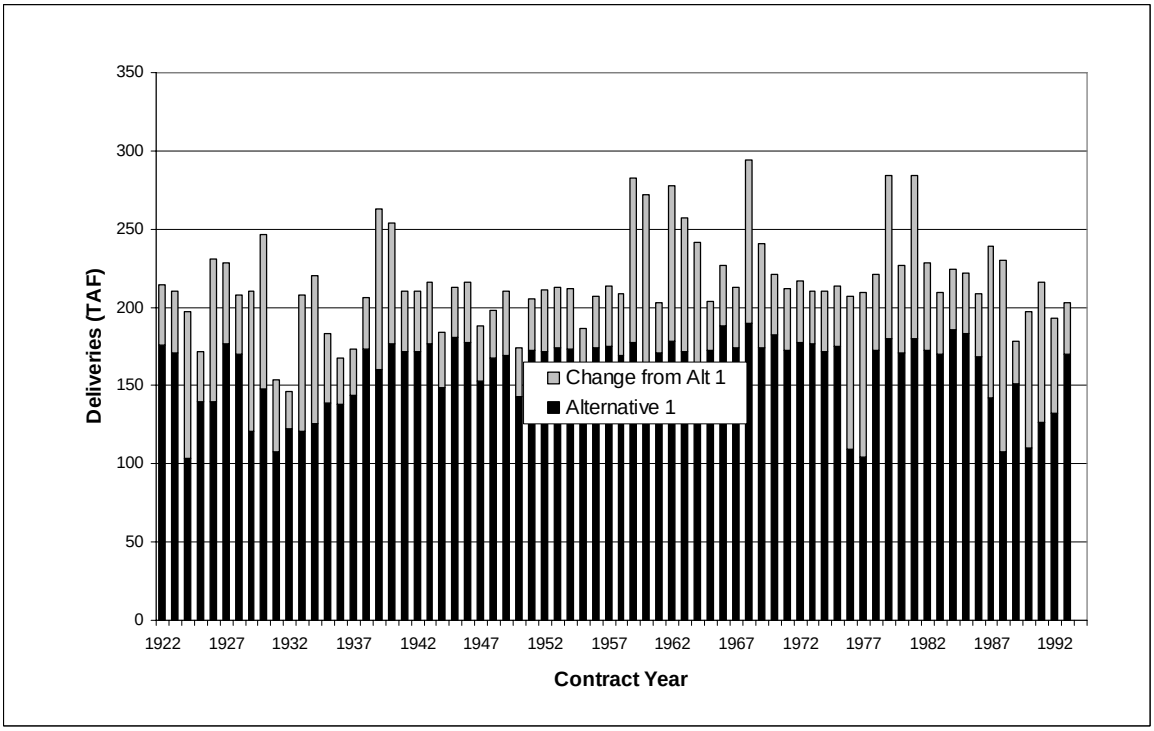


Figure 3.5.7-6. Simulated Annual CVP North-of-Delta M&I Deliveries, 2020 LOD (Alternative 6 comparison to Alternative 1)

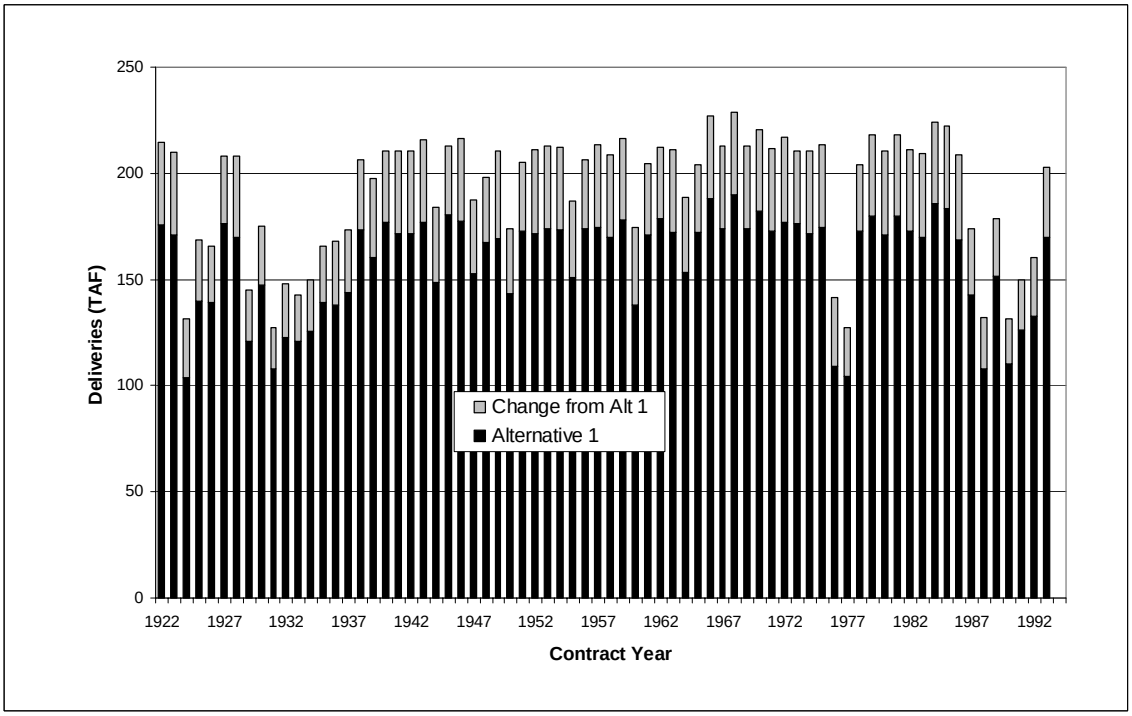


Table 3.5.7-6. Simulated CVP North-of-Delta M&I Deliveries (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	13	8	6	6	6	7	15	18	24	27	25	20	176
1923	11	8	6	6	6	10	11	19	24	27	25	18	171
1924	6	3	2	2	2	3	12	13	16	17	15	11	104
1925	8	6	5	5	5	6	11	14	19	22	23	16	140
1926	10	5	4	4	4	6	7	18	23	19	21	16	139
1927	11	7	6	6	6	8	13	23	24	27	25	20	176
1928	10	7	6	6	6	7	15	22	25	24	25	19	170
1929	9	5	4	4	4	4	12	16	16	16	17	13	121
1930	10	6	5	5	5	5	13	18	23	21	22	16	148
1931	7	4	3	3	3	4	14	13	15	15	16	12	108
1932	8	5	4	4	4	6	10	13	17	18	19	14	123
1933	8	5	4	4	4	4	14	14	19	16	17	13	121
1934	7	5	4	4	4	5	15	15	18	17	18	14	126
1935	9	6	5	5	5	6	7	16	20	22	21	17	139
1936	9	6	5	5	5	6	11	15	19	21	20	16	138
1937	10	7	5	5	5	6	11	16	19	22	23	16	144
1938	12	8	6	6	6	7	13	19	25	27	25	19	173
1939	10	7	5	5	5	6	18	17	25	22	23	17	160
1940	12	8	6	6	6	7	14	18	24	27	27	20	177
1941	11	8	6	6	6	7	10	17	25	27	26	21	172
1942	11	8	6	6	6	7	10	17	25	27	26	21	172
1943	13	8	6	6	6	7	12	19	24	27	28	20	177
1944	11	6	5	5	5	6	12	18	19	21	23	16	148
1945	11	8	6	6	6	7	15	22	24	27	28	20	180
1946	10	8	6	6	6	7	16	22	24	26	27	19	177
1947	11	6	5	5	5	6	12	20	22	22	23	16	153
1948	10	7	6	6	6	7	10	17	24	27	26	20	167
1949	12	7	6	6	6	7	15	17	23	25	26	20	169
1950	11	6	5	5	5	6	12	15	20	22	21	16	143
1951	10	8	6	6	6	8	15	18	24	26	25	20	173
1952	11	8	6	6	6	7	14	19	23	26	25	20	172
1953	14	8	6	6	6	8	13	18	23	27	25	20	174
1954	13	8	6	6	6	7	13	19	24	27	24	20	173
1955	12	6	5	5	5	7	13	15	23	21	22	16	151
1956	12	8	6	6	6	9	15	17	24	26	25	19	174
1957	11	9	6	6	6	7	14	19	25	27	26	18	175
1958	11	8	6	6	6	7	10	18	24	27	26	20	170
1959	13	8	6	6	6	8	18	22	26	25	25	16	178
1960	10	6	5	4	4	5	14	17	18	19	20	16	138
1961	11	7	5	5	5	6	15	21	26	24	25	19	171
1962	13	8	6	6	6	7	16	19	24	27	27	20	179
1963	10	8	6	6	6	7	11	19	25	27	26	21	172
1964	9	6	5	5	5	7	18	18	22	21	21	16	153
1965	11	7	6	6	6	8	12	19	24	26	26	20	172
1966	14	8	6	6	6	8	19	22	27	26	26	21	188
1967	13	8	6	6	6	7	10	20	24	27	26	20	174
1968	13	8	6	6	6	7	18	23	27	26	26	22	190
1969	12	8	6	6	6	7	14	19	24	26	25	20	174
1970	12	8	6	6	6	7	16	23	23	26	27	21	182
1971	11	8	6	6	6	8	16	17	24	26	25	19	173
1972	12	7	6	6	6	8	17	21	26	25	26	18	177
1973	11	8	6	6	6	7	15	19	24	26	27	19	176
1974	11	8	6	6	6	7	13	20	24	25	25	20	172
1975	11	8	6	6	6	7	14	20	25	26	25	20	175
1976	5	4	3	3	3	5	12	15	17	15	14	12	109
1977	6	3	2	2	2	5	13	11	16	18	16	10	104
1978	13	7	6	6	6	7	11	20	25	27	26	19	173
1979	14	8	6	6	6	7	14	19	25	27	28	20	180
1980	10	8	6	6	6	7	14	19	24	26	25	20	171
1981	12	8	6	6	6	7	14	22	28	26	27	20	180
1982	10	8	6	6	6	7	10	21	25	28	26	19	173
1983	10	8	6	6	6	7	10	19	25	27	25	19	170
1984	13	8	6	6	6	8	19	23	23	26	26	20	186
1985	11	8	6	6	6	7	15	24	28	26	27	19	184
1986	11	7	6	6	6	7	15	22	23	25	24	17	169
1987	10	6	4	4	4	5	14	18	21	19	20	16	143
1988	7	4	3	3	3	5	10	13	16	15	17	11	108
1989	10	6	5	5	5	6	12	21	24	22	23	13	151
1990	6	4	3	3	3	4	14	10	18	15	16	13	110
1991	8	5	4	4	4	5	13	16	19	17	18	13	126
1992	7	5	4	4	4	4	12	18	20	19	20	15	132
1993	11	8	6	6	6	7	14	17	23	27	25	20	170
AVG:	11	7	5	5	5	7	13	18	23	24	24	18	159
MIN:	5	3	2	2	2	3	7	10	15	15	14	10	104
MAX:	14	9	6	6	6	10	19	24	28	28	28	22	190

Table 3.5.7-7. Simulated CVP North-of-Delta M&I Deliveries (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	15	10	7	6	6	9	19	23	30	33	32	24	214
1923	14	10	7	6	6	12	15	24	29	33	32	22	210
1924	9	6	3	3	3	17	27	28	29	28	25	20	197
1925	11	6	5	5	5	9	16	20	26	27	26	17	172
1926	11	5	4	4	4	20	23	34	38	31	31	26	231
1927	20	16	7	6	6	10	17	27	29	33	32	24	228
1928	13	9	6	6	6	7	19	28	32	30	30	22	208
1929	10	5	4	4	3	19	27	32	29	27	28	23	210
1930	17	6	4	4	4	19	28	35	39	32	31	26	246
1931	16	13	10	3	3	8	20	18	18	16	17	12	154
1932	8	5	4	4	4	10	16	19	23	20	20	14	146
1933	8	4	3	3	3	19	29	29	32	27	28	22	208
1934	13	5	3	3	3	18	29	31	33	28	28	24	220
1935	18	14	5	5	5	8	12	22	27	28	23	17	183
1936	10	6	5	5	5	9	16	21	25	27	22	17	168
1937	11	7	5	5	5	8	16	22	25	27	25	17	173
1938	13	8	6	6	6	9	17	24	30	33	32	24	206
1939	12	9	6	5	5	16	31	33	40	38	38	29	263
1940	22	18	16	15	12	9	18	23	29	33	34	24	254
1941	14	10	7	6	6	9	14	22	30	34	32	25	211
1942	14	10	7	6	6	9	14	22	30	34	32	25	211
1943	16	10	7	6	6	9	16	24	29	33	34	24	216
1944	14	9	6	5	5	9	17	24	26	27	25	17	184
1945	12	8	6	6	6	9	19	26	29	33	35	24	213
1946	13	10	7	6	6	9	19	26	29	32	33	24	216
1947	13	9	6	5	5	9	17	26	28	27	25	17	188
1948	11	7	6	6	6	8	13	22	29	34	32	24	198
1949	15	10	7	6	6	8	20	23	29	31	32	23	210
1950	12	7	6	5	5	8	17	21	26	27	23	17	174
1951	11	8	6	6	6	10	19	22	29	33	31	24	205
1952	14	10	7	6	6	9	18	24	28	33	32	24	211
1953	16	10	7	6	6	10	17	23	29	33	31	24	213
1954	15	10	7	6	6	9	17	24	29	33	31	24	212
1955	14	9	6	5	5	10	19	21	30	27	25	17	187
1956	13	8	6	6	6	11	18	22	29	33	32	24	207
1957	14	11	7	6	6	9	18	24	30	33	32	22	213
1958	14	11	7	6	6	9	14	23	29	33	32	24	209
1959	15	10	7	6	6	19	31	36	41	40	41	29	282
1960	23	18	15	14	13	18	29	32	37	31	26	16	272
1961	11	6	5	5	5	7	21	27	32	30	31	21	203
1962	14	9	7	6	6	18	28	33	38	42	43	33	278
1963	23	19	16	16	15	9	15	23	30	33	32	25	257
1964	12	9	6	5	5	20	32	34	37	36	30	17	242
1965	12	7	6	6	6	10	15	24	29	33	32	24	204
1966	16	10	7	6	6	10	22	27	32	32	33	25	227
1967	16	10	7	6	6	9	14	24	29	33	32	25	213
1968	16	10	7	6	6	19	31	37	42	42	42	35	294
1969	24	19	16	6	6	10	18	24	29	32	31	24	241
1970	15	10	7	6	6	9	20	28	28	32	33	25	221
1971	14	10	7	6	6	10	19	22	29	32	31	24	212
1972	15	10	6	6	6	9	22	28	32	31	32	21	217
1973	12	9	6	6	6	9	19	24	29	33	34	24	210
1974	14	10	7	6	6	9	17	24	29	31	32	24	211
1975	14	10	7	6	6	9	18	24	30	33	31	24	213
1976	8	7	4	3	3	18	27	31	32	27	25	22	207
1977	16	10	2	2	2	20	28	26	30	29	26	19	210
1978	22	9	6	6	6	15	15	24	30	33	32	23	221
1979	17	10	7	6	6	19	27	33	39	42	44	33	284
1980	23	18	7	6	6	9	18	23	29	32	32	24	227
1981	15	10	7	6	6	19	27	36	42	41	43	33	284
1982	23	18	7	6	6	9	15	25	30	34	33	23	228
1983	13	10	7	6	6	9	14	24	30	33	32	24	209
1984	15	10	7	6	6	10	23	28	29	32	33	24	224
1985	14	10	7	6	6	9	19	28	33	33	34	24	222
1986	14	10	7	6	6	7	21	28	29	31	30	19	209
1987	11	7	5	4	4	17	29	34	37	34	32	26	239
1988	17	13	12	9	3	20	25	29	29	26	27	20	230
1989	10	6	5	5	5	8	17	27	30	28	25	14	179
1990	7	4	3	3	3	15	29	26	34	25	26	21	197
1991	9	5	4	4	4	19	28	32	33	28	29	22	216
1992	17	8	4	4	4	16	26	26	26	24	22	16	193
1993	12	8	6	6	6	9	18	21	28	33	31	24	203
AVG:	14	10	7	6	6	12	21	26	31	31	31	23	216
MIN:	7	4	2	2	2	7	12	18	18	16	17	12	146
MAX:	24	19	16	16	15	20	32	37	42	42	44	35	294

Table 3.5.7-8. Simulated CVP North-of-Delta M&I Deliveries (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	15	10	7	6	6	9	19	23	30	33	32	24	214
1923	14	10	7	6	6	12	15	24	29	33	32	22	210
1924	9	6	3	3	3	8	17	19	20	18	16	11	131
1925	8	6	5	5	5	9	16	20	26	27	26	17	168
1926	11	5	4	4	4	10	14	24	29	21	22	17	165
1927	11	7	6	6	6	10	17	27	29	33	32	24	208
1928	13	9	6	6	6	7	19	28	32	30	30	22	208
1929	10	5	4	4	3	9	18	22	20	18	18	13	145
1930	9	6	4	4	4	10	19	25	30	23	22	17	175
1931	7	3	3	3	3	8	20	18	18	16	17	12	127
1932	8	5	4	4	4	10	16	19	23	20	20	15	148
1933	8	4	3	3	3	9	20	20	22	18	18	13	142
1934	7	5	4	3	4	9	20	22	24	19	19	15	150
1935	9	6	5	5	5	8	12	22	27	28	23	17	166
1936	10	6	5	5	5	9	16	21	25	27	22	17	168
1937	11	7	5	5	5	8	16	22	25	27	25	17	173
1938	13	8	6	6	6	9	17	24	30	33	32	24	206
1939	12	9	6	5	5	7	22	23	30	28	29	20	198
1940	13	9	6	6	6	9	18	23	29	33	34	24	211
1941	14	10	7	6	6	9	14	22	30	34	32	25	211
1942	14	10	7	6	6	9	14	22	30	34	32	25	211
1943	16	10	7	6	6	9	16	24	29	33	34	24	216
1944	14	9	6	5	5	9	17	24	26	27	25	17	184
1945	12	8	6	6	6	9	19	26	29	33	35	24	213
1946	13	10	7	6	6	9	19	26	29	32	33	24	217
1947	13	9	6	5	5	9	17	26	28	27	25	17	188
1948	11	7	6	6	6	8	13	22	29	34	32	24	198
1949	15	10	7	6	6	8	21	23	29	31	32	23	211
1950	12	7	6	5	5	8	17	21	26	27	23	17	174
1951	11	8	6	6	6	10	19	22	29	33	31	24	205
1952	14	10	7	6	6	9	18	24	28	33	32	24	211
1953	16	10	7	6	6	10	17	23	29	33	31	24	213
1954	15	10	7	6	6	9	17	24	29	33	31	24	212
1955	14	9	6	5	5	10	19	21	30	27	25	17	187
1956	13	8	6	6	6	11	18	22	29	33	32	24	207
1957	14	11	7	6	6	9	18	24	30	33	32	22	213
1958	14	11	7	6	6	9	14	23	29	33	32	24	209
1959	15	10	7	6	6	10	22	27	31	31	32	20	217
1960	13	9	5	5	5	8	20	23	28	21	21	17	174
1961	11	6	5	5	5	7	21	27	32	30	31	21	204
1962	14	9	7	6	6	9	19	23	29	33	34	24	212
1963	13	10	7	6	6	9	15	23	30	33	32	25	211
1964	12	9	6	5	5	10	23	24	28	27	24	17	189
1965	12	7	6	6	6	10	15	24	29	33	32	24	204
1966	16	10	7	6	6	10	22	27	32	32	33	25	227
1967	16	10	7	6	6	9	14	24	29	33	32	25	213
1968	16	10	7	6	6	9	22	28	33	33	33	26	229
1969	14	10	7	6	6	10	18	24	29	32	31	24	213
1970	15	10	7	6	6	9	20	28	28	32	33	25	221
1971	14	10	7	6	6	10	19	22	29	32	31	24	212
1972	15	10	6	6	6	9	22	28	32	31	32	21	217
1973	12	9	6	6	6	9	19	24	29	33	34	24	210
1974	14	10	7	6	6	9	17	24	29	31	32	24	211
1975	14	10	7	6	6	9	18	24	30	33	31	24	213
1976	8	7	4	3	3	9	17	21	23	17	15	13	141
1977	6	3	2	2	2	10	19	17	20	19	17	10	127
1978	12	7	6	6	6	9	15	24	30	33	32	23	204
1979	17	10	7	6	6	9	17	24	30	33	34	24	218
1980	13	10	7	6	6	9	18	23	29	32	32	24	210
1981	15	10	7	6	6	9	17	26	33	32	33	24	218
1982	13	10	7	6	6	9	15	25	30	34	33	23	211
1983	13	10	7	6	6	9	14	24	30	33	32	24	209
1984	15	10	7	6	6	10	23	28	29	32	33	24	224
1985	14	10	7	6	6	9	19	28	33	33	34	24	222
1986	14	10	7	6	6	7	21	28	29	31	30	19	209
1987	11	7	5	4	4	8	20	24	28	25	23	17	174
1988	8	4	3	3	3	10	16	20	20	17	17	11	132
1989	10	6	5	5	5	8	17	27	30	28	25	14	179
1990	7	4	3	3	3	5	20	16	25	16	17	12	132
1991	8	5	4	4	4	10	19	23	24	19	19	13	150
1992	7	5	4	4	4	7	17	24	26	24	22	16	160
1993	12	8	6	6	6	9	18	21	28	33	31	24	203
AVG:	12	8	6	5	5	9	18	23	28	29	28	20	193
MIN:	6	3	2	2	2	5	12	16	18	16	15	10	127
MAX:	17	11	7	6	6	12	23	28	33	34	35	26	229

Table 3.5.7-9. Simulated CVP North-of-Delta M&I Deliveries (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	3	3	1	0	0	2	4	5	5	6	6	4	39
1923	3	3	1	0	0	2	4	4	5	6	6	4	39
1924	3	3	1	0	0	14	15	15	13	11	10	9	93
1925	3	0	0	0	0	3	5	6	6	6	2	1	32
1926	1	0	0	0	0	13	15	16	15	12	10	10	92
1927	10	9	1	0	0	2	4	4	5	6	6	4	52
1928	3	3	1	0	0	1	4	6	6	6	6	3	38
1929	1	1	0	0	0	14	15	15	13	11	10	9	90
1930	7	0	0	0	0	14	16	16	16	12	10	10	99
1931	9	9	7	0	0	5	5	5	4	1	1	0	46
1932	0	0	0	0	0	4	6	6	6	2	0	1	24
1933	0	0	0	0	0	14	15	15	13	11	10	9	87
1934	6	0	0	0	0	13	15	15	15	11	10	10	94
1935	9	8	0	0	0	2	4	6	6	6	2	1	44
1936	1	0	0	0	0	3	5	6	6	6	2	1	30
1937	1	0	0	0	0	3	5	6	6	6	2	1	29
1938	1	0	0	0	0	2	4	4	5	6	6	4	33
1939	3	3	1	0	0	10	13	15	15	15	15	12	102
1940	11	10	10	9	6	2	4	4	5	6	6	4	77
1941	3	3	1	0	0	2	4	5	5	6	6	4	39
1942	3	3	1	0	0	2	4	5	5	6	6	4	39
1943	3	3	1	0	0	2	4	4	5	6	6	4	39
1944	3	3	1	0	0	3	5	6	6	6	2	1	36
1945	1	0	0	0	0	2	4	4	5	6	6	4	32
1946	3	3	1	0	0	2	4	5	5	6	7	4	39
1947	3	3	1	0	0	3	5	6	6	6	2	1	35
1948	1	0	0	0	0	1	3	5	5	6	6	4	31
1949	3	3	1	0	0	1	6	6	6	6	6	2	41
1950	1	1	1	0	0	3	5	6	6	6	2	1	31
1951	1	0	0	0	0	2	3	5	5	6	6	4	33
1952	3	3	1	0	0	2	4	4	5	6	6	4	39
1953	3	3	1	0	0	2	4	4	5	6	7	4	39
1954	3	3	1	0	0	2	4	4	5	6	6	4	39
1955	3	3	1	0	0	3	5	6	6	6	2	1	36
1956	1	0	0	0	0	2	4	5	5	6	6	4	33
1957	3	3	1	0	0	2	4	5	5	6	6	4	39
1958	3	3	1	0	0	2	4	4	5	6	6	4	39
1959	3	3	1	0	0	12	13	14	14	16	16	14	105
1960	12	12	10	10	9	13	15	16	19	11	6	1	133
1961	0	0	0	0	0	1	6	6	6	6	6	2	32
1962	1	1	1	0	0	11	13	14	14	16	16	14	99
1963	13	12	10	10	9	2	4	4	5	6	6	4	85
1964	3	3	1	0	0	12	14	16	16	15	8	1	89
1965	1	0	0	0	0	2	3	4	5	6	6	4	32
1966	3	3	1	0	0	2	4	5	5	6	7	4	39
1967	3	3	1	0	0	2	4	4	5	6	6	4	39
1968	3	3	1	0	0	12	13	14	14	16	16	14	104
1969	12	12	10	0	0	2	4	4	5	6	6	4	67
1970	3	3	1	0	0	2	3	4	5	6	7	4	39
1971	3	3	1	0	0	2	3	5	5	6	7	4	39
1972	3	3	1	0	0	1	4	6	6	6	6	3	40
1973	1	1	0	0	0	2	4	4	5	6	6	4	34
1974	3	3	1	0	0	2	4	4	5	6	6	4	39
1975	3	3	1	0	0	2	4	4	5	6	6	4	39
1976	3	3	1	0	0	13	15	16	15	12	10	10	98
1977	9	7	0	0	0	14	15	16	13	11	10	9	105
1978	9	1	0	0	0	8	4	4	5	6	6	4	48
1979	3	3	1	0	0	12	13	14	14	16	16	14	104
1980	12	10	1	0	0	2	4	4	5	6	6	4	56
1981	3	3	1	0	0	12	13	14	14	16	16	14	104
1982	12	10	1	0	0	2	4	4	5	6	6	4	56
1983	3	3	1	0	0	2	4	4	5	6	6	4	39
1984	3	3	1	0	0	2	3	4	5	6	7	4	39
1985	3	3	1	0	0	2	4	4	5	6	6	4	39
1986	3	3	1	0	0	1	6	6	6	6	6	3	40
1987	1	1	1	0	0	12	14	15	16	15	12	10	97
1988	10	9	9	6	0	14	15	15	13	11	10	9	122
1989	0	0	0	0	0	2	5	6	6	6	2	1	27
1990	1	0	0	0	0	11	15	16	16	10	10	9	87
1991	0	0	0	0	0	15	16	16	13	11	10	9	90
1992	9	3	0	0	0	12	14	7	6	6	2	1	61
1993	1	0	0	0	0	2	4	5	5	6	6	4	33
AVG:	4	3	1	0	0	5	7	8	8	8	7	5	57
MIN:	0	0	0	0	0	1	3	4	4	1	0	0	24
MAX:	13	12	10	10	9	15	16	16	19	16	16	14	133

Table 3.5.7-10. Simulated CVP North-of-Delta M&I Deliveries (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	3	3	1	0	0	2	4	5	5	6	6	4	39
1923	3	3	1	0	0	2	4	4	5	6	6	4	39
1924	3	3	1	0	0	5	6	5	4	1	1	0	28
1925	0	0	0	0	0	3	5	6	6	6	2	1	29
1926	1	0	0	0	0	4	6	6	6	2	0	1	26
1927	0	0	0	0	0	2	4	4	5	6	6	4	31
1928	3	3	1	0	0	1	4	6	6	6	6	3	38
1929	1	1	0	0	0	5	6	6	4	1	1	0	24
1930	0	0	0	0	0	4	7	7	7	2	1	1	27
1931	0	0	0	0	0	5	5	5	4	1	1	0	20
1932	0	0	0	0	0	4	6	6	6	2	1	1	25
1933	0	0	0	0	0	5	6	6	4	1	1	0	21
1934	0	0	0	0	0	4	6	6	6	2	1	1	24
1935	0	0	0	0	0	2	5	6	6	6	2	1	27
1936	1	0	0	0	0	3	5	6	6	6	2	1	30
1937	1	0	0	0	0	3	5	6	6	6	2	1	30
1938	1	0	0	0	0	2	4	4	5	6	6	4	33
1939	3	3	1	0	0	1	4	6	6	6	6	3	37
1940	1	1	0	0	0	2	4	4	5	6	6	4	34
1941	3	3	1	0	0	2	4	5	5	6	6	4	39
1942	3	3	1	0	0	2	4	5	5	6	6	4	39
1943	3	3	1	0	0	2	4	4	5	6	6	4	39
1944	3	3	1	0	0	3	5	6	6	6	2	1	36
1945	1	0	0	0	0	2	4	4	5	6	6	4	32
1946	3	3	1	0	0	2	4	5	5	6	7	4	39
1947	3	3	1	0	0	3	5	6	6	6	2	1	35
1948	1	0	0	0	0	1	3	5	5	6	6	4	31
1949	3	3	1	0	0	1	6	6	6	6	7	3	42
1950	1	1	1	0	0	3	5	6	6	6	2	1	31
1951	1	0	0	0	0	2	3	5	5	6	6	4	33
1952	3	3	1	0	0	2	4	4	5	6	6	4	39
1953	3	3	1	0	0	2	4	4	5	6	7	4	39
1954	3	3	1	0	0	2	4	4	5	6	6	4	39
1955	3	3	1	0	0	3	5	6	6	6	2	1	36
1956	1	0	0	0	0	2	4	5	5	6	6	4	33
1957	3	3	1	0	0	2	4	5	5	6	6	4	39
1958	3	3	1	0	0	2	4	4	5	6	6	4	39
1959	3	3	1	0	0	2	4	4	5	6	7	5	39
1960	3	3	1	0	0	3	6	7	10	2	1	1	36
1961	0	0	0	0	0	1	6	6	6	6	6	2	33
1962	1	1	1	0	0	2	4	4	5	6	6	4	34
1963	3	3	1	0	0	2	4	4	5	6	6	4	39
1964	3	3	1	0	0	3	5	6	7	6	2	1	36
1965	1	0	0	0	0	2	3	4	5	6	6	4	32
1966	3	3	1	0	0	2	4	5	5	6	7	4	39
1967	3	3	1	0	0	2	4	4	5	6	6	4	39
1968	3	3	1	0	0	2	4	4	5	6	7	4	39
1969	3	3	1	0	0	2	4	4	5	6	6	4	39
1970	3	3	1	0	0	2	3	4	5	6	7	4	39
1971	3	3	1	0	0	2	3	5	5	6	7	4	39
1972	3	3	1	0	0	1	4	6	6	6	6	3	40
1973	1	1	0	0	0	2	4	4	5	6	6	4	34
1974	3	3	1	0	0	2	4	4	5	6	6	4	39
1975	3	3	1	0	0	2	4	4	5	6	6	4	39
1976	3	3	1	0	0	4	6	6	6	2	1	1	32
1977	0	0	0	0	0	5	6	6	4	2	1	0	23
1978	0	0	0	0	0	2	4	4	5	6	6	4	31
1979	3	3	1	0	0	2	4	4	5	6	6	4	38
1980	3	3	1	0	0	2	4	4	5	6	6	4	39
1981	3	3	1	0	0	2	4	4	5	6	6	4	39
1982	3	3	1	0	0	2	4	4	5	6	6	4	39
1983	3	3	1	0	0	2	4	4	5	6	6	4	39
1984	3	3	1	0	0	2	3	4	5	6	7	4	39
1985	3	3	1	0	0	2	4	4	5	6	6	4	39
1986	3	3	1	0	0	1	6	6	6	6	6	3	40
1987	1	1	1	0	0	3	5	6	6	6	2	1	31
1988	1	0	0	0	0	5	6	6	4	1	1	0	24
1989	0	0	0	0	0	2	5	6	6	6	2	1	27
1990	1	0	0	0	0	1	6	7	6	1	0	0	21
1991	0	0	0	0	0	5	6	6	4	2	1	0	23
1992	0	0	0	0	0	3	5	6	6	6	2	1	28
1993	1	0	0	0	0	2	4	5	5	6	6	4	33
AVG:	2	2	0	0	0	2	5	5	5	5	5	3	34
MIN:	0	0	0	0	0	1	3	4	4	1	0	0	20
MAX:	3	3	1	0	0	5	7	7	10	6	7	5	42

Figure 3.5.7-7. Exceedence for Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2020 LOD

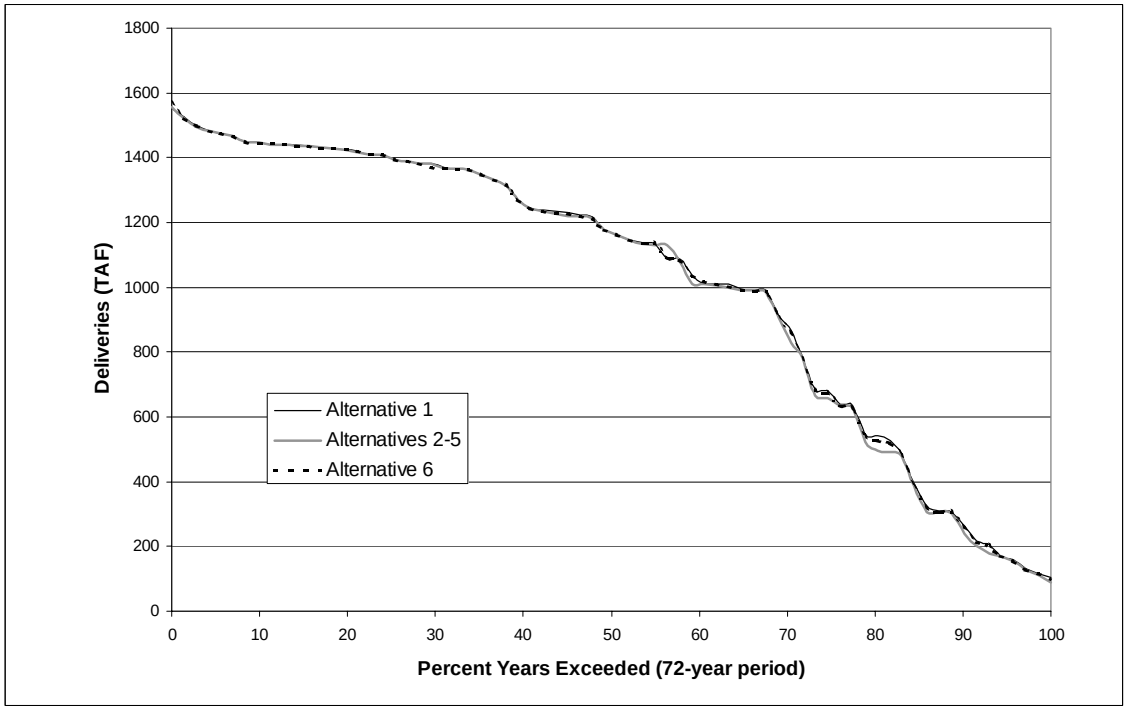


Figure 3.5.7-8. Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2020 LOD (Alternative 2-5 comparison to Alternative 1)

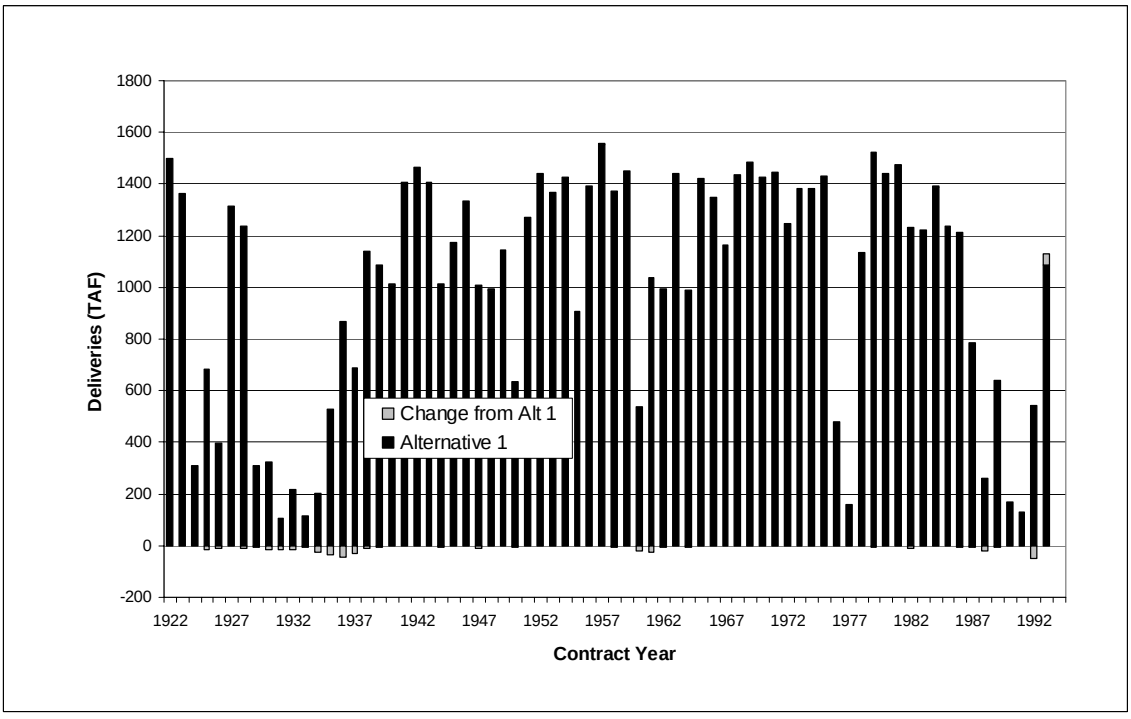


Figure 3.5.7-9. Simulated Annual CVP South-of-Delta Agricultural Water Service Deliveries, 2020 LOD (Alternative 6 comparison to Alternative 1)

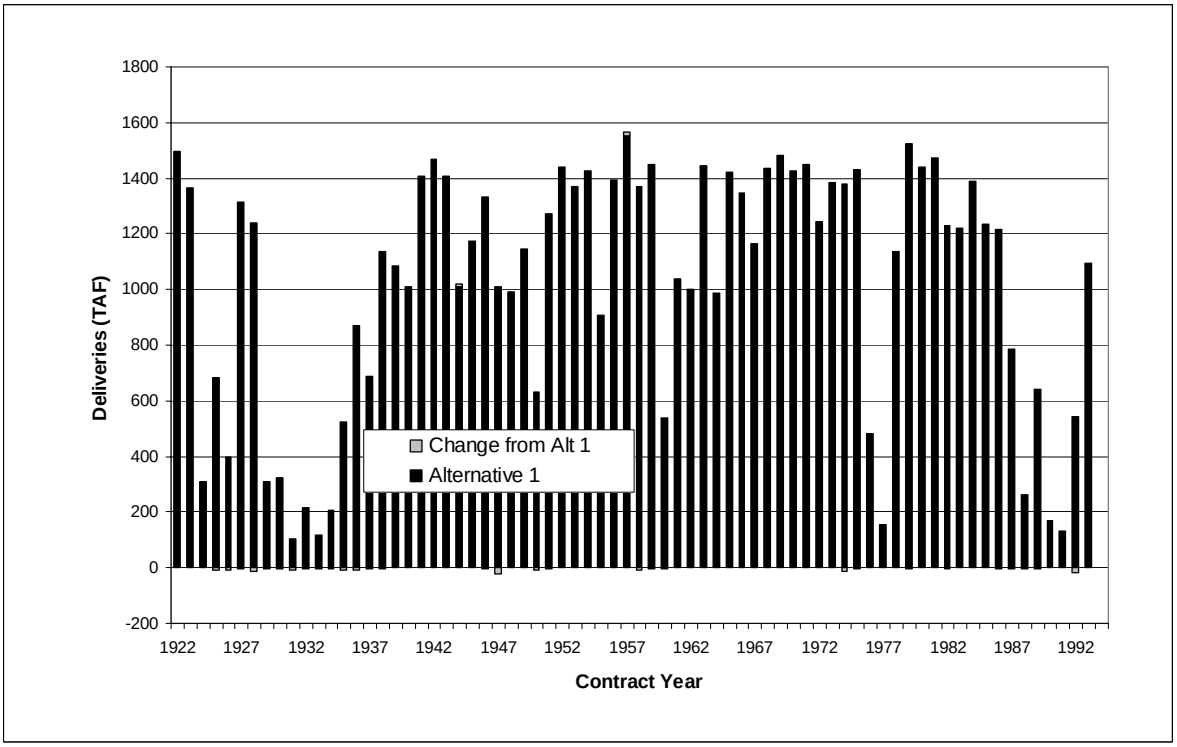


Table 3.5.7-11. Simulated CVP South-of-Delta Agricultural Water Service Deliveries (TAF) Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	53	81	151	242	301	218	70	1497
1923	46	33	47	82	96	62	87	140	224	279	203	65	1363
1924	42	31	43	76	89	2	2	3	6	7	5	2	308
1925	1	1	1	2	2	36	49	91	146	181	131	42	683
1926	27	20	28	49	58	14	19	28	45	55	40	13	396
1927	8	6	9	15	18	62	87	170	273	339	246	79	1314
1928	51	37	53	92	109	49	74	119	190	237	172	55	1238
1929	36	26	37	64	76	5	6	9	15	19	14	4	311
1930	3	2	3	5	6	16	27	40	64	80	58	19	323
1931	12	9	12	22	26	2	2	3	5	6	5	2	106
1932	1	1	1	2	2	13	18	28	44	55	40	13	218
1933	8	6	9	15	18	4	5	8	13	16	12	4	116
1934	2	2	2	4	5	12	17	25	40	49	36	12	205
1935	7	5	8	13	16	0	18	70	113	140	102	33	526
1936	21	15	22	38	45	46	64	95	152	189	137	44	869
1937	29	21	29	51	61	18	45	67	107	133	96	31	686
1938	20	15	21	36	42	55	86	133	213	264	192	62	1138
1939	40	29	41	72	85	39	73	109	174	217	157	51	1087
1940	33	24	34	59	69	31	47	110	176	219	159	51	1011
1941	33	24	34	59	70	60	86	160	257	319	231	75	1408
1942	48	35	50	87	102	66	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	45	63	93	150	186	135	44	1012
1945	28	20	29	51	60	56	84	130	209	260	188	61	1176
1946	39	28	40	70	83	52	76	146	234	291	204	68	1333
1947	44	32	45	79	93	26	64	96	154	191	139	45	1009
1948	29	21	30	52	61	11	46	114	182	227	165	53	990
1949	34	25	35	62	73	24	83	124	199	248	180	58	1145
1950	37	27	38	67	79	16	34	51	82	102	74	24	634
1951	15	11	16	28	33	62	87	158	254	315	216	74	1270
1952	48	35	49	86	101	54	79	152	243	303	220	71	1439
1953	46	33	47	82	97	59	86	141	226	281	204	66	1368
1954	43	31	44	76	90	55	80	155	248	308	223	72	1424
1955	47	34	48	84	99	38	52	78	125	155	113	36	908
1956	24	17	24	42	50	60	87	167	268	333	242	78	1392
1957	50	37	52	90	107	65	87	163	262	326	236	76	1552
1958	49	36	51	88	104	45	73	142	228	283	206	66	1371
1959	43	31	44	77	91	61	87	156	250	311	226	73	1449
1960	47	34	48	84	100	2	21	31	50	63	45	15	540
1961	9	7	10	17	20	37	87	131	210	261	189	61	1039
1962	39	29	40	71	84	40	59	98	156	194	141	45	996
1963	29	21	30	53	62	62	87	168	270	336	244	78	1441
1964	51	37	52	91	108	41	57	85	136	169	123	40	988
1965	26	19	26	46	54	50	69	174	279	346	251	81	1420
1966	52	38	54	94	111	51	77	134	214	267	193	62	1348
1967	40	29	41	72	85	45	66	120	193	240	174	56	1162
1968	36	26	37	65	77	62	87	161	258	320	232	75	1437
1969	48	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	60	87	148	238	296	215	69	1428
1971	45	32	46	80	95	56	82	157	252	313	215	73	1448
1972	47	34	49	85	100	51	74	123	198	246	179	58	1244
1973	37	27	38	67	79	60	87	152	243	302	219	71	1382
1974	46	33	47	82	97	57	87	143	229	285	207	67	1381
1975	43	31	44	77	91	63	87	153	245	304	221	71	1431
1976	46	33	47	82	97	11	15	23	37	46	33	11	482
1977	7	5	7	12	15	7	10	14	23	29	21	7	157
1978	4	3	4	8	9	54	87	148	238	295	214	69	1135
1979	45	32	46	80	95	61	87	166	266	330	240	77	1524
1980	50	36	51	90	106	54	87	148	238	295	214	69	1439
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	39	61	125	201	249	181	58	1232
1983	38	27	39	68	80	53	83	128	206	256	186	60	1222
1984	39	28	40	69	82	62	87	151	242	301	218	70	1390
1985	46	33	47	82	96	50	74	124	199	247	180	58	1235
1986	37	27	38	67	79	48	79	129	206	256	186	60	1214
1987	39	28	40	70	82	17	48	71	114	142	103	33	786
1988	21	16	22	38	45	8	10	16	25	31	23	7	262
1989	5	3	5	8	10	0	57	85	136	169	123	39	640
1990	26	19	26	46	54	0	0	0	0	0	0	0	170
1991	0	0	0	0	0	8	11	17	27	34	25	8	131
1992	5	4	5	9	11	15	46	69	110	137	100	32	544
1993	21	15	21	37	44	49	71	128	204	254	184	59	1088
AVG:	33	24	34	59	69	39	62	108	173	215	155	50	1020
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	106
MAX:	57	42	59	103	122	66	87	174	279	346	251	81	1552

Table 3.5.7-12. Simulated CVP South-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	53	81	151	241	300	218	70	1496
1923	45	33	47	81	96	62	87	140	224	279	203	65	1363
1924	42	31	43	76	89	2	2	3	5	6	5	1	305
1925	1	1	1	2	2	35	48	89	142	177	129	41	668
1926	27	19	27	48	57	13	18	27	43	54	39	13	386
1927	8	6	8	15	17	62	87	170	273	339	246	79	1312
1928	51	37	53	92	109	48	74	117	188	233	169	55	1225
1929	35	26	36	63	75	4	6	9	14	18	13	4	303
1930	3	2	3	5	6	14	26	38	61	76	55	18	306
1931	12	8	12	21	24	1	1	2	3	4	3	1	91
1932	1	0	1	1	1	12	17	26	41	51	37	12	201
1933	8	6	8	14	16	4	5	8	13	16	11	4	112
1934	2	2	2	4	5	10	14	21	34	42	31	10	179
1935	6	5	7	12	14	0	13	67	108	134	97	31	493
1936	20	15	21	36	43	44	60	90	145	180	131	42	827
1937	27	20	28	49	58	15	43	64	103	128	93	30	657
1938	19	14	20	35	41	55	85	132	212	263	191	62	1129
1939	40	29	41	71	84	39	72	108	173	215	156	50	1081
1940	33	24	33	58	69	31	47	110	176	219	159	51	1012
1941	33	24	34	59	70	60	86	160	256	319	231	75	1408
1942	48	35	49	86	102	66	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	45	62	93	149	185	135	43	1008
1945	28	20	29	50	59	56	84	130	209	260	188	61	1175
1946	39	28	40	70	83	52	76	146	234	291	204	68	1332
1947	44	32	45	79	93	26	64	95	152	189	137	44	999
1948	29	21	29	51	61	10	46	115	184	228	166	53	993
1949	35	25	35	62	73	24	83	124	199	248	180	58	1146
1950	37	27	38	67	79	16	34	50	81	101	73	24	628
1951	15	11	16	27	32	62	87	158	254	315	216	74	1268
1952	48	35	49	86	101	54	79	152	243	303	220	71	1439
1953	46	33	47	82	97	59	86	141	226	281	204	66	1368
1954	43	31	44	76	90	55	80	155	248	308	223	72	1424
1955	47	34	48	84	99	38	52	78	125	155	113	36	907
1956	23	17	24	42	50	60	87	167	268	333	242	78	1392
1957	50	37	52	90	107	64	87	164	263	327	237	76	1556
1958	50	36	51	89	105	45	72	142	227	282	205	66	1367
1959	43	31	44	76	90	61	87	156	250	311	226	73	1448
1960	47	34	48	84	100	0	19	29	47	58	42	14	522
1961	9	6	9	16	19	37	86	128	205	254	185	59	1012
1962	39	28	40	69	82	40	59	98	157	195	141	46	992
1963	29	21	30	53	62	62	87	168	270	336	244	78	1442
1964	51	37	52	91	108	41	56	84	135	168	122	39	983
1965	25	18	26	45	54	50	68	174	278	346	251	81	1417
1966	52	38	54	94	111	51	77	134	214	266	193	62	1347
1967	40	29	41	72	85	45	66	120	193	240	174	56	1162
1968	36	26	37	65	77	62	87	161	258	320	232	75	1437
1969	49	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	60	87	148	238	296	215	69	1428
1971	45	32	46	80	95	56	82	157	252	313	215	73	1448
1972	47	34	49	85	100	51	74	123	198	246	178	57	1243
1973	37	27	38	67	79	60	87	152	243	302	219	71	1382
1974	46	33	47	82	97	57	87	143	229	285	207	67	1380
1975	43	31	44	77	91	63	87	153	245	304	221	71	1431
1976	46	33	47	82	97	11	15	23	36	45	33	11	481
1977	7	5	7	12	14	7	10	14	23	28	21	7	155
1978	4	3	4	8	9	54	87	148	238	295	214	69	1135
1979	45	32	46	80	95	61	87	165	265	329	239	77	1521
1980	50	36	51	89	105	54	87	148	238	295	214	69	1438
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	39	60	124	198	246	179	58	1219
1983	37	27	38	67	79	53	83	129	206	256	186	60	1220
1984	39	28	40	69	82	62	87	151	242	301	218	70	1390
1985	46	33	47	82	96	50	74	124	199	247	180	58	1235
1986	37	27	38	67	79	48	79	128	205	255	185	60	1210
1987	39	28	40	69	82	17	47	71	113	141	102	33	782
1988	21	15	22	38	45	6	9	13	20	25	18	6	240
1989	4	3	4	7	8	0	57	85	136	169	122	39	633
1990	26	18	26	46	54	0	0	0	0	0	0	0	170
1991	0	0	0	0	0	8	11	17	27	34	24	8	129
1992	5	4	5	9	11	14	42	62	100	124	90	29	495
1993	19	14	19	34	40	49	76	135	216	269	195	63	1129
AVG:	33	24	33	58	69	39	61	107	172	214	155	50	1014
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	91
MAX:	57	42	59	103	122	66	87	174	278	346	251	81	1556

Table 3.5.7-13. Simulated CVP South-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	57	42	59	103	122	53	81	151	242	300	218	70	1496
1923	45	33	47	81	96	62	87	140	224	279	203	65	1363
1924	42	31	43	76	89	2	2	3	5	7	5	2	306
1925	1	1	1	2	2	35	48	90	144	179	130	42	674
1926	27	20	28	48	57	13	18	27	43	54	39	13	388
1927	8	6	8	15	17	62	87	170	273	339	246	79	1312
1928	51	37	53	92	109	49	73	117	188	234	170	55	1227
1929	35	26	36	63	75	4	6	9	15	18	13	4	306
1930	3	2	3	5	6	16	27	40	64	79	57	18	319
1931	12	9	12	21	25	1	1	2	3	4	3	1	96
1932	1	0	1	1	1	13	18	27	44	54	39	13	213
1933	8	6	8	15	17	4	5	8	13	16	11	4	115
1934	2	2	2	4	5	12	16	24	38	48	35	11	200
1935	7	5	7	13	15	0	17	70	112	139	101	32	519
1936	21	15	22	38	44	46	63	94	151	187	136	44	861
1937	28	21	29	51	60	18	44	66	106	131	95	31	680
1938	20	14	20	36	42	55	86	133	213	264	192	62	1136
1939	40	29	41	72	85	39	73	109	174	216	157	51	1085
1940	33	24	34	59	69	31	47	110	176	219	159	51	1011
1941	33	24	34	59	70	60	86	160	257	319	231	75	1408
1942	48	35	50	87	102	66	87	152	244	304	220	71	1467
1943	46	33	47	82	97	58	87	147	236	293	213	68	1408
1944	44	32	45	79	94	46	63	94	151	188	137	44	1019
1945	28	21	29	51	60	56	84	130	208	259	188	61	1175
1946	39	28	40	70	83	52	76	146	234	291	204	68	1332
1947	44	32	45	79	93	26	62	93	149	185	135	43	987
1948	28	20	29	50	59	11	47	115	184	229	166	53	992
1949	35	25	36	62	73	25	83	124	199	247	180	58	1147
1950	37	27	38	67	79	16	34	50	81	100	73	23	628
1951	15	11	16	27	32	62	87	158	254	315	216	74	1268
1952	48	35	49	86	101	54	79	152	243	303	220	71	1439
1953	46	33	47	82	97	59	86	141	226	281	204	66	1368
1954	43	31	44	76	90	55	80	155	248	308	223	72	1424
1955	47	34	48	84	99	38	52	78	125	155	113	36	907
1956	24	17	24	42	50	60	87	167	268	333	242	78	1392
1957	50	37	52	90	107	64	87	166	266	330	240	77	1566
1958	50	36	51	90	106	44	71	140	225	279	203	65	1362
1959	42	31	43	76	90	61	87	156	250	311	226	73	1445
1960	47	34	48	84	100	2	21	31	50	62	45	14	537
1961	9	7	10	17	20	37	87	131	210	260	189	61	1038
1962	39	29	40	71	83	40	60	98	157	195	142	46	1001
1963	30	21	30	53	63	62	87	168	270	336	244	78	1443
1964	51	37	52	91	108	41	57	85	136	169	122	39	987
1965	26	18	26	46	54	50	68	174	279	346	251	81	1419
1966	52	38	54	94	111	51	77	134	214	266	193	62	1347
1967	40	29	41	72	85	45	66	120	193	240	174	56	1162
1968	36	26	37	65	77	62	87	161	258	320	232	75	1437
1969	48	35	50	87	103	54	87	157	251	312	226	73	1483
1970	47	34	48	85	100	60	87	148	238	296	215	69	1428
1971	45	32	46	80	95	56	82	157	252	313	215	73	1448
1972	47	34	49	85	100	51	74	123	198	246	178	57	1243
1973	37	27	38	67	79	60	87	152	243	302	219	71	1382
1974	46	33	47	82	97	56	86	142	227	282	205	66	1369
1975	43	31	44	77	90	62	87	153	245	304	221	71	1428
1976	46	33	47	82	97	11	15	23	37	46	33	11	482
1977	7	5	7	12	15	7	10	14	23	28	21	7	156
1978	4	3	4	8	9	54	87	148	238	295	214	69	1134
1979	45	32	46	80	95	61	87	165	265	329	239	77	1520
1980	50	36	51	89	105	54	87	148	238	295	214	69	1438
1981	45	32	46	80	95	61	87	158	253	314	228	74	1473
1982	48	34	49	85	101	39	61	125	200	248	180	58	1228
1983	38	27	39	67	80	53	83	128	206	256	186	60	1221
1984	39	28	40	69	82	62	87	151	242	301	218	70	1390
1985	46	33	47	82	96	50	74	124	199	247	180	58	1235
1986	37	27	38	67	79	48	79	128	205	255	185	60	1209
1987	39	28	40	69	82	18	47	71	113	141	102	33	783
1988	21	15	22	38	45	7	10	15	24	30	22	7	257
1989	5	3	5	8	10	0	57	84	135	168	122	39	635
1990	25	18	26	46	54	0	0	0	0	0	0	0	169
1991	0	0	0	0	0	8	11	17	27	34	24	8	129
1992	5	4	5	9	11	15	45	67	107	133	96	31	526
1993	20	15	21	36	43	49	72	129	206	257	186	60	1093
AVG:	33	24	34	59	69	39	62	108	172	214	155	50	1018
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	96
MAX:	57	42	59	103	122	66	87	174	279	346	251	81	1566

Table 3.5.7-14. Simulated CVP South-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	-1
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	-1	-1	0	0	-2
1925	0	0	0	0	0	-1	-1	-2	-3	-4	-3	-1	-15
1926	-1	0	-1	-1	-1	0	0	-1	-1	-1	-1	0	-9
1927	0	0	0	0	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	-1	0	-2	-3	-4	-3	-1	-13
1929	-1	0	-1	-1	-1	0	0	0	-1	-1	-1	0	-7
1930	0	0	0	0	0	-1	-1	-2	-3	-4	-3	-1	-17
1931	-1	0	-1	-1	-1	-1	-1	-1	-2	-3	-2	-1	-15
1932	0	0	0	-1	-1	-1	-1	-2	-3	-4	-3	-1	-17
1933	-1	0	-1	-1	-1	0	0	0	0	0	0	0	-5
1934	0	0	0	0	0	-2	-2	-3	-5	-7	-5	-2	-26
1935	-1	-1	-1	-2	-2	0	-5	-3	-5	-6	-5	-1	-33
1936	-1	-1	-1	-2	-2	-2	-3	-5	-7	-9	-7	-2	-42
1937	-1	-1	-1	-3	-3	-3	-2	-2	-4	-5	-4	-1	-29
1938	-1	-1	-1	-1	-2	0	0	0	-1	-1	-1	0	-9
1939	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-6
1940	0	0	0	0	0	0	0	0	0	1	0	0	1
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	-1
1947	0	0	0	0	0	0	-1	-1	-2	-3	-2	-1	-10
1948	0	0	0	-1	-1	0	0	1	1	1	1	0	2
1949	0	0	0	0	0	0	0	0	0	0	0	0	2
1950	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-6
1951	0	0	0	0	-1	0	0	0	0	0	0	0	-2
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	1	1	1	1	0	4
1958	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	-1	-2	-2	-4	-5	-3	-1	-18
1961	-1	-1	-1	-1	-1	-1	-2	-3	-5	-6	-4	-1	-27
1962	-1	-1	-1	-2	-2	0	0	0	0	0	0	0	-4
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-6
1965	0	0	0	0	0	0	0	0	0	0	0	0	-3
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	-1
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	-1
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	-1	0	0	0	0	0	0	-1
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	-1
1977	0	0	0	0	0	0	0	0	0	0	0	0	-2
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1980	0	0	0	0	0	0	0	0	0	0	0	0	-1
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	-1	-1	-2	-3	-3	-2	-1	-13
1983	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1987	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1988	0	0	0	0	0	-1	-2	-3	-5	-6	-4	-1	-22
1989	-1	-1	-1	-2	-2	0	0	0	0	0	0	0	-6
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	-1	-4	-7	-11	-13	-9	-3	-49
1993	-2	-1	-2	-4	-4	1	5	7	12	15	11	3	40
AVG:	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-6
MIN:	-2	-1	-2	-4	-4	-3	-5	-7	-11	-13	-9	-3	-49
MAX:	0	0	0	0	0	1	5	7	12	15	11	3	40

Table 3.5.7-15. Simulated CVP South-of-Delta Agricultural Water Service Deliveries (TAF) Alternatives 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	-1
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	-1
1925	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-9
1926	0	0	0	-1	-1	0	0	-1	-1	-1	-1	0	-8
1927	0	0	0	0	0	0	0	0	0	0	0	0	-1
1928	0	0	0	0	0	0	-1	-2	-2	-3	-2	-1	-11
1929	0	0	0	-1	-1	0	0	0	0	0	0	0	-5
1930	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-5
1931	0	0	0	0	0	-1	-1	-1	-2	-2	-2	-1	-10
1932	0	0	0	-1	-1	0	0	0	-1	-1	-1	0	-5
1933	0	0	0	0	0	0	0	0	0	0	0	0	-2
1934	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-6
1935	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	-7
1936	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-8
1937	0	0	0	0	-1	0	0	-1	-1	-1	-1	0	-6
1938	0	0	0	0	0	0	0	0	0	0	0	0	-2
1939	0	0	0	0	0	0	0	0	0	0	0	0	-1
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	1	1	2	2	1	0	7
1945	0	0	0	1	1	0	0	0	0	-1	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	-2
1947	0	0	0	0	0	0	-2	-3	-5	-6	-4	-1	-22
1948	-1	-1	-1	-2	-2	1	0	1	2	2	1	0	1
1949	0	0	0	1	1	0	0	0	0	0	0	0	2
1950	0	0	0	0	0	0	-1	-1	-1	-2	-1	0	-6
1951	0	0	0	0	-1	0	0	0	0	0	0	0	-2
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	-1	0	2	4	5	3	1	14
1958	1	1	1	1	2	-1	-1	-2	-3	-4	-3	-1	-9
1959	-1	0	-1	-1	-1	0	0	0	0	0	0	0	-4
1960	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1961	0	0	0	0	0	0	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	1	1	1	1	0	5
1963	0	0	0	0	0	0	0	0	0	0	0	0	1
1964	0	0	0	0	0	0	0	0	0	0	0	0	-1
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	-1
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	-1
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	-2	-1	-1	-2	-3	-2	-1	-12
1975	0	0	0	-1	-1	-1	0	0	0	0	0	0	-4
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	-1
1978	0	0	0	0	0	0	0	0	0	0	0	0	-1
1979	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1980	0	0	0	0	0	0	0	0	0	0	0	0	-1
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1983	0	0	0	0	0	0	0	0	0	0	0	0	-1
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-5
1987	0	0	0	0	0	0	0	0	-1	-1	0	0	-3
1988	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-6
1989	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1990	0	0	0	0	0	0	0	0	0	0	0	0	-1
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	0	-2	-2	-4	-5	-3	-1	-18
1993	-1	-1	-1	-1	-1	1	1	1	2	2	2	1	5
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-2
MIN:	-1	-1	-1	-2	-2	-2	-2	-3	-5	-6	-4	-1	-22
MAX:	1	1	1	1	2	1	1	2	4	5	3	1	14

Figure 3.5.7-10. Exceedence for Simulated Annual CVP South-of-Delta M&I Deliveries, 2020 LOD

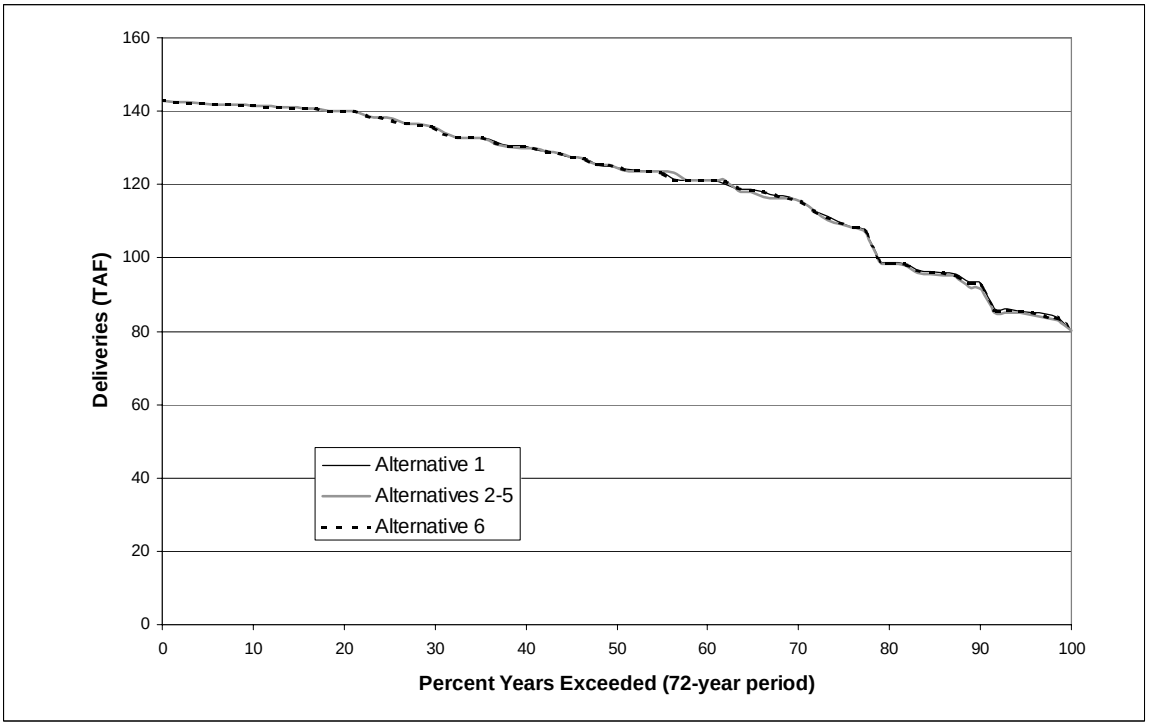


Figure 3.5.7-11. Simulated Annual CVP South-of-Delta M&I Deliveries, 2020 LOD (Alternative 2-5 comparison to Alternative 1)

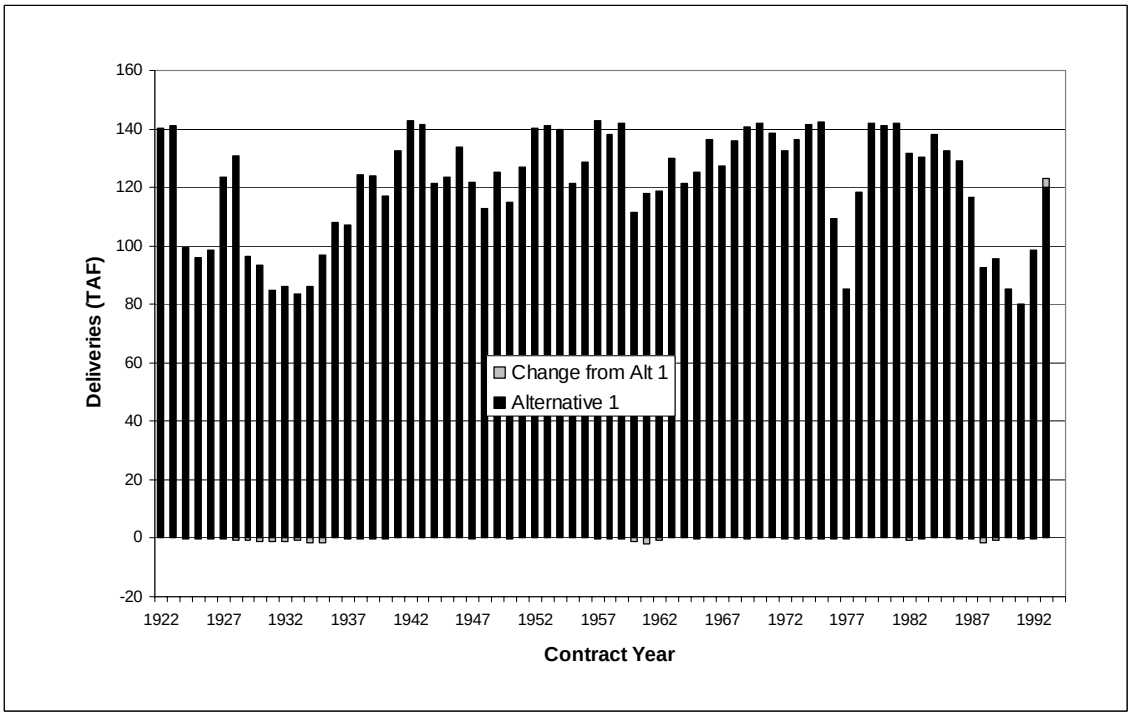


Figure 3.5.7-12. Simulated Annual CVP South-of-Delta M&I Deliveries, 2020 LOD (Alternative 6 comparison to Alternative 1)

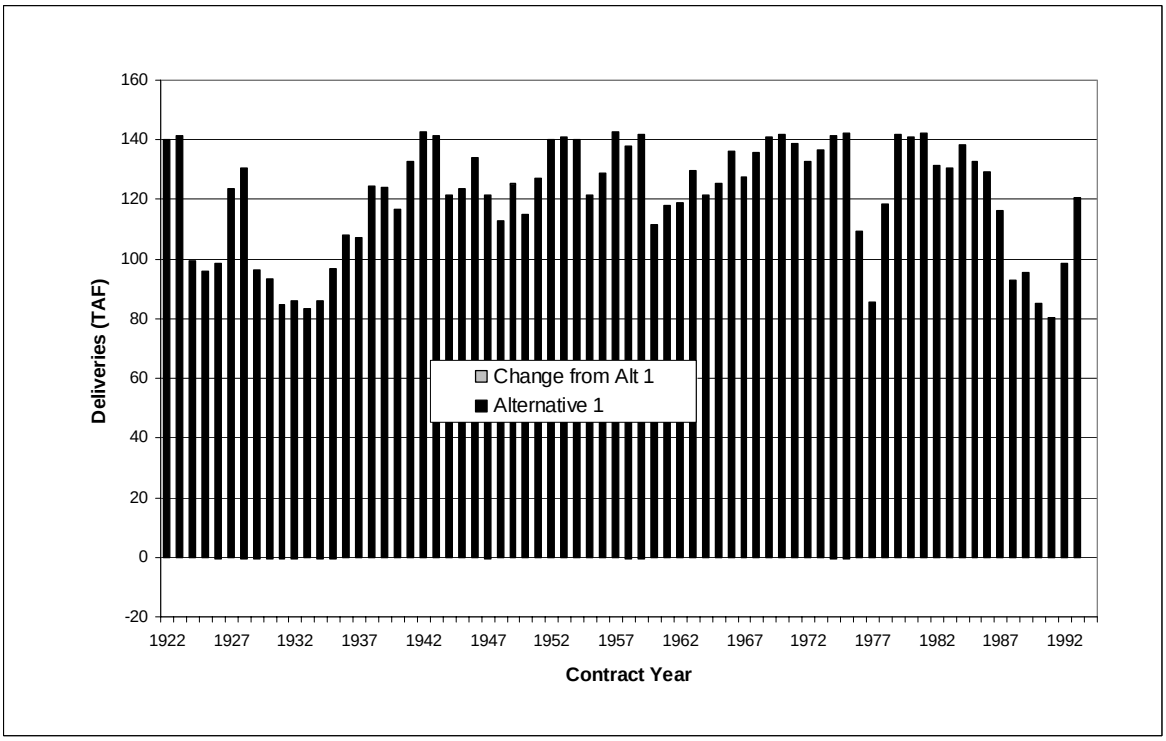


Table 3.5.7-16. Simulated CVP South-of-Delta M&I Deliveries (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	12	11	11	11	13	14	16	140
1923	11	14	14	9	4	14	11	11	11	13	14	15	141
1924	10	14	14	9	4	8	6	6	6	7	7	8	99
1925	5	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	10	8	7	7	8	9	10	99
1927	7	9	9	6	3	14	11	11	11	13	14	16	124
1928	11	14	14	9	4	12	10	10	10	11	12	14	131
1929	9	12	13	8	4	8	7	6	6	7	8	9	96
1930	6	8	8	5	2	10	9	8	8	9	10	11	93
1931	8	10	10	7	3	8	6	6	6	7	7	8	85
1932	5	7	7	5	2	10	8	7	7	8	9	10	86
1933	7	9	9	6	3	8	7	6	6	7	8	8	84
1934	6	8	8	5	2	9	8	7	7	8	9	10	86
1935	7	9	9	6	3	7	8	8	8	10	11	12	97
1936	8	11	11	7	3	11	9	8	8	10	11	12	108
1937	8	11	11	7	3	10	9	8	8	10	11	12	107
1938	8	11	11	7	3	13	11	10	10	12	14	15	124
1939	10	13	14	9	4	11	10	9	9	11	12	13	124
1940	9	12	12	8	4	11	9	9	9	11	12	13	117
1941	9	12	12	8	4	13	11	11	11	13	14	16	133
1942	11	14	14	9	4	14	11	11	11	13	14	16	143
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	11	9	8	8	10	11	12	121
1945	8	11	11	7	3	13	11	10	10	12	13	15	124
1946	10	13	13	9	4	12	10	11	11	13	12	16	134
1947	11	14	14	9	4	11	9	8	8	10	11	12	122
1948	8	11	11	7	3	9	9	9	9	11	12	13	113
1949	9	12	12	8	4	11	11	10	10	12	13	14	125
1950	10	13	13	9	4	10	9	8	8	10	11	12	115
1951	8	11	11	7	3	14	11	11	11	13	12	16	127
1952	11	14	14	9	4	12	10	11	11	13	14	16	140
1953	11	14	14	9	4	13	11	11	11	13	14	15	141
1954	10	14	14	9	4	13	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	8	8	10	11	12	121
1956	8	11	11	7	3	13	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	143
1958	11	14	14	9	4	11	10	11	11	13	14	15	138
1959	11	14	14	9	4	14	11	11	11	13	14	16	142
1960	11	14	14	9	4	8	8	7	7	9	9	10	111
1961	7	9	10	6	3	11	11	10	10	12	13	15	118
1962	10	13	13	9	4	11	9	8	8	10	11	12	119
1963	8	11	11	7	3	14	11	11	11	13	14	16	130
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	9	11	11	13	14	16	125
1966	11	14	14	9	4	12	10	10	10	12	14	15	136
1967	10	13	14	9	4	11	9	10	10	11	13	14	128
1968	9	12	13	8	4	14	11	11	11	13	14	16	136
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	13	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	12	16	139
1972	11	14	14	9	4	12	10	10	10	11	13	14	133
1973	10	13	13	8	4	13	11	11	11	13	14	16	137
1974	11	14	14	9	4	13	11	11	11	13	14	16	141
1975	11	14	14	9	4	14	11	11	11	13	14	16	142
1976	11	14	14	9	4	9	7	7	7	8	9	10	109
1977	7	9	9	6	3	9	7	6	6	7	8	9	85
1978	6	8	8	5	2	12	11	11	11	13	14	16	119
1979	11	14	14	9	4	13	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	9	10	10	12	13	14	131
1983	10	13	13	9	4	12	11	10	10	12	13	14	131
1984	10	13	13	9	4	14	11	11	11	13	14	16	138
1985	11	14	14	9	4	12	10	10	10	12	13	14	133
1986	10	13	13	9	4	11	10	10	10	12	13	14	129
1987	10	13	13	9	4	10	9	8	8	10	11	12	116
1988	8	11	11	7	3	9	7	6	6	7	8	9	93
1989	6	8	8	5	3	7	9	8	8	10	11	12	96
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	7	6	6	8	8	9	80
1992	6	8	8	6	3	10	9	8	8	10	11	12	98
1993	8	11	11	7	3	12	10	10	10	12	13	14	120
AVG:	9	12	12	8	4	11	10	9	9	11	12	13	121
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	80
MAX:	11	14	14	9	4	14	11	11	11	13	14	16	143

Table 3.5.7-17. Simulated CVP South-of-Delta M&I Deliveries (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	12	11	11	11	13	14	16	140
1923	11	14	14	9	4	14	11	11	11	13	14	15	141
1924	10	14	14	9	4	8	6	6	6	7	7	8	99
1925	5	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	10	8	7	7	8	9	10	98
1927	7	9	9	6	3	14	11	11	11	13	14	16	123
1928	11	14	14	9	4	11	10	10	9	11	12	13	130
1929	9	12	12	8	4	8	7	6	6	7	8	8	96
1930	6	8	8	5	2	10	8	8	8	9	10	11	92
1931	7	10	10	7	3	8	6	6	6	7	7	8	84
1932	5	7	7	5	2	9	8	7	7	8	9	10	85
1933	7	9	9	6	3	8	6	6	6	7	8	8	83
1934	6	8	8	5	2	9	7	7	7	8	9	10	84
1935	6	9	9	6	3	7	7	8	8	10	11	12	95
1936	8	11	11	7	3	11	9	8	8	10	11	12	108
1937	8	11	11	7	3	10	9	8	8	10	11	12	107
1938	8	11	11	7	3	13	11	10	10	12	13	15	124
1939	10	13	14	9	4	11	10	9	9	10	12	13	124
1940	9	11	12	8	4	11	9	9	9	11	12	13	117
1941	9	12	12	8	4	13	11	11	11	13	14	16	133
1942	11	14	14	9	4	14	11	11	11	13	14	16	143
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	11	9	8	8	10	11	12	121
1945	8	11	11	7	3	13	11	10	10	12	13	15	124
1946	10	13	13	9	4	12	10	11	11	13	12	16	134
1947	11	14	14	9	4	11	9	8	8	10	11	12	121
1948	8	11	11	7	3	9	9	9	9	11	12	13	113
1949	9	12	12	8	4	11	11	10	10	12	13	14	125
1950	10	13	13	9	4	10	9	8	8	10	11	12	115
1951	8	11	11	7	3	14	11	11	11	13	12	16	127
1952	11	14	14	9	4	12	10	11	11	13	14	16	140
1953	11	14	14	9	4	13	11	11	11	13	14	15	141
1954	10	14	14	9	4	13	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	8	8	10	11	12	121
1956	8	11	11	7	3	13	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	143
1958	11	14	14	9	4	11	10	11	11	13	14	15	138
1959	11	14	14	9	4	14	11	11	11	13	14	16	142
1960	11	14	14	9	4	8	8	7	7	8	9	10	110
1961	7	9	9	6	3	11	11	10	10	12	13	14	116
1962	10	13	13	9	4	11	9	8	8	10	11	12	118
1963	8	11	11	7	3	14	11	11	11	13	14	16	130
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	9	11	11	13	14	16	125
1966	11	14	14	9	4	12	10	10	10	12	14	15	136
1967	10	13	14	9	4	11	9	10	10	11	13	14	128
1968	9	12	13	8	4	14	11	11	11	13	14	16	136
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	13	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	12	16	139
1972	11	14	14	9	4	12	10	10	10	11	13	14	133
1973	10	13	13	8	4	13	11	11	11	13	14	16	137
1974	11	14	14	9	4	13	11	11	11	13	14	16	141
1975	11	14	14	9	4	14	11	11	11	13	14	16	142
1976	11	14	14	9	4	9	7	7	7	8	9	10	109
1977	7	9	9	6	3	9	7	6	6	7	8	9	85
1978	6	8	8	5	2	12	11	11	11	13	14	16	119
1979	11	14	14	9	4	13	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	9	10	10	12	13	14	131
1983	10	13	13	8	4	12	11	10	10	12	13	14	130
1984	10	13	13	9	4	14	11	11	11	13	14	16	138
1985	11	14	14	9	4	12	10	10	10	12	13	14	133
1986	10	13	13	9	4	11	10	10	10	12	13	14	129
1987	10	13	13	9	4	10	9	8	8	10	11	12	116
1988	8	11	11	7	3	8	7	6	6	7	8	9	91
1989	6	8	8	5	2	7	9	8	8	10	11	12	95
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	7	6	6	8	8	9	80
1992	6	8	8	6	3	10	9	8	8	10	11	12	98
1993	8	11	11	7	3	12	10	11	11	12	14	15	123
AVG:	9	12	12	8	4	11	10	9	9	11	12	13	121
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	80
MAX:	11	14	14	9	4	14	11	11	11	13	14	16	143

Table 3.5.7-18. Simulated CVP South-of-Delta M&I Deliveries (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	11	14	14	9	4	12	11	11	11	13	14	16	140
1923	11	14	14	9	4	14	11	11	11	13	14	15	141
1924	10	14	14	9	4	8	6	6	6	7	7	8	99
1925	5	7	7	5	2	11	9	8	8	10	11	12	96
1926	8	11	11	7	3	10	8	7	7	8	9	10	98
1927	7	9	9	6	3	14	11	11	11	13	14	16	123
1928	11	14	14	9	4	12	10	10	10	11	12	13	130
1929	9	12	12	8	4	8	7	6	6	7	8	9	96
1930	6	8	8	5	2	10	9	8	8	9	10	11	93
1931	7	10	10	7	3	8	6	6	6	7	7	8	84
1932	5	7	7	5	2	10	8	7	7	8	9	10	86
1933	7	9	9	6	3	8	6	6	6	7	8	8	83
1934	6	8	8	5	2	9	8	7	7	8	9	10	86
1935	7	9	9	6	3	7	8	8	8	10	11	12	96
1936	8	11	11	7	3	11	9	8	8	10	11	12	108
1937	8	11	11	7	3	10	9	8	8	10	11	12	107
1938	8	11	11	7	3	13	11	10	10	12	14	15	124
1939	10	13	14	9	4	11	10	9	9	11	12	13	124
1940	9	12	12	8	4	11	9	9	9	11	12	13	117
1941	9	12	12	8	4	13	11	11	11	13	14	16	133
1942	11	14	14	9	4	14	11	11	11	13	14	16	143
1943	11	14	14	9	4	13	11	11	11	13	14	16	141
1944	11	14	14	9	4	11	9	8	8	10	11	12	121
1945	8	11	11	7	3	13	11	10	10	12	13	14	123
1946	10	13	13	9	4	12	10	11	11	13	12	16	134
1947	11	14	14	9	4	11	9	8	8	10	11	12	121
1948	8	11	11	7	3	9	9	9	9	11	12	13	113
1949	9	12	12	8	4	11	11	10	10	12	13	14	125
1950	10	13	13	9	4	10	9	8	8	10	11	12	115
1951	8	11	11	7	3	14	11	11	11	13	12	16	127
1952	11	14	14	9	4	12	10	11	11	13	14	16	140
1953	11	14	14	9	4	13	11	11	11	13	14	15	141
1954	10	14	14	9	4	13	11	11	11	13	14	16	140
1955	11	14	14	9	4	11	9	8	8	10	11	12	121
1956	8	11	11	7	3	13	11	11	11	13	14	16	129
1957	11	14	14	9	4	14	11	11	11	13	14	16	142
1958	11	14	14	9	4	11	10	11	11	13	14	15	137
1959	10	14	14	9	4	14	11	11	11	13	14	16	141
1960	11	14	14	9	4	8	8	7	7	8	9	10	111
1961	7	9	9	6	3	11	11	10	10	12	13	15	118
1962	10	13	13	9	4	11	9	8	8	10	11	12	119
1963	8	11	11	7	3	14	11	11	11	13	14	16	130
1964	11	14	14	9	4	11	9	8	8	10	11	12	121
1965	8	11	11	7	3	12	9	11	11	13	14	16	125
1966	11	14	14	9	4	12	10	10	10	12	14	15	136
1967	10	13	14	9	4	11	9	10	10	11	13	14	128
1968	9	12	13	8	4	14	11	11	11	13	14	16	136
1969	11	14	14	9	4	12	11	11	11	13	14	16	141
1970	11	14	14	9	4	13	11	11	11	13	14	16	142
1971	11	14	14	9	4	13	11	11	11	13	12	16	139
1972	11	14	14	9	4	12	10	10	10	11	13	14	133
1973	10	13	13	8	4	13	11	11	11	13	14	16	137
1974	11	14	14	9	4	13	11	11	11	13	14	15	141
1975	11	14	14	9	4	14	11	11	11	13	14	16	142
1976	11	14	14	9	4	9	7	7	7	8	9	10	109
1977	7	9	9	6	3	9	7	6	6	7	8	9	85
1978	6	8	8	5	2	12	11	11	11	13	14	16	118
1979	11	14	14	9	4	13	11	11	11	13	14	16	142
1980	11	14	14	9	4	12	11	11	11	13	14	16	141
1981	11	14	14	9	4	14	11	11	11	13	14	16	142
1982	11	14	14	9	4	11	9	10	10	12	13	14	131
1983	10	13	13	9	4	12	11	10	10	12	13	14	130
1984	10	13	13	9	4	14	11	11	11	13	14	16	138
1985	11	14	14	9	4	12	10	10	10	12	13	14	133
1986	10	13	13	9	4	11	10	10	10	12	13	14	129
1987	10	13	13	9	4	10	9	8	8	10	11	12	116
1988	8	11	11	7	3	9	7	6	6	7	8	9	92
1989	6	8	8	5	2	7	9	8	8	10	11	12	95
1990	8	11	11	7	3	7	6	5	5	6	7	8	85
1991	5	7	7	5	2	9	7	6	6	8	8	9	80
1992	6	8	8	6	3	10	9	8	8	10	11	12	98
1993	8	11	11	7	3	12	10	10	10	12	13	14	121
AVG:	9	12	12	8	4	11	10	9	9	11	12	13	121
MIN:	5	7	7	5	2	7	6	5	5	6	7	8	80
MAX:	11	14	14	9	4	14	11	11	11	13	14	16	143

Table 3.5.7-19. Simulated CVP South-of-Delta M&I Deliveries (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	-1
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	-1
1931	0	0	0	0	0	0	0	0	0	0	0	0	-1
1932	0	0	0	0	0	0	0	0	0	0	0	0	-1
1933	0	0	0	0	0	0	0	0	0	0	0	0	-1
1934	0	0	0	0	0	0	0	0	0	0	0	0	-2
1935	0	0	0	0	0	0	-1	0	0	0	0	0	-1
1936	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	-1
1961	0	0	0	0	0	0	0	0	0	0	0	0	-2
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	-1
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	0	0	0	0	-1
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	1	1	3
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	-1	0	0	0	0	0	-2
MAX:	0	0	0	0	0	0	0	0	0	0	1	1	3

Table 3.5.7-20. Simulated CVP South-of-Delta M&I Deliveries (TAF)
Alternatives 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	0	0	0	0	-1
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	-1
1932	0	0	0	0	0	0	0	0	0	0	0	0	-1
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	-1
1959	0	0	0	0	0	0	0	0	0	0	0	0	-1
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	-1
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	1
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MAX:	0	0	0	0	0	0	0	0	0	0	0	0	1

3.5.8 SWP Deliveries

This section reports State Water Project delivery results for the 2001 LOD. As in section 3.5.7, delivery results are separated into North-of-Delta and South-of-Delta categories. Figures illustrate overall trends and compare each Action alternative to Alternative 1. Monthly results and Action alternative comparisons to Alternative 1 are portrayed in tables.

Figure 3.5.8-1. Exceedence for Simulated Annual SWP Agricultural Deliveries, 2020 LOD

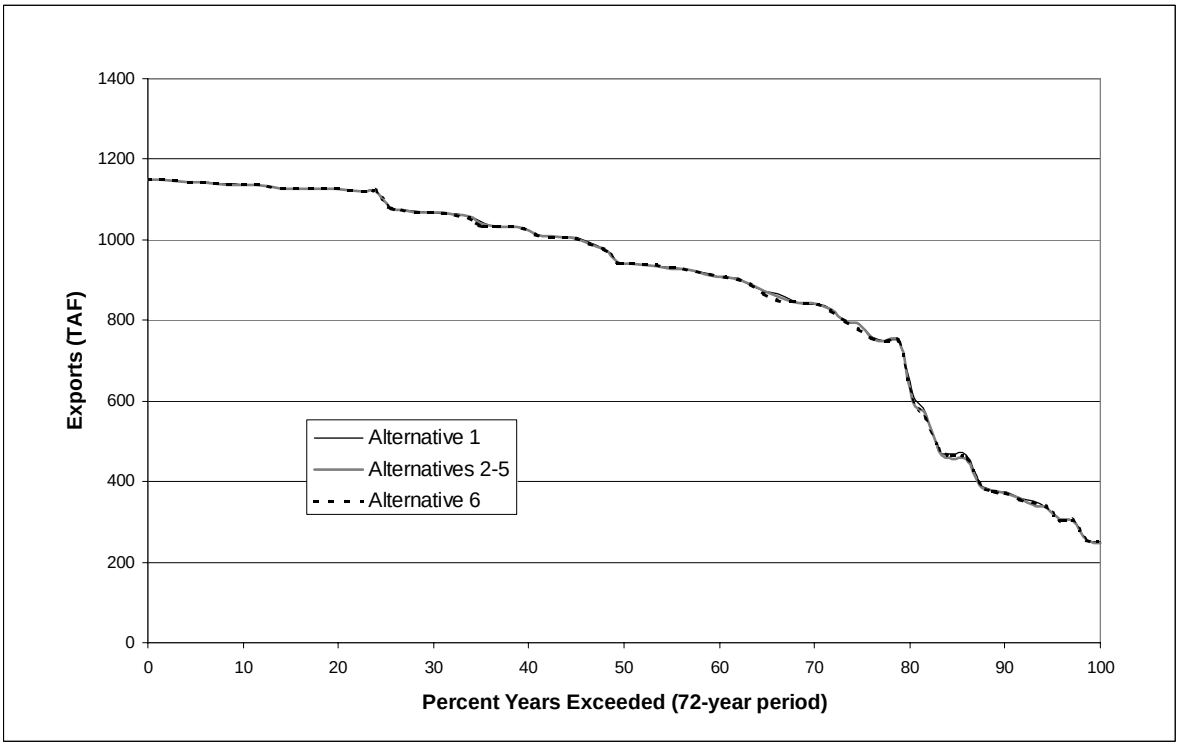


Figure 3.5.8-2. Simulated Annual SWP Agricultural Deliveries, 2020 LOD (Alternatives 2-5 comparison to Alternative 1)

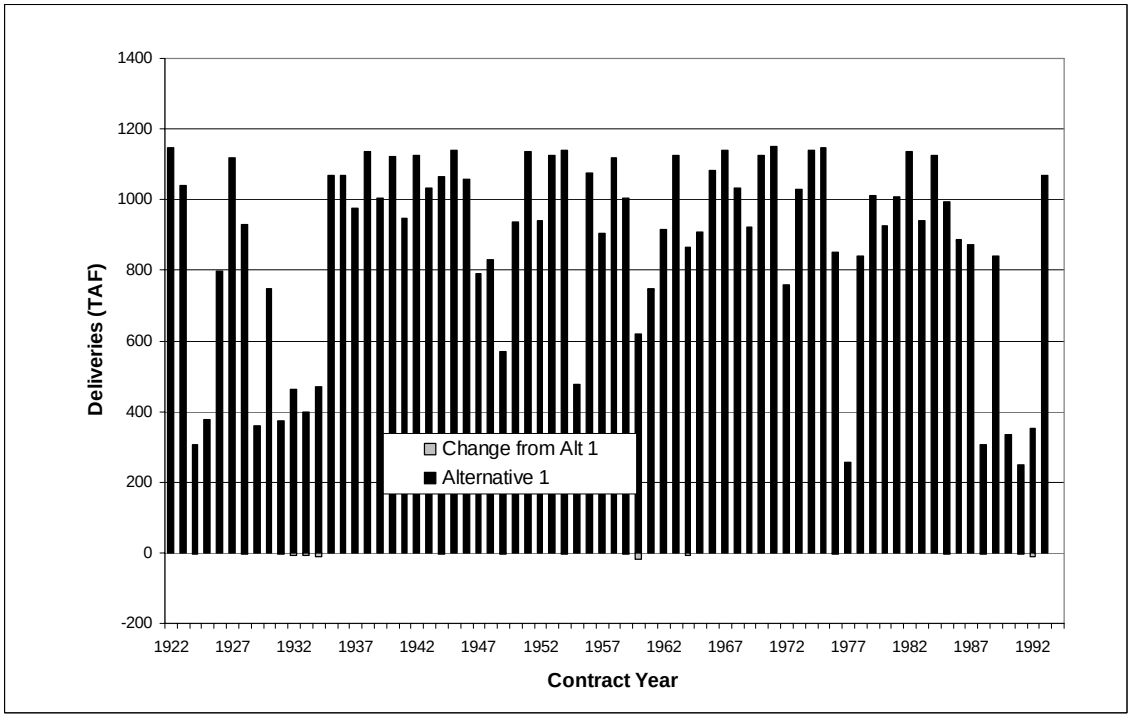


Figure 3.5.8-3. Simulated Annual SWP Agricultural Deliveries, 2020 LOD (Alternative 6 comparison to Alternative 1)

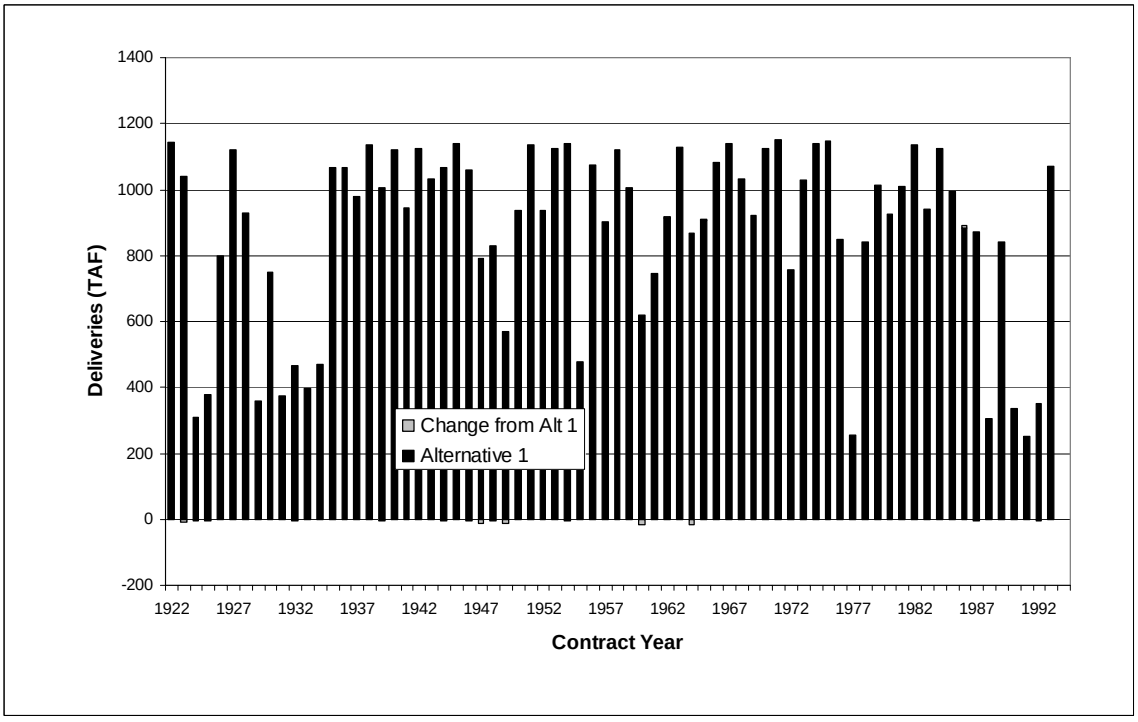


Table 3.5.8-1. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	34	53	91	127	203	198	201	107	1145
1923	37	37	44	26	47	52	78	109	179	172	171	90	1041
1924	31	31	37	5	9	11	18	25	41	39	39	21	307
1925	7	7	8	5	10	19	31	44	72	69	69	36	378
1926	12	12	14	8	24	37	53	97	158	152	151	80	798
1927	27	27	33	13	34	54	91	127	204	199	201	107	1120
1928	37	37	44	19	37	39	70	98	161	155	153	81	930
1929	28	28	34	7	11	13	23	32	53	51	51	27	358
1930	9	9	11	7	24	29	65	90	148	142	141	74	749
1931	26	26	31	8	13	14	25	35	58	56	55	29	375
1932	10	10	12	7	20	23	37	52	86	82	82	43	464
1933	15	15	18	7	17	16	30	42	69	67	66	35	398
1934	12	12	14	8	17	21	38	52	86	83	82	43	468
1935	15	15	18	6	18	24	76	135	217	212	215	118	1068
1936	40	26	61	5	13	48	86	119	193	188	189	99	1066
1937	32	32	38	6	13	33	81	112	183	178	176	93	977
1938	31	31	37	24	46	52	90	125	200	196	197	105	1135
1939	36	36	43	25	44	46	76	106	174	167	166	87	1006
1940	30	30	36	5	12	47	95	131	210	206	208	113	1122
1941	38	38	45	17	37	42	71	99	163	157	156	82	946
1942	28	28	34	28	47	52	89	124	200	195	196	104	1126
1943	36	36	43	26	47	47	78	109	178	172	170	90	1031
1944	31	31	37	13	29	45	86	120	194	189	190	100	1065
1945	35	35	42	12	21	45	93	130	208	203	205	111	1140
1946	38	38	46	26	42	44	81	113	183	178	177	93	1059
1947	32	32	38	8	13	19	64	89	145	140	139	73	792
1948	25	25	30	5	10	10	26	105	173	166	165	87	828
1949	27	27	32	7	11	13	44	62	102	98	97	51	570
1950	17	17	21	6	19	36	80	112	182	177	176	92	935
1951	31	31	38	25	47	52	89	125	200	195	197	104	1136
1952	35	35	42	23	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	48	90	125	200	195	197	105	1126
1954	36	36	43	21	40	47	90	125	201	196	198	105	1141
1955	36	36	43	7	17	18	29	44	72	69	68	36	476
1956	12	12	15	26	47	52	89	125	200	195	197	104	1075
1957	36	36	44	20	35	38	68	95	155	150	148	78	904
1958	27	27	32	19	42	51	91	126	202	197	199	106	1120
1959	37	37	44	23	40	49	76	106	174	167	166	87	1005
1960	30	30	36	5	8	14	48	68	111	107	106	56	618
1961	19	19	22	8	15	23	63	87	143	138	136	72	744
1962	25	25	30	5	9	28	78	108	177	171	170	89	914
1963	30	30	35	21	42	44	87	127	204	199	201	107	1127
1964	37	37	44	18	40	37	64	89	147	141	140	74	867
1965	25	25	30	22	42	42	71	98	161	155	154	81	907
1966	28	28	33	27	47	52	85	119	192	186	186	98	1082
1967	34	34	40	13	47	53	90	126	202	197	199	106	1142
1968	36	36	43	28	47	46	78	109	178	171	170	89	1031
1969	31	31	37	15	38	42	72	100	163	157	156	82	923
1970	28	28	34	28	47	47	90	125	200	196	197	105	1125
1971	36	36	43	26	47	44	90	126	201	197	198	105	1150
1972	35	35	42	18	33	36	55	76	125	120	119	63	757
1973	22	22	26	19	43	51	83	116	188	183	182	96	1030
1974	33	33	40	28	47	52	89	124	200	195	196	104	1141
1975	36	36	43	24	40	49	90	126	202	197	199	106	1148
1976	36	36	43	24	36	40	62	87	142	137	136	71	851
1977	25	25	29	5	8	9	15	21	34	33	33	17	255
1978	6	6	7	5	30	43	73	102	167	161	159	84	842
1979	28	28	34	13	32	45	82	114	185	180	178	94	1012
1980	32	32	38	17	35	42	72	100	163	157	156	82	927
1981	29	29	34	18	40	44	80	111	182	176	174	92	1009
1982	32	32	38	28	47	52	89	124	200	195	196	104	1137
1983	36	36	43	23	37	42	71	99	162	156	155	81	940
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	43	21	32	38	77	107	176	169	168	88	993
1986	30	30	36	5	11	44	71	100	163	157	156	82	885
1987	27	27	32	14	25	31	70	98	160	154	153	81	872
1988	27	13	48	6	12	11	18	26	42	40	40	21	304
1989	7	7	9	7	12	12	77	107	176	170	168	89	840
1990	30	29	37	5	10	12	21	29	47	46	45	24	335
1991	8	8	10	5	8	9	20	28	45	44	43	23	251
1992	8	8	9	6	9	14	29	41	67	64	64	34	352
1993	12	12	14	7	43	53	91	127	204	199	201	107	1070
AVG:	27	27	33	15	30	37	68	97	157	152	152	80	875
MIN:	6	6	7	5	8	9	15	21	34	33	33	17	251
MAX:	40	38	61	28	47	54	95	135	217	212	215	118	1150

Table 3.5.8-2. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	34	53	91	127	203	198	201	107	1145
1923	37	37	44	26	47	52	78	109	178	172	170	90	1039
1924	31	31	37	5	9	11	18	25	40	39	39	20	304
1925	7	7	8	5	10	19	31	44	72	69	69	36	377
1926	12	12	14	8	24	37	52	96	158	152	151	79	797
1927	27	27	33	13	34	54	92	128	204	199	201	108	1119
1928	37	37	44	19	37	39	70	98	160	154	153	80	928
1929	28	28	34	7	11	13	23	32	53	51	51	27	358
1930	9	9	11	7	24	28	65	90	148	142	141	74	748
1931	26	26	31	8	13	14	25	35	57	55	55	29	372
1932	10	10	12	7	20	22	37	51	84	81	80	42	455
1933	15	15	18	8	16	16	30	42	68	66	65	34	391
1934	12	12	14	8	17	21	37	51	84	81	80	42	457
1935	15	15	17	6	18	24	76	135	217	212	215	118	1067
1936	40	26	61	5	13	48	86	120	193	188	189	100	1069
1937	32	32	39	6	13	32	80	112	183	177	176	93	975
1938	31	31	37	24	46	52	90	125	200	196	197	105	1134
1939	36	36	43	25	44	46	76	106	174	167	166	87	1006
1940	30	30	36	5	11	47	95	131	211	206	208	113	1122
1941	26	8	87	14	38	42	72	100	164	157	156	82	945
1942	28	28	34	28	47	52	89	124	200	195	196	104	1126
1943	36	36	43	26	47	47	78	109	178	172	170	90	1031
1944	31	31	37	13	29	44	86	120	193	188	190	100	1062
1945	35	35	41	12	21	45	93	130	208	203	205	111	1139
1946	38	38	46	26	42	44	81	113	183	178	177	93	1058
1947	32	32	38	8	13	19	63	88	145	139	138	73	790
1948	25	25	30	5	10	10	26	105	172	166	165	87	826
1949	27	27	32	7	11	13	44	62	101	97	96	51	567
1950	17	17	21	6	19	36	80	112	182	177	176	92	935
1951	31	31	37	25	47	52	89	125	200	195	197	104	1135
1952	35	35	42	23	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	48	90	125	200	195	197	105	1126
1954	36	36	43	21	40	47	90	125	201	196	198	105	1138
1955	36	36	43	7	17	18	29	44	71	69	68	36	475
1956	12	12	15	26	47	52	89	125	200	195	197	104	1074
1957	36	36	44	20	35	38	68	95	155	149	148	78	902
1958	27	27	32	19	42	51	91	126	202	197	199	106	1119
1959	37	37	44	23	40	49	76	106	173	167	165	87	1002
1960	30	30	36	5	8	14	47	65	107	103	102	54	601
1961	18	18	22	8	16	24	63	88	144	139	138	72	750
1962	25	25	30	5	9	28	78	108	177	171	169	89	913
1963	30	30	35	21	41	44	87	127	204	199	201	107	1126
1964	37	37	44	18	40	37	64	89	145	140	139	73	861
1965	25	25	30	22	42	42	71	99	162	156	154	81	908
1966	28	28	33	27	47	52	85	119	192	186	186	98	1082
1967	34	34	40	13	47	53	90	126	202	197	199	106	1141
1968	36	36	43	28	47	46	78	109	178	171	170	89	1031
1969	31	31	37	14	38	42	72	100	163	157	156	82	923
1970	28	28	34	28	47	47	90	125	200	196	197	105	1125
1971	36	36	43	26	47	44	90	126	201	197	198	105	1150
1972	35	35	42	18	33	35	54	76	124	120	119	62	755
1973	22	22	26	19	43	51	83	116	188	183	182	96	1030
1974	33	33	40	28	47	52	89	124	200	195	196	104	1141
1975	36	36	43	24	40	49	90	126	202	197	199	106	1148
1976	36	36	43	24	36	40	62	86	142	136	135	71	848
1977	25	25	29	5	8	9	15	21	34	33	33	17	254
1978	6	6	7	5	29	43	73	102	167	161	159	84	841
1979	28	28	34	13	32	45	82	114	185	180	178	94	1012
1980	32	32	38	17	35	42	72	100	163	157	156	82	927
1981	29	29	34	18	40	44	80	111	182	176	175	92	1008
1982	32	32	38	28	47	52	89	124	200	195	196	104	1137
1983	36	36	43	23	37	42	71	99	162	156	155	81	940
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	43	21	32	37	77	107	175	169	168	88	990
1986	30	30	36	5	11	44	72	100	164	158	157	82	888
1987	27	27	32	13	25	31	70	98	161	155	153	81	872
1988	28	5	55	5	12	11	18	25	41	40	39	21	302
1989	7	7	9	6	11	12	77	108	177	170	169	89	842
1990	30	30	36	5	10	12	21	29	47	46	45	24	335
1991	8	8	10	5	8	9	20	27	45	43	43	23	248
1992	8	8	9	5	9	13	28	39	65	62	62	33	341
1993	11	11	14	8	44	53	91	127	203	198	201	107	1069
AVG:	27	26	34	15	30	37	68	97	157	152	152	80	874
MIN:	6	5	7	5	8	9	15	21	34	33	33	17	248
MAX:	40	38	87	28	47	54	95	135	217	212	215	118	1150

Table 3.5.8-2. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	35	35	42	18	34	53	91	127	203	198	201	107	1145
1923	37	37	44	26	47	51	77	108	177	170	169	89	1033
1924	31	31	37	5	9	11	18	25	40	39	38	20	303
1925	7	7	8	5	10	18	30	43	71	68	68	36	372
1926	12	12	14	8	24	37	52	97	159	153	152	80	798
1927	28	27	33	13	34	54	92	127	204	199	201	108	1120
1928	37	37	44	18	36	38	71	98	161	155	154	81	930
1929	28	28	34	7	11	13	23	32	53	51	50	26	356
1930	9	9	11	7	24	28	65	90	148	142	141	74	749
1931	26	26	31	8	13	14	25	35	58	56	55	29	375
1932	10	10	12	7	20	23	37	52	85	82	81	43	460
1933	15	15	18	7	16	16	30	42	69	66	66	35	395
1934	12	12	14	8	17	21	37	52	86	82	82	43	466
1935	15	15	18	6	18	24	76	135	217	212	215	118	1068
1936	40	26	61	5	13	48	85	119	192	187	188	99	1064
1937	32	32	38	7	13	32	81	112	183	178	176	93	977
1938	31	31	37	24	46	52	90	125	200	196	197	105	1135
1939	36	36	43	25	44	46	76	105	173	166	165	87	1002
1940	30	30	36	5	12	47	95	131	210	206	208	113	1122
1941	26	8	87	14	38	42	72	100	164	157	156	82	945
1942	28	28	34	28	47	52	89	124	200	195	196	104	1126
1943	36	36	43	26	47	47	78	109	178	172	170	90	1031
1944	31	31	37	13	29	44	86	120	193	188	189	100	1062
1945	35	35	41	12	22	45	93	130	208	203	205	110	1139
1946	38	38	46	26	42	43	81	112	183	177	176	93	1055
1947	32	32	38	8	13	19	62	87	143	137	136	72	779
1948	23	23	28	5	10	10	26	106	173	167	165	87	824
1949	27	27	32	7	11	13	43	60	99	95	94	50	557
1950	17	17	20	6	19	36	81	112	183	178	177	93	938
1951	32	32	38	25	47	52	89	125	200	195	197	104	1136
1952	35	35	42	23	37	42	71	99	162	156	155	81	939
1953	28	28	34	28	47	48	90	125	200	195	197	105	1126
1954	36	36	43	21	40	47	90	125	201	196	198	105	1138
1955	36	36	43	7	17	18	29	44	72	69	69	36	477
1956	12	12	15	26	47	52	89	125	200	195	197	104	1075
1957	36	36	44	19	35	38	68	95	155	149	148	78	902
1958	27	27	32	19	42	51	91	126	202	197	199	106	1119
1959	37	37	44	23	40	49	76	106	174	168	166	88	1007
1960	30	30	36	5	8	14	47	66	107	103	103	54	603
1961	18	18	22	8	16	23	63	88	144	138	137	72	747
1962	25	25	30	5	9	28	78	108	178	171	170	89	916
1963	30	30	35	21	42	44	87	127	204	199	201	107	1127
1964	37	37	44	18	39	36	63	88	144	138	137	72	851
1965	25	25	30	22	42	42	71	99	162	156	155	81	908
1966	28	28	34	27	47	52	85	119	192	186	186	98	1082
1967	34	34	40	13	47	53	90	126	202	197	199	106	1141
1968	36	36	43	28	47	46	78	109	178	171	170	89	1031
1969	31	31	37	15	38	42	72	100	163	157	156	82	923
1970	28	28	34	28	47	47	90	125	200	196	197	105	1125
1971	36	36	43	26	47	44	90	126	201	197	198	105	1150
1972	35	35	42	18	33	35	54	76	124	120	119	62	755
1973	22	22	26	19	43	51	83	116	188	183	182	96	1030
1974	33	33	40	28	47	52	89	124	200	195	196	104	1141
1975	36	36	43	25	41	49	90	126	202	197	199	106	1149
1976	36	36	43	24	36	40	62	86	142	136	135	71	848
1977	25	25	29	5	8	9	15	21	35	33	33	17	255
1978	6	6	7	5	30	43	73	102	167	160	159	84	842
1979	28	28	34	13	32	45	82	114	185	180	178	94	1012
1980	32	32	38	17	35	42	72	100	163	157	156	82	927
1981	29	29	34	18	39	44	80	111	182	176	175	92	1007
1982	32	32	38	28	47	52	89	124	200	195	196	104	1137
1983	36	36	43	23	37	42	71	99	162	156	155	81	940
1984	28	28	34	28	47	52	89	124	200	195	196	104	1125
1985	36	36	43	21	32	37	77	107	175	169	167	88	990
1986	30	30	36	5	11	44	72	100	164	158	157	83	889
1987	27	27	32	13	24	30	70	97	160	154	152	80	868
1988	27	10	50	5	12	11	18	25	42	40	40	21	302
1989	7	7	9	7	11	12	77	108	176	170	168	89	841
1990	30	20	46	5	10	12	21	29	48	46	45	24	336
1991	8	8	10	5	8	9	20	28	45	44	43	23	250
1992	8	8	9	6	9	14	29	40	66	64	63	33	349
1993	12	12	14	7	43	53	91	127	203	199	201	107	1069
AVG:	27	26	34	15	30	36	68	96	157	152	152	80	874
MIN:	6	6	7	5	8	9	15	21	35	33	33	17	250
MAX:	40	38	87	28	47	54	95	135	217	212	215	118	1150

Table 3.5.8-4. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	-2
1924	0	0	0	0	0	0	0	0	-1	0	0	0	-3
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	0	0	0	0	0	0	-2
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	-1	0	0	0	-3
1932	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-9
1933	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-8
1934	0	0	0	0	0	-1	-1	-1	-2	-2	-2	-1	-11
1935	0	0	0	0	0	0	0	0	0	0	0	0	-1
1936	0	0	0	0	0	0	0	0	1	1	1	0	3
1937	0	0	0	0	0	0	0	0	0	0	0	0	-2
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	-12	-30	42	-3	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	-1
1947	0	0	0	0	0	0	0	0	0	0	0	0	-2
1948	0	0	0	0	0	0	0	0	0	0	0	0	-2
1949	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1950	0	0	0	0	0	0	0	0	0	0	0	0	-1
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1955	0	0	0	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	-2
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	-1	0	0	0	-3
1960	0	0	0	0	0	0	-2	-2	-4	-4	-4	-2	-18
1961	-1	-1	-1	0	1	1	1	1	1	1	1	1	5
1962	0	0	0	0	0	0	0	0	0	0	0	0	-1
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-6
1965	0	0	0	0	0	0	0	0	0	0	0	0	2
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	-2
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1977	0	0	0	0	0	0	0	0	0	0	0	0	-1
1978	0	0	0	0	-1	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	-2
1986	0	0	0	0	0	0	0	0	1	1	1	0	3
1987	0	0	0	0	0	0	0	0	0	0	0	0	1
1988	0	-8	8	0	0	0	0	0	-1	-1	-1	0	-3
1989	0	0	0	0	0	0	0	0	1	1	1	0	2
1990	0	1	-1	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	-2
1992	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-10
1993	0	0	0	0	1	0	0	0	0	0	0	0	-1
AVG:	0	-1	1	0	0	0	0	0	0	0	0	0	-1
MIN:	-12	-30	-1	-3	-1	-1	-2	-2	-4	-4	-4	-2	-18
MAX:	0	1	42	0	1	1	1	1	1	1	1	1	5

Table 3.5.8-5. Simulated Annual SWP Agricultural Deliveries (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	-1	-1	-1	-1	-2	-2	-1	-8
1924	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1925	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-5
1926	0	0	0	0	0	0	-1	0	0	0	0	0	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	-1	-1	-1	0	0	1	1	1	0	0
1929	0	0	0	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-4
1933	0	0	0	0	0	0	0	0	0	0	0	0	-3
1934	0	0	0	0	0	0	0	0	0	0	0	0	-2
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	0	0	0	0	0	0	-1	0	-3
1937	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1940	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	-12	-30	42	-3	0	0	0	0	0	0	0	0	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	-1	0	0	-1	-1	-1	0	-4
1947	0	0	0	0	0	-1	-1	-2	-2	-2	-2	-1	-12
1948	-2	-2	-2	0	0	0	0	0	0	0	0	0	-4
1949	0	0	0	0	0	0	-1	-2	-3	-3	-3	-1	-13
1950	-1	-1	-1	0	0	0	0	1	1	1	1	1	3
1951	0	0	0	0	0	0	0	0	0	0	0	0	1
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1955	0	0	0	0	0	0	0	0	0	0	0	0	1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	-2
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	2
1960	0	0	0	0	0	0	-1	-2	-3	-3	-3	-2	-15
1961	-1	-1	-1	0	1	0	0	0	1	1	1	0	3
1962	0	0	0	0	0	0	0	0	0	0	0	0	2
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	-1	-1	-1	-1	-2	-3	-3	-3	-1	-16
1965	-1	-1	-1	0	0	0	0	0	1	1	1	0	2
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	-2
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	1	1	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	-2
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	-1	-1	0	0	0	0	0	0	-2
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	-1	0	0	0	-3
1986	0	0	0	0	0	0	0	1	1	1	1	0	4
1987	0	0	0	0	-1	-1	0	0	-1	-1	-1	0	-4
1988	0	-2	2	0	0	0	0	0	0	0	0	0	-2
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	-9	9	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG:	0	-1	1	0	0	0	0	0	0	0	0	0	-2
MIN:	-12	-30	-2	-3	-1	-1	-1	-2	-3	-3	-3	-2	-16
MAX:	0	0	42	1	1	0	0	1	1	1	1	1	4

Figure 3.5.8-4. Exceedence for Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2020 LOD

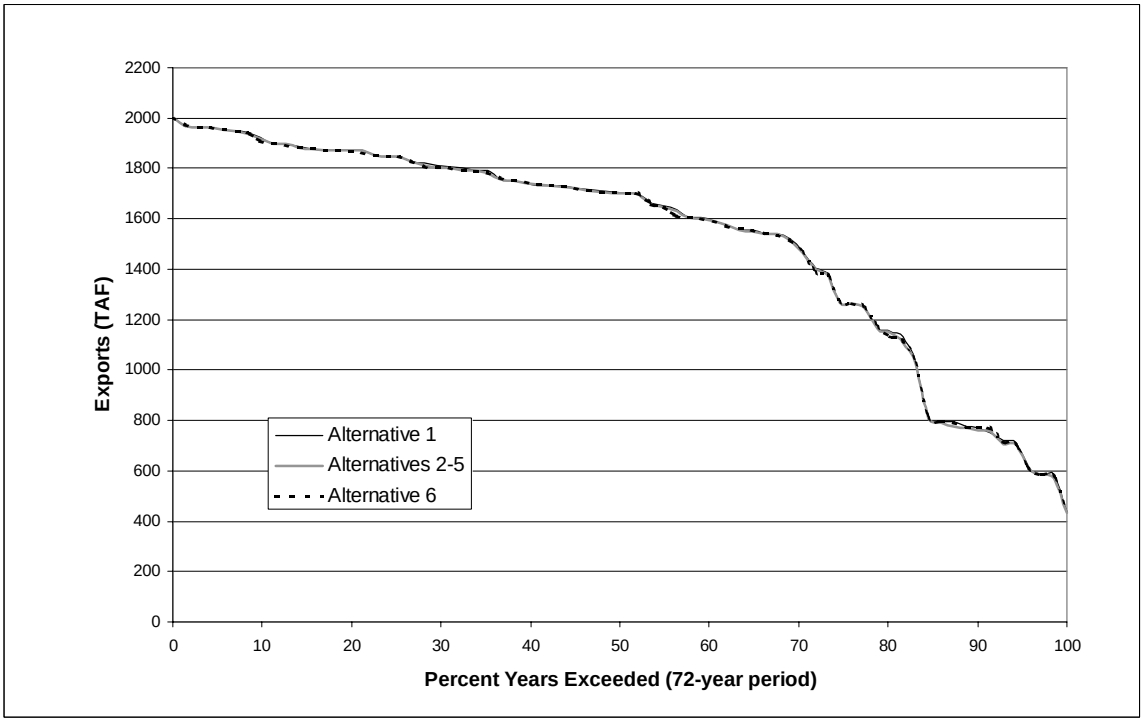


Figure 3.5.8-5. Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2020 LOD (Alternatives 2-5 comparison to Alternative 1)

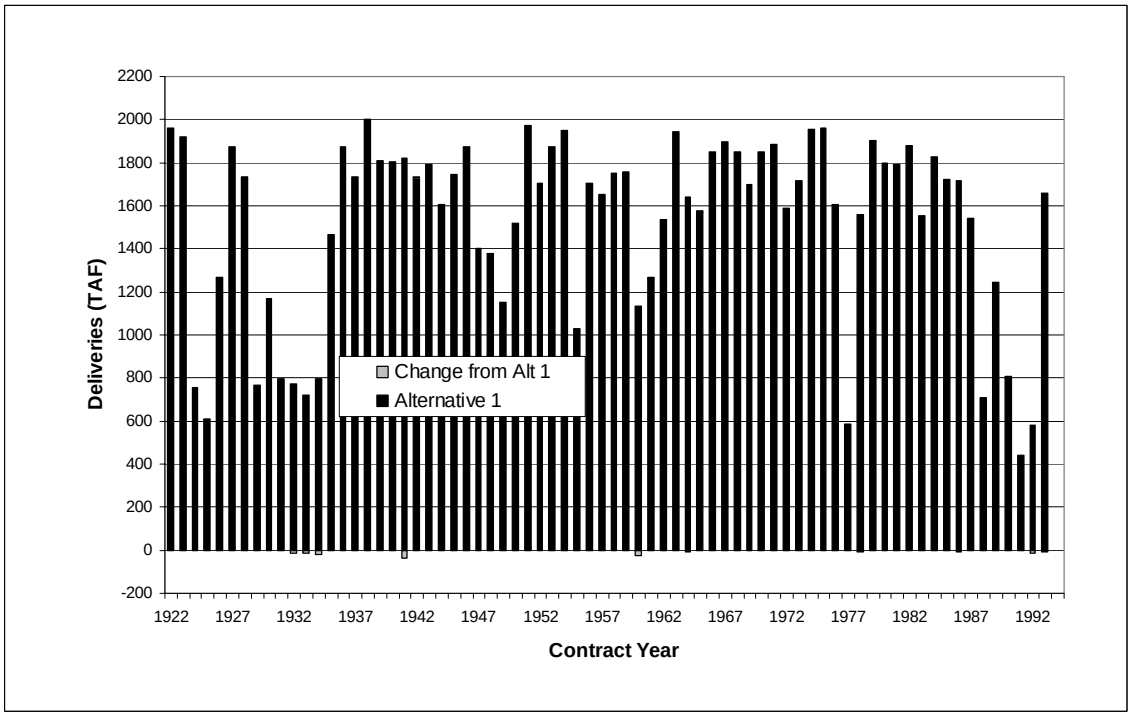


Figure 3.5.8-6. Simulated Annual SWP M&I Deliveries To Metropolitan Water District, 2020 LOD (Alternatives 6 comparison to Alternative 1)

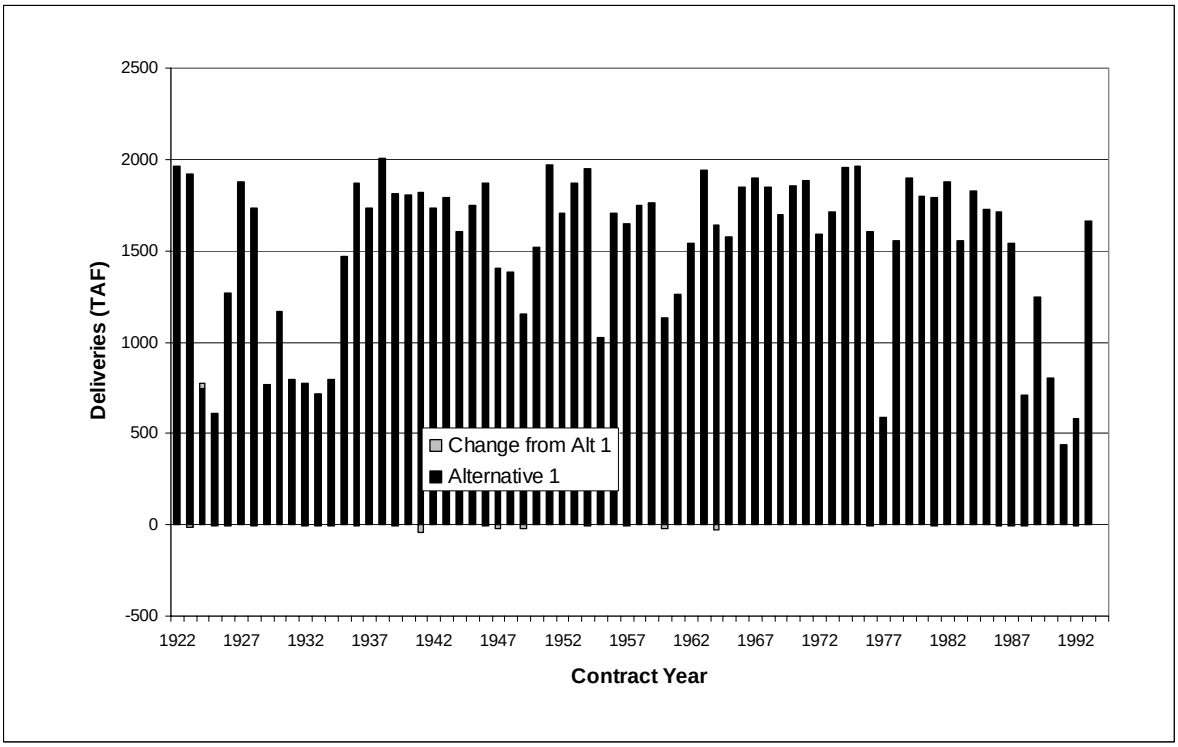


Table 3.5.8-6. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	166	142	150	101	114	195	191	168	154	213	181	187	1961
1923	185	158	167	147	157	185	158	139	127	176	176	147	1922
1924	159	135	143	30	31	41	36	32	29	40	40	34	749
1925	33	28	30	30	33	69	64	59	54	75	75	63	612
1926	62	53	56	46	82	136	109	132	121	168	167	140	1271
1927	139	118	125	74	118	197	193	170	156	216	183	183	1873
1928	188	160	170	109	125	138	144	126	116	161	160	134	1731
1929	135	115	121	38	38	47	47	42	38	53	53	44	770
1930	44	37	39	41	82	104	140	123	113	156	156	131	1166
1931	130	110	117	44	42	49	52	45	42	58	58	48	794
1932	47	40	43	40	69	82	77	68	62	86	86	72	773
1933	72	62	65	42	56	56	63	55	50	70	70	58	720
1934	58	49	52	43	57	76	78	69	63	88	87	73	795
1935	73	62	65	32	62	88	170	170	156	217	184	190	1469
1936	187	158	170	29	43	182	188	165	152	210	210	176	1871
1937	175	149	157	36	43	122	180	158	145	201	200	168	1733
1938	166	142	150	135	155	186	183	161	147	204	203	171	2004
1939	169	144	152	143	142	163	153	135	123	171	171	143	1810
1940	142	121	127	27	39	179	210	185	170	229	186	191	1806
1941	217	158	223	95	127	149	146	128	118	163	163	136	1823
1942	135	115	122	141	137	161	157	138	127	176	175	147	1731
1943	146	124	131	148	156	166	157	138	127	176	175	147	1792
1944	146	124	131	75	98	153	150	132	121	168	168	141	1607
1945	141	120	126	69	71	166	181	159	146	202	190	173	1744
1946	171	145	154	148	141	154	164	144	132	183	182	153	1872
1947	152	129	136	47	44	70	141	124	114	158	157	132	1404
1948	130	111	117	28	34	36	56	157	144	200	199	167	1380
1949	166	141	149	38	37	46	98	86	79	110	110	92	1152
1950	91	78	82	35	65	134	177	155	142	198	197	165	1518
1951	164	139	147	145	154	181	178	156	143	199	198	166	1971
1952	163	139	147	131	126	148	145	128	117	162	162	136	1704
1953	136	116	122	156	151	169	175	153	141	195	194	163	1872
1954	162	138	145	121	136	168	187	164	151	209	186	181	1949
1955	179	153	161	42	58	63	59	57	52	72	72	60	1029
1956	59	50	53	146	158	185	181	159	146	203	191	173	1704
1957	173	147	156	111	118	132	139	122	112	155	155	130	1650
1958	129	109	116	110	143	170	167	146	134	186	186	156	1750
1959	154	131	139	130	133	173	153	135	124	172	171	143	1759
1960	142	121	128	27	28	51	109	96	88	122	121	102	1134
1961	101	86	91	43	52	84	138	121	111	154	154	129	1263
1962	128	109	115	29	28	107	175	154	141	196	195	164	1539
1963	162	138	146	119	141	154	182	168	154	214	181	183	1943
1964	186	158	167	105	135	130	129	114	104	145	144	121	1638
1965	120	102	108	124	141	147	142	125	115	159	159	133	1574
1966	132	112	118	151	150	176	172	151	139	193	192	161	1848
1967	160	136	144	74	155	182	179	157	144	200	199	167	1896
1968	163	139	147	161	156	162	157	138	127	176	175	147	1848
1969	145	124	131	83	136	160	157	138	127	176	175	147	1698
1970	145	124	131	151	146	166	169	148	136	189	188	158	1852
1971	157	133	141	147	157	155	185	162	149	207	135	158	1886
1972	220	187	198	104	112	125	110	97	89	123	123	103	1590
1973	102	87	92	109	145	185	170	149	137	190	189	159	1714
1974	157	134	142	158	153	180	176	155	142	197	196	165	1954
1975	163	139	147	138	135	174	184	161	148	206	191	176	1962
1976	172	147	155	139	120	140	126	110	101	140	140	117	1607
1977	116	99	104	29	28	32	30	27	24	34	34	28	585
1978	28	24	25	28	103	169	204	179	164	228	209	196	1557
1979	196	167	177	76	109	164	172	151	139	192	192	161	1896
1980	158	134	142	98	119	167	168	147	135	188	187	157	1800
1981	157	134	141	105	135	157	165	145	133	184	184	154	1793
1982	153	130	137	152	147	172	169	148	136	189	188	158	1878
1983	156	133	141	117	113	133	130	114	105	146	145	122	1556
1984	120	103	108	156	151	177	173	152	140	194	193	162	1830
1985	162	138	146	121	107	132	160	141	129	179	152	157	1724
1986	206	175	185	29	39	180	154	135	124	172	171	144	1714
1987	142	121	128	77	84	111	150	131	121	167	167	140	1540
1988	138	117	124	31	41	40	37	33	30	41	41	35	708
1989	34	29	31	38	39	42	176	155	142	197	197	165	1245
1990	163	139	147	29	34	42	43	38	34	48	48	40	804
1991	40	34	36	27	26	30	42	37	34	47	47	39	438
1992	39	33	35	32	30	49	63	55	50	70	70	59	583
1993	58	50	53	42	150	197	193	170	156	216	187	188	1661
AVG:	136	115	122	85	99	130	141	126	116	161	155	135	1521
MIN:	28	24	25	27	26	30	30	27	24	34	34	28	438
MAX:	220	187	223	161	158	197	210	185	170	229	210	196	2004

Table 3.5.8-7. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	166	142	150	101	114	195	191	168	154	213	181	187	1961
1923	185	158	167	147	158	183	157	138	127	176	175	147	1918
1924	162	138	146	30	30	40	36	31	29	40	40	33	756
1925	33	28	30	30	32	69	64	59	54	75	74	63	610
1926	62	53	56	46	82	136	108	132	121	167	167	140	1268
1927	139	118	125	72	117	198	194	170	156	217	184	183	1870
1928	189	161	170	109	125	139	143	126	115	160	159	134	1729
1929	134	114	121	38	38	47	47	42	38	53	53	44	768
1930	44	37	39	40	81	103	140	123	113	157	156	131	1165
1931	130	110	117	44	42	49	51	45	41	57	57	48	791
1932	47	40	42	40	68	81	76	66	61	85	84	71	759
1933	71	60	64	43	55	55	61	54	49	69	68	57	706
1934	57	48	51	43	57	74	76	67	62	85	85	71	777
1935	71	60	64	32	62	88	169	170	156	217	185	189	1465
1936	187	157	170	29	44	183	189	166	152	211	210	177	1874
1937	175	149	158	36	42	121	179	157	144	200	200	168	1731
1938	166	141	149	135	155	187	183	161	147	204	203	171	2003
1939	169	144	152	143	142	163	153	135	123	171	171	143	1810
1940	142	121	127	27	39	178	211	185	170	230	185	191	1804
1941	217	120	225	80	128	150	147	129	119	165	164	138	1783
1942	136	116	123	141	137	161	157	138	127	176	175	147	1735
1943	146	124	131	148	156	166	157	138	127	176	175	147	1792
1944	146	124	131	74	97	154	151	132	121	168	168	141	1607
1945	141	120	127	69	71	166	181	159	146	203	190	173	1744
1946	171	145	154	148	141	154	164	144	132	183	182	153	1870
1947	152	129	136	47	44	70	141	124	113	157	157	132	1401
1948	130	111	117	28	34	36	56	157	144	199	199	167	1376
1949	166	141	149	38	36	46	98	86	79	109	109	91	1147
1950	91	77	81	35	65	134	177	155	142	198	197	165	1516
1951	164	139	147	144	154	181	178	156	143	199	198	166	1971
1952	163	139	147	131	126	148	145	128	117	162	162	136	1704
1953	136	116	122	156	151	169	175	153	141	195	194	163	1872
1954	162	138	145	120	136	168	187	164	150	209	188	180	1946
1955	178	152	160	42	58	63	59	57	52	72	72	60	1024
1956	59	50	53	146	158	185	181	159	146	203	191	173	1704
1957	173	147	156	111	118	132	139	122	112	155	154	130	1648
1958	128	109	115	110	143	170	166	146	134	186	186	156	1750
1959	154	131	139	130	133	173	153	134	123	171	170	143	1755
1960	141	120	127	27	28	50	105	92	85	117	117	98	1108
1961	98	83	88	44	55	86	139	122	112	155	155	130	1265
1962	128	109	116	29	28	107	175	153	141	195	194	163	1539
1963	162	138	145	117	140	155	182	168	155	214	182	183	1941
1964	186	158	167	104	135	129	128	113	103	143	143	120	1630
1965	119	101	107	124	141	148	143	125	115	160	159	133	1574
1966	132	112	119	151	150	176	172	151	139	193	192	161	1848
1967	160	136	144	74	155	182	179	157	144	200	199	167	1896
1968	163	139	147	161	156	162	157	138	127	176	175	147	1848
1969	145	124	131	82	136	160	157	138	127	176	175	147	1698
1970	145	124	131	151	146	166	169	148	136	189	188	158	1853
1971	157	133	141	147	157	155	185	162	149	207	133	158	1885
1972	221	188	199	103	112	125	110	96	89	123	122	103	1590
1973	102	86	91	108	145	185	170	149	137	190	189	159	1713
1974	157	134	142	158	153	180	176	155	142	197	196	165	1954
1975	163	139	147	138	135	175	184	161	148	206	191	176	1962
1976	172	147	155	138	119	139	125	110	101	140	139	117	1602
1977	116	99	104	29	28	32	30	27	24	34	34	28	583
1978	28	24	25	28	100	165	205	180	165	228	207	196	1550
1979	198	169	178	74	108	165	172	151	139	193	192	161	1900
1980	158	135	142	95	119	168	168	148	135	188	187	157	1800
1981	157	134	141	103	135	156	165	145	133	185	184	154	1792
1982	153	130	138	152	147	172	169	148	136	189	188	158	1879
1983	156	133	141	117	113	133	130	114	105	146	145	122	1556
1984	120	103	108	156	151	177	173	152	140	194	193	162	1830
1985	162	138	146	120	106	132	160	140	129	179	154	156	1722
1986	202	172	182	29	38	180	155	136	125	173	172	145	1709
1987	143	122	129	75	83	109	150	132	121	168	168	141	1541
1988	138	116	126	31	41	40	37	32	29	41	41	34	705
1989	34	29	30	37	37	41	177	156	143	198	198	166	1246
1990	164	140	148	29	34	41	43	37	34	48	47	40	806
1991	39	34	36	27	26	30	42	37	33	46	46	39	435
1992	38	32	34	31	30	48	60	53	49	68	67	57	568
1993	56	48	51	43	152	197	193	169	156	216	185	189	1654
AVG:	135	114	122	85	99	130	141	126	116	160	155	135	1518
MIN:	28	24	25	27	26	30	30	27	24	34	34	28	435
MAX:	221	188	225	161	158	198	211	185	170	230	210	196	2003

Table 3.5.8-8. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	166	142	150	101	114	195	191	168	154	213	181	187	1961
1923	185	158	167	145	158	181	156	137	126	175	174	146	1908
1924	169	144	152	30	30	40	36	31	29	40	40	33	773
1925	33	28	30	30	32	68	64	58	53	74	73	62	604
1926	61	52	55	45	81	135	107	132	121	169	168	141	1267
1927	140	119	126	73	117	197	193	170	156	216	183	183	1874
1928	189	161	170	105	121	134	145	127	117	162	162	136	1729
1929	136	116	122	38	37	46	47	41	38	53	52	44	770
1930	43	37	39	40	81	103	140	123	113	157	156	131	1166
1931	130	111	117	44	42	49	52	45	42	58	57	48	795
1932	47	40	42	40	69	82	76	67	62	85	85	71	767
1933	72	61	64	42	56	56	62	55	50	69	69	58	714
1934	57	49	52	43	57	76	78	69	63	87	87	73	791
1935	72	61	65	32	62	87	170	170	156	217	184	190	1468
1936	187	158	170	29	43	182	188	165	151	210	209	175	1867
1937	174	148	157	37	43	122	180	158	145	201	200	168	1732
1938	166	142	150	135	155	187	183	161	147	204	203	171	2004
1939	169	144	152	142	142	163	153	134	123	171	170	142	1805
1940	141	120	127	27	39	179	210	185	170	229	186	191	1804
1941	218	120	224	80	128	150	147	129	119	165	164	138	1783
1942	136	116	123	141	137	161	157	138	127	176	175	147	1735
1943	146	124	131	148	156	166	157	138	127	176	175	147	1792
1944	146	124	131	75	97	154	151	132	121	168	168	141	1607
1945	141	120	127	70	72	166	181	159	146	202	190	172	1745
1946	170	145	153	147	139	153	163	144	132	183	182	153	1864
1947	151	129	136	46	43	68	139	122	112	155	155	130	1386
1948	130	111	117	28	34	36	57	157	144	200	199	167	1382
1949	166	142	150	37	36	46	95	84	77	107	106	89	1135
1950	88	75	80	35	65	134	178	156	143	199	198	166	1517
1951	165	140	148	143	154	181	178	156	143	199	198	166	1973
1952	163	139	147	131	126	148	145	128	117	162	162	136	1704
1953	136	116	122	156	151	169	175	153	141	195	194	163	1872
1954	162	138	145	120	136	168	187	164	150	209	188	180	1946
1955	178	152	160	42	59	63	59	57	52	72	72	61	1028
1956	59	50	53	146	158	185	181	159	146	203	191	173	1705
1957	173	147	156	111	117	132	139	122	112	155	154	130	1647
1958	128	109	115	110	143	170	166	146	134	186	186	156	1750
1959	154	131	139	130	133	174	154	135	124	172	171	144	1762
1960	142	121	128	27	28	50	105	93	85	118	118	99	1114
1961	98	83	88	44	55	85	138	121	111	155	154	129	1263
1962	128	109	115	29	28	107	175	154	141	196	195	164	1542
1963	162	138	146	119	141	154	182	168	154	214	181	183	1943
1964	186	158	167	100	133	127	127	111	102	142	141	118	1613
1965	117	100	105	124	142	148	143	126	115	160	159	133	1572
1966	132	113	119	151	150	176	172	151	139	193	192	161	1849
1967	160	136	144	74	155	182	179	157	144	200	199	167	1896
1968	163	139	147	161	156	162	157	138	127	176	175	147	1848
1969	145	124	131	83	136	160	157	138	127	176	175	147	1698
1970	145	124	131	151	146	166	169	148	136	189	188	158	1852
1971	157	133	141	147	157	155	185	162	149	207	133	158	1885
1972	221	189	199	102	112	125	110	96	88	123	122	103	1591
1973	102	86	91	108	145	185	170	149	137	190	189	159	1713
1974	157	134	142	158	153	180	176	155	142	197	196	165	1954
1975	163	139	147	142	138	174	183	161	148	205	192	174	1966
1976	171	145	154	138	120	139	125	110	101	140	139	117	1599
1977	116	99	104	29	28	32	30	27	25	34	34	28	585
1978	28	24	25	28	104	170	204	179	164	228	209	195	1558
1979	196	167	176	75	108	165	172	151	139	192	192	161	1894
1980	158	135	142	98	119	167	168	147	135	188	187	157	1800
1981	157	134	141	100	133	155	166	145	133	185	184	155	1788
1982	153	131	138	152	147	172	169	148	136	189	188	158	1880
1983	156	133	141	117	113	133	130	114	105	146	145	122	1556
1984	120	103	108	156	151	177	173	152	140	194	193	162	1830
1985	162	138	146	120	106	132	160	140	129	179	155	155	1722
1986	202	172	182	29	38	181	155	136	125	173	172	145	1709
1987	143	122	129	75	82	109	149	131	120	167	167	140	1534
1988	137	117	124	31	41	40	37	32	30	41	41	34	705
1989	34	29	31	37	38	42	177	155	142	198	197	165	1245
1990	164	139	148	29	34	42	43	38	35	48	48	40	806
1991	40	34	36	27	26	30	42	37	34	47	47	39	437
1992	38	33	35	31	30	49	62	54	50	69	69	58	578
1993	58	49	52	42	151	197	193	170	156	216	187	188	1659
AVG:	136	115	122	85	99	130	141	126	116	160	155	135	1518
MIN:	28	24	25	27	26	30	30	27	25	34	34	28	437
MAX:	221	189	224	161	158	197	210	185	170	229	209	195	2004

Table 3.5.8-9. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	-1	0	0	0	0	0	0	-3
1924	4	3	3	0	0	0	0	0	0	0	0	0	7
1925	0	0	0	0	0	0	0	0	0	0	0	0	-2
1926	0	0	0	0	0	0	-1	0	0	0	0	0	-3
1927	0	0	0	-2	-1	0	0	0	0	0	0	0	-2
1928	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-2
1929	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1930	0	0	0	0	-1	-1	0	0	0	0	0	0	-1
1931	0	0	0	0	0	0	0	0	0	0	0	0	-3
1932	0	0	0	0	-1	-2	-2	-1	-1	-2	-2	-2	-14
1933	-2	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-14
1934	-1	-1	-1	-1	0	-2	-2	-2	-2	-2	-2	-2	-18
1935	-2	-2	-2	0	0	1	0	0	0	0	1	0	-4
1936	0	0	0	0	0	1	1	1	0	1	1	1	3
1937	1	0	1	0	0	-1	0	0	0	0	0	0	-2
1938	0	0	0	0	0	0	0	0	0	0	0	0	-1
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	-1	-2	0	0	0	0	0	0	-2
1941	-1	-38	2	-15	1	1	1	1	1	2	2	1	-40
1942	1	1	1	0	0	0	0	0	0	0	0	0	4
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	-1	-1	0	0	0	0	0	0	0	-1
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	-1	0	0	0	0	0	0	0	0	-2
1947	0	0	0	0	0	0	0	0	0	0	0	0	-3
1948	0	0	0	0	0	0	0	0	0	0	0	0	-4
1949	0	0	0	0	0	0	-1	0	0	-1	-1	-1	-5
1950	-1	0	0	0	0	0	0	0	0	0	0	0	-2
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	-1	0	0	-1	-1	0	-1	2	-1	-3
1955	-1	-1	-1	0	0	0	0	0	0	0	0	0	-4
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	-1	-1	0	0	0	0	0	0	0	-3
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	-1	-1	0	-4
1960	0	0	0	0	0	-1	-4	-3	-3	-4	-4	-4	-25
1961	-4	-3	-3	1	3	3	1	1	1	1	1	1	2
1962	1	1	1	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	-2	-1	1	0	0	0	0	0	0	-2
1964	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-8
1965	-1	-1	-1	0	0	0	0	0	0	0	0	0	1
1966	0	0	0	0	0	0	0	0	0	0	0	0	1
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	-1	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	-2	0	-1
1972	1	1	1	-1	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	-1
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	-1	-1	-1	0	0	0	-1	-1	0	-5
1977	0	0	0	0	0	0	0	0	0	0	0	0	-2
1978	0	0	0	0	-3	-3	1	1	1	0	-2	0	-6
1979	2	2	2	-1	-1	0	0	0	0	0	0	0	5
1980	0	0	0	-2	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	-1	-1	0	0	0	0	0	0	-1
1982	0	0	0	0	0	0	0	0	0	0	0	0	1
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	-1	-1	-1	0	0	0	0	2	-1	-2
1986	-4	-3	-3	0	0	1	1	1	1	1	1	1	-5
1987	1	1	1	-2	-1	-1	1	1	1	1	1	1	1
1988	1	0	2	0	0	0	-1	0	0	-1	-1	0	-3
1989	0	0	0	-1	-1	-1	1	1	1	1	1	1	0
1990	1	1	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	-1	0	0	-1	-1	0	-3
1992	0	0	0	-1	0	-1	-2	-2	-2	-2	-2	-2	-15
1993	-2	-2	-2	1	2	0	0	0	0	0	-3	0	-6
AVG:	0	-1	0	-1	0	0	0	0	0	0	0	0	-3
MIN:	-4	-38	-3	-15	-3	-3	-4	-3	-3	-4	-4	-4	-40
MAX:	4	3	3	1	3	3	1	1	1	2	2	1	7

Table 3.5.8-10. Simulated Annual SWP M&I Deliveries to MWD (TAF)
Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	-2	0	-4	-2	-1	-1	-2	-2	-1	-14
1924	10	9	9	0	0	-1	-1	0	0	-1	-1	0	24
1925	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-8
1926	-1	-1	-1	0	-1	-1	-1	1	1	1	1	1	-3
1927	1	1	1	-1	0	0	0	0	0	0	0	0	1
1928	0	0	0	-5	-4	-4	2	1	1	2	2	1	-3
1929	1	1	1	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	-1	-1	0	0	0	0	0	0	-1
1931	0	0	0	0	0	0	0	0	0	0	0	0	1
1932	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-6
1933	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-6
1934	0	0	0	0	0	0	0	0	0	0	0	0	-4
1935	0	0	0	0	0	0	0	0	0	0	0	0	-1
1936	0	0	0	0	0	-1	-1	0	0	-1	-1	0	-4
1937	0	0	0	1	0	0	0	0	0	0	0	0	-1
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	-1	0	0	-1	-1	-1	-1	-1	-1	-5
1940	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1941	1	-38	2	-15	1	1	1	1	1	2	2	1	-39
1942	1	1	1	0	0	0	0	0	0	0	0	0	4
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	-1	0	0	0	0	0	0	0	0
1945	0	0	0	1	1	1	0	0	0	0	1	0	2
1946	0	0	0	-2	-2	-2	0	0	0	0	0	0	-8
1947	0	0	0	-2	0	-2	-2	-2	-2	-3	-3	-2	-18
1948	0	0	0	0	0	0	0	0	0	0	0	0	2
1949	0	0	0	0	0	-1	-3	-3	-2	-3	-3	-3	-18
1950	-3	-2	-2	0	0	0	1	1	1	1	1	1	-1
1951	1	1	1	-1	0	0	0	0	0	0	0	0	2
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	-1	0	0	-1	-1	0	-1	2	-1	-3
1955	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	1
1957	0	0	0	-1	-1	0	0	0	0	0	0	0	-3
1958	0	0	0	0	0	0	0	0	0	0	0	0	-1
1959	0	0	0	0	0	0	0	0	0	0	0	0	3
1960	0	0	0	0	0	-1	-3	-3	-3	-4	-4	-3	-20
1961	-3	-3	-3	1	3	2	0	0	0	0	0	0	-1
1962	0	0	0	0	0	0	0	0	0	0	0	0	3
1963	0	0	0	0	0	0	0	0	0	0	0	0	1
1964	0	0	0	-5	-2	-3	-3	-2	-2	-3	-3	-2	-25
1965	-2	-2	-2	1	0	1	1	1	0	1	1	1	-1
1966	1	0	1	0	0	0	0	0	0	0	0	0	1
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	-2	0	-2
1972	1	1	1	-1	0	0	0	0	0	0	0	0	1
1973	0	0	0	0	0	0	0	0	0	0	0	0	-1
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	4	3	0	-1	-1	-1	-1	1	-1	4
1976	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-8
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	1	1	0	0	0	0	1	-1	2
1979	0	0	0	-1	0	0	0	0	0	0	0	0	-1
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	-5	-3	-1	1	1	1	1	1	1	-5
1982	1	1	1	0	0	0	0	0	0	0	0	0	2
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	-1	-1	-1	0	0	0	0	3	-1	-2
1986	-4	-4	-4	0	0	1	1	1	1	1	1	1	-5
1987	1	1	1	-2	-2	-2	0	0	0	0	0	0	-6
1988	0	0	0	0	0	0	0	0	0	0	0	0	-3
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-5
1993	-1	-1	-1	0	1	0	0	0	0	0	0	0	-2
AVG:	0	-1	0	-1	0	0	0	0	0	0	0	0	-3
MIN:	-4	-38	-4	-15	-4	-4	-3	-3	-3	-4	-4	-3	-39
MAX:	10	9	9	4	3	2	2	1	1	2	3	1	24

Figure 3.5.8-7. Exceedence for Simulated Annual SWP M&I Deliveries Other than MWD, 2020 LOD

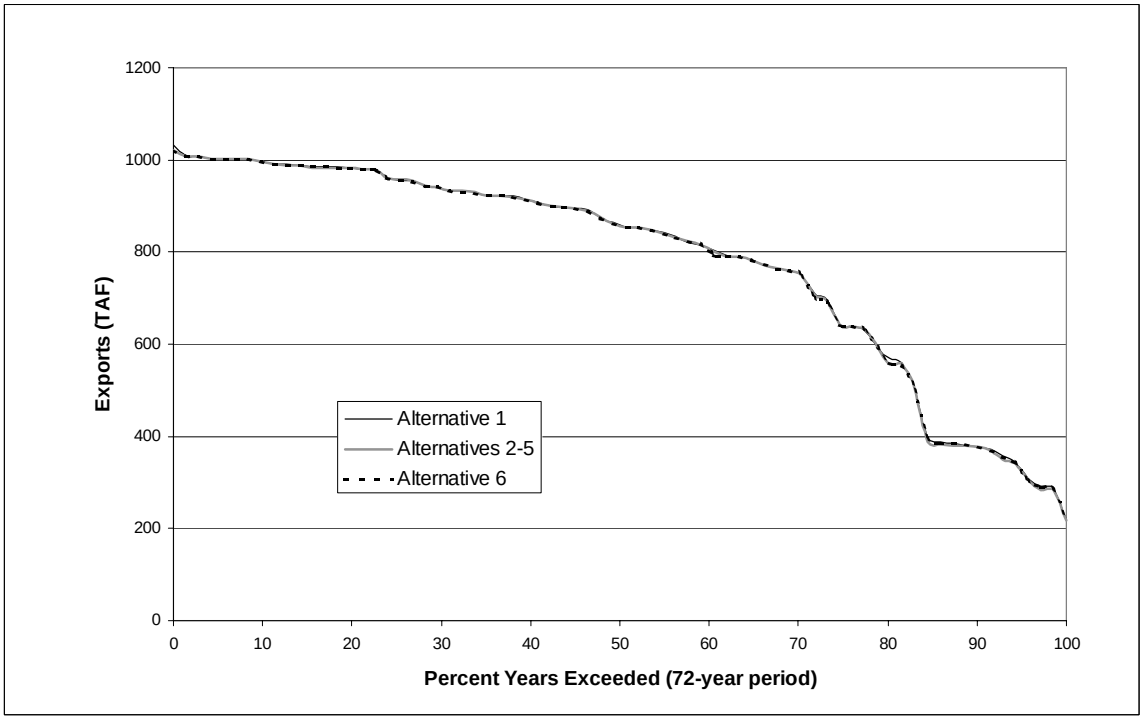


Figure 3.5.8-8. Simulated Annual SWP M&I Deliveries Other than MWD, 2020 LOD (Alternatives 2-5 comparison to Alternative 1)

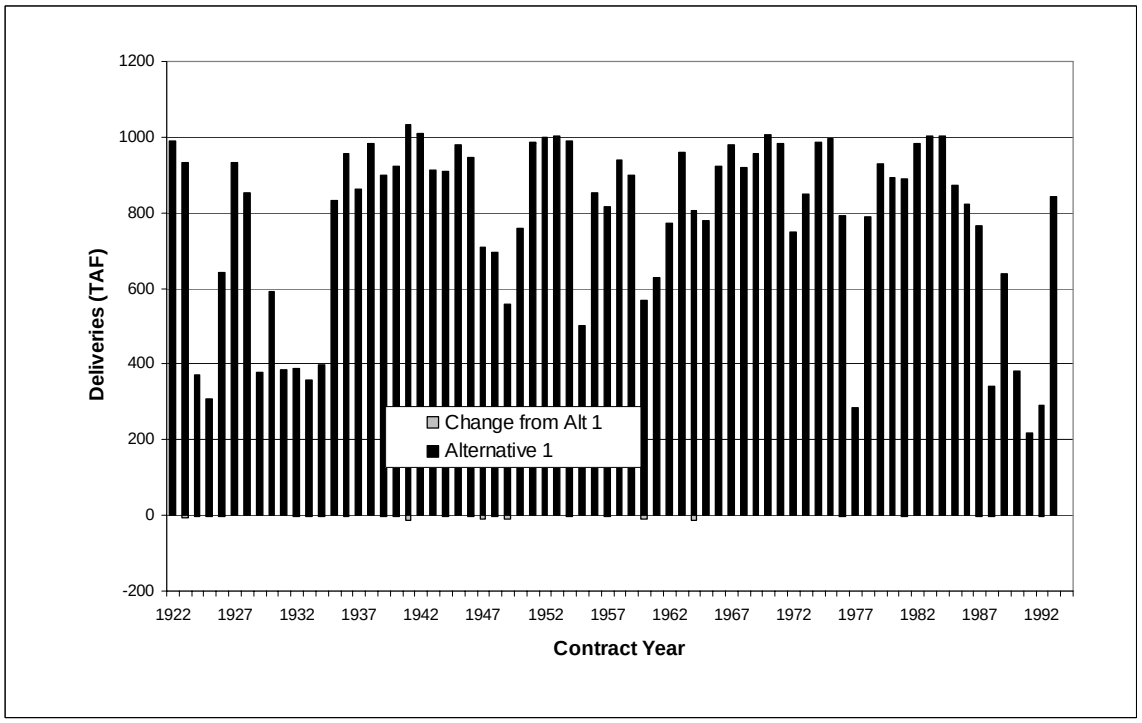


Figure 3.5.8-9. Simulated Annual SWP M&I Deliveries Other than MWD, 2020 LOD (Alternatives 6 comparison to Alternative 1)

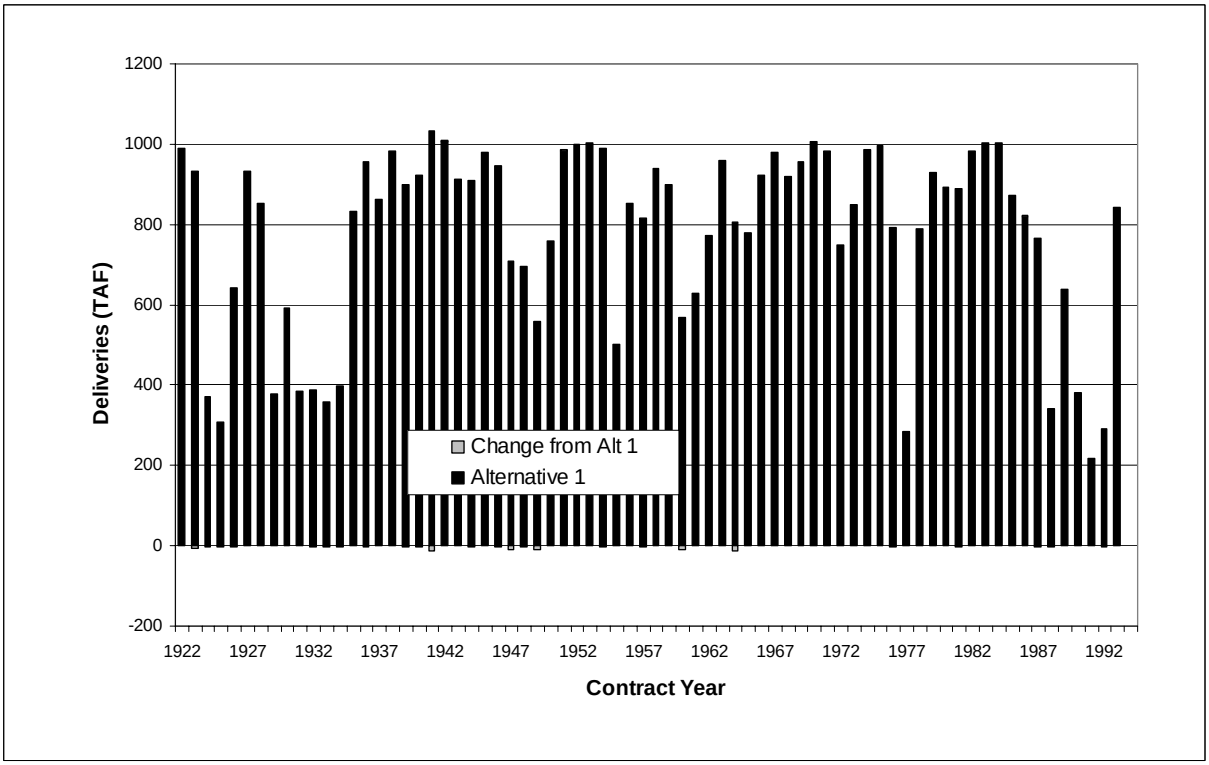


Table 3.5.8-11. Simulated Annual SWP M&I Deliveries Other than MWD (TAF)
Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	89	71	57	29	37	67	85	100	108	125	120	101	991
1923	88	74	66	43	51	68	71	85	92	106	103	87	934
1924	84	70	61	9	10	15	16	19	21	24	24	20	372
1925	17	14	12	9	11	24	28	35	38	44	42	35	308
1926	31	25	23	13	26	48	48	77	84	97	93	77	642
1927	68	56	50	21	38	68	85	101	109	126	106	105	934
1928	93	78	69	32	41	49	65	77	83	95	93	79	853
1929	70	56	49	11	12	17	21	25	27	31	31	26	377
1930	23	19	15	12	26	36	61	72	78	89	87	74	592
1931	64	52	47	13	14	18	23	28	30	34	33	29	384
1932	25	20	16	12	22	30	35	41	44	51	50	42	387
1933	37	30	26	12	18	21	28	33	36	41	40	34	357
1934	30	25	20	13	18	28	35	41	45	51	49	43	397
1935	38	30	27	9	20	30	72	110	118	134	131	114	833
1936	102	76	82	8	14	61	81	96	103	117	114	99	955
1937	88	72	60	11	14	41	76	91	98	111	108	93	863
1938	81	67	59	39	50	65	83	98	105	120	116	100	984
1939	90	72	63	41	49	60	69	82	89	101	98	86	900
1940	77	61	48	8	13	60	90	106	113	129	107	112	923
1941	101	67	94	27	52	66	84	99	106	119	116	101	1033
1942	90	74	66	47	51	65	83	97	104	117	114	99	1007
1943	92	71	62	43	51	58	72	84	91	102	100	87	914
1944	81	62	50	22	32	57	82	95	102	115	113	98	909
1945	88	72	64	20	23	57	89	104	110	125	122	107	981
1946	94	80	71	43	46	55	75	88	94	106	104	89	945
1947	82	65	58	14	14	24	61	71	77	86	84	72	709
1948	63	54	48	8	11	13	25	87	93	105	102	87	696
1949	81	65	57	11	12	16	43	50	53	60	59	50	558
1950	46	38	32	10	21	45	75	91	96	108	105	91	759
1951	81	69	61	42	51	66	82	99	104	117	113	99	984
1952	86	75	66	47	51	65	81	98	104	117	113	98	1001
1953	91	73	65	47	51	61	82	99	104	117	113	99	1002
1954	90	73	65	35	44	59	83	100	106	119	115	100	990
1955	93	74	66	12	19	23	27	35	37	41	40	35	501
1956	32	25	23	42	51	67	81	98	104	117	113	99	853
1957	90	77	64	32	39	47	62	75	80	89	86	75	816
1958	66	58	50	32	46	64	84	100	106	119	115	100	941
1959	93	77	65	38	43	63	70	83	88	99	96	83	899
1960	77	63	50	8	9	17	46	55	59	66	64	55	570
1961	51	41	37	12	17	29	59	71	75	84	81	71	629
1962	65	52	47	8	9	36	74	89	94	105	102	89	771
1963	78	68	60	34	46	54	81	102	107	120	106	104	961
1964	94	80	71	30	44	48	59	71	75	83	81	70	805
1965	64	51	46	36	46	54	65	78	82	92	89	77	780
1966	71	56	46	44	51	68	79	94	99	111	107	94	921
1967	86	68	57	22	52	67	85	102	106	119	115	100	979
1968	92	74	66	47	51	57	72	86	91	101	98	85	921
1969	78	62	50	24	52	66	85	100	107	119	114	99	956
1970	93	76	67	47	51	58	83	98	107	117	113	97	1006
1971	91	74	66	43	51	57	86	99	107	117	96	98	984
1972	99	86	77	30	36	47	51	60	65	71	68	59	749
1973	54	44	35	32	47	64	79	92	99	108	104	90	848
1974	82	70	62	47	51	65	84	98	106	116	112	96	988
1975	89	73	65	40	44	61	86	100	107	118	114	98	996
1976	89	76	67	40	40	53	58	68	74	82	78	67	791
1977	62	50	40	8	9	12	14	17	18	20	19	16	285
1978	15	12	10	8	33	57	91	106	111	126	119	102	790
1979	96	81	72	22	35	57	79	92	97	109	103	88	929
1980	81	68	61	28	39	58	77	91	95	108	101	87	894
1981	81	70	59	30	44	55	76	90	94	106	100	86	891
1982	78	67	60	47	51	65	84	99	105	118	113	95	982
1983	86	73	65	47	51	65	82	99	106	118	112	95	1001
1984	88	72	64	47	51	66	82	99	106	119	113	96	1002
1985	87	73	65	35	35	47	72	87	93	103	93	84	873
1986	90	78	70	8	12	60	67	81	87	97	91	77	819
1987	72	62	51	22	27	39	66	80	85	95	90	76	764
1988	70	46	63	9	13	14	17	20	22	24	23	20	343
1989	18	15	12	11	13	15	74	87	94	109	103	86	637
1990	79	51	72	8	11	15	19	23	24	28	27	22	380
1991	21	17	15	8	9	11	18	22	24	27	26	22	219
1992	20	17	14	9	10	17	27	32	35	40	38	32	292
1993	29	25	21	12	48	68	85	100	108	125	119	100	841
AVG:	72	59	52	25	33	47	65	79	84	95	90	79	779
MIN:	15	12	10	8	9	11	14	17	18	20	19	16	219
MAX:	102	86	94	47	52	68	91	110	118	134	131	114	1033

Table 3.5.8-12. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternatives 2-5, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	89	71	57	29	37	67	85	100	109	125	120	101	991
1923	88	74	66	43	51	67	71	84	92	106	103	87	932
1924	84	70	61	9	10	15	16	19	21	24	23	20	370
1925	17	14	11	9	10	23	28	35	38	44	42	35	307
1926	31	25	23	13	26	48	48	77	84	96	92	77	641
1927	68	56	50	21	38	68	85	101	109	126	105	106	933
1928	93	78	70	32	41	49	65	77	83	94	93	79	852
1929	70	56	48	11	12	17	21	25	27	31	31	26	376
1930	23	19	15	12	26	36	61	72	78	89	87	74	591
1931	64	52	47	13	14	18	23	27	29	34	33	28	383
1932	25	20	16	11	22	29	34	40	43	50	49	41	380
1933	37	30	25	12	18	20	27	33	35	40	39	33	350
1934	30	24	20	12	18	27	34	40	43	49	48	41	387
1935	37	29	26	9	20	30	72	110	118	134	131	114	830
1936	102	83	76	8	14	61	81	96	104	118	115	99	957
1937	88	72	60	11	14	41	76	90	98	111	108	93	862
1938	81	66	59	39	50	65	83	98	105	120	117	100	984
1939	90	72	63	41	49	60	69	82	89	101	98	86	899
1940	77	58	48	8	13	59	90	106	113	129	107	112	920
1941	87	57	108	23	52	66	85	99	106	120	117	101	1021
1942	91	75	67	47	51	65	83	97	104	117	114	99	1008
1943	92	71	62	43	51	58	72	84	91	102	100	87	914
1944	81	62	50	21	31	56	81	95	102	115	112	97	906
1945	87	72	64	20	23	56	89	104	110	125	122	107	980
1946	94	80	71	43	46	55	75	88	94	106	104	89	945
1947	82	65	58	14	14	24	61	71	76	86	84	72	707
1948	62	54	48	8	11	13	25	86	93	105	102	87	694
1949	81	65	57	11	12	16	42	50	53	60	58	50	556
1950	46	38	32	10	21	45	75	91	96	108	105	91	759
1951	81	69	61	42	51	66	82	99	104	117	113	99	984
1952	86	75	66	47	51	65	81	98	104	117	113	98	1001
1953	91	73	65	47	51	61	82	99	104	117	113	99	1002
1954	90	73	65	35	44	59	83	100	105	118	115	100	988
1955	92	74	66	12	19	23	26	35	37	41	40	35	500
1956	32	25	23	42	51	67	81	98	104	117	113	99	853
1957	90	77	64	32	38	47	62	75	80	89	86	75	815
1958	66	58	50	32	46	64	84	100	106	119	115	100	941
1959	93	77	65	38	43	62	69	83	88	99	95	83	897
1960	77	63	50	8	9	17	45	53	57	63	61	53	557
1961	49	40	35	13	18	30	60	71	76	85	82	72	630
1962	66	53	47	8	9	36	74	88	94	105	102	89	771
1963	78	67	60	34	45	55	81	102	107	120	105	104	960
1964	94	80	71	30	44	47	58	70	74	83	80	70	801
1965	64	51	45	36	46	55	65	78	82	92	89	78	781
1966	72	57	46	44	51	68	79	94	99	111	107	94	921
1967	86	68	57	21	52	67	85	102	106	119	115	101	979
1968	92	74	66	47	51	57	72	86	91	101	98	85	921
1969	78	62	50	24	52	66	85	100	107	119	114	99	956
1970	93	76	67	47	51	58	83	98	107	117	113	97	1006
1971	91	74	66	43	51	57	86	99	107	117	96	98	984
1972	99	86	77	30	36	47	51	59	65	71	68	59	748
1973	54	44	35	31	47	64	79	92	99	108	104	90	848
1974	82	70	62	47	51	65	84	98	106	116	112	96	988
1975	89	73	65	40	44	61	86	100	107	118	114	98	996
1976	89	76	67	40	40	52	58	68	73	81	78	67	789
1977	62	50	40	8	9	12	14	17	18	20	19	16	284
1978	15	12	10	8	32	56	91	107	111	126	119	102	789
1979	96	81	72	22	35	57	79	92	97	109	103	88	930
1980	81	68	61	28	39	58	77	91	95	108	101	87	894
1981	81	70	59	30	44	55	76	90	94	106	100	86	890
1982	78	68	60	47	51	65	84	99	105	118	113	95	982
1983	86	73	65	47	51	65	82	99	106	118	112	95	1001
1984	88	72	64	47	51	66	82	99	106	119	113	96	1002
1985	87	73	65	35	35	47	72	86	92	103	97	82	874
1986	90	78	70	8	12	60	68	82	87	97	92	78	822
1987	72	62	52	22	27	38	66	80	85	95	90	76	765
1988	70	50	60	9	13	14	17	20	22	24	23	20	342
1989	18	14	12	11	12	15	74	87	95	110	104	87	638
1990	79	55	69	8	11	15	19	23	24	28	27	22	381
1991	21	17	15	8	9	11	18	22	23	27	26	22	217
1992	20	17	14	9	10	17	26	31	34	39	37	31	284
1993	28	24	20	13	48	67	85	100	108	125	119	100	839
AVG:	71	58	52	25	33	47	65	78	84	94	90	78	778
MIN:	15	12	10	8	9	11	14	17	18	20	19	16	217
MAX:	102	86	108	47	52	68	91	110	118	134	131	114	1021

Table 3.5.8-13. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternative 6, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	89	71	57	29	37	67	85	100	109	125	120	101	991
1923	88	74	66	42	51	66	71	84	91	105	102	86	927
1924	84	70	61	9	10	15	16	19	21	24	23	20	370
1925	17	14	11	9	11	23	28	34	37	43	41	34	304
1926	31	25	22	13	26	48	48	77	84	97	93	77	641
1927	68	57	50	21	38	68	85	101	109	126	105	106	934
1928	93	78	69	30	39	47	65	77	83	95	94	79	852
1929	70	56	50	11	12	17	21	25	27	31	30	26	376
1930	23	19	15	12	26	36	61	72	78	89	87	74	591
1931	64	52	47	13	14	18	23	28	30	34	33	29	385
1932	25	20	16	12	22	30	34	41	44	50	49	42	384
1933	37	30	25	12	18	20	28	33	36	41	40	34	354
1934	30	25	20	13	19	27	35	41	44	50	49	42	395
1935	38	30	26	9	20	30	72	110	118	134	131	114	832
1936	102	72	86	8	14	61	81	96	103	117	114	98	952
1937	88	71	60	11	14	41	76	91	98	111	108	93	863
1938	81	67	59	39	50	65	83	98	105	120	117	100	984
1939	90	72	63	41	48	60	69	82	88	100	98	86	897
1940	77	59	48	8	13	60	90	106	113	129	107	112	921
1941	87	57	109	23	52	66	85	99	106	120	117	101	1022
1942	91	75	67	47	51	65	83	97	104	117	114	99	1008
1943	92	71	62	43	51	58	72	84	91	102	100	87	914
1944	81	62	50	22	31	57	81	95	102	115	112	97	906
1945	87	72	64	20	23	57	89	104	110	125	122	107	980
1946	94	80	71	43	46	54	75	88	94	106	103	89	942
1947	82	65	58	13	14	24	60	70	75	85	83	71	699
1948	62	54	48	8	11	13	25	87	93	105	102	87	694
1949	81	65	57	11	12	16	41	48	52	59	57	49	549
1950	45	37	31	10	21	45	76	92	97	109	105	92	759
1951	82	69	62	42	51	66	82	99	104	117	113	99	985
1952	86	75	66	47	51	65	81	98	104	117	113	98	1001
1953	91	73	65	47	51	61	82	99	104	117	113	99	1002
1954	90	73	65	35	44	59	83	100	105	118	115	100	988
1955	92	74	66	12	19	23	27	35	37	41	40	35	501
1956	32	26	23	42	51	67	81	98	104	117	113	99	853
1957	90	77	64	32	38	47	62	75	80	89	86	75	814
1958	66	58	50	32	46	64	84	100	106	119	115	100	941
1959	93	77	65	38	43	63	70	83	89	99	96	84	900
1960	77	63	51	8	9	17	45	54	57	64	62	54	559
1961	50	40	35	13	18	29	60	71	75	85	82	71	629
1962	66	53	47	8	9	36	74	89	94	105	102	89	773
1963	78	68	60	34	46	54	81	102	107	120	106	104	961
1964	94	80	71	29	43	47	58	69	73	82	79	69	793
1965	63	51	45	36	46	55	65	78	82	92	89	78	780
1966	72	57	46	44	51	68	79	94	99	111	107	94	922
1967	86	68	57	21	52	67	85	102	106	119	115	100	979
1968	92	74	66	47	51	57	72	86	91	101	98	85	921
1969	78	62	50	24	52	66	85	100	107	119	114	99	956
1970	93	76	67	47	51	58	83	98	107	117	113	97	1006
1971	91	74	66	43	51	57	86	99	107	117	96	97	984
1972	99	86	77	30	36	47	51	59	65	71	68	59	748
1973	54	44	35	31	47	64	79	92	99	108	104	90	848
1974	82	70	62	47	51	65	84	98	106	116	112	96	988
1975	89	73	65	41	45	61	86	99	107	118	113	98	996
1976	89	76	66	40	40	52	58	68	74	81	78	67	789
1977	62	50	40	8	9	12	14	17	18	20	19	16	285
1978	15	12	10	8	33	58	91	106	111	126	119	102	790
1979	96	81	72	22	35	57	79	92	97	109	103	88	929
1980	81	68	61	28	39	58	77	91	95	108	101	87	894
1981	81	70	59	29	43	54	76	90	94	106	100	86	889
1982	78	68	60	47	51	65	84	99	105	118	113	95	982
1983	86	73	65	47	51	65	82	99	106	118	112	95	1001
1984	88	72	64	47	51	66	82	99	106	119	113	96	1002
1985	87	73	65	35	35	47	72	86	92	103	97	82	874
1986	91	78	70	8	12	60	68	82	87	97	92	78	823
1987	72	62	52	22	27	38	66	79	85	94	89	76	762
1988	70	49	61	9	13	14	17	20	22	24	23	20	341
1989	18	15	12	11	12	15	74	87	95	109	103	87	637
1990	79	66	58	8	11	15	19	23	25	28	27	23	382
1991	21	18	15	8	9	11	18	22	24	27	26	22	218
1992	20	17	14	9	10	17	27	32	35	40	38	32	290
1993	29	25	21	12	48	68	85	100	108	125	119	100	840
AVG:	71	58	52	25	33	47	65	78	84	94	90	78	778
MIN:	15	12	10	8	9	11	14	17	18	20	19	16	218
MAX:	102	86	109	47	52	68	91	110	118	134	131	114	1022

Table 3.5.8-14. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	-2
1924	0	0	0	0	0	0	0	0	0	0	0	0	-2
1925	0	0	0	0	0	0	0	0	0	0	0	0	-1
1926	0	0	0	0	0	0	0	0	0	0	0	0	-1
1927	0	0	0	-1	0	0	0	0	0	0	-1	0	-1
1928	0	0	0	0	0	0	0	0	0	0	0	0	-1
1929	0	0	0	0	0	0	0	0	0	0	0	0	-1
1930	0	0	0	0	0	0	0	0	0	0	0	0	-1
1931	0	0	0	0	0	0	0	0	0	0	0	0	-2
1932	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-7
1933	-1	-1	-1	0	0	0	-1	-1	-1	-1	-1	-1	-7
1934	-1	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-9
1935	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1936	0	6	-6	0	0	0	0	0	0	0	0	0	3
1937	0	0	0	0	0	0	0	0	0	0	0	0	-1
1938	0	0	0	0	0	0	0	0	0	0	0	0	-1
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	-3	0	0	0	-1	0	0	0	0	0	0	-3
1941	-14	-11	14	-4	0	0	0	0	0	0	0	0	-12
1942	0	0	0	0	0	0	0	0	0	0	0	0	1
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	-1	0	0	0	0	0	0	-3
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	0	0	0	0	0	0	0	0	0	-1
1947	0	0	0	0	0	0	0	0	0	0	0	0	-2
1948	0	0	0	0	0	0	0	0	0	0	0	0	-2
1949	0	0	0	0	0	0	0	0	0	0	0	0	-2
1950	0	0	0	0	0	0	0	0	0	0	0	0	-1
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	-2
1955	0	0	0	0	0	0	0	0	0	0	0	0	-1
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	-1
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	-2
1960	0	0	0	0	0	0	-2	-2	-2	-2	-2	-2	-13
1961	-2	-1	-1	0	1	1	0	1	1	1	1	1	1
1962	1	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	-1	0	-1
1964	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-4
1965	-1	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	-1
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	-2
1977	0	0	0	0	0	0	0	0	0	0	0	0	-1
1978	0	0	0	0	-1	-1	0	0	0	0	0	0	-1
1979	0	0	0	0	0	0	0	0	0	0	0	0	1
1980	0	0	0	-1	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	4	-1	1
1986	1	0	0	0	0	0	0	0	0	0	0	0	3
1987	0	0	0	-1	0	-1	0	0	0	0	0	0	1
1988	0	4	-4	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	3	-2	0	0	0	0	0	0	0	0	0	1
1991	0	0	0	0	0	0	0	0	0	0	0	0	-2
1992	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-8
1993	-1	-1	-1	0	1	0	0	0	0	0	0	0	-2
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-14	-11	-6	-4	-1	-1	-2	-2	-2	-2	-2	-2	-13
MAX:	1	6	14	0	1	1	0	1	1	1	4	1	3

Table 3.5.8-15. Simulated Annual SWP M&I Deliveries Other than MWD (TAF) Alternative 6 minus Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1922	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-7
1924	0	0	0	0	0	0	0	0	0	0	0	0	-2
1925	0	0	0	0	0	0	0	0	-1	-1	-1	0	-4
1926	0	0	0	0	0	0	-1	0	0	0	0	0	-1
1927	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	0	0	0	-1	-1	-1	0	0	1	1	1	0	-1
1929	0	0	1	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	-1	-1	0	-3
1933	0	0	0	0	0	0	0	0	0	0	0	0	-3
1934	0	0	0	0	0	0	0	0	0	0	0	0	-2
1935	0	0	0	0	0	0	0	0	0	0	0	0	-1
1936	0	-4	4	0	0	0	0	0	0	0	0	0	-2
1937	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	0	0	0	0	0	0	0	0	0	0	0	0	-3
1940	0	-2	0	0	0	0	0	0	0	0	0	0	-3
1941	-15	-11	15	-4	0	0	0	0	0	0	0	0	-11
1942	0	0	0	0	0	0	0	0	0	0	0	0	1
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	-3
1945	0	0	0	0	0	0	0	0	0	0	0	0	-1
1946	0	0	0	-1	-1	-1	0	0	0	0	0	0	-3
1947	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-9
1948	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2
1949	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	-9
1950	-1	-1	-1	0	0	0	0	0	1	1	1	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	1
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	-2
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	-2
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	2
1960	0	0	0	0	0	0	-1	-2	-2	-2	-2	-2	-10
1961	-2	-1	-1	0	1	1	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	2
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	-1	-1	-1	-1	-1	-2	-2	-2	-1	-12
1965	-1	-1	-1	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	-1
1972	0	0	0	0	0	0	0	0	0	0	0	0	-1
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	1	1	0	0	0	0	0	0	0	1
1976	0	0	0	0	0	0	0	0	0	0	0	0	-2
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	-1	-1	-1	0	0	0	0	0	0	-2
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	4	-1	1
1986	1	0	0	0	0	0	0	0	1	1	1	0	4
1987	0	0	0	-1	-1	-1	0	0	0	0	0	0	-3
1988	0	3	-3	0	0	0	0	0	0	0	0	0	-1
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	15	-13	0	0	0	0	0	0	0	0	0	2
1991	0	0	0	0	0	0	0	0	0	0	0	0	-1
1992	0	0	0	0	0	0	0	0	0	0	0	0	-3
1993	0	0	0	0	0	0	0	0	0	0	0	0	-1
AVG:	0	0	0	0	0	0	0	0	0	0	0	0	-1
MIN:	-15	-11	-13	-4	-1	-1	-1	-2	-2	-2	-2	-2	-12
MAX:	1	15	15	1	1	1	0	0	1	1	4	0	4

3.5.9. Discussion of CALSIM II results

CALSIM II provides a reasonable representation of CVP/SWP operations for planning level analyses of the potential effects of the FRWP on the CVP/SWP systems, as well as environmental programs and requirements such as CVPIA 3406(b)(2), EWA, minimum instream flows, and Delta salinity requirements. In a few isolated months over the 72-year simulation period there are instances where small changes in system conditions trigger disproportionately large changes in CVP/SWP system operations that are not a direct result of the FRWP. These isolated cases result from CALSIM II's generalized rules and simplified representation of the CVP/SWP systems. Some of these changes in CVP/SWP operations that CALSIM II simulates as occurring in a single month would normally occur over a number of months and not result in the large changes in reservoir storage and flows simulated by the model.

This section outlines specific results of the 2020 LOD CALSIM II action alternatives in comparison to Alternative 1. While the body of the EIR discusses the appropriate conclusions regarding potential impacts of the FRWP, this appendix section focuses on a few specific monthly changes in the model results that appear to be larger than anticipated and assesses the extent that these changes are a direct effect of the FRWP. All years listed are water years (October - September).

3.5.9.1 Alternatives 2-5 comparison to Alternative 1

August 1935

A reduction of 75 TAF in the Trinity Lake import to the Sacramento River in Alternatives 2-5 study results in an increased release from Shasta Reservoir to meet the minimum instream flow requirements at the Navigation Control Point on the Sacramento River. This increased Shasta release reduces Shasta storage by 75 TAF as compared to Alternative 1. In actual operations this reduction in Trinity imports would be spread out over a number of months, but as a result of the simplified reservoir balancing logic in the CALSIM model the reduction occurs in a single month.

September 1940

A shift in simulated operations for September is caused by the model code formulation for estimating the incidental benefit to the SWP from CVPIA 3406(b)(2) operations. In Alternatives 2-5 the base water supply that EWA must guarantee at the end of 1940 is over-estimated by 383 TAF due to this code formulation. This results in a reduction of 164 TAF in EWA purchase water in September, as well as a reduction in simulated Lake Oroville storage of 130 TAF and a reduction of 157 TAF in SWP San Luis Reservoir storage.

November 1941

The EWA accounting adjustment described above for September 1940 results in reduced SWP San Luis Reservoir storage and causes the reservoir to reach the minimum storage level a month earlier in the Alternatives 2-5 study than in Alternative 1 As a result, SWP deliveries are reduced 79 TAF in November of 1941.

February 1941

Simulated Delta outflow drops by 167 TAF in February 1941 in Alternatives 2-5 in comparison to Alternative 1. This drop compensates for the EWA re-operation in September 1940. Simulated Lake Oroville storage is higher in Alternative 1 from September 1940 to February 1941, when it reaches

the flood limit and spills, causing higher Delta outflows. The Alternatives 2-5 study simulated Lake Oroville storage does not have a flood spill in this month, resulting in a lower simulated Delta outflow. This is an example of how earlier operations may cause the system to trend differently in the action alternatives in comparison to Alternative 1. This operational trend is a result of the EWA re-operation in September 1940, and it is therefore attributable to simplified simulated operations in CALSIM II.

December 1978

Simulated Shasta Reservoir storage experiences a 95 TAF drop in Alternatives 2-5 as a result of a reduction in simulated Trinity Lake imports to the Sacramento River of 1130 cfs. Shasta Lake releases must be increased to compensate for the loss of Trinity imports in order to meet minimum instream flow requirements on the Sacramento River below Keswick Dam. In actual operations this reduction in Trinity imports to balance the storages in Trinity and Shasta Lakes would be spread out over a number of months, but as a result of the simplified logic in the CALSIM model the reduction occurs in a single month.

February 1978

Effects from the December 1978 Shasta re-operation carry over into February. Shasta Lake flood control releases in February are reduced by 2166 cfs in Alternative 2-5 since Shasta storage is 120 TAF less at the end of January, This decrease in the simulated Sacramento River flow causes a drop in simulated Delta outflow of 124 TAF. This change in Delta outflow is a function of the simplified representation of Trinity system operations in CALSIM II.

3.5.9.2 Alternative 6 comparison to Alternative 1

September 1940

Similar to Alternatives 2-5, a shift in simulated operations for September is caused by the model code formulation for estimating the incidental benefit to the SWP from CVPIA 3406(b)(2) operations. In Alternative 6 the base water supply that EWA must guarantee at the end of 1940 is over estimated by 400 TAF due to this code formulation. This results in a reduction in simulated Lake Oroville storage of 130 TAF and a reduction of 156 TAF in SWP San Luis Reservoir storage

October 1941

A reduction in SWP deliveries similar to the Alternatives 2-5 study is evident in October and November of this year, precipitated by the simulated EWA operation in September 1940. CALSIM compensates for this shortage condition by increasing simulated SWP South-of-Delta deliveries in December. In February 1941 Lake Oroville flood control releases are reduced in Alternative 6 as compared to Alternative 1 due to lower Oroville storage conditions, resulting in a decrease in Delta outflow.

July 1963

In July of 1963, simulated Lake Oroville storage decreases by 100 TAF in Alternatives 6 as compared to Alternative 1, as a result of the transfer of EWA water from Lake Oroville to the EWA account in San Luis Reservoir. In the Alternative 1 simulation this transfer does not occur because Lake Oroville storage encroaches into flood control space in the spring of 1963 and the entire amount of EWA storage in the reservoir is transferred over to the SWP, since stored EWA water is assumed to spill first. In Alternatives 6, simulated storage in Lake Oroville does not encroach into flood control space in the spring, allowing EWA to retain its Lake Oroville storage, which is then moved to San Luis Reservoir in July. This is not an effect of the FRWP, but rather an EWA re-operation triggered by a slight difference in Lake Oroville storage.

3.5.9.3 Conclusion

Using CALSIM II in a long-term comparative fashion, as it was designed, provides a reasonable basis for assessing project impacts when the results are used in a statistical sense. The isolated months described above are not representative of the potential affects of the FRWP and the differences between project alternatives must be carefully analyzed to differentiate between realistic effects and these isolated modeling artifacts.

4. Water Quality Modeling for the Sacramento-San Joaquin River Delta

The changes in hydrological conditions discussed in Section 3 will lead to changes in water quality in the Sacramento-San Joaquin River Delta. This section provides a detailed analysis on these potential changes.

A number of mathematical models have been developed in the last twenty years to estimate hydrodynamic and water quality conditions in the Delta under different hydrological conditions. These models account for the myriad of physical processes and factors governing the hydrodynamic (flow rate and water level) and transport of water quality constituents (salt, organic carbon, and other parameters) to different level of details. Comparisons of model results to field data typically show varying degree of agreement over different historical periods.[1] This lack of a "perfect tool" to model Delta water quality requires a good understanding of each model's assumptions and limitations in evaluating modeling results.

A number of technical tools are used to assess water quality changes of the Freeport Project alternatives. In some cases, additional analyses of the same impact using alternative models are performed to provide a more complete picture or to estimate the extent of uncertainty in impact estimates. The relevance and applicability of model results to individual impact analysis will be discussed. A brief summary of alternative approaches that are not used will also be provided. In particular, plausible approaches that might appear to give more detailed information but that could lead to misleading or erroneous conclusions will be discussed.

This section of the appendix is organized as follows. Section 4.1 reviews the environment and beneficial uses that could be affected by changes in Delta water quality. Section 4.2 provides an overview of the mathematical models used to quantify potential changes caused by the Freeport Regional Water Project alternatives and their effects, and discusses some of the limitations of these models. The section also contains a brief discussion on other models that are not used in the analysis and a comparison of the modeling approach with other similar water supply reliability projects. Section 4.3 discusses the key modeling assumptions that are essential to an understanding and proper interpretation of modeling results. Section 4.4 discusses modeling results for Alternatives 2 through 5, in which both Sacramento County Water Agency (SCWA) and East Bay Municipal Utility District (EBMUD) divert from Freeport, and Alternative 6, in which only SCWA diverts from Freeport and EBMUD enlarges the existing Pardee reservoir, and compare with results for Alternative 1. Sections 4.4.5 and 4.4.6 contain tables of monthly results from the various water quality models utilized for the analysis. Summary and conclusions of the water quality analysis are provided in Section 4.5. All figures in this section of the appendix are included at the end, in Section 4.7.

4.1 OVERVIEW

Water quality in the Delta is determined by numerous factors, of which only a few would be affected by the Freeport Project. Project alternatives could lead to changes in inflows to the Delta (specifically the Sacramento River, Yolo Bypass, San Joaquin River,[2] and Mokelumne River) and export pumping at state and federal projects pumping plants. Other major factors affecting Delta water quality, such as tides, agricultural diversions and return flows within the Delta, and operations of flow control structures such as the Delta Cross Channel, would not be affected by the Freeport Project.

[1] Significant discrepancies are invariably found in some comparisons in all models.
[2] Changes in the flow rates in the Sacramento and San Joaquin would also change the salinities of these inflows.

The hydrological and reservoir operations model CALSIM II is used to estimate changes in Delta inflows and exports. These results are applied to water quality models to estimate the corresponding changes in water quality in the Delta. CALSIM II is developed as a statewide planning model covering all major water projects and channel networks in the Central Valley system. It is used to study structural and nonstructural water management alternatives by simulating their performance under historical unimpaired flows upstream.[3] Its outputs represent an operation scheme to best meet legal and contractual obligations of the State Water Project and the Central Valley Project, including the need to meet all applicable regulatory and operational constraints in the Central Valley and the Delta to the extent possible. It runs on monthly time-steps, that is, monthly-averaged variables are used in its analyses.

4.1.1 Affected environment

Water quality in the Sacramento/San Joaquin River Delta is highly variable due to the large range of hydrological conditions. Delta outflow, the key factor determining salinity in the Delta, typically varies by one to two orders of magnitude over the course of a few months in most years. Daily Delta outflow (averaged over a tidal day) could range from negative 6,000 cubic feet per second (cfs) or lower (during spring tide in the fall of dry years, when the Delta is "filling") to over 500,000 cfs during extreme flood events (e.g. in early January 1997). Even when averaged over a month, Delta outflow could vary between 3,000 cfs and over 200,000 cfs. Consequently, Delta salinity varies by a factor of 10 or higher at most stations in most years.

The physical mechanisms for flow and salt transport in the Delta are complex. The network of interconnecting channels, with highly variable cross-sectional geometries, provides a setting for complicated mixing processes. Highly variable physical forcings such as diurnal tides, fresh water inflows, and export pumping lead to a complicated flow pattern with different time scales. As a result, Delta salinity could vary over a considerable range for the same Delta outflow, especially in the interior Delta. This is illustrated in Figure 4.1.1-1, which shows the large variability of monthly averaged salinity at Jersey Point with Delta outflow. A more descriptive quantification of Delta outflow, by taking into account antecedent effects (Denton, 1993), improves the correlation significantly (Figure 4.1.1-2), but a variability typically by a factor of 2 remains. More complicated numerical models that take more factors into account have only limited success in improving the correlation between Delta salinity and hydrology.

Drinking water is probably the beneficial use of Delta water that is most sensitive to salinity changes. Table 4.1.1-1 shows the large variability of the different salinity measures pertinent to drinking water beneficial uses. The levels of disinfection by-products in treated Delta water vary accordingly (Table 4.1.1-2).[4] Blending with lower salinity water is a management strategy pursued by some Delta agencies to reduce peak salinity in their supply. For example, blending with high quality stored water in the Los Vaqueros Reservoir lowers Contra Costa Water District's delivered water in the fall of 1999 to between 45 mg/L and 90 mg/L in chloride concentration, even though salinity at its Rock Slough intake varies between 100 mg/L and 240 mg/L during the same period.[5]

[3] The historical period currently used for statewide studies is from water year (WY) 1922 to1994. The same period is used for FRWP alternatives analysis. However, results for the last year of simulation (WY 1994) were found to be unreliable because of the forecasting logic currently in place. Water years 1922 through 1991 are used in this water quality analysis.

[4] Many Delta agencies have modified the treatment processes in the last few years in response to the new federal Safe Drinking Water Act regulations (see §4.1.2.1.1) and reduced the levels of disinfection by-products. Table 4.1.1-2 therefore shows only the most recent year (2001) of data.

[5] Source: Contra Costa Water District presentation on Los Vaqueros Reservoir Expansion Studies in CALFED Drinking Water Subcommittee meeting on March 28, 2003.

A more detailed overview of water quality in the Delta environment could be found in Section 5.3.3.1 (p. 5.3-7 thru 5.3-15) in the CALFED Final Programmatic Environmental Impact Statement/Environmental Impact Report (CALFED, 2000).

Table 4.1.1-1 Water quality at Delta drinking water intakes between 1982 and 1995

	Rock Slough				Banks Pumping Plant			
Parameter	**EC**	**TDS**	**Chloride**	**Bromide**	**EC**	**TDS**	**Chloride**	**Bromide**
Unit	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**
Data from	Jul-83	Jul-86	Jul-83	Jan-90	Mar-82	Jul-86	Mar-82	Jan-90
to	Oct-94	Oct-94	Oct-94	Oct-94	Jan-95	Jan-95	Jan-95	Jan-95
Number of samples	170	42	170	90	258	81	258	121
maximum	1250	544	303	0.92	877	475	186	0.65
median	547	302	105	0.47	492	287	79	0.32
average	552	302	109	0.45	508	293	87	0.32
standard deviation	280	124	78	0.25	181	84	48	0.16
minimum	156	86	12	0.04	143	102	14	0.05

Data collected by the Municipal Water Quality Investigation Program of the California Department of Water Resources.

Table 4.1.1-2 Treated water quality of uban agencies using Delta water in 2001

		ACWD		CCWD		MWD - Jensen Plant		MWD - Mills Plant	
Parameter	**Units**	**Range**	**Mean**	**Range**	**Mean**	**Range**	**Mean**	**Range**	**Mean**
Total Dissolved Solids	ppm (mg/L)	316 to 402	364	287 to 312	300	259 to 318	293	278 to 352	307
Chloride	ppm (mg/L)	69 to 180	125	43 to 69	55	64 to 80	70	87 to 128	100
Bromate	ppb (µg/L)	2 to 29	11	ND to 15	2.6	n/a	n/a	n/a	n/a
Total Trihalomethanes	ppb (µg/L)	11 to 99	38	36 to 46	41	49 to 85	61	41 to 83	65

From 2001 Annual Water Quality Report of Alameda County Water District (ACWD), Contra Costa Water District (CCWD), and Metropolitan Water District of Southern Califronia (MWD). ND - Non-Detect; n/a - Not Available.

4.1.2 Beneficial uses and water quality parameters

Beneficial uses that could be affected by changes in Delta water quality, as a result of changes in Delta inflows and exports, are discussed in the following.

4.1.2.1 Municipal and Industrial

Municipal and industrial beneficial uses Delta water are protected by a maximum salinity standard of 250 mg/L in chloride concentration in the 1995 State Water Resources Control Board (SWRCB) Water Quality Control Plan (WQCP).[6] This standard applies to the Contra Costa Canal, West Canal, Delta Mendota Canal, Barker Slough, and Cache Slough. A more stringent standard of 150 mg/L in chloride

[6] The Water Quality Control Plan is implemented by SWRCB Water Rights Decision 1641.

concentration is also applicable for between 155 and 240 days every year, depending on the hydrological year type, at the Contra Costa Canal. In addition to these standards, there are a number of issues related to salinity that are of concern to urban water agencies. These issues will be summarized in the following subsections.

4.1.2.1.1 Safe Drinking Water Act

Stage 1 of the Disinfectant / Disinfection By-products (D/DBP) Rule of the federal Safe Drinking Water Act (SDWA), which became effective in January 2002, imposes a maximum contaminant level (MCL) of 0.010 mg/L on the concentration of bromate, a suspected carcinogen, in the treated municipal water supply.[7] Bromate production in ozonation increases with bromide concentration in source water. Even though the corresponding maximum bromide concentration in source water would vary with a number of factors, it is likely that an annual average of no higher than 0.30 mg/L for the chemical matrix in Delta water would be needed. This corresponds to a chloride concentration of between 75 and 95 mg/L in the Delta.

Stage 1 of the D/DBP Rule also imposes an MCL of 0.080 mg/L (as a running annual average and reported quarterly) on total trihalomethanes (TTHM), a by-product in the chlorination treatment process. The concentration of TTHM in chlorinated water increases with bromide concentration in source water. In addition, there are a number of other disinfection by-products of chlorination that are regulated or are under study. For example, there is an MCL of 0.060 mg/L for the sum total of five haloacetic acids. The concentration of these haloacetic acids, however, is less affected by salinity in source water.

The mathematical models used to quantify potential changes in bromate and TTHM due to Project related changes in source water salinity are discussed in Section 4.2.6 and the results are presented in Section 4.4.4.1.

4.1.2.1.2 Salinity Targets of California Urban Water Agencies

In addition to potential effects on chronic health risks, changes in source water salinity could impact the operations and economics of urban agencies using Delta water. Even at salinity considerably below the WQCP standard of 250 mg/L chloride concentration and the federal secondary MCL of 500 mg/L in total dissolved solids concentration (TDS) for municipal and industrial uses, an increase in salinity in Delta source water could adversely impact conjunctive use and groundwater management, water reclamation and reuse, and industrial uses due to increased corrosion. Based in part on the Salinity Management Plan of the Metropolitan Water District of Southern California[8], the California Urban Water Agencies recommended to the CALFED Bay-Delta Program a target of 150 mg/L in TDS for Southern California exporters and 220 mg/L in TDS for Bay Area users.[9] The State Water Project also has salinity goals of 220 mg/L TDS as a long-term average and 440 mg/L TDS as a maximum monthly average. Potential changes in salinity to the State Water Project are discussed in Section 4.4.4.2.

[7] This bromate standard is a running annual average maximum contaminant level (MCL) to be reported quarterly.
[8] *Salinity Management Study Final Report – Long-Term Strategy and Recommended Action Plan*, prepared for the Metropolitan Water District of Southern California and the United States Bureau of Reclamation by Bookman-Edmonston Engineering, Inc.,1998.
[9] *CALFED Water Quality Program – Salinity Targets, and Program Actions* prepared by California Urban Water Agencies, 1999. The salinity target, however, was not adopted by CALFED.

4.1.2.1.3 Delivered water quality goal of Contra Costa Water District

Contra Costa Water District (CCWD) has established a delivered water quality goal of 65 mg/L in chloride concentration.[10] A new 100,000 acre-feet Los Vaqueros Reservoir and a new Delta intake (on Byron Tract at Old River) were built to store low salinity water from the Delta when it is available for blending during times of when salinity is high in Delta water. Changes in salinity at CCWD's new Old River intake and its historical Rock Slough intake could affect the performance of the Los Vaqueros Project.

Comments to the Notice of Preparation in the environmental impact review process include a specific request to quantify potential impacts on the availability of high quality Delta water for filling Los Vaqueros Reservoir. Actual impacts on CCWD operations, and the quantity and quality of water in the Los Vaqueros Reservoir, would depend on how CCWD's complex operational constraints might be affected.[11] These changes are not accounted for in CALSIM II and would not be feasible in this analysis. Instead, reasonable estimates on potential changes caused by Project alternatives are made. The approach used to approximate CCWD diversions at its two Delta intakes is discussed in Section 4.3.4, and potential Project changes in CCWD operations and the salinity of its diversions are discussed in Section 4.4.4.3.

4.1.2.1.4 CALFED long-term water quality goal

High quality source water for drinking water uses has been advocated by the US Environmental Protection Agency and California Urban Water Agencies, among others, as part of a multiple barriers approach to protect public health. This view was accepted by the CALFED Bay-Delta Program, which adopted a long-term water quality goal of 0.050 mg/L in bromide concentration and 3.0 mg/L in total organic carbon concentration in the Delta source water. These objectives were based on estimates of the source water needs to meet increasingly stringent federal drinking water quality standards.[12] A 0.050 mg/L bromide concentration in Delta water corresponds to a chloride concentration of around 20 mg/L, which is well below the salinity at Delta intakes at most times.[13]

Many analyses have shown that such a high water quality could not be achieved with existing Delta intakes and infrastructure. Storage for blending is a critical element towards meeting this goal. A number of key actions in the CALFED Program, such as the Bay Area Water Supply Reliability and Water Quality Program (formerly the Bay-Area Blending/Exchange Program), expanded Los Vaqueros Project, and Friant Exchange Program, may contribute towards meeting the CALFED water quality goal for Delta water users. Details of these CALFED actions are still in development at the time of this writing.

In the CALFED Record of Decision, this water quality goal was qualified by an alternative "equivalent level of public health protection" (ELPHP). This alternative compliance would account for improvement in treatment technology, increased understanding of the chronic and acute public health risks associated

[10] This is a target for delivered water at all times. The goal is below the long-term averaged chloride concentration of between 80 and 90 mg/L at CCWD's Rock Slough intake and is considerably less than the historical chloride concentration of up to 250 mg/L during late summer and fall of drier years.

[11] For example, the Biological Opinion for CCWD's Los Vaqueros Project prohibits filling of the Los Vaqueros Reservoir for a 75-day period every year between March and May and no Delta diversions at all for CCWD for a total of 30 days every year between April and May. Potential changes in Delta salinity during these periods would affect the performance of the Los Vaqueros Project differently than at other times of the year. These prohibitions could be lifted if the Reservoir drops below emergency storage level which varies with the hydrological year type.

[12] The key assumptions in developing these objectives are potential SDWA requirements (at the time) of a 90% inactivation for *Cryptosporidium parvum* and a bromate MCL of 0.005 mg/L, and that ozonation and enhanced coagulation (followed by chlorination) are the most advanced practicable treatment technology.

[13] The long-term average salinity at Delta urban intakes ranges between 70 and 90 mg/L in chloride concentration. Seasonal variations range from 20 mg/L in late winter and spring of wet years to 250 mg/L in late summer and fall of dry years.

with microbials and disinfection by-products, and development of state and federal drinking water regulations. However, how this ELPHP condition is to be applied has not been defined.

Comments to the Notice of Preparation in the environmental impact review process include a specific request to evaluate potential Project impact on the ability of the meeting this CALFED water quality goal (DWU, 2002, p.B-10). Specifics of the CALFED actions to allow blending of Delta water with other high quality source waters, and the definition of ELPHP, would be critical to a quantitative impact analysis for the Freeport Project alternatives. These details have yet to be developed in the CALFED program, and reliable estimates of the potential Project impacts on the CALFED long-term water quality goal is not possible at this time.

4.1.2.2 Ecosystem

The 1995 SWRCB WQCP includes a number of water quality objectives for fish and wildlife beneficial uses. Salinity standards cover a large geographic area in the Delta, extending from the western edge of Suisun Marsh to Sacramento River at Collinsville and San Joaquin River at Prisoners Point, and each objective varies seasonally and in some cases with the hydrological year type. In addition, there are flow objectives[14] and dissolved oxygen standards in the San Joaquin River near Stockton. Potential changes caused by Project alternatives on the salinity at these stations are limited to the extent in which Delta inflows and exports, and consequently the outflow, could be a significant factor. Alternatively, the location of constant isohalines would serve as a measure of salinity variation at these locations.

In this analysis, the location of X2,[15] the 2 ppt (parts-per-thousand in practical salinity unit) isohaline at 1 meter off the bottom of the Sacramento River Channel, is used as a surrogate parameter to quantify Project impacts on hydrological and salinity conditions conducive to ecosystem health in the Delta. The model used to quantify these potential changes, and the results for different alternatives, are discussed in Section 4.2.1 and Section 4.4.2, respectively.

4.1.2.3 Agriculture

To protect agricultural beneficial uses, the 1995 SWRCB WQCP include eight salinity compliance locations for in-Delta use and two for export uses (at the two major export facilities). Water quality objectives vary considerably with the particular location in the Delta, seasonally, and with hydrological year type, ranging between 0.45 μmhos/cm in the spring in wet years at Emmaton, Jersey Point, and interior Delta, to 2.78 μmhos/cm at Emmaton in critically dry years. In addition, salinity objectives in south Delta are effective year-round while those at Emmaton, Jersey Point, and interior Delta apply only between April and August.

The key factors affecting salinity at these stations are seawater intrusion, Delta wide and local circulation patterns, and salinity of San Joaquin inflow. Potential effects of seawater intrusion and Delta circulation pattern will be discussed in detail in the analysis of potential Project effects on drinking water beneficial uses. Local circulation pattern in south Delta is controlled by the operation of agricultural flow barriers, which will not be affected by the Freeport Project alternatives. The uncertain design and operation schedule of these barriers at this time preclude reliable estimates of south Delta salinity at the compliance locations. Instead, salinity of San Joaquin inflow at Vernalis will be used as the surrogate parameter for potential effects on agricultural beneficial uses. Note that the detailed discussion on potential changes in salinity at Delta drinking water intakes in Section 4.4.4 also serves to quantify salinity changes at export pumps for agricultural uses.

[14] Flow objectives include Delta outflow, Sacramento River at Rio Vista, and San Joaquin River at Vernalis.
[15] See *An estimate of the historical position of 2 ppt salinity in the San Francisco Bay Estuary* by Wim Kimmerer and Stephen Monismith, Appendix A in *San Francisco Estuary Project, 1993*, for a detailed discussion of the significance of X2.

4.1.3 Approach to water quality analysis

The Freeport Project alternatives' potential impact on salinity in the Delta is caused by Project induced changes in the hydrology, which affect the hydrodynamics and transport processes in the Delta. These potential changes will be analyzed in detail using chloride concentration as the primary salinity parameter, both because it is the constituent regulated in the 1995 SWRCB WQCP and because it provides for the most reliable correlation to bromide concentration in Delta water.[16] Other salinity parameters such as electrical conductivity and total dissolved solids and bromide concentrations are inferred from chloride concentrations using regression relationships developed from field measurements.[17]

Potential effects on other water quality parameters such as organic carbon, nutrients, pathogens (in particular Cryptosporidium parvum), pharmaceuticals, and temperature will not be attempted. A lack of sufficiently accurate predictive tools, coupled with the small magnitude of the Freeport Project compared to water project operations in the Delta, would make impact estimates of these parameters unreliable.

a higher salinity at Delta intakes could increase bromate formation during ozonation. In Delta water, the ratio of bromide to chloride concentration falls between 0.003 and 0.004, and bromide impacts can be inferred from model results for chloride. Potential salinity impact at Rock Slough (a Contra Costa Water District water intake in the Delta) will be used in the analysis because of its downstream location. Among all drinking water intakes in the Delta, potential changes in salinity would be largest at Rock Slough.

Table 4.1.3-1 gives a statistics of the Delta hydrology and export pumping under Alt.1 and potential changes under Project alternatives (e.g. differences between Alts.2-6 and Alt.1) at 2001 LoD.[18] Except for the Mokelumne inflow, the 70-year (water years 1922-1991) average change in Delta hydrology is less than 0.3% under Alts.2-5. At 2020 LoD (Table 4.1.3-2), long-term average inflows to the Delta are slightly lower than at 2001 LoD, while exports and diversions are slightly higher. The ranges of potential change in Sacramento River inflow and export pumping are also smaller.

For the relatively small magnitudes of potential changes, modeling uncertainties become a consideration in quantifying water quality impacts. At the same time, Table 4.1.3-1 shows that the differences in hydrology in individual months could be much larger than the long-term average. This requires a careful assessment of model results for those months with substantial differences, as discussed in Sections 3.4.9 and 3.5.9. It should also be noted that the Freeport Project is located near the upstream boundary of the Delta. Except for potential changes in Delta inflows and exports, Project alternatives would not directly impact the flow and transport within the Delta. Potential changes in Delta hydrology are caused by CVP and SWP operational changes and are quantified through CALSIM II.

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[16] As discussed in §4.1.2.1.1 above, Delta water beneficial uses is most sensitive to potential changes in bromide concentration and is of the most concern.

[17] A number of regression relations have been developed, including:

- A DWR internal memorandum report *Salinity Unit Conversion Equations* dated June 24, 1986, Kamyar Guivetchi to Peter Lee, Dick Kretsinger, and James McDaniel, provides relationships between EC, TDS, and chloride for 34 stations in the Delta;
- The Municipal Water Quality Investigation Program (MWQI) of the California Department of Water Resources has collected field measurements of a large number of water quality constituents on a monthly basis (in some cases more frequent) at key locations in the Delta for over fifteen years. These data are available at http://wq.water.ca.gov/owq/Data/wqdata.htm. Simultaneous data for different parameters, including bromide, could be used to develop regression relationships of interest;
- Correlations between EC, TDS, and chloride and bromide concentrations have been developed at specific intake locations by Delta water agencies, in particular the Contra Costa Water District and the Metropolitan Water District of Southern California.

Conversions used in this study are based on MWQI data and will be discussed in §4.3.2.3.

[18] Detailed comparisons are provided in §3.4 and §3.5.

Table 4.1.3-1 Statistics of potential Project changes in monthly Delta hydrology and export pumping at 2001 LoD, based on CALSIM results for water years 1922-1991

	Sacramento River Flow below Freeport	Yolo Bypass Flow	Mokelumne + Cosumnes Flow	San J. Flow at Vernalis	Sac chloride below Freeport	San J. chloride at Vernalis	Tracy Exports	Banks Exports	NBA and Vallejo Diversion	CCWD Diversion at Rock Slough	CCWD Diversion at Old River
	cfs	cfs	cfs	cfs	*mg/L*	*mg/L*	cfs	cfs	cfs	cfs	cfs
Alts.2-5 minus Alt.1											
maximum	2,045	1,104	1,740	28	0.96	0.24	1,460	2,045	54	7	20
average	-64	-3	9	0	0.25	-0.01	-4	-7	0	0	0
median	-45	0	0	0	0.24	0.00	0	0	0	0	0
minimum	-1,612	-1,253	-254	-98	0.03	-1.19	-783	-1,618	-45	-20	-7
Alt.6 minus Alt.1											
maximum	1,780	22	826	28	0.96	0.43	1,370	1,266	55	6	38
average	-39	-3	-18	0	0.25	0.00	0	-10	0	0	0
median	-38	0	0	0	0.24	0.00	0	0	0	0	0
minimum	-2,362	-598	-1,675	-88	0.03	-1.11	-1,218	-2,125	-8	-38	-6
Alt.1											
maximum	78,428	126,427	11,481	37,503	7.06	205	4,600	8,500	124	284	250
average	22,546	2,140	886	3,761	7.02	87	3,190	4,560	77	132	66
median	15,995	57	431	2,040	7.02	96	3,439	4,632	79	135	35
minimum	6,035	0	0	678	7.00	5	40	300	13	1	0

Table 4.1.3-2 Statistics of potential Project impacts on monthly Delta hydrology and export pumping at 2020 LoD, based on CALSIM results for water years 1922-1991

	Sacramento River Flow below Freeport	Yolo Bypass Flow	Mokelumne + Cosumnes Flow	San J. Flow at Vernalis	Sac chloride below Freeport	San J. chloride at Vernalis	Tracy Exports	Banks Exports	NBA and Vallejo Diversion	CCWD Diversion at Rock Slough	CCWD Diversion at Old River
	cfs	cfs	cfs	cfs	*mg/L*	*mg/L*	cfs	cfs	cfs	cfs	cfs
Alts.2-5 minus Alt.1											
maximum	2,065	685	2,168	128	0.97	0.24	399	1,342	114	13	12
average	-62	-7	18	0	0.26	-0.03	-9	-5	0	0	0
median	-42	0	0	0	0.24	0.00	0	0	0	0	0
minimum	-2,230	-2,873	-16	-63	0.03	-2.44	-576	-645	-71	-12	-13
Alt.6 minus Alt.1											
maximum	2,288	185	839	155	0.97	3.88	292	1,492	32	11	42
average	-31	-6	-9	0	0.26	-0.03	-5	-1	0	0	0
median	-39	0	0	0	0.24	0.00	0	0	0	0	0
minimum	-1,122	-2,870	-1,292	-428	0.03	-10.15	-1,068	-645	-75	-42	-11
Alt.1											
maximum	78,533	126,596	11,252	37,400	7.06	202	4,600	8,500	155	300	250
average	22,431	2,117	871	3,652	7.02	87	3,141	4,619	96	131	77
median	15,960	62	427	2,047	7.02	96	3,338	4,756	103	103	35
minimum	6,000	0	0	680	7.00	5	600	300	19	0	0

Salinity in western Delta varies primarily with Delta outflow, an important factor controlling salinity in interior Delta. Factors at the next level of importance are the distribution of inflows and exports, in particular the entrainment of higher salinity water at the confluence of the Sacramento-San Joaquin River to south Delta due to export pumping during times of seawater intrusion (often referred to as the "carriage-water" effect[19]).

The approach taken in this EIR/EIS is to use a variety of analytical tools to quantify potential salinity changes in the Delta, starting in order from the downstream most location. Impacts caused by changes in Delta outflow are assessed using two models: an outflow-X2 relationship developed by Profs. Stephen Monismith of Stanford University and Wim Kimmerer (then at Biosystems Analysis Inc.) and an outflow-Delta salinity model (the G-model) developed by Dr. Richard Denton of the Contra Costa Water District (CCWD).

Analysis at the next level of complexity, considering both the effects of Delta outflow and distribution of inflows and exports, is performed using results of an artificial neural network algorithm (ANN) developed at the California Department of Water Resources (DWR). ANN also simulates the effects of Delta Cross Channel operation. For analyses taking full account of all of the major factors affecting Delta salinity, two different one-dimensional numerical models are used – the Fischer Delta Model (FDM) developed by the late Prof. Hugo B. Fischer of University of California at Berkeley and Dr. Gregory Gartrell,

[19] See for example SWRCB Order WR-81-15 titled "Proposed Method of Calculating Supplemental Project Water".

previously of Flow Science Incorporated and now at CCWD, and the Delta Simulation Model II (DSM2) developed at DWR.

The potential effects on drinking water beneficial uses caused by these potential changes in Delta salinity are quantified using two regression relationships for disinfection by-product formation. Potential changes in bromate concentration in ozonated water are estimated using a modified Ozekin equation, and potential changes in total trihalomethanes concentration in chlorinated water are estimated using an equation developed at Malcolm-Pirnie, Inc. In addition, potential changes on the salinity goals of delivered water to the State Water Project and to the Contra Costa Water District are quantified as changes in total salt load of diversion and weighted average salinity.

In evaluating the performance of each alternative for "worst-case" conditions, such as model predictions of mean monthly chloride concentration during dry and critical years, will be discussed separately. However, impacts on other year types could affect beneficial uses such as conjunctive use and reclamation. These impacts are addressed using long-term averages.

CALSIM II accounts for a myriad of regulatory constraints and demand priorities in a highly complex physical environment. These considerations are quantified as a complex objective function. In many cases, a number of alternate solutions could give values of the objective function close to the solution in one alternative. When conditions change even only slightly, an alternate solution with a considerably different hydrology could be selected. Consequently, CALSIM II solutions for two Project alternatives could give hydrological outputs in a particular month that are much larger than what might be expected from the magnitude of difference between the two alternatives. However, these month-to-month variations between alternatives would average out in the longer term as water balance is preserved.

Results from CALSIM II studies, and hence the water quality models, must be analyzed as a whole. It could be misleading to focus on large impacts (be they beneficial or adverse) in a particular month as representative without a detailed analysis of the underlying reasons. Appropriately designed statistical parameters are much more reliable estimates of Project impacts than single month comparisons. Project impacts must be assessed through its frequency of occurrence and variability under different hydrological conditions (such as seasonality and hydrological year types), and its consistency with real time operations of the state and federal projects. The choice of these statistical parameters appropriate for quantifying Project impacts would vary with the particular beneficial use addressed, and will be discussed individually under each impact analysis.

Analyses at finer temporal scale (daily or hourly) would incur additional uncertainties due to the limitations in the input data from CALSIM II (which are monthly averages) and approximations and processes not accounted for in the water quality models. Analyses using monthly averages are deemed adequate to quantify Project impacts.

4.2 MODELING METHODOLOGY

Five different water quality models are used to assess potential changes in Delta salinity. These models are described in order of their complexity in Section 4.2.1 through Section 4.2.5. Potential changes in disinfection by-products formation are estimated using two empirical relationships based on regression of data from pilot treatment plant. These two relationships, one for bromate formation and one for total trihalomethanes formation, are described in Section 4.2.6. Accuracies of these salinity and disinfection by-products models are limited by the approximations each model assumes. The corresponding uncertainties in impact estimates are discussed in Section 4.2.7. Sections 4.2.8 and 4.2.9 give a brief review of some approaches considered but are not used in this analysis. Section 4.2.10 compares the water quality analysis for this Project with recent environmental impacts documents of other water projects in the Delta, and addresses the adequacy issue of the present analysis.

4.2.1 Delta outflow-X2 model of Kimmerer and Monismith

Two models have been developed to quantify Delta salinity to a single hydrological variable, the Delta outflow. Profs. Stephen Monismith of Stanford University and Wim Kimmerer of San Francisco State University (formerly at BioSystems Analysis Inc.) developed a linear regression relating the mean monthly location of a salinity of 2.64 mmho/cm in electrical conductivity (X2) in a month to the monthly averaged Delta outflow in that month and the location of X2 in the previous month. The equation takes the form (San Francisco Estuary Project, 1993)

$$X2 = 122.2 + 0.3278\ X2_{PRE} - 17.65\ \log_{10}NDOI$$

where

X2 = Monthly-averaged distance of the 2.64 mmho/cm surface isohaline from the Golden Gate Bridge, in kilometers and along the main shipping channel

$X2_{PRE}$ = Monthly-averaged distance in the previous month

NDOI = Monthly-averaged net Delta outflow in the month in which X2 is computed

This equation is used in CALSIM II to determine compliance of the X2 requirement in the Water Quality Control Plan.[20] Figure 4.2.1-1 shows the compliance locations of X2, the variation of the steady-state X2 corresponding to different values of constant NDOI, and two curves showing the X2 value if the previous month X2 is at the steady state X2 and NDOI is decreased by 300 cfs and by 1,000 cfs. These curves give a rough estimate of the sensitivity of X2 location to changes in Delta outflow.

4.2.2 Outflow-salinity Model of the Contra Costa Water District (the "G-model")

A more complex regression relationship to relate Delta salinity at various locations to Delta outflow was developed by Dr. Richard Denton at the Contra Costa Water District. This so called "G-model" was proposed in Denton (1993), for which Dr. Denton was awarded the first Fischer Award of the California Water and Environmental Modeling Forum (formerly the Bay-Delta Modeling Forum) for modeling excellence. The model estimates the electrical conductivity at Martinez, Chipps Island, Antioch, Emmaton, and Jersey Point, and the chloride concentration at Pumping Plant No.1 of the Contra Costa Canal (off Rock Slough) through a time-weighted average of Jersey Point salinity.

Whereas the Kimmerer-Monismith equation estimates the new location of an isohaline (constant salinity) based on the location in the previous month and the average Delta outflow in that month, the G-model relates the salinity at a location to an "antecedent" Delta outflow (the "G-function"). This antecedent outflow accounts for the cumulative effects of Delta outflow in the past by relating its rate of change (as a ratio to the current value of antecedent outflow) to the difference between the Delta outflow in that month from the current value of antecedent outflow. It is then used to estimate salinity at different locations based on an analogy to the steady state solution of a one-dimensional advection-diffusion transport equation. Despite the simplicity of this formulation, the G-model has been able to capture the variations in Delta salinity to considerable details and to a high accuracy at downstream locations such as at Martinez.

[20] This X2 requirement in the WQCP could be met by any one of three alternatives. It could be met as either maximum daily average salinity or maximum 14-day running average salinity below 2.64 mmhos/cm for the number of days required, or by an equivalent minimum 3-day running average Delta outflow. Note that this Delta outflow calculation does not include the effects of Delta filling or draining due to spring-neap tidal variations.

4.2.3 Artificial Neural Network Algorithm of the Department of Water Resources

The Kimmerer-Monismith equation and the G-model relate Delta salinity to one single variable, the Delta outflow. The use of Delta outflow captures the effects of seawater intrusion and provides a good estimate of the salinity variation at Delta locations further downstream, where salinity transport resembles that in a single channel. In the interior Delta, however, flows in the intricate channel network are more complex. Salinity transport forced by tidal actions and export pumping is also influenced by the relative magnitudes of individual inflows and exports. Effects of agricultural drainage and municipal wastewater discharges nearby could also contribute to local salinity. To account for these effects, the Modeling Support Branch at the California Department of Water Resources developed an empirical tool based on an artificial neural network algorithm (ANN).

The algorithm is based on four input parameters – daily Delta inflows in the Sacramento River and the San Joaquin River, total Delta exports, and Delta Cross Channel gate operations. It is "trained" (calibrated) with model results of a physical-based numerical model DSM2 (Section 4.2.5.) using mean monthly hydrology and a "19-year mean tide" as tidal forcing. Model outputs from ANN include salinity (as electrical conductivity) at Collinsville, Emmaton, Jersey Point, and Rock Slough at Old River.

The ANN algorithm has been undergoing continuous development in the past few years. Two ANN softwares – the Stuggart Neural Network Simulator (version 4.0) and more recently the Matlab Neural Network Toolbox – have been developed and incorporated into CALSIM II. A CALSIM II ANN Refinement Team (CART), composed of technical staff from DWR and USBR and consultants, is currently working on further improvements of the algorithm.

Further details of the model could be found in Appendix D in Benchmark Studies Assumptions dated September 30, 2002, available under "Benchmark Studies Assumptions and Appendices" of the DWR CALSIM II website, at http://modeling.water.ca.gov/hydro/studies/Version2_Benchmark.html. Model performance can be found in Department of Water Resources (1999, 2002a).

4.2.4 Fischer Delta Model (FDM) of Hugo B. Fischer, Inc.

ANN is an empirical model and relies on training (calibration) data to emulate the governing physical processes. It is developed primarily for use in CALSIM II to estimate water needs for compliance with water quality standards in the Delta. Its application is limited by the range of hydrological conditions (including operations of flow control structures and channel configurations in the Delta) used in its training, as simulated in DSM2, in addition to the performance of the ANN algorithm itself. For detailed analyses of Delta hydrodynamics and water quality, two physical-based models, the Fischer Delta Model and the Delta Simulation Model II, have been developed and widely used to account for the dynamic processes governing flow and transport in the Delta. Both FDM and DSM2 are one-dimensional numerical models.

The Fischer Delta Model (FDM) was developed by the late Prof. Hugo B. Fischer at the University of California at Berkeley and Dr. Gregory Gartrell, previously of Flow Science Incorporated and now at CCWD, to simulate flow and transport in the Delta. Model area extends from upstream Sacramento River (at Sacramento) and San Joaquin River (at Vernalis) to the Carquinez Strait downstream at Eckley (Crockett). The model accounts for inflows from all major tributaries, Delta exports, and in-Delta diversions and agricultural returns. It uses the Method of Characteristics for hydrodynamics simulations and a Lagrangian "box-car" scheme for salinity transport. Model formulation is discussed in Hugo B. Fischer (1984).

The model has undergone extensive refinements since its original development in the early 1980s. It has been used by a number of federal and state agencies in planning studies. The most recent version has

been calibrated and compared to over 20 months of historical hourly and filtered flow data (at ten stations) and hourly stage data (at over thirty stations) between 1988 and 2000. Calibration of the salinity transport module (DELSAL) was performed using hourly and filtered salinity at a number of stations for the period August through December 1999.

A "19-year mean tide" is used to simulate tidal forcing in planning simulations (Contra Costa Water District, 1991). Boundary salinity in these runs is generated using an algorithm that estimates the salinity of flood flow as a weighted average of the salinity of Delta outflow in previous tide cycles and the background salinity in the San Francisco and San Pablo Bay (Flow Science Incorporated, 1993).

4.2.5 Delta Simulation Model II (DSM2) of the Department of Water Resources

The DWR Delta Simulation Model II (DSM2) is a one-dimensional numerical model of the Delta developed at DWR in the late 1990s. DSM2-Hydro, the hydrodynamics module, is derived from the U.S. Geological Survey's FourPt model developed by Lew Delong. DSM2-Qual, the water quality module, is derived from the U.S. Geological Survey's Branched Lagrangian Transport Model developed by Harvey Jobson. These codes have been extensively modified to simulate the Delta. The model is used in the analyses of Delta projects and CALFED actions.

The model is copyrighted by the State of California, Department of Water Resources, and is licensed for public use under the GNU General Public License, version 2. Details of the model, including source codes and model performance, are available on the web at http://modeling.water.ca.gov/delta/models/dsm2/index.html. Other aspects of model formulation and implementation are discussed in the annual reports to the State Water Resources Control Board *Methodology for flow and salinity estimates in the Sacramento-San Joaquin Delta and Suisun Marsh* of the Delta Modeling Section of the Department of Water Resources, in particular since 1999. Additional information could be found in an incomplete draft report of the Interagency Ecological Program DSM2 Project Work Team, available on the web at http://www.iep.ca.gov/dsm2pwt/reports/DSM2FinalReport_v07-19-02.pdf.

DSM2 was first developed to use "19-year mean tide" as tidal forcing in planning simulations. Salinity at the downstream boundary is generated using an artificial neural network approach to estimate mean daily salinity from a time series of Delta outflow. A set of constant coefficients (the "Kristoff coefficients") is used to simulate hourly variations from this mean salinity.[21] More recently, an alternative using "adjusted astronomical tide" that accounts for spring-neap variations was implemented (Department of Water Resources, 2002b). The estimate of downstream boundary salinity in this case is more complicated and is discussed in Department of Water Resources (2001b).

4.2.6 Disinfection By-Products

The Freeport Project could lead to changes in bromide concentration at Delta drinking water intakes and affect the bromate concentration in ozonated water and trihalomethanes concentration in chlorinated water. Both bromate and total trihalomethanes are regulated in the federal Safe Drinking Water Act. Other factors affecting the level of disinfection by-products in treated water such as pH, organic carbon concentration, and other constituents in the water matrix, and specifics of the treatment process, will not be affected by the Project.

[21] Details of this approach is provided on the web at http://modeling.water.ca.gov/delta/studies/CalFed/models/mtz_ec_boundary/boundary.html.

4.2.6.1 Ozonation By-products

Bromate concentration in treated water varies with a number of factors, most importantly the specifics of the treatment train and source water chemistry (matrix), including bromide concentration. The magnitude of potential Project impacts is therefore site specific, and could vary as the treatment process evolves.

In this Appendix, estimates of the potential Project impact are made based on an equation developed by Ozekin and revised by Stuart Krasner of MWDSC.[22] The equation takes the form

$$BRM = [1.63x10^{-6} \times TOC^{-1.26} \times pH^{5.82} \times O3_{DOSE}^{1.57} \times Br^{0.73} \times O3_{TIME}^{0.28}] \times BRMCF$$

where

TOC = raw water TOC (mg/l) x (0.75 if TOC<4 or 0.65 if TOC>4) = 4.0 mg/L

pH = 7.0

$O3_{DOSE}$ = 2.4 mg/L (O3:TOC ratio = 0.6)

Br = raw water bromide (µg/l)

$O3_{TIME}$ (contact time) = 12 minutes

and BRMCF is a "central-tendency" correction factor that is site-specific, and a value of 0.56 is assumed.

4.2.6.2 Chlorination By-products

A change in bromide concentration in source water could also affect trihalomethanes formation in chlorination. An equation relating concentration of total trihalomethanes to bromide level in source water has been developed by Malcolm-Pirnie, Inc. and used in a variety of applications. The equation takes the form

$$TTHM = 7.21 \times TOC^{0.004} \times UVA_{254}^{0.534} \times (Cl_{DOSE} - 7.6\ NH_3N)^{0.224} \times Cl_{TIME}^{0.255} \times (Br+1)^{2.01} \times (pH-2.6)^{0.719} \times T^{0.48}$$

where

TOC = raw water TOC (mg/l) x (0.75 if TOC<4 or 0.65 if TOC>4) = 4.0 mg/L

UVA_{254} = 0.033 x TOC + 0.010 = 0.142

Cl_{DOSE} = 4.0 (Cl: TOC ratio = 1.0)

NH_3N = Not Applicable (assumed to be zero)

Cl_{TIME} (contact time) = 1.0 hour

Br = raw water bromide (mg/l)

pH = 7.0

T = Monthly average raw water temperature (9-24^{o}C)

Mean historical temperature from MWQI measurements at Rock Slough is used to simulate seasonal variation in temperature as shown in Table 4.2.6.2-1.

[22] The California Urban Water Agencies (CUWA) adopted a modified form of this "Ozekin equation" in 2000 for the impact analysis of an unrelated project in the Delta. This equation is described on p.14 of the Water Quality Management Plan in the October 9, 2000 Protest Dismissal Agreement between CUWA and Delta Wetlands Properties.

Table 4.2.6.2.1. Monthly average temperature at Contra Costa Canal based on 115 measurements made by DWR between Oct 1990 and Feb 1998.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temp (deg C)	9.8	12.3	15.6	17.9	21.0	23.2	24.1	24.6	22.5	19.2	14.6	11.8

Potential effects on another class of chlorination by-product regulated in SDWA, haloacetic acids, are not quantified due to the lack of a reliable predictive tool.

4.2.7 Model uncertainties and limitations

Hydrodynamic and transport in Delta channels are three-dimensional processes.[23] The use of one-dimensional models to simulate these complex processes necessarily requires assumptions and approximations. Calibration of parameters (such as friction and dispersion coefficients) used in empirical formulations are hampered by uncertainties in both model input (in particular agricultural diversions and return flow in the Delta) and field measurements. For the calibration of flows, the need to estimate small mean flows under tidal conditions require accuracy in both model results and flow measurements. For comparison of salinity values, the relationships between different salinity parameters are different at different locations in the Delta and under different hydrological conditions.[24]

Estimates of potential salinity impacts of Freeport Project alternatives are subject to uncertainties commensurate with those of the models, which may be up to ±20%, and possibly higher.[25] Application of salinity results to estimate disinfection by-product (DBP) concentrations are further complicated by the high variability in DBPs formation with both the specifics of the water treatment process and the water matrix. In particular, temperature, an important factor affecting bromate production in ozonation, is not accounted for in the Ozekin equation (see Section 4.2.6.1).

The uncertainty in conversion between different salinity parameters poses a challenge in comparing estimates of potential differences between Project alternatives from different models. The change in chloride concentration for the same change in electrical conductivity at different times or at different locations could vary by a factor of two.[26] In the discussion of results, percentage changes are used to the extent possible to circumscribe this problem.

4.2.8 Potential use of daily models

Comments to the Notice of Preparation in the environmental impact review process includes a specific requests for water quality analyses at finer time scales, such as range of daily variations. CALSIM II is

[23] Three-dimensional effects are particularly significant when topographic effects and stratification are prominent (e.g. in the Sacramento River in Suisun Bay), in large open water surface areas (e.g. in Sherman Lake and Franks Tract), and at channel junctions. Empirical formulations used in one-dimensional models may not accurately simulate these complex effects on seawater intrusion and on the transport between Sacramento and San Joaquin through connections upstream of Collinsville.

[24] DSM2 and G-model (except for Contra Costa Canal predictions) simulate electrical conductivity as the salinity parameter and FDM simulates chloride as the salinity parameter. Salinity standards in the Delta are in electrical conductivity for the protection of agricultural, fish, and wildlife beneficial uses, and in chloride units for the protection of municipal and industrial beneficial uses.

[25] Comparison of field measurements and model results from DSM2 could be found on the web at http://www.iep.ca.gov/dsm2pwt/dsm2pwt.html.

[26] For example, the ratio between the change in chloride concentration and the change in electrical conductivity could vary between 0.15 and 0.29 in Rock Slough (see §4.3.2.3). The same ratio could also vary widely among Delta locations, from 0.19 at Vernalis to 0.36 at Martinez (Department of Water Resources, 1986).

developed for analyses of monthly-average hydrology. Applications of these monthly averages for comparisons of hourly or daily values of different alternatives would not be appropriate.

4.2.9 Multi-dimensional models

A number of multi-dimensional models have been developed to simulate hydrodynamic and water quality in all or portion of the Delta in the past ten years. Some examples are

- Trim-3D, and more recently the UnTrim Model, have been applied to studies of the San Francisco Bay and the Delta at the U.S. Geological Survey and Stanford University. See for example a discussion on the web page http://sfports.wr.usgs.gov/~rtcheng/UnTRIM.pdf
- RMA-2 and RMA-10 developed at RMA-Associates for the western Delta and recently extended to cover the interior Delta, a description could be found at http://www.rmanet.com/models.htm
- Semi-Implicit-3D Model (SI-3D) developed at U.S. Geological Survey to model the San Francisco Bay and portions of the Delta (e.g. Sacramento River at Delta Cross Channel and Georgiana Slough)

The California Water and Environmental Modeling Forum web page http://www.cwemf.org/modelingclearinghouse/modch.htm provides brief descriptions of these and other models.

Despite recent advances in computing resources, grid resolution and data availability have precluded the use of these models in long-term simulations of the entire Delta. Their applications have primarily been limited to studies aimed at improving the understanding of physical processes at various Delta locations. General applications to water management analyses and planning purposes in the Sacramento-San Joaquin River Delta are not likely in the foreseeable future. For the impact analysis of Freeport Project alternatives, no new significant information could be deduced from simulations using multi-dimensional models that are not obtainable from one-dimensional model (FDM and DSM2) simulations.[27]

4.2.10 Consistency with other approaches in recent impact analyses

The approach discussed above is designed according to the specific nature of Freeport Project alternatives and is the most detailed practicable at this time. Comments to the Notice of Preparation in the environmental impact review process of this Project include specific requests for analyses that are determined to be inappropriate or not practicable.[28] Potential approaches that are not taken have been briefly reviewed in Sections 4.1.2.1.4, 4.2.8 and 4.2.9 above and in Section 4.3.4.[29] These requests can be viewed in perspective by comparing the present analysis with recent water quality impact analyses of projects of the same stakeholders who have concerns about the impacts of this Project. Recent projects of comparable size include Contra Costa Water District's Los Vaqueros Project (CCWD, 1993), Metropolitan Water District of Southern California's Eastside Reservoir Project (MWDSC, 1991), and Department of Water Resources' Kern Water Bank Project (DWR, 1990). The approaches used in these environmental impact documentations are briefly reviewed in the following.

[27] There are instances, such as in studies of the effects of Delta Cross Channel operations or flooded islands on fish movements, when cross-sectional variations in flow and transport would be important considerations and hence require detailed analyses using three-dimensional models. The Freeport Project alternatives would only affect Delta inflows and exports and simulations using multi-dimensional models would not contribute significant information to the impact analysis.

[28] In particular Delta Water Users' requests on a number of water quality impact analyses. See DWU (2002), Section V.2, pp. B-9 to B-10.

[29] See also Section 4.1.1 for a perspective on the magnitude of potential changes caused by Freeport Project alternatives compared to the variability in the natural system.

4.2.10.1 Los Vaqueros Project of Contra Costa Water District

The Los Vaqueros Project, a water supply reliability and water quality project, consists of a new 100,000 TAF off-stream Los Vaqueros Reservoir and a new Delta intake at Old River on Byron Tract. With the addition of this sizable storage capacity,[30] the Contra Costa Water District's diversions from the Delta could be substantially different.

Water quality analysis in the project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is based on results from the Fischer Delta Model. Monthly average salinity at ten key Delta locations over a 57-year simulation period (1922-1978) was analyzed. The significance criteria (CCWD, 1993, pp. 5-9 *et seq*) consisted of two steps. In the first step, all months with a salinity difference that is less than 5% or 5 mg/L in chloride concentration (or 20 μS/cm in electrical conductivity) of base condition (No Action) are screened from further considerations unless the base condition salinity level is greater than 95% of an applicable standard and the alternative caused *any* increase in salinity levels. The remaining months are further reviewed in the second step, in which a number of considerations are used to evaluate the significance of water quality changes. These considerations include: whether the differences follow distinct periodic or seasonal trends, or continuous increases throughout a substantial portion of the simulation period; if the frequency of salinity increases is substantially greater than the frequency of decreases (e.g., salinity levels predicted to increase 70% of the time and decrease 30% of the time); if the frequency, magnitude, and duration of salinity increases are consistent during certain water-year types or Delta conditions (e.g., consistent increases during critical dry years); if the trends in salinity increases are consistent at several Delta stations or over well-defined geographic areas; or if the salinity changes have the potential to affect beneficial uses or CCWD operations. This second step is discussed only qualitatively and no quantitative thresholds have been proposed in the EIR/EIS.[31]

As a comparison, Contra Costa Water District requested that "any increase in chloride concentration exceeding 3 mg/L to be (considered) significant and … full mitigation for those impacts (be provided)" (emphasis added) in a comment letter (CCWD, 1998, p.26, incorporated by reference in DWU, 2002, p.B-2) on a previous EIR/EIS for East Bay Municipal Utility District's Supplemental Water Supply Project, a former version of the Freeport Regional Water Project.

4.2.10.2 Eastside Reservoir Project of Metropolitan Water District of Southern California

The Eastside Reservoir is an 800 TAF off-stream storage facility which nearly doubles Metropolitan Water District of Southern California's surface storage capacity. It provides emergency and additional water supplies for drought protection and peak summer demands. Although the project was described as potentially increasing diversions by as much as 20% in the November through April time frame, the EIR (MWDSC, 1991) did not appear to contain any analysis of potential water quality impacts on the Delta. It appeared that the only discussion on potential Delta impacts appeared on page A-23 of the EIR:

"Impacts on Sacramento-San Joaquin Delta Fisheries Resources

The project would affect the Delta only as permitted by the results of the state's Bay/Delta Hearing process. Under a 1986 Fisheries Agreement between DWR and CDFG, direct impacts to fisheries may be offset by payments which would permit replacement of lost fish. Direct impacts to fisheries in the Delta are covered by this agreement provided that diversions of water are consistent with limits proscribed by US COE."

[30] This storage capacity is close to the annual demand of the Contra Costa Water District at the time.
[31] These significance criteria are reproduced in full in Section 4.4.7.

4.2.10.3 Kern Water Bank

The Kern Water Bank is a ground water storage project designed to add operational flexibility and augment water supplies for the State Water Project (SWP). The first stage is designed to increase SWP water supplies by 50 TAF annually. The EIR (DWR, 1990) estimates that Delta outflow could be impacted when up to 15 TAF per month (250 cfs) could be diverted out of Delta for storage. However, potential impacts on Delta hydrology and water quality do not appear to be quantified in Chapter 3, Affected Environment and Environmental Consequences, of the EIR.

4.3 MODELING ASSUMPTIONS IN FDM AND DSM2 SIMULATIONS

The two one-dimensional numerical models used in this chapter, FDM and DSM2, allow considerable flexibility in model setup.[1] Key assumptions (including tidal forcing, flow control structure operations, and salinities of the major inflows) could be tailored according to the question that the modeling exercise seeks to address. The different possibilities in FDM and DSM2 and the approaches adopted for this impact study will be reviewed in this section. The key consideration in determining the approach in this analysis is to identify and select the one that would provide a reasonable estimate of the range of potential changes.

The outline of this section is as follows. Section 4.3.1 discusses the two options in tidal forcing and assess the difference in impact estimates between mean-tide and astronomical tide simulations. Section 4.3.2 describes the approach to estimating salinity in the Sacramento and San Joaquin inflows and conversions between different salinity parameters. Operations of flow control structures are discussed in Section 4.3. The approach used to split the total CCWD Delta diversions from CALSIM II output into diversions at Rock Slough and Old River is discussed in Section 4.3.4.

4.3.1 Tidal forcing

The magnitude and pattern of tidal sloshing and freshwater outflow determine the extent of seawater intrusion, the key mechanism leading to high salinity in the Delta. Tidal forcing is imposed at the downstream boundary as a time series of stage (in the hydrodynamics module) and salinity variation (in the water quality module) in numerical models of the Delta.

Tidal stage in the Delta is determined primarily by astronomical forcing (see for example Schwiderski, 1980) and to a lesser extent by Delta outflow during high runoff events. Other factors such as wind (especially during storm events) and barometric pressure could also play significant roles. These same factors also determine salinity at the downstream boundary.

FDM and DSM2 were both developed to use "19-year mean-tide" in simulations for planning studies.[2] This is a repeating tide with a 25-hour cycle and is computed from 19 years of tide data at Eckley.[3] An "adjusted astronomical tide" version of DSM2 was developed recently which accounts for the spring-neap variation of the lunar tide cycle (Department of Water Resources, 2001a). In historical simulations and analyses of real-time project operations, accounting for the salinity variation at this fortnightly time-scale is critical.[4] There are also projects in which the spring-neap variation is important to quantify in their planning level analyses.[5]

Two independent comparisons have recently been made of results from mean-tide and from modified astronomical tide simulations using DSM2. Both comparisons are based on hydrological input from the September 30, 2002 release of the CALSIM II benchmark. Results from "mean-tide" and from "modified

[1] All other models used in this chapter (such as K-M, G, and ANN) are completely defined.
[2] However, real tides (measured data which would account for all the factors listed previously) have been used in historical simulations and for model calibration in both FDM and DSM2 for some time.
[3] The National Ocean Service adopted the specific 19-year (actually 18.6 years) mean tide as the National Tidal Datum Epoch (presently computed from 1960-1978), from which mean values (e.g., mean lower low water, etc.) are defined for tidal datum. It is the period over which all significant astronomical effects on tides will occur.
[4] Some examples in which the spring-neap variation is critical are the planning of Delta Cross Channel closure, estimating carriage water requirement and low water levels in south Delta.
[5] For example, low water level in south Delta channels is a critical consideration in the South Delta Improvement Program in CALFED. The large difference in stage in a spring-neap tide cycle is an important variation to quantify in planning level analyses for the project.

astronomical tide" simulations are found to be nearly identical in both comparisons except at times of seawater intrusion. At times of low Delta outflow, monthly-averaged salinity from modified astronomical tide simulation is consistently lower. For all months in water years 1977-91 in which the mean chloride concentration in Rock Slough at Old River is above 150 mg/L in the mean tide simulation, predictions from modified astronomical tide simulations could be lower by as much as 19% and averages 6%. The average difference is 2% over the entire 180 months.

As of April 2003, the set up for planning level simulations and impacts analyses with DSM2 using modified astronomical tide has not been made publicly available. The high complexity of this approach would require considerable support by the DWR Delta Modeling Section before stakeholders could take advantage of this new development. Such support would not be available in the near future due to the heavy workload in the Section.

In the impact analyses for the Freeport Project, tidal forcing in both FDM and DSM2 simulations will be based on 19-year mean tide. This allows for a full period simulation that would be possible only by using the mean-tide approach.[6] The difference in salinity impacts using the two formulations of tidal-forcing would be small. The comparison discussed above suggests that simulations using mean-tide would predict a larger potential difference between Project alternatives and thus provides a more conservative (larger) estimate, since mean-tide simulations appear to accentuate the salinity effects of a lower Delta outflow, the key Project impact on Delta salinity.

4.3.2 Salinity of Delta inflows and conversion between salinity parameters

4.3.2.1 Sacramento River at Freeport

In the hydrological impact analysis in CALSIM II, 61.5% of the water diverted for Sacramento County Water Agency (SCWA) is assumed to return to the Sacramento River. The salinity impact of this treated wastewater discharge is estimated based on the historical effluent salinity of the Sacramento Regional Wastewater Treatment Plant (SRWWTP).

For the purpose of computing changes in the salinity of the Sacramento River inflow to the Delta, SCWA return flow is assumed to follow a different pattern than in CALSIM II in all Freeport Project alternatives (Alts.1-6). In CALSIM II simulations, 61.5% of the SCWA diversion is assumed to return to the Sacramento River in the same month of the diversion.[7] However, some of the water diverted in wetter years is stored for use in drier years. The return flow, if released in drier months, would have a higher impact on Sacramento River salinity. To account for this effect, the return flow is assumed to follow a seasonal pattern, with a peaking factor of 1.7.[8] The return flow in each month is the same in every year and prorated such that the long-term average is identical to 61.5% of the average SCWA diversion over the 73-year simulation period.

Effluent data show that the chloride concentration in the SRWWTP discharge averaged 78 mg/L between 1997 and 2002, ranged between 45 and 98 mg/L, and has a standard deviation of 11 mg/L. Chloride concentration in the Sacramento River at Freeport is assumed to be 7 mg/L in the absence of the SCWA

[6] Mean tide simulation could be set up for the entire 1922-1994 CALSIM II simulation period, while astronomical tide simulations are limited to the 1976-1991 period.

[7] For the purpose of quantifying hydrological impacts, this assumption would give a higher impact estimate. By not accounting for the shift in timing of the return flow to drier months, when SCWA may not be diverting as much at Freeport, the CALSIM II results might portrait a drier hydrology in some dry years under Alts.2-6 than would be under actual operations.

[8] Return flow in July (month of highest use) is 1.66 times that of annual average while January (month of lowest use) is 55% of average. The standard deviation of this seasonal variation is 0.47 times the average.

return flow. In simulations for the 2001 level-of-development, chloride concentration in the Sacramento River inflow ranges between 7.03 and 8.00 mg/L and averages 7.28 mg/L in Project alternatives (Alts.2-6), compared to a range of between 7.00 and 7.07 mg/L and averages 7.02 mg/L in the No Action alternative (Alt.1). These statistical parameters at 2020 LoD are different by less than 0.01 mg/L. To account for these small salinity differences between Sacramento River inflows, all model input and output are carried to three decimal places and are tabulated in Tables 4.3.2.1-1 for 2001 LoD and in Tables 4.3.2.1-2 for 2020 LoD.

4.3.2.2 Salinity of San Joaquin River at Vernalis

CALSIM II output includes electrical conductivity for San Joaquin River at Vernalis. These monthly averages are converted to chloride concentration based on a regression relationship developed at DWR, assuming a minimum chloride concentration of 5 mg/L.9 The chloride concentration in all alternatives are very nearly identical, ranging up to 205 mg/L and averaged 87 mg/L, with the difference between alternatives in any month under 2 mg/L and averages less than 0.1 mg/L. The values are tabulated in Tables 4.3.2.2-1 for 2001 LoD and in Tables 4.3.2.2-2 for 2020 LoD.

[9] For comparison, the lowest chloride concentration recorded in MWQI grab sample measurements between 1982 and 1998 was 7 mg/L, at an electrical conductivity measurement of 0.12 mmhos/cm. For comparison, the lowest mean monthly-average electrical conductivity recorded in the field since 1993 is 0.10 mmhos/cm.

Table 4.3.2.1-1a Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternative 1 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.032	7.024	7.013	7.014	7.007	7.008	7.025	7.012	7.020	7.038	7.044	7.033	7.023
1923	7.026	7.018	7.007	7.008	7.018	7.023	7.017	7.036	7.047	7.035	7.042	7.030	7.026
1924	7.030	7.024	7.019	7.018	7.015	7.013	7.042	7.039	7.039	7.032	7.028	7.030	7.027
1925	7.015	7.015	7.009	7.010	7.002	7.007	7.019	7.028	7.035	7.044	7.033	7.030	7.021
1926	7.028	7.021	7.018	7.010	7.005	7.014	7.011	7.032	7.038	7.029	7.038	7.039	7.024
1927	7.018	7.007	7.008	7.005	7.002	7.006	7.011	7.024	7.040	7.036	7.042	7.035	7.020
1928	7.028	7.012	7.015	7.010	7.010	7.003	7.018	7.035	7.047	7.032	7.034	7.029	7.023
1929	7.028	7.018	7.017	7.016	7.015	7.012	7.046	7.046	7.035	7.032	7.028	7.032	7.027
1930	7.025	7.022	7.008	7.006	7.008	7.005	7.031	7.037	7.040	7.030	7.033	7.033	7.023
1931	7.026	7.020	7.018	7.013	7.018	7.017	7.041	7.041	7.037	7.024	7.028	7.032	7.026
1932	7.021	7.018	7.007	7.006	7.008	7.014	7.039	7.029	7.026	7.040	7.039	7.026	7.023
1933	7.024	7.020	7.016	7.012	7.016	7.009	7.029	7.044	7.036	7.030	7.037	7.032	7.025
1934	7.018	7.019	7.008	7.006	7.009	7.013	7.032	7.043	7.035	7.037	7.043	7.030	7.025
1935	7.023	7.013	7.014	7.005	7.011	7.005	7.004	7.021	7.025	7.029	7.032	7.037	7.018
1936	7.018	7.018	7.016	7.004	7.003	7.006	7.020	7.029	7.035	7.029	7.029	7.028	7.020
1937	7.023	7.022	7.015	7.014	7.005	7.004	7.018	7.029	7.030	7.029	7.031	7.029	7.021
1938	7.025	7.008	7.003	7.006	7.003	7.003	7.008	7.011	7.021	7.043	7.045	7.024	7.017
1939	7.018	7.020	7.016	7.017	7.023	7.013	7.048	7.034	7.047	7.030	7.030	7.026	7.027
1940	7.022	7.025	7.020	7.005	7.003	7.003	7.009	7.032	7.043	7.032	7.041	7.036	7.023
1941	7.031	7.020	7.005	7.003	7.004	7.003	7.006	7.014	7.038	7.039	7.046	7.037	7.020
1942	7.022	7.018	7.004	7.003	7.003	7.010	7.008	7.016	7.027	7.037	7.046	7.035	7.019
1943	7.026	7.014	7.008	7.003	7.005	7.003	7.017	7.034	7.044	7.040	7.043	7.034	7.023
1944	7.030	7.026	7.022	7.017	7.010	7.009	7.040	7.041	7.033	7.028	7.030	7.023	7.026
1945	7.018	7.013	7.011	7.013	7.004	7.009	7.052	7.043	7.040	7.035	7.043	7.034	7.026
1946	7.025	7.014	7.004	7.005	7.010	7.011	7.052	7.041	7.043	7.035	7.037	7.031	7.026
1947	7.029	7.019	7.015	7.020	7.014	7.009	7.032	7.045	7.035	7.027	7.029	7.024	7.025
1948	7.017	7.018	7.016	7.010	7.012	7.011	7.010	7.019	7.034	7.034	7.042	7.041	7.022
1949	7.029	7.021	7.017	7.021	7.023	7.004	7.043	7.038	7.041	7.036	7.041	7.033	7.029
1950	7.034	7.024	7.024	7.010	7.007	7.008	7.021	7.028	7.031	7.025	7.032	7.026	7.022
1951	7.013	7.004	7.002	7.003	7.003	7.010	7.042	7.029	7.044	7.034	7.038	7.034	7.021
1952	7.026	7.018	7.005	7.003	7.003	7.004	7.009	7.010	7.019	7.037	7.041	7.020	7.016
1953	7.021	7.019	7.005	7.003	7.011	7.014	7.033	7.024	7.027	7.033	7.039	7.023	7.021
1954	7.024	7.014	7.016	7.007	7.004	7.005	7.012	7.029	7.053	7.032	7.040	7.030	7.022
1955	7.027	7.015	7.010	7.012	7.018	7.021	7.031	7.036	7.035	7.033	7.036	7.029	7.025
1956	7.025	7.015	7.002	7.002	7.003	7.009	7.030	7.014	7.036	7.034	7.041	7.022	7.020
1957	7.019	7.023	7.020	7.015	7.007	7.005	7.026	7.032	7.042	7.034	7.045	7.038	7.026
1958	7.014	7.018	7.010	7.006	7.003	7.003	7.004	7.014	7.022	7.039	7.047	7.025	7.017
1959	7.020	7.023	7.019	7.006	7.005	7.013	7.059	7.050	7.037	7.033	7.035	7.026	7.027
1960	7.030	7.023	7.023	7.020	7.008	7.006	7.033	7.029	7.035	7.024	7.029	7.029	7.024
1961	7.024	7.013	7.009	7.013	7.005	7.010	7.037	7.049	7.054	7.032	7.031	7.030	7.025
1962	7.028	7.017	7.013	7.020	7.005	7.008	7.052	7.050	7.048	7.033	7.037	7.030	7.028
1963	7.007	7.015	7.009	7.015	7.004	7.007	7.005	7.020	7.045	7.039	7.045	7.041	7.021
1964	7.017	7.009	7.018	7.010	7.017	7.019	7.041	7.033	7.034	7.026	7.026	7.023	7.023
1965	7.020	7.013	7.002	7.002	7.006	7.010	7.009	7.028	7.054	7.033	7.040	7.036	7.021
1966	7.029	7.011	7.015	7.008	7.011	7.010	7.045	7.041	7.038	7.033	7.038	7.034	7.026
1967	7.027	7.016	7.006	7.006	7.005	7.004	7.009	7.015	7.018	7.043	7.043	7.024	7.018
1968	7.019	7.018	7.015	7.008	7.004	7.007	7.048	7.055	7.039	7.035	7.038	7.031	7.026
1969	7.027	7.019	7.010	7.003	7.004	7.005	7.013	7.013	7.033	7.044	7.041	7.021	7.019
1970	7.018	7.017	7.004	7.003	7.004	7.007	7.044	7.054	7.044	7.029	7.038	7.030	7.024
1971	7.026	7.014	7.004	7.005	7.009	7.006	7.029	7.021	7.033	7.029	7.038	7.023	7.020
1972	7.023	7.019	7.012	7.013	7.010	7.008	7.045	7.049	7.034	7.032	7.036	7.033	7.026
1973	7.021	7.011	7.008	7.003	7.003	7.005	7.035	7.036	7.038	7.033	7.042	7.032	7.022
1974	7.020	7.004	7.003	7.003	7.007	7.003	7.008	7.029	7.031	7.033	7.042	7.021	7.017
1975	7.018	7.018	7.014	7.015	7.004	7.003	7.025	7.022	7.029	7.035	7.042	7.023	7.021
1976	7.013	7.015	7.015	7.017	7.021	7.015	7.040	7.051	7.042	7.031	7.030	7.027	7.027
1977	7.028	7.022	7.018	7.019	7.022	7.022	7.037	7.043	7.031	7.021	7.026	7.029	7.026
1978	7.021	7.017	7.008	7.002	7.003	7.004	7.012	7.031	7.043	7.042	7.043	7.030	7.021
1979	7.032	7.024	7.025	7.010	7.006	7.007	7.033	7.039	7.036	7.036	7.044	7.037	7.027
1980	7.021	7.018	7.012	7.003	7.003	7.005	7.029	7.038	7.058	7.043	7.041	7.032	7.025
1981	7.033	7.028	7.016	7.010	7.010	7.007	7.036	7.056	7.051	7.036	7.040	7.034	7.030
1982	7.020	7.007	7.003	7.003	7.004	7.003	7.004	7.020	7.032	7.044	7.047	7.027	7.018
1983	7.010	7.007	7.004	7.003	7.003	7.003	7.006	7.011	7.013	7.029	7.033	7.020	7.012
1984	7.017	7.004	7.003	7.005	7.007	7.009	7.037	7.048	7.046	7.031	7.037	7.031	7.023
1985	7.023	7.008	7.010	7.017	7.017	7.016	7.050	7.047	7.050	7.036	7.038	7.028	7.028
1986	7.025	7.022	7.014	7.009	7.003	7.002	7.026	7.046	7.048	7.034	7.034	7.026	7.024
1987	7.026	7.026	7.019	7.015	7.012	7.006	7.031	7.044	7.035	7.029	7.032	7.027	7.025
1988	7.021	7.020	7.010	7.006	7.011	7.022	7.035	7.038	7.037	7.040	7.050	7.035	7.027
1989	7.027	7.016	7.014	7.012	7.018	7.002	7.020	7.032	7.043	7.028	7.031	7.021	7.022
1990	7.015	7.014	7.014	7.009	7.013	7.010	7.029	7.032	7.043	7.034	7.027	7.021	7.022
1991	7.020	7.017	7.017	7.016	7.016	7.005	7.028	7.042	7.054	7.034	7.039	7.031	7.027
AVG:	7.023	7.017	7.012	7.009	7.009	7.009	7.027	7.033	7.038	7.034	7.038	7.030	7.023
MIN:	7.007	7.004	7.002	7.002	7.002	7.002	7.004	7.010	7.013	7.021	7.026	7.020	7.012
MAX:	7.034	7.028	7.025	7.021	7.023	7.023	7.059	7.056	7.058	7.044	7.050	7.041	7.030

Table 4.3.2.1-1b Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternatives 2 through 5 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.300	7.244	7.137	7.147	7.067	7.083	7.221	7.128	7.196	7.384	7.431	7.329	7.222
1923	7.287	7.184	7.075	7.083	7.162	7.175	7.220	7.365	7.469	7.367	7.424	7.346	7.263
1924	7.304	7.234	7.200	7.186	7.152	7.245	7.680	7.774	7.754	7.655	7.620	7.647	7.454
1925	7.401	7.305	7.187	7.193	7.037	7.095	7.242	7.421	7.448	7.593	7.422	7.400	7.312
1926	7.334	7.285	7.246	7.139	7.060	7.184	7.261	7.489	7.572	7.448	7.545	7.518	7.340
1927	7.333	7.106	7.130	7.077	7.032	7.057	7.112	7.237	7.389	7.367	7.413	7.341	7.216
1928	7.306	7.123	7.154	7.105	7.092	7.033	7.196	7.384	7.513	7.359	7.398	7.329	7.249
1929	7.287	7.199	7.198	7.183	7.152	7.228	7.714	7.786	7.692	7.566	7.535	7.665	7.434
1930	7.392	7.336	7.133	7.108	7.129	7.078	7.421	7.516	7.533	7.428	7.465	7.477	7.335
1931	7.333	7.279	7.250	7.175	7.220	7.328	7.593	7.838	7.738	7.438	7.545	7.601	7.445
1932	7.393	7.342	7.129	7.115	7.143	7.185	7.536	7.469	7.406	7.634	7.659	7.406	7.368
1933	7.338	7.285	7.245	7.184	7.221	7.186	7.485	7.954	7.701	7.609	7.803	7.643	7.471
1934	7.392	7.335	7.166	7.122	7.162	7.199	7.441	7.782	7.616	7.586	7.737	7.560	7.425
1935	7.393	7.233	7.240	7.083	7.169	7.096	7.108	7.257	7.329	7.396	7.401	7.392	7.258
1936	7.259	7.260	7.216	7.060	7.039	7.082	7.245	7.406	7.462	7.384	7.409	7.386	7.267
1937	7.276	7.259	7.204	7.186	7.066	7.063	7.232	7.381	7.386	7.380	7.431	7.385	7.271
1938	7.312	7.103	7.037	7.076	7.032	7.033	7.084	7.110	7.203	7.427	7.427	7.248	7.174
1939	7.193	7.196	7.162	7.177	7.206	7.184	7.500	7.491	7.593	7.387	7.410	7.371	7.322
1940	7.301	7.281	7.274	7.072	7.042	7.033	7.079	7.327	7.411	7.323	7.416	7.367	7.244
1941	7.320	7.200	7.052	7.032	7.032	7.035	7.084	7.151	7.364	7.393	7.423	7.256	7.195
1942	7.233	7.179	7.037	7.034	7.032	7.108	7.119	7.179	7.259	7.373	7.428	7.254	7.186
1943	7.233	7.142	7.083	7.033	7.046	7.037	7.200	7.333	7.422	7.402	7.419	7.339	7.224
1944	7.269	7.254	7.219	7.169	7.099	7.118	7.484	7.563	7.432	7.371	7.408	7.305	7.308
1945	7.260	7.171	7.146	7.179	7.051	7.111	7.446	7.439	7.392	7.346	7.418	7.337	7.275
1946	7.323	7.140	7.037	7.048	7.095	7.120	7.429	7.430	7.414	7.350	7.399	7.329	7.259
1947	7.276	7.191	7.152	7.208	7.133	7.119	7.368	7.577	7.455	7.360	7.379	7.309	7.294
1948	7.280	7.234	7.211	7.137	7.145	7.166	7.197	7.216	7.330	7.337	7.386	7.301	7.245
1949	7.266	7.217	7.176	7.211	7.208	7.053	7.411	7.443	7.433	7.393	7.474	7.368	7.305
1950	7.331	7.255	7.268	7.114	7.068	7.123	7.271	7.387	7.393	7.339	7.394	7.341	7.274
1951	7.223	7.050	7.032	7.038	7.037	7.089	7.343	7.322	7.427	7.339	7.393	7.343	7.220
1952	7.304	7.179	7.051	7.032	7.033	7.044	7.085	7.099	7.185	7.369	7.421	7.202	7.167
1953	7.186	7.195	7.054	7.032	7.104	7.115	7.322	7.244	7.273	7.329	7.414	7.231	7.208
1954	7.224	7.145	7.166	7.070	7.038	7.050	7.129	7.283	7.506	7.325	7.396	7.296	7.219
1955	7.239	7.149	7.104	7.121	7.167	7.226	7.396	7.495	7.449	7.447	7.508	7.418	7.310
1956	7.328	7.204	7.032	7.031	7.034	7.071	7.275	7.160	7.349	7.343	7.424	7.235	7.207
1957	7.215	7.203	7.202	7.153	7.067	7.054	7.251	7.377	7.399	7.342	7.418	7.342	7.252
1958	7.160	7.165	7.100	7.061	7.031	7.033	7.069	7.136	7.209	7.388	7.433	7.218	7.167
1959	7.180	7.200	7.192	7.065	7.045	7.115	7.510	7.495	7.367	7.333	7.385	7.335	7.268
1960	7.272	7.201	7.236	7.200	7.079	7.114	7.459	7.495	7.559	7.383	7.495	7.470	7.330
1961	7.334	7.210	7.151	7.200	7.067	7.133	7.381	7.538	7.583	7.352	7.353	7.334	7.303
1962	7.292	7.182	7.147	7.226	7.050	7.097	7.444	7.485	7.456	7.325	7.383	7.302	7.282
1963	7.089	7.154	7.088	7.158	7.034	7.075	7.073	7.199	7.430	7.394	7.417	7.310	7.202
1964	7.187	7.088	7.185	7.100	7.163	7.200	7.421	7.455	7.475	7.358	7.374	7.317	7.277
1965	7.315	7.170	7.033	7.032	7.076	7.106	7.125	7.270	7.516	7.334	7.420	7.356	7.229
1966	7.259	7.113	7.154	7.081	7.096	7.088	7.376	7.420	7.388	7.349	7.417	7.359	7.258
1967	7.248	7.164	7.059	7.058	7.044	7.045	7.137	7.138	7.176	7.438	7.403	7.210	7.177
1968	7.171	7.179	7.152	7.083	7.039	7.068	7.422	7.559	7.379	7.349	7.405	7.312	7.260
1969	7.262	7.188	7.101	7.032	7.032	7.053	7.122	7.124	7.321	7.446	7.422	7.212	7.193
1970	7.185	7.173	7.040	7.031	7.033	7.074	7.345	7.538	7.450	7.295	7.406	7.307	7.240
1971	7.282	7.146	7.039	7.050	7.083	7.055	7.236	7.234	7.325	7.296	7.411	7.233	7.199
1972	7.214	7.190	7.127	7.131	7.095	7.070	7.436	7.544	7.370	7.358	7.416	7.410	7.280
1973	7.276	7.125	7.091	7.032	7.032	7.047	7.312	7.350	7.351	7.359	7.427	7.350	7.229
1974	7.247	7.038	7.035	7.032	7.060	7.033	7.078	7.268	7.302	7.357	7.420	7.205	7.173
1975	7.179	7.177	7.146	7.155	7.037	7.035	7.247	7.213	7.283	7.350	7.408	7.224	7.204
1976	7.169	7.147	7.148	7.174	7.191	7.168	7.541	7.796	7.687	7.499	7.525	7.439	7.374
1977	7.391	7.321	7.275	7.292	7.306	7.318	7.566	8.006	7.627	7.436	7.605	7.635	7.482
1978	7.393	7.340	7.160	7.037	7.047	7.040	7.161	7.299	7.416	7.378	7.401	7.299	7.248
1979	7.283	7.239	7.249	7.101	7.057	7.083	7.330	7.382	7.346	7.362	7.417	7.369	7.268
1980	7.270	7.185	7.125	7.032	7.032	7.055	7.286	7.385	7.555	7.440	7.429	7.320	7.259
1981	7.298	7.254	7.165	7.097	7.090	7.077	7.332	7.557	7.486	7.359	7.387	7.349	7.288
1982	7.255	7.069	7.032	7.035	7.032	7.036	7.068	7.172	7.303	7.440	7.439	7.211	7.174
1983	7.136	7.067	7.037	7.033	7.032	7.032	7.083	7.108	7.127	7.296	7.310	7.169	7.119
1984	7.157	7.038	7.032	7.047	7.070	7.069	7.296	7.482	7.481	7.313	7.407	7.319	7.226
1985	7.260	7.077	7.105	7.169	7.156	7.188	7.439	7.460	7.486	7.364	7.396	7.295	7.283
1986	7.253	7.219	7.137	7.095	7.030	7.033	7.281	7.506	7.514	7.378	7.391	7.319	7.263
1987	7.268	7.260	7.217	7.172	7.121	7.103	7.363	7.581	7.460	7.394	7.460	7.362	7.313
1988	7.282	7.274	7.129	7.086	7.144	7.272	7.559	7.696	7.585	7.641	7.813	7.571	7.421
1989	7.392	7.261	7.240	7.189	7.265	7.052	7.236	7.400	7.563	7.382	7.386	7.369	7.311
1990	7.238	7.191	7.186	7.120	7.164	7.189	7.466	7.885	7.805	7.690	7.575	7.412	7.410
1991	7.371	7.336	7.349	7.324	7.294	7.078	7.420	7.696	7.882	7.580	7.644	7.455	7.452
AVG:	7.274	7.198	7.144	7.112	7.096	7.106	7.311	7.424	7.445	7.404	7.451	7.357	7.277
MIN:	7.089	7.038	7.032	7.031	7.030	7.032	7.068	7.099	7.127	7.295	7.310	7.169	7.119
MAX:	7.401	7.342	7.349	7.324	7.306	7.328	7.714	8.006	7.882	7.690	7.813	7.665	7.482

Table 4.3.2.1-1c Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternative 6 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.300	7.244	7.137	7.147	7.067	7.083	7.221	7.128	7.196	7.382	7.423	7.329	7.221
1923	7.287	7.184	7.076	7.083	7.162	7.175	7.220	7.365	7.478	7.364	7.421	7.348	7.264
1924	7.304	7.234	7.202	7.186	7.152	7.245	7.670	7.770	7.764	7.644	7.607	7.610	7.449
1925	7.401	7.305	7.187	7.193	7.037	7.095	7.242	7.421	7.440	7.587	7.420	7.400	7.311
1926	7.334	7.285	7.246	7.139	7.060	7.182	7.259	7.487	7.572	7.446	7.541	7.509	7.338
1927	7.333	7.105	7.129	7.077	7.032	7.057	7.112	7.237	7.389	7.367	7.406	7.341	7.215
1928	7.306	7.124	7.154	7.105	7.092	7.033	7.196	7.398	7.507	7.356	7.398	7.328	7.250
1929	7.287	7.199	7.198	7.183	7.152	7.225	7.714	7.786	7.682	7.566	7.533	7.554	7.423
1930	7.392	7.336	7.133	7.109	7.128	7.078	7.422	7.510	7.526	7.418	7.447	7.468	7.331
1931	7.333	7.282	7.255	7.177	7.222	7.331	7.592	7.839	7.730	7.442	7.544	7.595	7.445
1932	7.393	7.342	7.126	7.115	7.137	7.185	7.536	7.469	7.405	7.634	7.659	7.406	7.367
1933	7.338	7.285	7.245	7.184	7.221	7.185	7.485	7.954	7.702	7.605	7.795	7.643	7.470
1934	7.392	7.335	7.166	7.122	7.162	7.197	7.441	7.782	7.632	7.660	7.804	7.545	7.437
1935	7.393	7.231	7.240	7.082	7.169	7.096	7.106	7.257	7.330	7.396	7.399	7.386	7.257
1936	7.252	7.253	7.217	7.061	7.039	7.081	7.245	7.402	7.476	7.374	7.402	7.380	7.265
1937	7.273	7.259	7.204	7.186	7.066	7.063	7.232	7.380	7.394	7.369	7.418	7.378	7.269
1938	7.312	7.103	7.037	7.076	7.032	7.033	7.084	7.110	7.203	7.424	7.419	7.247	7.173
1939	7.200	7.196	7.162	7.177	7.206	7.182	7.498	7.494	7.588	7.387	7.411	7.369	7.322
1940	7.303	7.279	7.269	7.072	7.042	7.033	7.079	7.330	7.415	7.319	7.410	7.367	7.243
1941	7.314	7.201	7.052	7.032	7.032	7.035	7.084	7.151	7.364	7.389	7.414	7.256	7.194
1942	7.243	7.179	7.037	7.034	7.032	7.108	7.119	7.179	7.259	7.345	7.420	7.254	7.184
1943	7.233	7.156	7.083	7.033	7.046	7.037	7.200	7.334	7.423	7.409	7.418	7.339	7.226
1944	7.269	7.254	7.219	7.169	7.098	7.117	7.484	7.563	7.432	7.371	7.408	7.305	7.307
1945	7.263	7.171	7.146	7.178	7.051	7.111	7.446	7.439	7.407	7.342	7.407	7.332	7.275
1946	7.324	7.142	7.036	7.048	7.094	7.120	7.430	7.430	7.410	7.347	7.395	7.319	7.258
1947	7.281	7.189	7.151	7.207	7.133	7.120	7.368	7.577	7.464	7.360	7.379	7.313	7.295
1948	7.286	7.235	7.239	7.136	7.145	7.166	7.196	7.215	7.329	7.337	7.386	7.299	7.247
1949	7.267	7.206	7.176	7.211	7.208	7.054	7.411	7.443	7.430	7.393	7.475	7.368	7.304
1950	7.331	7.258	7.268	7.113	7.068	7.123	7.271	7.381	7.404	7.335	7.388	7.344	7.274
1951	7.230	7.050	7.032	7.038	7.037	7.089	7.343	7.322	7.427	7.337	7.391	7.343	7.220
1952	7.304	7.180	7.051	7.032	7.033	7.044	7.084	7.099	7.185	7.366	7.424	7.202	7.167
1953	7.186	7.195	7.054	7.032	7.104	7.115	7.322	7.244	7.273	7.329	7.413	7.231	7.208
1954	7.225	7.145	7.166	7.070	7.038	7.050	7.129	7.283	7.506	7.325	7.396	7.296	7.219
1955	7.239	7.149	7.104	7.121	7.167	7.226	7.398	7.495	7.449	7.448	7.508	7.418	7.310
1956	7.328	7.204	7.032	7.031	7.034	7.071	7.275	7.160	7.349	7.377	7.417	7.235	7.209
1957	7.201	7.202	7.194	7.153	7.067	7.054	7.251	7.377	7.405	7.345	7.423	7.321	7.249
1958	7.161	7.165	7.100	7.061	7.031	7.033	7.069	7.136	7.209	7.384	7.425	7.217	7.166
1959	7.180	7.200	7.192	7.065	7.045	7.115	7.510	7.494	7.368	7.333	7.385	7.339	7.269
1960	7.271	7.196	7.234	7.197	7.078	7.113	7.459	7.487	7.542	7.383	7.494	7.469	7.327
1961	7.334	7.210	7.150	7.200	7.066	7.133	7.381	7.538	7.579	7.352	7.353	7.334	7.303
1962	7.281	7.183	7.147	7.227	7.050	7.097	7.438	7.481	7.456	7.328	7.382	7.300	7.281
1963	7.088	7.152	7.088	7.156	7.034	7.074	7.073	7.199	7.419	7.372	7.411	7.304	7.198
1964	7.187	7.088	7.185	7.106	7.163	7.199	7.416	7.462	7.470	7.358	7.374	7.313	7.277
1965	7.314	7.169	7.033	7.032	7.076	7.106	7.125	7.270	7.524	7.339	7.415	7.356	7.230
1966	7.259	7.111	7.154	7.081	7.096	7.088	7.376	7.420	7.388	7.349	7.417	7.359	7.258
1967	7.248	7.164	7.059	7.058	7.044	7.045	7.137	7.138	7.176	7.438	7.403	7.210	7.177
1968	7.171	7.179	7.152	7.083	7.039	7.068	7.422	7.551	7.381	7.350	7.405	7.312	7.259
1969	7.261	7.188	7.100	7.032	7.032	7.053	7.122	7.124	7.321	7.439	7.415	7.215	7.192
1970	7.185	7.173	7.040	7.031	7.033	7.074	7.345	7.538	7.450	7.295	7.406	7.307	7.240
1971	7.282	7.146	7.039	7.050	7.083	7.055	7.235	7.234	7.325	7.296	7.411	7.233	7.199
1972	7.214	7.190	7.128	7.131	7.095	7.070	7.434	7.544	7.370	7.358	7.413	7.410	7.280
1973	7.276	7.124	7.089	7.032	7.032	7.048	7.312	7.350	7.356	7.355	7.421	7.353	7.229
1974	7.253	7.038	7.035	7.032	7.060	7.033	7.078	7.268	7.304	7.354	7.414	7.210	7.173
1975	7.179	7.177	7.146	7.155	7.037	7.035	7.247	7.213	7.283	7.347	7.408	7.224	7.204
1976	7.170	7.147	7.148	7.174	7.191	7.166	7.537	7.796	7.676	7.493	7.538	7.429	7.372
1977	7.391	7.314	7.281	7.291	7.306	7.319	7.566	8.006	7.627	7.437	7.571	7.635	7.479
1978	7.393	7.340	7.161	7.037	7.047	7.040	7.160	7.299	7.415	7.425	7.401	7.299	7.251
1979	7.283	7.239	7.249	7.099	7.057	7.082	7.328	7.378	7.347	7.362	7.418	7.363	7.267
1980	7.267	7.182	7.123	7.032	7.032	7.055	7.286	7.385	7.555	7.435	7.424	7.320	7.258
1981	7.298	7.254	7.165	7.098	7.090	7.076	7.329	7.549	7.487	7.359	7.387	7.349	7.287
1982	7.252	7.068	7.032	7.035	7.032	7.036	7.068	7.172	7.303	7.436	7.433	7.212	7.173
1983	7.137	7.067	7.037	7.033	7.032	7.032	7.083	7.108	7.127	7.296	7.310	7.169	7.119
1984	7.157	7.038	7.032	7.047	7.070	7.069	7.296	7.482	7.481	7.314	7.406	7.319	7.226
1985	7.260	7.077	7.105	7.169	7.156	7.188	7.439	7.460	7.485	7.364	7.396	7.295	7.283
1986	7.253	7.219	7.137	7.095	7.030	7.033	7.281	7.506	7.515	7.377	7.388	7.319	7.263
1987	7.268	7.260	7.217	7.172	7.121	7.102	7.364	7.579	7.464	7.394	7.469	7.364	7.314
1988	7.276	7.269	7.128	7.086	7.144	7.277	7.549	7.668	7.609	7.613	7.800	7.566	7.415
1989	7.391	7.261	7.233	7.189	7.270	7.052	7.235	7.400	7.556	7.376	7.384	7.364	7.309
1990	7.233	7.188	7.186	7.121	7.164	7.187	7.466	7.861	7.815	7.689	7.572	7.413	7.408
1991	7.375	7.336	7.349	7.321	7.289	7.077	7.413	7.683	7.882	7.544	7.657	7.476	7.450
AVG:	7.274	7.197	7.144	7.112	7.096	7.106	7.311	7.423	7.446	7.403	7.449	7.353	7.276
MIN:	7.088	7.038	7.032	7.031	7.030	7.032	7.068	7.099	7.127	7.295	7.310	7.169	7.119
MAX:	7.401	7.342	7.349	7.321	7.306	7.331	7.714	8.006	7.882	7.689	7.804	7.643	7.479

Table 4.3.2.1-2a Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternative 1 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.030	7.023	7.013	7.014	7.007	7.008	7.025	7.012	7.021	7.033	7.043	7.034	7.022
1923	7.024	7.017	7.008	7.008	7.017	7.021	7.017	7.038	7.047	7.034	7.040	7.028	7.025
1924	7.025	7.025	7.018	7.017	7.015	7.013	7.044	7.040	7.039	7.034	7.028	7.031	7.027
1925	7.015	7.014	7.009	7.009	7.002	7.007	7.018	7.030	7.034	7.044	7.060	7.030	7.023
1926	7.028	7.021	7.020	7.010	7.005	7.014	7.011	7.032	7.040	7.029	7.041	7.035	7.024
1927	7.018	7.007	7.008	7.005	7.002	7.006	7.011	7.025	7.037	7.035	7.042	7.037	7.019
1928	7.022	7.014	7.015	7.010	7.011	7.003	7.018	7.029	7.041	7.034	7.040	7.032	7.022
1929	7.028	7.017	7.017	7.016	7.014	7.011	7.047	7.046	7.038	7.037	7.041	7.041	7.030
1930	7.025	7.022	7.007	7.006	7.008	7.005	7.029	7.037	7.044	7.031	7.036	7.030	7.023
1931	7.026	7.021	7.019	7.012	7.017	7.016	7.042	7.040	7.037	7.025	7.030	7.028	7.026
1932	7.021	7.018	7.006	7.006	7.008	7.013	7.036	7.032	7.032	7.028	7.032	7.025	7.021
1933	7.024	7.020	7.017	7.011	7.014	7.009	7.030	7.040	7.038	7.031	7.037	7.032	7.025
1934	7.018	7.019	7.008	7.006	7.009	7.013	7.032	7.043	7.036	7.037	7.046	7.030	7.025
1935	7.023	7.012	7.013	7.005	7.011	7.004	7.004	7.021	7.026	7.030	7.032	7.035	7.018
1936	7.019	7.020	7.016	7.004	7.003	7.006	7.020	7.029	7.035	7.029	7.028	7.028	7.020
1937	7.022	7.023	7.015	7.013	7.005	7.004	7.018	7.030	7.038	7.031	7.030	7.028	7.021
1938	7.023	7.008	7.003	7.006	7.003	7.003	7.008	7.011	7.022	7.036	7.045	7.026	7.016
1939	7.019	7.021	7.016	7.017	7.021	7.013	7.053	7.037	7.039	7.028	7.030	7.026	7.027
1940	7.021	7.025	7.019	7.006	7.003	7.003	7.009	7.032	7.041	7.033	7.040	7.036	7.022
1941	7.028	7.019	7.006	7.003	7.004	7.003	7.006	7.014	7.039	7.034	7.046	7.037	7.020
1942	7.023	7.019	7.004	7.003	7.003	7.010	7.007	7.016	7.029	7.038	7.046	7.036	7.020
1943	7.026	7.015	7.008	7.003	7.005	7.003	7.017	7.035	7.044	7.043	7.043	7.037	7.023
1944	7.033	7.025	7.020	7.016	7.010	7.009	7.037	7.042	7.035	7.029	7.032	7.026	7.026
1945	7.019	7.012	7.011	7.012	7.004	7.009	7.048	7.046	7.040	7.035	7.042	7.037	7.026
1946	7.022	7.016	7.004	7.005	7.010	7.013	7.052	7.042	7.043	7.035	7.037	7.030	7.026
1947	7.026	7.019	7.015	7.020	7.014	7.009	7.031	7.044	7.039	7.028	7.030	7.026	7.025
1948	7.018	7.018	7.019	7.011	7.012	7.010	7.010	7.019	7.035	7.034	7.041	7.047	7.023
1949	7.027	7.021	7.017	7.021	7.020	7.004	7.043	7.038	7.040	7.035	7.051	7.032	7.029
1950	7.034	7.024	7.023	7.011	7.007	7.008	7.020	7.027	7.027	7.027	7.033	7.028	7.022
1951	7.015	7.004	7.002	7.003	7.003	7.010	7.043	7.031	7.056	7.031	7.038	7.031	7.022
1952	7.022	7.016	7.006	7.003	7.003	7.004	7.009	7.011	7.019	7.039	7.044	7.021	7.016
1953	7.021	7.018	7.005	7.003	7.011	7.014	7.032	7.024	7.030	7.034	7.039	7.024	7.021
1954	7.024	7.015	7.019	7.007	7.004	7.005	7.012	7.025	7.051	7.032	7.041	7.030	7.022
1955	7.027	7.016	7.010	7.012	7.018	7.019	7.032	7.034	7.035	7.040	7.050	7.029	7.027
1956	7.025	7.015	7.002	7.002	7.003	7.009	7.029	7.015	7.037	7.034	7.041	7.024	7.020
1957	7.019	7.024	7.017	7.018	7.007	7.005	7.026	7.033	7.042	7.035	7.043	7.040	7.026
1958	7.015	7.019	7.010	7.006	7.003	7.003	7.004	7.014	7.025	7.039	7.047	7.027	7.018
1959	7.020	7.023	7.019	7.006	7.005	7.013	7.058	7.049	7.039	7.032	7.035	7.030	7.027
1960	7.028	7.028	7.025	7.018	7.009	7.006	7.034	7.028	7.032	7.024	7.023	7.026	7.023
1961	7.024	7.013	7.009	7.012	7.005	7.009	7.044	7.049	7.052	7.032	7.032	7.032	7.026
1962	7.027	7.021	7.013	7.021	7.005	7.008	7.054	7.048	7.040	7.034	7.039	7.032	7.028
1963	7.007	7.015	7.009	7.015	7.004	7.008	7.005	7.020	7.040	7.034	7.045	7.045	7.021
1964	7.021	7.009	7.018	7.011	7.017	7.020	7.026	7.038	7.038	7.027	7.025	7.024	7.023
1965	7.022	7.013	7.003	7.002	7.006	7.010	7.008	7.028	7.055	7.034	7.040	7.036	7.021
1966	7.036	7.011	7.015	7.008	7.010	7.010	7.045	7.040	7.040	7.034	7.039	7.036	7.027
1967	7.026	7.017	7.007	7.006	7.005	7.004	7.009	7.015	7.020	7.048	7.045	7.024	7.019
1968	7.019	7.018	7.015	7.008	7.004	7.007	7.039	7.054	7.049	7.037	7.038	7.035	7.027
1969	7.025	7.019	7.010	7.003	7.004	7.005	7.013	7.014	7.034	7.044	7.041	7.032	7.020
1970	7.018	7.017	7.004	7.003	7.004	7.007	7.044	7.052	7.045	7.030	7.038	7.032	7.024
1971	7.024	7.014	7.004	7.005	7.009	7.006	7.029	7.021	7.036	7.028	7.038	7.025	7.020
1972	7.022	7.018	7.014	7.014	7.010	7.008	7.046	7.049	7.034	7.033	7.037	7.031	7.026
1973	7.020	7.012	7.008	7.003	7.003	7.005	7.035	7.038	7.036	7.033	7.042	7.033	7.022
1974	7.021	7.004	7.003	7.003	7.006	7.003	7.008	7.030	7.034	7.037	7.042	7.023	7.018
1975	7.021	7.018	7.014	7.015	7.004	7.003	7.024	7.024	7.033	7.035	7.044	7.024	7.022
1976	7.013	7.018	7.014	7.017	7.019	7.015	7.041	7.054	7.046	7.032	7.033	7.028	7.027
1977	7.028	7.022	7.017	7.018	7.023	7.022	7.037	7.043	7.031	7.023	7.023	7.028	7.026
1978	7.021	7.017	7.008	7.002	7.002	7.004	7.011	7.033	7.044	7.042	7.043	7.032	7.022
1979	7.037	7.023	7.015	7.010	7.007	7.007	7.030	7.044	7.036	7.037	7.044	7.037	7.027
1980	7.021	7.018	7.012	7.003	7.003	7.005	7.028	7.038	7.058	7.036	7.038	7.034	7.025
1981	7.033	7.029	7.016	7.011	7.010	7.007	7.033	7.055	7.051	7.036	7.039	7.033	7.029
1982	7.021	7.008	7.003	7.003	7.004	7.003	7.004	7.018	7.034	7.038	7.046	7.034	7.018
1983	7.012	7.007	7.004	7.003	7.003	7.003	7.006	7.011	7.013	7.031	7.034	7.020	7.012
1984	7.017	7.004	7.003	7.005	7.007	7.009	7.037	7.048	7.045	7.031	7.037	7.030	7.023
1985	7.024	7.008	7.011	7.017	7.017	7.014	7.041	7.049	7.051	7.036	7.035	7.028	7.028
1986	7.026	7.021	7.014	7.010	7.003	7.002	7.026	7.045	7.047	7.033	7.035	7.027	7.024
1987	7.027	7.025	7.019	7.015	7.012	7.006	7.033	7.045	7.037	7.032	7.034	7.028	7.026
1988	7.021	7.020	7.009	7.006	7.012	7.023	7.030	7.037	7.040	7.036	7.047	7.035	7.026
1989	7.027	7.015	7.014	7.011	7.018	7.003	7.021	7.032	7.038	7.028	7.031	7.019	7.021
1990	7.015	7.017	7.014	7.009	7.012	7.010	7.030	7.028	7.045	7.037	7.027	7.027	7.022
1991	7.021	7.017	7.017	7.016	7.016	7.005	7.026	7.042	7.059	7.038	7.041	7.031	7.027
AVG:	7.023	7.017	7.012	7.009	7.009	7.008	7.027	7.033	7.038	7.034	7.039	7.031	7.023
MIN:	7.007	7.004	7.002	7.002	7.002	7.002	7.004	7.011	7.013	7.023	7.023	7.019	7.012
MAX:	7.037	7.029	7.025	7.021	7.023	7.023	7.058	7.055	7.059	7.048	7.060	7.047	7.030

Table 4.3.2.1-2b Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternatives 2 through 5 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.285	7.235	7.134	7.145	7.066	7.083	7.222	7.129	7.197	7.329	7.424	7.344	7.216
1923	7.268	7.171	7.084	7.082	7.157	7.162	7.219	7.390	7.472	7.356	7.410	7.313	7.257
1924	7.255	7.238	7.189	7.179	7.145	7.242	7.705	7.778	7.746	7.708	7.621	7.651	7.455
1925	7.401	7.286	7.176	7.182	7.037	7.092	7.237	7.440	7.436	7.596	7.777	7.392	7.338
1926	7.334	7.285	7.266	7.136	7.058	7.181	7.248	7.487	7.595	7.455	7.587	7.459	7.341
1927	7.332	7.102	7.124	7.076	7.032	7.057	7.112	7.242	7.373	7.358	7.413	7.367	7.216
1928	7.237	7.138	7.152	7.105	7.100	7.033	7.196	7.316	7.453	7.390	7.476	7.368	7.247
1929	7.290	7.195	7.189	7.182	7.146	7.206	7.741	7.789	7.753	7.649	7.762	7.745	7.471
1930	7.392	7.335	7.128	7.108	7.127	7.077	7.410	7.508	7.573	7.420	7.487	7.431	7.333
1931	7.332	7.285	7.260	7.172	7.206	7.300	7.606	7.822	7.752	7.469	7.587	7.592	7.449
1932	7.393	7.342	7.121	7.111	7.141	7.182	7.491	7.526	7.487	7.440	7.545	7.395	7.348
1933	7.331	7.285	7.267	7.172	7.200	7.188	7.492	7.894	7.726	7.626	7.791	7.653	7.469
1934	7.392	7.335	7.160	7.126	7.158	7.191	7.444	7.779	7.651	7.665	7.909	7.650	7.455
1935	7.392	7.215	7.227	7.080	7.173	7.091	7.107	7.263	7.335	7.397	7.394	7.372	7.254
1936	7.263	7.262	7.218	7.059	7.039	7.083	7.243	7.412	7.465	7.390	7.403	7.374	7.268
1937	7.281	7.262	7.203	7.172	7.066	7.062	7.232	7.397	7.490	7.415	7.412	7.373	7.280
1938	7.290	7.101	7.039	7.076	7.032	7.033	7.084	7.111	7.207	7.363	7.426	7.267	7.169
1939	7.205	7.197	7.160	7.176	7.188	7.178	7.562	7.557	7.484	7.373	7.413	7.360	7.321
1940	7.284	7.285	7.260	7.073	7.042	7.033	7.079	7.328	7.391	7.328	7.409	7.309	7.235
1941	7.264	7.198	7.056	7.033	7.032	7.035	7.083	7.157	7.370	7.340	7.425	7.256	7.187
1942	7.237	7.186	7.039	7.034	7.032	7.106	7.117	7.180	7.275	7.381	7.428	7.263	7.190
1943	7.232	7.152	7.082	7.033	7.046	7.036	7.197	7.337	7.425	7.429	7.424	7.370	7.230
1944	7.297	7.245	7.203	7.164	7.096	7.114	7.450	7.574	7.456	7.387	7.432	7.347	7.314
1945	7.272	7.165	7.142	7.167	7.052	7.109	7.415	7.470	7.397	7.350	7.407	7.366	7.276
1946	7.289	7.158	7.036	7.048	7.090	7.135	7.430	7.440	7.415	7.351	7.399	7.307	7.258
1947	7.243	7.193	7.149	7.207	7.130	7.120	7.364	7.569	7.514	7.368	7.387	7.334	7.298
1948	7.302	7.234	7.251	7.147	7.145	7.147	7.194	7.223	7.340	7.340	7.385	7.340	7.254
1949	7.250	7.210	7.173	7.208	7.188	7.051	7.411	7.440	7.426	7.390	7.602	7.362	7.309
1950	7.331	7.258	7.257	7.118	7.068	7.119	7.257	7.349	7.342	7.360	7.403	7.365	7.269
1951	7.255	7.054	7.032	7.038	7.037	7.088	7.346	7.337	7.535	7.313	7.392	7.313	7.228
1952	7.255	7.156	7.060	7.032	7.033	7.044	7.084	7.103	7.189	7.397	7.455	7.215	7.169
1953	7.186	7.183	7.054	7.032	7.104	7.114	7.310	7.244	7.305	7.338	7.413	7.240	7.210
1954	7.223	7.151	7.192	7.069	7.038	7.050	7.128	7.247	7.487	7.324	7.403	7.297	7.217
1955	7.240	7.164	7.101	7.125	7.164	7.214	7.401	7.460	7.451	7.542	7.705	7.424	7.333
1956	7.325	7.200	7.032	7.031	7.034	7.071	7.264	7.163	7.360	7.345	7.424	7.264	7.209
1957	7.210	7.207	7.167	7.181	7.068	7.053	7.254	7.388	7.405	7.354	7.404	7.355	7.254
1958	7.173	7.171	7.102	7.062	7.031	7.033	7.069	7.140	7.236	7.397	7.433	7.237	7.174
1959	7.179	7.205	7.193	7.063	7.044	7.113	7.509	7.481	7.381	7.332	7.383	7.408	7.274
1960	7.238	7.256	7.253	7.181	7.082	7.120	7.472	7.468	7.489	7.372	7.374	7.437	7.312
1961	7.332	7.199	7.148	7.192	7.079	7.125	7.456	7.541	7.557	7.349	7.368	7.359	7.309
1962	7.263	7.229	7.142	7.230	7.050	7.098	7.458	7.467	7.387	7.346	7.392	7.319	7.282
1963	7.096	7.151	7.087	7.156	7.034	7.081	7.072	7.203	7.387	7.343	7.416	7.350	7.198
1964	7.236	7.093	7.182	7.109	7.162	7.214	7.262	7.544	7.521	7.371	7.365	7.328	7.282
1965	7.333	7.168	7.034	7.032	7.076	7.108	7.120	7.274	7.524	7.346	7.421	7.361	7.233
1966	7.326	7.116	7.154	7.080	7.094	7.088	7.377	7.409	7.409	7.359	7.428	7.370	7.268
1967	7.239	7.167	7.066	7.058	7.044	7.045	7.135	7.141	7.192	7.481	7.420	7.216	7.184
1968	7.171	7.178	7.149	7.082	7.039	7.068	7.340	7.547	7.474	7.373	7.404	7.350	7.264
1969	7.250	7.193	7.101	7.032	7.032	7.052	7.122	7.134	7.327	7.445	7.421	7.324	7.203
1970	7.180	7.175	7.040	7.031	7.033	7.074	7.345	7.517	7.458	7.302	7.404	7.331	7.241
1971	7.252	7.137	7.040	7.050	7.083	7.058	7.233	7.237	7.358	7.284	7.410	7.254	7.200
1972	7.211	7.182	7.137	7.147	7.095	7.070	7.438	7.541	7.366	7.364	7.425	7.391	7.281
1973	7.268	7.129	7.092	7.032	7.032	7.047	7.309	7.367	7.349	7.334	7.423	7.346	7.227
1974	7.250	7.042	7.035	7.032	7.059	7.033	7.077	7.277	7.323	7.394	7.419	7.222	7.180
1975	7.212	7.178	7.143	7.154	7.036	7.035	7.234	7.226	7.317	7.350	7.433	7.235	7.213
1976	7.170	7.170	7.146	7.172	7.179	7.161	7.552	7.861	7.708	7.509	7.569	7.452	7.387
1977	7.390	7.325	7.271	7.278	7.310	7.321	7.576	8.013	7.630	7.491	7.520	7.640	7.480
1978	7.393	7.340	7.152	7.037	7.046	7.040	7.143	7.318	7.426	7.424	7.396	7.327	7.254
1979	7.326	7.227	7.156	7.105	7.065	7.081	7.302	7.430	7.348	7.370	7.413	7.359	7.265
1980	7.252	7.183	7.126	7.032	7.032	7.055	7.281	7.388	7.556	7.371	7.390	7.348	7.251
1981	7.298	7.258	7.163	7.111	7.089	7.077	7.304	7.547	7.490	7.362	7.378	7.349	7.286
1982	7.255	7.076	7.032	7.034	7.032	7.034	7.068	7.156	7.324	7.378	7.428	7.260	7.173
1983	7.151	7.066	7.037	7.033	7.032	7.032	7.082	7.109	7.129	7.307	7.320	7.171	7.122
1984	7.156	7.037	7.031	7.047	7.070	7.069	7.297	7.480	7.471	7.314	7.406	7.316	7.225
1985	7.267	7.079	7.108	7.169	7.152	7.170	7.364	7.472	7.499	7.365	7.371	7.295	7.276
1986	7.264	7.210	7.138	7.100	7.030	7.033	7.282	7.490	7.502	7.374	7.396	7.340	7.263
1987	7.273	7.258	7.218	7.165	7.118	7.099	7.379	7.590	7.487	7.435	7.488	7.381	7.324
1988	7.282	7.278	7.125	7.083	7.150	7.277	7.528	7.612	7.650	7.582	7.788	7.568	7.410
1989	7.392	7.244	7.227	7.179	7.261	7.054	7.244	7.394	7.488	7.376	7.385	7.336	7.298
1990	7.227	7.227	7.195	7.121	7.151	7.183	7.474	7.756	7.850	7.741	7.571	7.508	7.417
1991	7.394	7.336	7.337	7.334	7.284	7.077	7.390	7.684	7.928	7.628	7.690	7.510	7.466
AVG:	7.272	7.199	7.142	7.111	7.094	7.104	7.306	7.424	7.455	7.409	7.465	7.369	7.279
MIN:	7.096	7.037	7.031	7.031	7.030	7.032	7.068	7.103	7.129	7.284	7.320	7.171	7.122
MAX:	7.401	7.342	7.337	7.334	7.310	7.321	7.741	8.013	7.928	7.741	7.909	7.745	7.480

Table 4.3.2.1-2c Monthly-average chloride concentration (mg/L) in Sacramento River inflow (below Freeport) in Alternative 6 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.285	7.235	7.134	7.145	7.066	7.083	7.222	7.129	7.197	7.325	7.416	7.350	7.216
1923	7.268	7.171	7.085	7.082	7.157	7.162	7.219	7.390	7.481	7.354	7.407	7.312	7.258
1924	7.249	7.236	7.185	7.179	7.145	7.242	7.694	7.776	7.754	7.698	7.611	7.627	7.450
1925	7.398	7.286	7.176	7.182	7.037	7.093	7.236	7.439	7.441	7.595	7.775	7.392	7.337
1926	7.334	7.285	7.266	7.136	7.058	7.180	7.249	7.482	7.596	7.453	7.585	7.459	7.340
1927	7.332	7.102	7.121	7.076	7.032	7.057	7.112	7.242	7.370	7.339	7.406	7.367	7.213
1928	7.238	7.141	7.155	7.105	7.100	7.033	7.196	7.324	7.444	7.385	7.474	7.368	7.247
1929	7.286	7.194	7.189	7.182	7.146	7.204	7.739	7.787	7.758	7.652	7.766	7.726	7.469
1930	7.393	7.335	7.128	7.108	7.127	7.077	7.404	7.503	7.577	7.420	7.489	7.421	7.332
1931	7.332	7.285	7.260	7.172	7.206	7.300	7.606	7.821	7.746	7.470	7.587	7.533	7.443
1932	7.393	7.342	7.120	7.110	7.137	7.182	7.491	7.526	7.487	7.439	7.545	7.400	7.348
1933	7.331	7.285	7.267	7.172	7.200	7.186	7.492	7.877	7.726	7.624	7.788	7.652	7.467
1934	7.392	7.335	7.160	7.126	7.158	7.190	7.444	7.779	7.651	7.665	7.899	7.542	7.445
1935	7.392	7.212	7.227	7.079	7.169	7.091	7.107	7.263	7.335	7.396	7.393	7.363	7.252
1936	7.263	7.262	7.216	7.059	7.039	7.084	7.242	7.411	7.476	7.389	7.397	7.366	7.267
1937	7.281	7.263	7.203	7.172	7.067	7.062	7.232	7.395	7.498	7.414	7.407	7.367	7.280
1938	7.291	7.101	7.038	7.076	7.032	7.033	7.084	7.111	7.207	7.358	7.418	7.273	7.168
1939	7.210	7.198	7.161	7.176	7.188	7.176	7.547	7.551	7.490	7.373	7.413	7.360	7.320
1940	7.288	7.284	7.255	7.073	7.042	7.033	7.079	7.332	7.398	7.326	7.403	7.304	7.235
1941	7.264	7.198	7.056	7.033	7.032	7.035	7.083	7.157	7.376	7.335	7.416	7.257	7.187
1942	7.237	7.186	7.039	7.034	7.032	7.106	7.117	7.180	7.275	7.351	7.420	7.263	7.187
1943	7.232	7.156	7.082	7.033	7.046	7.036	7.197	7.337	7.426	7.442	7.418	7.370	7.231
1944	7.297	7.246	7.202	7.164	7.096	7.113	7.450	7.574	7.456	7.385	7.430	7.346	7.313
1945	7.274	7.169	7.141	7.166	7.052	7.109	7.415	7.470	7.411	7.346	7.401	7.366	7.277
1946	7.279	7.163	7.036	7.048	7.088	7.138	7.430	7.440	7.411	7.348	7.395	7.304	7.257
1947	7.243	7.196	7.150	7.209	7.130	7.119	7.364	7.569	7.528	7.371	7.388	7.335	7.300
1948	7.306	7.237	7.252	7.147	7.146	7.147	7.194	7.223	7.340	7.340	7.385	7.340	7.255
1949	7.236	7.211	7.173	7.208	7.188	7.051	7.411	7.441	7.426	7.393	7.591	7.362	7.308
1950	7.331	7.260	7.257	7.119	7.068	7.121	7.258	7.349	7.348	7.359	7.399	7.368	7.270
1951	7.255	7.054	7.032	7.038	7.037	7.088	7.346	7.337	7.526	7.303	7.390	7.313	7.227
1952	7.255	7.155	7.062	7.032	7.033	7.044	7.084	7.103	7.189	7.394	7.453	7.217	7.168
1953	7.186	7.183	7.054	7.032	7.104	7.114	7.310	7.244	7.305	7.337	7.412	7.240	7.210
1954	7.223	7.151	7.192	7.069	7.038	7.050	7.128	7.247	7.487	7.325	7.403	7.297	7.218
1955	7.240	7.165	7.101	7.125	7.164	7.214	7.403	7.460	7.451	7.540	7.703	7.424	7.333
1956	7.326	7.200	7.032	7.031	7.034	7.071	7.264	7.163	7.360	7.340	7.416	7.268	7.209
1957	7.210	7.207	7.170	7.181	7.068	7.053	7.254	7.389	7.405	7.354	7.404	7.356	7.254
1958	7.175	7.171	7.102	7.062	7.031	7.033	7.069	7.140	7.236	7.393	7.425	7.241	7.173
1959	7.179	7.205	7.193	7.063	7.044	7.113	7.501	7.483	7.384	7.330	7.383	7.373	7.271
1960	7.258	7.240	7.249	7.179	7.082	7.119	7.471	7.461	7.489	7.372	7.374	7.442	7.311
1961	7.332	7.199	7.148	7.192	7.077	7.125	7.456	7.541	7.553	7.349	7.369	7.359	7.308
1962	7.263	7.228	7.142	7.230	7.050	7.098	7.452	7.464	7.383	7.344	7.403	7.317	7.281
1963	7.095	7.150	7.087	7.154	7.034	7.080	7.072	7.203	7.383	7.317	7.409	7.350	7.194
1964	7.236	7.093	7.182	7.109	7.162	7.215	7.260	7.537	7.526	7.375	7.365	7.333	7.283
1965	7.333	7.168	7.034	7.032	7.076	7.109	7.120	7.274	7.535	7.351	7.416	7.360	7.234
1966	7.326	7.114	7.155	7.080	7.094	7.088	7.377	7.409	7.409	7.359	7.428	7.370	7.267
1967	7.240	7.167	7.066	7.058	7.044	7.045	7.135	7.141	7.192	7.481	7.420	7.216	7.184
1968	7.171	7.178	7.149	7.082	7.039	7.068	7.340	7.539	7.476	7.369	7.404	7.350	7.264
1969	7.249	7.191	7.100	7.032	7.032	7.052	7.122	7.134	7.327	7.438	7.414	7.329	7.202
1970	7.184	7.175	7.040	7.031	7.033	7.074	7.345	7.517	7.457	7.302	7.403	7.331	7.241
1971	7.252	7.137	7.041	7.050	7.083	7.058	7.233	7.237	7.358	7.283	7.410	7.254	7.200
1972	7.211	7.182	7.137	7.147	7.095	7.070	7.438	7.541	7.366	7.364	7.425	7.391	7.281
1973	7.268	7.129	7.092	7.032	7.032	7.047	7.309	7.367	7.354	7.331	7.419	7.350	7.228
1974	7.249	7.042	7.035	7.032	7.059	7.033	7.077	7.277	7.324	7.390	7.414	7.222	7.180
1975	7.216	7.178	7.142	7.154	7.036	7.035	7.234	7.226	7.317	7.348	7.428	7.237	7.213
1976	7.170	7.171	7.147	7.172	7.179	7.159	7.548	7.841	7.715	7.511	7.573	7.447	7.386
1977	7.390	7.325	7.269	7.278	7.311	7.320	7.582	8.014	7.628	7.496	7.519	7.636	7.481
1978	7.393	7.340	7.152	7.037	7.045	7.039	7.142	7.318	7.426	7.425	7.396	7.327	7.253
1979	7.325	7.229	7.156	7.105	7.065	7.081	7.300	7.425	7.349	7.370	7.415	7.359	7.265
1980	7.259	7.182	7.126	7.032	7.032	7.055	7.281	7.388	7.556	7.367	7.385	7.357	7.252
1981	7.298	7.258	7.163	7.111	7.090	7.077	7.302	7.540	7.492	7.362	7.378	7.344	7.284
1982	7.257	7.076	7.032	7.034	7.032	7.034	7.068	7.156	7.324	7.374	7.425	7.260	7.173
1983	7.152	7.066	7.037	7.033	7.032	7.032	7.082	7.109	7.129	7.307	7.320	7.171	7.122
1984	7.156	7.037	7.031	7.047	7.070	7.069	7.297	7.480	7.471	7.315	7.405	7.317	7.225
1985	7.265	7.079	7.108	7.169	7.152	7.170	7.364	7.472	7.499	7.365	7.371	7.295	7.276
1986	7.264	7.210	7.138	7.100	7.030	7.033	7.282	7.490	7.512	7.372	7.394	7.340	7.264
1987	7.273	7.258	7.218	7.165	7.118	7.098	7.380	7.590	7.485	7.437	7.489	7.382	7.324
1988	7.279	7.274	7.124	7.082	7.151	7.277	7.472	7.631	7.661	7.587	7.794	7.587	7.410
1989	7.392	7.243	7.227	7.179	7.261	7.053	7.245	7.395	7.489	7.375	7.384	7.342	7.299
1990	7.225	7.226	7.194	7.120	7.151	7.181	7.475	7.742	7.853	7.751	7.565	7.512	7.416
1991	7.394	7.336	7.337	7.333	7.284	7.076	7.384	7.672	7.928	7.614	7.682	7.501	7.462
AVG:	7.273	7.199	7.142	7.111	7.094	7.104	7.305	7.423	7.456	7.407	7.463	7.366	7.278
MIN:	7.095	7.037	7.031	7.031	7.030	7.032	7.068	7.103	7.129	7.283	7.320	7.171	7.122
MAX:	7.398	7.342	7.337	7.333	7.311	7.320	7.739	8.014	7.928	7.751	7.899	7.726	7.481

Table 4.3.2.2-1a Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternative 1 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	117	119	71	68	36	36	35	30	19	107	107	150	75
1923	59	119	35	17	35	91	41	47	92	107	107	154	75
1924	99	111	91	95	115	130	94	97	102	96	119	180	111
1925	115	110	96	105	68	95	51	55	90	103	106	149	95
1926	118	120	98	112	110	128	63	71	107	97	142	188	113
1927	123	91	70	78	42	66	39	47	87	104	106	154	84
1928	120	89	68	68	85	41	39	54	99	105	104	156	86
1929	115	115	96	100	116	129	86	84	103	97	145	195	115
1930	121	123	106	100	114	119	82	84	100	103	150	196	116
1931	122	122	106	109	134	152	95	94	94	104	138	179	121
1932	126	110	39	32	17	49	37	48	75	79	83	116	68
1933	89	96	82	72	85	101	72	68	96	101	103	159	94
1934	105	110	88	88	89	121	90	96	99	104	126	179	108
1935	129	104	86	33	50	67	32	36	65	86	94	132	76
1936	110	115	91	79	16	44	29	40	85	97	102	139	79
1937	92	112	85	59	5	22	22	21	79	93	99	135	69
1938	72	118	24	18	5	5	9	5	8	67	95	104	44
1939	23	113	85	80	82	72	56	63	105	99	100	176	88
1940	124	133	116	45	39	29	35	44	88	107	106	148	85
1941	104	119	69	31	8	25	25	26	42	105	107	153	68
1942	54	117	35	17	22	51	36	38	50	89	101	140	63
1943	44	104	51	6	16	14	31	33	79	95	103	139	59
1944	81	122	104	105	83	90	59	56	107	105	105	163	98
1945	127	119	105	112	38	39	38	49	100	107	106	159	92
1946	74	107	29	36	46	64	44	51	94	107	106	155	76
1947	103	97	76	86	86	127	87	84	104	100	161	202	110
1948	129	127	116	129	153	126	57	58	91	106	106	152	112
1949	120	123	108	120	133	94	63	65	106	105	105	156	108
1950	118	120	106	76	80	99	61	63	102	105	104	152	99
1951	132	47	10	5	13	45	40	41	76	102	105	140	63
1952	99	105	59	28	31	23	22	13	15	70	94	112	56
1953	24	102	62	20	44	81	48	50	87	106	105	158	74
1954	109	119	101	101	106	97	48	51	107	105	105	160	101
1955	108	120	99	89	118	135	86	83	106	104	143	197	116
1956	151	132	9	5	7	41	38	45	43	92	101	120	65
1957	43	109	87	90	87	59	48	48	85	106	105	154	85
1958	105	114	95	87	71	30	14	15	22	83	91	116	70
1959	32	111	92	78	44	78	61	64	104	100	99	163	86
1960	121	128	113	112	102	124	87	87	104	102	173	200	121
1961	127	119	96	108	135	161	100	101	102	136	169	200	129
1962	148	127	108	117	37	54	44	58	102	104	104	153	96
1963	111	113	99	77	60	83	37	40	68	88	96	135	84
1964	105	95	79	86	120	126	83	80	103	96	136	187	108
1965	128	103	34	5	22	51	30	38	72	99	105	143	69
1966	99	59	24	29	44	74	66	72	106	104	103	162	79
1967	118	120	62	54	77	41	19	14	11	26	99	94	61
1968	37	113	83	78	52	77	56	66	105	100	100	163	86
1969	124	129	95	5	5	12	9	5	5	62	102	108	55
1970	21	111	50	5	18	36	41	45	85	106	106	148	64
1971	103	106	73	75	92	78	53	54	96	106	105	162	92
1972	108	113	87	92	114	134	80	75	102	102	101	166	106
1973	125	128	109	70	27	33	33	41	98	107	107	147	85
1974	100	118	82	25	45	43	29	33	64	97	102	135	73
1975	66	111	89	89	39	32	32	38	50	95	103	137	73
1976	51	107	88	94	114	129	85	81	103	100	99	184	103
1977	69	80	85	109	143	162	104	93	98	139	180	197	122
1978	117	122	96	38	20	29	16	17	18	87	107	110	65
1979	45	115	90	27	15	29	33	38	95	107	106	144	70
1980	93	104	84	5	5	17	26	32	39	57	93	98	54
1981	40	109	89	77	89	70	55	60	105	101	102	163	88
1982	125	126	110	20	10	17	5	11	26	70	106	79	59
1983	13	23	5	5	5	5	8	7	5	10	105	49	20
1984	14	7	5	5	18	46	48	50	89	107	106	155	54
1985	102	99	84	94	109	113	76	57	106	98	100	163	100
1986	123	127	108	88	5	7	18	29	39	98	105	140	74
1987	61	108	92	95	111	120	85	83	103	98	114	205	106
1988	123	119	106	108	143	162	97	99	101	104	179	201	128
1989	122	121	94	102	127	129	90	93	102	99	134	186	116
1990	123	118	106	106	135	148	90	91	102	98	122	184	119
1991	119	114	98	110	141	87	64	71	103	103	97	164	106
AVG:	96	109	80	67	66	75	52	54	80	96	112	153	87
MIN:	13	7	5	5	5	5	5	5	5	10	83	49	20
MAX:	151	133	116	129	153	162	104	101	107	139	180	205	129

Table 4.3.2.2-1b Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternatives 2 through 5 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	117	119	71	68	36	36	35	30	19	107	107	150	75
1923	59	119	35	17	35	91	41	47	92	107	107	154	75
1924	99	111	91	95	115	130	94	97	102	96	119	180	111
1925	115	110	96	105	68	95	51	55	90	103	106	149	95
1926	118	120	98	112	110	128	63	71	107	97	142	188	113
1927	123	91	70	78	42	66	39	47	87	104	106	154	84
1928	120	89	68	68	85	41	39	54	99	105	104	156	86
1929	115	115	96	100	116	129	86	84	103	97	145	195	115
1930	121	123	106	100	114	119	82	84	100	103	149	196	116
1931	122	122	106	109	134	152	95	94	94	104	138	179	121
1932	126	110	39	32	17	49	37	48	75	79	83	116	68
1933	89	96	82	72	85	101	72	68	96	101	103	159	94
1934	105	110	88	88	89	121	90	96	99	104	126	179	108
1935	129	104	86	33	50	67	32	36	65	86	94	132	76
1936	110	114	91	79	16	44	30	40	85	97	102	140	79
1937	92	112	85	59	5	23	22	21	79	93	99	135	69
1938	72	118	24	18	5	5	9	5	8	67	95	104	44
1939	23	113	85	80	82	72	56	63	105	99	100	176	88
1940	124	133	116	45	39	29	35	44	88	107	106	148	85
1941	104	119	69	31	8	25	25	26	42	105	107	153	68
1942	54	117	35	17	22	51	36	38	50	89	101	140	63
1943	44	104	51	6	16	14	31	33	79	95	103	139	59
1944	81	122	104	105	83	90	59	56	107	105	105	163	98
1945	127	119	105	112	38	39	38	49	100	107	106	159	92
1946	74	107	29	36	46	64	44	51	94	107	106	155	76
1947	103	97	76	86	86	127	87	84	104	100	161	202	110
1948	129	127	116	129	153	126	57	58	91	106	106	152	112
1949	120	123	108	120	133	94	63	65	106	105	105	156	108
1950	118	120	106	76	80	99	61	63	102	105	104	152	99
1951	132	47	10	5	12	45	40	41	76	102	105	140	63
1952	99	105	59	28	31	23	22	13	15	70	94	112	56
1953	24	102	62	20	44	81	48	50	87	106	105	158	74
1954	109	119	101	101	106	97	48	51	107	105	105	160	101
1955	108	120	99	89	118	135	86	83	106	104	143	197	116
1956	151	131	9	5	7	41	38	45	43	92	101	120	65
1957	43	109	87	90	87	59	48	48	85	106	105	154	85
1958	105	114	95	87	71	30	14	15	22	83	91	116	70
1959	32	111	92	78	44	78	61	64	104	100	99	163	86
1960	121	128	113	112	102	124	87	86	104	102	172	200	121
1961	126	119	96	108	135	161	100	101	102	135	169	200	129
1962	147	127	108	117	36	54	44	58	102	104	104	153	96
1963	111	113	99	77	60	83	37	40	68	88	96	135	84
1964	105	95	79	86	120	126	83	80	103	96	136	187	108
1965	127	103	34	5	22	51	30	38	72	99	105	143	69
1966	98	59	24	29	44	74	66	72	106	104	103	162	78
1967	118	120	62	54	77	41	19	14	11	26	99	94	61
1968	37	113	83	78	52	77	56	66	105	100	100	163	86
1969	124	129	95	5	5	12	9	5	5	62	102	108	55
1970	21	111	50	5	18	36	41	45	85	106	106	148	64
1971	103	106	73	75	92	78	53	54	96	106	105	162	92
1972	108	113	87	92	114	134	80	75	102	102	101	166	106
1973	125	128	109	70	27	33	33	41	98	107	107	147	85
1974	100	118	82	25	45	43	29	33	64	97	102	135	73
1975	66	111	89	89	39	32	32	38	50	95	103	137	73
1976	51	107	88	94	114	129	85	81	103	100	99	184	103
1977	69	80	85	109	143	162	104	93	98	139	179	197	122
1978	117	122	96	38	20	29	16	17	18	87	107	110	65
1979	45	115	90	27	15	29	33	38	95	107	106	144	70
1980	93	104	84	5	5	17	26	32	39	57	93	98	54
1981	40	109	89	77	89	70	55	60	105	101	102	163	88
1982	125	126	110	20	10	17	5	11	26	70	106	79	59
1983	13	23	5	5	5	5	8	7	5	10	105	49	20
1984	14	7	5	5	18	46	48	50	89	107	106	155	54
1985	102	99	84	94	109	113	76	57	106	98	100	163	100
1986	123	127	108	88	5	7	18	29	39	98	105	140	74
1987	61	108	92	95	111	120	85	83	103	98	114	205	106
1988	123	119	106	108	143	162	97	99	101	104	178	201	128
1989	122	120	94	102	127	129	90	93	102	99	133	186	116
1990	123	118	106	106	135	148	90	91	102	98	122	184	119
1991	119	114	98	110	141	87	64	71	103	103	97	164	106
AVG:	96	109	80	67	66	75	52	54	80	96	112	153	87
MIN:	13	7	5	5	5	5	5	5	5	10	83	49	20
MAX:	151	133	116	129	153	162	104	101	107	139	179	205	129

Table 4.3.2.2-1c Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternative 6 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	117	119	71	68	36	36	35	30	19	107	107	150	75
1923	59	119	35	17	35	91	41	47	92	107	107	154	75
1924	99	111	91	95	115	130	94	97	102	96	119	180	111
1925	115	110	96	105	68	95	51	55	90	103	106	149	95
1926	118	120	98	112	110	128	63	71	107	97	142	188	113
1927	123	91	70	78	42	66	39	47	87	104	106	154	84
1928	120	89	68	68	85	41	39	54	99	105	104	156	86
1929	115	115	96	100	116	129	86	84	103	97	145	195	115
1930	121	123	106	100	114	119	82	84	100	103	150	196	116
1931	122	122	106	109	134	152	95	94	94	104	138	179	121
1932	126	110	39	32	17	49	37	48	75	79	83	116	68
1933	89	96	82	72	85	101	72	68	96	101	103	159	94
1934	105	110	88	88	89	121	90	96	99	104	126	179	108
1935	129	104	86	33	50	67	32	36	65	86	94	132	76
1936	110	115	91	79	16	44	30	40	85	98	102	140	79
1937	92	112	85	59	5	23	22	21	79	93	100	135	69
1938	73	118	24	18	5	5	9	5	8	67	95	104	44
1939	23	113	85	80	82	72	56	63	105	99	100	176	88
1940	124	133	116	45	39	29	35	44	88	107	106	148	85
1941	104	119	69	31	8	25	25	26	42	105	107	153	68
1942	54	117	35	17	22	51	36	38	50	89	101	140	63
1943	44	104	51	6	16	14	31	33	79	95	103	139	59
1944	81	122	104	105	83	90	59	56	107	105	105	163	98
1945	127	119	105	112	38	39	38	49	100	107	106	159	92
1946	74	107	29	36	46	64	44	51	94	107	106	155	76
1947	103	97	76	86	86	127	87	84	104	100	161	202	110
1948	129	127	116	129	153	126	57	58	91	106	106	152	112
1949	120	123	108	120	132	94	63	65	106	105	105	156	108
1950	118	121	106	76	80	100	61	63	102	105	104	152	99
1951	132	47	10	5	13	45	40	41	76	102	105	140	63
1952	99	105	59	28	31	23	22	13	15	70	94	112	56
1953	24	102	62	20	44	81	48	50	87	106	105	158	74
1954	109	119	101	101	106	97	48	51	107	105	105	160	101
1955	108	120	99	89	118	135	86	83	106	104	143	197	116
1956	151	131	9	5	7	41	38	45	43	92	101	120	65
1957	43	109	87	90	87	59	48	48	85	106	105	154	85
1958	105	114	95	87	71	30	14	15	22	83	91	116	70
1959	32	111	92	78	44	78	61	64	104	100	99	163	86
1960	121	128	113	112	102	124	87	87	104	102	173	200	121
1961	127	119	96	108	135	161	100	101	102	136	169	200	129
1962	147	127	108	117	37	54	44	58	102	104	104	153	96
1963	111	113	99	77	60	83	37	40	68	88	96	135	84
1964	105	95	79	85	120	126	83	80	104	96	136	187	108
1965	127	103	34	5	22	51	30	38	72	99	105	143	69
1966	98	59	24	29	44	74	66	72	106	104	103	162	78
1967	118	120	62	54	77	41	19	14	11	26	99	94	61
1968	37	113	83	78	52	77	56	66	105	100	100	163	86
1969	124	129	95	5	5	12	9	5	5	62	102	108	55
1970	21	111	50	5	18	36	41	45	85	106	106	148	64
1971	103	106	73	75	92	78	53	54	96	106	105	162	92
1972	108	113	87	92	114	134	80	75	102	102	101	166	106
1973	125	128	109	70	27	33	33	41	98	107	107	147	85
1974	100	118	82	25	45	43	29	33	64	97	102	135	73
1975	66	111	89	89	39	32	32	38	50	95	103	137	73
1976	51	107	88	94	114	129	85	81	103	100	99	185	103
1977	69	80	85	110	144	162	104	93	98	139	179	197	122
1978	117	122	96	38	20	29	16	17	18	87	107	110	65
1979	45	115	90	27	15	29	33	38	95	107	106	144	70
1980	93	104	84	5	5	17	26	32	39	57	93	98	54
1981	40	109	89	77	89	70	55	60	105	101	102	163	88
1982	125	126	110	20	10	17	5	11	26	70	106	79	59
1983	13	23	5	5	5	5	8	7	5	10	105	49	20
1984	14	7	5	5	18	46	48	50	89	107	106	155	54
1985	102	99	84	94	109	113	76	57	106	98	100	163	100
1986	123	127	108	88	5	7	18	29	39	98	105	140	74
1987	61	108	92	95	111	120	85	83	103	98	114	205	106
1988	123	119	106	108	143	162	97	99	101	104	179	201	129
1989	122	121	94	102	128	129	90	93	102	99	134	186	116
1990	123	118	106	106	135	148	90	91	102	98	122	184	119
1991	119	114	98	110	141	87	64	71	103	103	97	164	106
AVG:	96	109	80	67	66	75	52	54	80	96	112	153	87
MIN:	13	7	5	5	5	5	5	5	5	10	83	49	20
MAX:	151	133	116	129	153	162	104	101	107	139	179	205	129

Table 4.3.2.2-2a Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternative 1 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	114	119	71	68	38	53	39	40	49	107	107	149	79
1923	78	119	52	42	55	97	46	47	92	107	107	152	83
1924	98	111	90	94	113	131	95	99	101	96	115	179	110
1925	112	110	96	104	68	96	51	56	91	103	106	148	95
1926	115	120	98	112	110	129	64	73	106	97	142	186	113
1927	119	91	69	78	41	66	39	47	88	103	106	154	83
1928	120	89	68	68	85	77	50	54	99	105	104	154	89
1929	114	115	95	99	115	130	85	84	103	97	145	194	115
1930	118	123	105	99	113	119	83	83	100	103	150	195	116
1931	120	122	105	108	133	152	96	94	94	96	139	179	120
1932	127	110	39	33	17	49	38	50	77	81	84	117	68
1933	88	97	83	74	88	102	74	71	96	101	106	158	95
1934	102	111	88	88	90	121	91	95	98	103	130	175	108
1935	130	104	86	33	50	67	33	36	65	85	93	131	76
1936	107	114	91	79	16	44	30	38	85	97	100	138	78
1937	106	112	84	62	11	34	25	18	77	92	98	133	71
1938	101	118	32	30	5	5	9	5	7	68	94	115	49
1939	25	112	85	81	83	86	60	63	105	99	101	170	89
1940	121	133	116	45	43	29	36	45	89	107	107	148	85
1941	102	119	69	35	10	26	26	23	41	105	107	153	68
1942	69	117	42	17	23	52	36	34	47	89	101	140	64
1943	54	105	57	6	17	14	30	31	79	94	102	139	61
1944	107	122	104	105	85	92	60	56	106	105	105	163	101
1945	124	118	104	110	42	44	38	46	97	107	107	156	91
1946	81	108	45	35	47	66	45	48	94	107	106	155	78
1947	101	97	76	86	94	128	87	83	104	99	150	200	109
1948	125	126	115	127	151	127	58	58	90	106	106	150	112
1949	116	122	108	119	131	94	64	66	106	105	105	155	108
1950	115	120	106	75	80	100	61	64	101	105	105	149	98
1951	120	46	15	17	16	46	40	42	78	104	105	140	64
1952	98	106	60	28	39	23	21	13	15	71	93	114	57
1953	28	102	63	20	45	82	49	51	86	106	105	157	74
1954	106	118	101	100	104	98	52	52	107	106	105	160	101
1955	107	120	99	89	118	136	87	83	106	104	143	190	115
1956	147	131	9	5	6	42	39	40	42	92	100	125	65
1957	55	109	87	90	94	61	48	48	85	106	105	154	87
1958	103	114	95	87	71	38	14	14	23	82	90	122	71
1959	39	110	92	78	45	79	67	65	104	100	98	163	87
1960	119	128	113	112	102	125	87	86	104	101	168	199	120
1961	124	118	95	106	134	161	100	102	101	135	165	198	128
1962	144	126	108	117	36	54	44	59	100	104	104	150	95
1963	107	112	97	75	57	84	38	40	69	88	95	135	83
1964	103	94	79	85	120	127	85	83	102	96	134	185	108
1965	119	103	44	21	22	52	32	37	72	99	105	143	71
1966	91	72	26	30	45	75	68	74	106	104	104	161	80
1967	115	119	61	53	76	53	18	13	11	26	97	110	63
1968	40	112	82	77	51	78	60	67	105	101	101	163	86
1969	124	129	95	7	5	12	8	5	5	63	101	120	56
1970	26	99	47	5	19	37	41	46	85	106	106	147	64
1971	101	105	72	75	106	109	55	55	96	106	105	161	95
1972	105	113	87	92	114	139	81	76	101	102	99	164	106
1973	121	128	109	70	45	37	34	41	98	107	107	146	87
1974	99	118	82	23	46	43	30	29	65	96	101	134	72
1975	89	111	89	91	42	34	33	37	47	94	102	136	75
1976	72	106	88	94	115	130	86	81	102	100	97	184	105
1977	68	80	85	109	143	162	104	92	98	139	179	197	121
1978	117	122	96	38	20	29	16	16	18	89	106	127	66
1979	51	115	90	39	16	29	34	33	95	107	106	143	72
1980	93	104	84	5	5	17	27	28	43	58	93	106	55
1981	48	110	89	77	90	73	58	61	105	102	103	163	90
1982	123	126	109	27	10	17	5	11	25	69	104	91	60
1983	14	21	5	5	5	5	8	6	5	10	105	54	20
1984	15	6	5	5	18	47	49	51	89	107	106	155	54
1985	100	99	84	94	109	114	77	58	105	98	99	163	100
1986	118	126	108	88	10	8	18	27	40	97	104	139	74
1987	82	108	92	95	111	121	85	82	102	97	105	201	107
1988	119	118	104	106	140	162	98	99	100	110	180	202	128
1989	120	121	94	103	129	129	90	93	101	99	133	186	117
1990	121	118	106	106	135	149	91	91	101	98	120	184	118
1991	117	114	98	105	141	88	65	72	101	103	97	163	105
AVG:	97	109	80	68	67	78	53	54	80	96	111	154	87
MIN:	14	6	5	5	5	5	5	5	5	10	84	54	20
MAX:	147	133	116	127	151	162	104	102	107	139	180	202	128

Table 4.3.2.2-2b Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternatives 2 through 5 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	114	119	71	68	38	53	39	40	49	107	107	149	79
1923	78	119	52	42	55	97	46	47	92	107	107	152	83
1924	98	111	90	94	113	131	95	99	101	96	115	179	110
1925	112	110	96	104	67	96	51	56	91	103	105	148	95
1926	115	120	98	112	110	129	64	73	106	97	142	186	113
1927	119	91	69	78	41	66	39	47	88	103	106	154	83
1928	120	89	68	68	85	77	50	54	99	105	104	154	89
1929	114	115	95	99	115	130	85	84	103	97	145	194	115
1930	118	123	105	99	113	119	83	83	100	103	149	195	116
1931	120	122	105	108	133	152	95	94	94	96	139	179	120
1932	127	110	39	32	17	49	38	50	77	81	84	117	68
1933	88	96	83	74	87	102	74	71	96	101	106	158	95
1934	102	111	88	88	90	121	91	95	98	103	128	175	108
1935	129	104	86	33	50	67	32	36	65	85	93	131	76
1936	107	114	91	79	16	44	30	38	85	96	100	137	78
1937	106	112	84	62	11	34	25	18	77	92	98	133	71
1938	101	118	32	30	5	5	9	5	7	68	94	115	49
1939	25	112	85	81	83	86	60	63	105	99	101	170	89
1940	121	133	116	45	43	29	36	45	89	107	107	148	85
1941	102	119	69	35	10	26	26	23	41	105	107	153	68
1942	69	117	42	17	23	52	36	34	47	89	101	140	64
1943	54	105	57	6	17	14	30	31	79	94	102	139	61
1944	107	122	104	105	85	92	60	56	106	105	105	163	101
1945	124	118	104	110	42	44	38	46	97	107	107	156	91
1946	81	108	45	35	47	66	45	48	94	107	106	155	78
1947	101	97	76	86	94	128	87	83	104	99	150	200	109
1948	125	126	115	127	151	127	58	58	90	106	106	150	112
1949	116	122	108	119	131	94	64	66	106	105	105	155	108
1950	115	120	106	75	80	100	61	64	101	105	105	149	98
1951	120	46	15	17	16	46	40	42	78	104	105	140	64
1952	98	106	60	28	39	23	21	13	15	71	93	114	57
1953	28	102	63	20	45	82	49	51	86	106	105	157	74
1954	106	118	101	100	104	98	52	52	107	106	105	160	101
1955	107	120	99	89	118	136	87	83	106	104	143	190	115
1956	147	131	9	5	6	42	39	40	42	92	100	125	65
1957	55	109	87	90	94	61	48	48	85	106	105	154	87
1958	103	114	95	87	71	38	14	14	23	82	90	122	71
1959	38	110	92	78	45	79	67	65	104	100	98	163	86
1960	119	128	113	112	102	125	87	86	104	101	167	199	120
1961	124	118	95	106	133	161	100	102	101	134	165	198	128
1962	144	126	108	116	36	54	44	59	100	104	104	150	95
1963	107	112	97	75	57	84	38	40	69	88	95	135	83
1964	103	94	79	85	120	127	85	83	102	96	134	185	108
1965	119	103	44	21	22	52	32	37	72	99	105	143	71
1966	92	72	26	30	45	75	68	74	106	104	104	161	80
1967	115	119	61	53	76	53	18	13	11	26	97	110	63
1968	40	112	82	77	51	78	60	67	105	101	101	163	86
1969	124	129	95	7	5	12	8	5	5	63	101	120	56
1970	26	99	47	5	19	37	41	46	85	106	106	147	64
1971	101	105	72	75	106	109	55	55	96	106	105	161	95
1972	105	113	87	92	114	139	81	76	101	102	99	164	106
1973	121	128	109	70	45	37	34	41	98	107	107	146	87
1974	99	118	82	23	46	43	30	29	65	96	101	134	72
1975	89	111	89	91	42	34	33	37	47	94	102	136	75
1976	72	106	88	94	115	130	86	81	102	100	97	184	105
1977	68	80	85	109	143	162	104	92	98	139	179	197	121
1978	117	122	96	38	20	29	16	16	18	89	106	127	66
1979	51	115	90	39	16	29	34	33	95	107	106	143	72
1980	93	104	84	5	5	17	27	28	43	58	93	106	55
1981	48	110	89	77	90	73	58	61	105	102	103	163	90
1982	123	126	109	27	10	17	5	10	25	69	104	91	60
1983	14	21	5	5	5	5	8	6	5	10	105	54	20
1984	15	6	5	5	18	47	49	51	89	107	106	155	54
1985	100	99	84	94	109	114	77	58	105	98	99	163	100
1986	118	126	108	88	10	8	18	27	40	97	104	139	74
1987	82	108	92	95	111	121	85	82	102	97	105	201	107
1988	119	118	104	106	140	162	98	99	100	109	180	202	128
1989	120	121	94	103	128	129	90	93	101	99	133	185	117
1990	121	118	106	106	135	149	91	91	101	98	120	184	118
1991	117	114	98	105	139	88	65	72	101	103	97	163	105
AVG:	97	109	80	68	67	78	53	54	80	96	111	154	87
MIN:	14	6	5	5	5	5	5	5	5	10	84	54	20
MAX:	147	133	116	127	151	162	104	102	107	139	180	202	128

Table 4.3.2.2-2c Monthly-average chloride concentration (mg/L) in San Joaquin River inflow at Vernalis in Alternative 6 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	114	119	71	68	38	53	39	40	49	107	107	149	79
1923	78	119	52	42	55	97	46	47	92	107	107	152	83
1924	98	111	90	94	113	131	95	99	101	96	115	179	110
1925	112	110	96	104	68	96	51	56	91	103	105	148	95
1926	115	120	98	112	110	129	64	73	106	97	142	186	113
1927	119	91	69	78	41	66	39	47	88	103	106	154	83
1928	120	89	68	68	85	77	50	54	99	105	104	154	89
1929	114	115	95	99	115	130	85	84	103	97	145	194	115
1930	118	123	105	99	113	119	83	83	100	103	150	195	116
1931	120	122	105	108	133	152	95	94	94	96	139	179	120
1932	127	110	39	32	17	49	38	50	77	81	84	117	68
1933	88	97	83	74	88	102	74	71	96	101	106	158	95
1934	102	111	88	88	90	121	91	95	98	103	130	175	108
1935	130	104	86	33	50	67	33	36	65	85	93	131	76
1936	107	114	91	79	16	44	30	38	85	97	100	138	78
1937	106	112	84	62	11	34	25	18	77	92	98	133	71
1938	101	118	32	30	5	5	9	5	7	68	94	115	49
1939	25	112	85	81	83	86	60	63	105	99	101	170	89
1940	121	133	116	45	43	29	36	45	89	107	107	148	85
1941	102	119	69	35	10	26	26	23	41	105	107	153	68
1942	69	117	42	17	23	52	36	34	47	89	101	140	64
1943	54	105	57	6	17	14	30	31	79	94	102	139	61
1944	107	122	104	105	85	92	60	56	106	105	105	163	101
1945	124	118	104	110	42	44	38	46	97	107	107	156	91
1946	81	108	45	35	47	66	45	48	94	107	106	155	78
1947	101	97	76	86	94	128	87	83	104	99	150	199	109
1948	125	126	114	127	151	127	58	58	90	106	106	150	111
1949	116	122	108	119	131	94	64	66	106	105	105	155	108
1950	115	120	106	75	80	100	61	64	101	105	105	149	98
1951	120	46	15	17	16	46	40	42	78	104	105	140	64
1952	98	106	60	28	39	23	21	13	15	71	93	114	57
1953	28	102	63	20	45	82	49	51	86	106	105	157	74
1954	106	118	101	100	104	98	52	52	107	106	105	160	101
1955	107	120	99	89	118	136	87	83	106	104	143	190	115
1956	147	131	9	5	6	42	39	40	42	92	100	125	65
1957	55	109	87	90	94	61	48	48	85	106	105	154	87
1958	103	114	95	87	71	38	14	14	23	82	90	122	71
1959	42	100	83	73	45	79	67	65	104	100	98	163	85
1960	119	128	113	112	102	125	87	86	104	101	168	199	120
1961	124	118	95	106	134	161	100	102	101	135	165	198	128
1962	144	126	108	117	36	54	44	59	100	104	104	150	95
1963	107	112	97	75	57	84	38	40	69	88	95	135	83
1964	103	94	79	85	120	127	85	83	102	96	134	185	108
1965	119	103	44	21	22	52	32	37	72	99	104	143	71
1966	90	72	26	30	45	74	68	74	106	104	104	161	79
1967	115	119	61	53	76	53	18	13	11	26	97	110	63
1968	40	112	82	77	51	78	60	67	105	101	101	163	86
1969	124	129	95	7	5	12	8	5	5	63	101	120	56
1970	26	99	47	5	19	37	41	46	85	106	106	147	64
1971	101	105	72	75	106	109	55	55	96	106	105	161	95
1972	105	113	87	92	114	139	81	76	101	102	99	164	106
1973	121	128	109	70	45	37	34	41	98	107	107	146	87
1974	99	118	82	23	46	43	30	29	65	96	101	134	72
1975	89	111	89	91	42	34	33	37	47	94	102	136	75
1976	72	106	88	94	115	130	86	81	102	100	97	184	105
1977	68	80	85	109	143	162	104	92	98	139	179	197	121
1978	117	122	96	38	20	29	16	16	18	89	106	127	66
1979	51	115	90	39	16	29	34	33	95	107	106	143	72
1980	93	104	84	5	5	17	27	28	43	58	93	106	55
1981	48	110	89	77	90	73	58	61	105	102	103	163	90
1982	123	126	109	27	10	17	5	10	25	69	104	91	60
1983	14	21	5	5	5	5	8	6	5	10	105	54	20
1984	15	6	5	5	18	47	49	51	89	107	106	155	54
1985	100	99	84	94	109	114	77	58	105	98	99	163	100
1986	118	126	108	88	10	8	18	27	40	97	104	139	74
1987	82	108	92	95	111	121	85	82	102	97	105	201	107
1988	119	118	104	106	140	162	98	99	100	110	180	202	128
1989	120	121	94	103	129	129	90	93	101	99	133	185	117
1990	121	118	106	106	135	149	91	91	101	98	120	184	118
1991	117	114	98	105	141	88	65	72	101	103	97	163	105
AVG:	97	109	80	68	67	78	53	54	80	96	111	154	87
MIN:	14	6	5	5	5	5	5	5	5	10	84	54	20
MAX:	147	133	116	127	151	162	104	102	107	139	180	202	128

4.3.2.3 Empirical relationships between different salinity parameters

Laboratory analyses for different salinity parameters in the same water sample have been performed in the Municipal Water Quality Investigation Program (MWQI) of the California Department of Water Resources. These data, collected since 1983, provide the most direct and reliable correlation between electrical conductivity (EC), total dissolved solids concentration (TDS), chloride concentration (Cl), and bromide concentration (Br). For the water quality analysis of the Freeport Project, Br is converted from modeling results for EC and Cl at Rock Slough for potential Project effects on disinfection byproducts formation, TDS is converted from model results for EC and Cl in Clifton Court Forebay for potential Project changes on salt load in State Water Project exports, and Cl is converted from model results on EC in Rock Slough and the Old River at the Los Vaqueros intake for potential Project changes on delivered water salinity of the Contra Costa Water District. These regression relationships are summarized in Table 4.3.2.3-1.

Table 4.3.2.3-1. Regression relationships used in the conversion of salinity parameters.

Rock Slough near entrance to Old River

from	*to*	*slope*	*intercept*	*range*
Cl (mg/L)	Br (μg/L)	3.40	38	all values
EC (mS/cm)	Br (μg/L)	913	- 96	all values
EC (mS/cm)	Cl (mg/L)	150	- 12	EC < 0.281 mS/cm
		285	- 50	EC > 0.281 mS/cm

Banks Pumping Plant at Clifton Court Forebay

from	*to*	*slope*	*intercept*	*range*
Cl (mg/L)	TDS (mg/L)	1.818	126	all values
EC (mS/cm)	TDS (mg/L)	513	23	all values

Old River near CCWD's Los Vaqueros intake

from	*to*	*slope*	*intercept*	*range*
EC (mS/cm)	Cl (mg/L)	150	- 12	EC < 0.341 mS/cm
		285	- 50	EC > 0.341 mS/cm

San Joaquin River at Vernalis

from	*to*	*slope*	*intercept*	*range*
EC (mS/cm)	Cl (mg/L)	0	5	EC < 0.152 mS/cm
		185	-23	EC > 0.152 mS/cm

Figure 4.3.2.3-1 shows the linear regression relationships used in the conversion to Br from model results for Rock Slough. Both regression relationships (from Cl and from EC) appear to overestimate bromide concentration at low salinity. This over-estimation would tend to over-predict bromate formation and give a higher estimate of project effects, and no attempts were made to adjust the bromide regression at low salinity. On the other hand, a bilinear regression based on two linear regressions developed at Contra Costa Water District is used for conversion from EC to Cl. The two linear regressions intersect at an EC value of 0.281 mS/cm (at a Cl value of 30 mg/L). This equation is also used for the conversion of chloride concentration from FDM to EC values for comparison with results of the G-model and DSM2 at Martinez and Chipps Island.

Figure 4.3.2.3-2 shows the linear regression relationships used in the conversion to TDS from model results for Clifton Court Forebay. As in the conversion to Br of the Rock Slough data, both linear

regressions tend to overestimate TDS, the Cl regression more so than the EC regression. No attempt is made to adjust the low salinity conversion.

Figure 4.3.2.3-3 shows the bilinear regression relationships used in the conversion from EC to Cl from model results for Old River near the Los Vaqueros intake of the Contra Costa Water District. The regression is based on two linear regressions developed at Contra Costa Water District for Rock Slough, with the one for higher salinity slightly adjusted. The two linear regressions intersect at an EC value of 0.341 mS/cm (at a Cl value of 39 mg/L).

The scatter in the correlations between different parameters found in Figures 4.3.2.3-1 through 4.3.2.3-3 is caused in part by the different composition of the water at the intakes from different sources at different times and uncertainties in the laboratory analyses. Uncertainties in laboratory measurements of salinity vary with the parameters and methods, but a possible discrepancy of 10% is within the accuracy of EPA approved methods in most cases (see *EPA Methods and Guidance for Analysis of Water*). These uncertainties in the conversion between salinity parameters add to the variability in comparing results from different models simulating different salinity parameters.

4.3.3 Operations of flow control structures

A number of flow control structures are currently operated seasonally in the Delta. Of these, only a few would have significant effects on flows in the main channels in the Delta. By altering the circulation pattern over a large portion of the Delta, these structures could have considerable impacts on salinity over parts of the Delta under certain hydrological conditions.

Freeport Project alternatives would not change the operation of any of the flow control structures in the Delta.[10] Whereas specifics of gate operations could lead to substantial differences in salinity predictions, impact estimates would not depend on details of these specifics as long as they are consistent.[11] Nevertheless, assumptions for the operations of key flow control structures are briefly reviewed in this section for completeness. Only the control structures at Delta Cross Channel and Sand Mound Slough are simulated in FDM.

4.3.3.1 Delta Cross Channel

The Delta Cross Channel could substantially increase the amount of Sacramento River inflow reaching central Delta through North Fork Mokelumne, by 20% to 30% of the Sacramento River flow above the Channel when the channel gates are open. In comparison, Georgiana Slough alone would divert only between 15% and 20% of the Sacramento River inflow to Central Delta.[12] At times of seawater intrusion (when the salinity at Collinsville is high), a closed Delta Cross Channel could increase the entrainment of

[10] There is one exception. In one month out of the 876-month simulation, CALSIM II output in Alt.1 is for closed Delta Cross Channel gates but the output in Alts.2-6 is for open gates for 11 days. This happens in January 1986, when Delta outflow is high in December 1985 and the following months. The effect of this difference in gate operations on Delta salinity is much more significant in DSM2 results than in FDM results, with ANN results showing the smallest response. Recall that G-model does not simulate the effects of Delta Cross Channel gate operations.

[11] That is, the same gates operations are used in all alternatives.

[12] Based on the empirical relationships developed by DWR between the flow in Sacramento River at Freeport and the flow into Delta Cross Channel and Georgiana Slough:
DXC+GS = 0.133 x Sac + 829 when gates are closed
DXC+GS = 0.293 x Sac +2090 when gates are open
These relationships compare very closely with flow measurements made by the U.S. Geological Survey.

higher salinity water in Sherman Lake and San Joaquin River towards Central and South Delta to meet export pumping.[13]

CALSIM II output includes the number of days the Delta Cross Channel gates are open in each month. To simulate requirements in the Water Quality Control Plan, the gates are closed for 10 days in November, 15 days in December, and 20 days in January. They are also closed from February 1 to May 20, and for 14 days between May 21 and June 15. In addition, the gates are closed whenever Sacramento River flow at Delta Cross Channel is over 25,000 cfs to avoid scouring. As discussed above, the magnitude of salinity impact of a Delta Cross Channel closure depend on the location of the salinity gradient downstream. It is possible that closing the gates early in a month could have a different effect than closing the gates later in the month (for the same number of days) when the extent of seawater intrusion may be different. In all FDM and DSM2 simulations in this analysis, all partial month closings of the Delta Cross Channel are assumed to occur at the end of the month, consistent with planning simulations performed by DWR Delta Modeling Section using DSM2.

4.3.3.2 South Delta flow barriers

One-way flow control structures have been installed in south Delta channels since 1988 to raise water level in the region. Over the years, these temporary barriers have been undergoing continuous changes in design and in operations schedule. Details of these barriers could be found on the web at http://sdelta.water.ca.gov/. Installations of permanent barriers (to be operated seasonally) are being studied as part of the CALFED South Delta Improvement Program. However, much of the details of the program have yet to be determined as of this writing.

The water quality impacts of these barriers at urban water intakes could vary considerably with design details such as the number of barriers and their operations schedule. The one-way barriers act to redirect the higher salinity San Joaquin River inflow to Delta drinking water intakes through Central Delta. Under typical summer and early fall conditions, barrier operations could increase salinity at Delta's drinking water intakes by close to 10 mg/L in chloride concentration at CCWD's Rock Slough intake, and half that amount at CCFB.[14] The magnitude of these impacts generally increases with the rate of Delta exports pumping, salinity and volume of San Joaquin inflow. The Freeport Project will likely decrease export pumping and hence decrease the impacts of the barriers operation on Delta water users. For a conservative estimate of Project impacts, and because of the uncertainty in barrier operations in the future, these barriers are not simulated.

4.3.3.3 Suisun Marsh Salinity Control Gate

When Delta outflow is low to moderate and the SMSCG are not operating, net movement of water in Montezuma Slough is from west to east and leads to high salinity. To meet salinity standards in western Delta, the Suisun Marsh Salinity Control Gates (SMSCG), consisting of a boat lock, a series of three radial gates, and flashboards, were installed and began operations in October 1988. The facility controls

[13] As an example of the significance of the Delta Cross Channel, consider a combined export pumping of 10,000 cfs. In late summer and fall of below normal years, Sacramento River flow is not much higher than 1.5 times that of export pumping. Assuming a Sacramento flow of 16,000 cfs, the amount of flow into Central Delta would be around 3,000 cfs when the Delta Channel gates are closed and 6,800 cfs when they are open. When the Delta channel gates are closed, more of the water for export pumping in south Delta is routed through further downstream (7,000 cfs compared to 3,200 cfs in this example). This leads to a higher salinity in Central and south Delta. Note that an export pumping of 10,000 cfs corresponds to 600 TAF per month, or roughly one-third of the total volume of water in the Delta between Martinez, Sacramento, and Vernalis. For comparison, the volume of water passing though Martinez in a typical tide cycle is roughly 100 TAF.

[14] The water quality impacts of these barriers are considerably less if the Grant Line Canal barrier is not operating.

salinity by restricting the flow of higher salinity water from Grizzly Bay into Montezuma Slough during incoming tides and retaining lower salinity Sacramento River water from the previous ebb tide. Operation of the SMSCG in this fashion lowers salinity in Suisun Marsh channels and results in a net movement of water from east to west. The SMSCG usually begin operating in early October and, depending on salinity conditions, may continue operating through the end of the control season in May. When the channel water salinity decreases sufficiently below the salinity standards, or at the end of the control season, the flashboards are removed and the gates are raised to allow unrestricted movement through Montezuma Slough. Details of annual SMSCG operations can be found in *Summary of Salinity Conditions in Suisun Marsh During Water Years 1984–1992* (DWR 1994b), or the *Suisun Marsh Monitoring Program Data Summary* produced annually by DWR's Environmental Services Office, and on the web at http://www.iep.ca.gov/suisun/facts/physicalFacilities.html.

The fact that SMSCG operation depends on salinity in the Suisun Marsh precludes its determination a priori in FDM simulations. The relatively small flow through Montezuma Slough, whether SMSCG is operating or not, has little effects on salinity in central and south Delta. SMSCG is therefore not simulated in FDM. On the other hand, an empirical approach has been set up in DSM2 to model its operations.[15] This rather complex algorithm is an integral part of DSM2 and is used in all DSM2 simulations in this impact analysis.

4.3.4 Assigning CCWD diversions to Old River and Rock Slough intakes

Contra Costa Water District (CCWD) has established a delivered water quality goal of 65 mg/L in chloride concentration. To meet this goal, a new Delta intake (at Old River on Byron Tract) and an 100,000 acre-feet Los Vaqueros Reservoir were recently built to store low salinity water from the Delta for blending during times of high Delta salinity. In planning studies, only water with a chloride concentration of 50 mg/L or less will be diverted for storage in the Reservoir. Water quality at the new intake is usually better, but the Rock Slough intake is used to the extent possible because of a lower electrical consumption required for pumping at that intake. Rock Slough diversion could be used only to the extent of meeting customer demand at the time and cannot be delivered to the Los Vaqueros Reservoir for storage.

In this analysis, CCWD's operation is approximated according to its water quality goal, customer demand at the time, and its pumping capacities at the Old River and Rock Slough intakes. Monthly values of total CCWD Delta diversions from CALSIM II output are divided between the two intakes as follows.[16] A monthly pattern of CCWD's customer demand is assumed based on the annual average for the 1922-1994 simulation period and a peaking factor of 1.4 (see Table 4.3.4-1). Salinity at Rock Slough is estimated from Delta outflow using the "G-model". Whenever salinity at Rock Slough is lower than 64.5 mg/L in chloride concentration, the Rock Slough diversion is assigned the CCWD diversion in CALSIM II output or the CCWD customer demand, whichever is lower. If the CCWD diversion in CALSIM II is higher than the estimated Rock Slough diversion, the balance is diverted at the Old River intake. When water quality at Rock Slough is over 65 mg/L in chloride concentration, the amount that could be diverted at Rock Slough is determined such that this diversion, when blended with Los Vaqueros release, assumed at 50 mg/L, would be no higher than 65 mg/L in chloride concentration. This approach is applied to all

[15] See Appendix D, SMSCG Operations Criteria for 73-Year DSM (Suisun Marsh Version) Model Runs, in Suisun Marsh 73-year modeling studies in support of SWRCB EIR for implementation of the Water Quality Control Plan of the San Francisco/Sacramento-San Joaquin Delta Estuary, Suisun Marsh Branch, Environmental Services Office, Department of Water Resources, November 1997.

[16] Diversions at a third intake of the Contra Costa Water District, at Mallard Slough, are not simulated. The Mallard Slough intake, with a capacity of less than 40 cfs, is used only when the chloride concentration is under 100 mg/L, typically when Delta outflow has been well over 10,000 cfs for a prolonged period.

alternatives. Differences in diversions at CCWD's two intakes give an estimate on potential effects on CCWD operations.[17] The values are tabulated in Tables 4.3.4-2 and 4.3.4-3 for 2001 LoD and in Tables 4.3.4-4 and 4.3.4-5 for 2020 LoD.

Table 4.3.4-1 Monthly demand (in cfs) assumed for division of CCWD diversions

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2001 LoD	180	159	152	148	148	159	174	210	256	284	284	218
2020 LoD	190	168	160	156	156	168	184	222	270	300	300	230

[17] Note that CALSIM II output for CCWD's total diversions are identical in all alternatives.

Table 4.3.4-2a Monthly-average diversion of Contra Costa Water District at its Rock Slough intake in Alternative 1 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	3	9	25	148	148	159	174	73	256	284	284	41	134
1923	7	46	79	106	113	159	108	128	256	284	284	14	132
1924	4	10	23	33	101	57	174	152	62	85	74	23	67
1925	15	14	19	58	148	159	174	84	256	284	192	12	118
1926	3	8	19	55	148	159	174	126	256	284	54	5	108
1927	15	36	152	148	148	159	174	109	256	284	284	84	154
1928	9	60	123	136	109	103	163	126	256	284	284	28	140
1929	6	4	29	51	141	147	174	152	256	129	60	5	96
1930	2	13	29	95	148	153	174	126	256	284	44	5	111
1931	17	18	25	38	148	159	174	136	223	83	72	10	92
1932	16	15	39	148	148	159	174	84	256	284	281	15	135
1933	3	3	4	41	148	159	174	192	256	131	66	13	99
1934	17	15	24	148	122	159	174	138	256	193	61	5	109
1935	15	16	20	65	148	159	174	210	256	284	284	14	137
1936	8	22	24	68	148	159	174	84	256	284	284	12	127
1937	3	10	24	23	148	125	174	126	256	284	284	22	123
1938	4	28	152	148	148	81	163	109	256	284	284	218	156
1939	180	153	133	136	146	135	174	84	256	284	31	4	143
1940	2	3	4	44	148	159	174	210	256	284	284	28	133
1941	5	21	68	148	148	153	174	73	256	284	284	218	153
1942	119	61	95	50	105	97	107	73	256	284	284	218	146
1943	172	150	95	68	113	77	110	109	256	284	284	80	150
1944	5	4	2	20	148	159	174	84	256	284	69	4	101
1945	2	4	9	148	148	159	174	84	256	284	284	14	131
1946	4	26	152	148	148	159	174	84	256	284	284	14	144
1947	4	10	41	138	148	159	174	126	256	284	40	5	115
1948	3	3	3	39	148	159	174	210	256	284	284	17	132
1949	10	25	32	72	148	143	174	126	256	284	170	12	121
1950	3	3	4	50	148	159	174	184	256	284	284	17	131
1951	7	60	152	148	148	130	174	84	256	284	284	31	147
1952	5	5	109	148	148	129	109	109	256	284	284	218	150
1953	180	150	95	103	113	124	132	73	256	284	284	218	168
1954	153	77	55	108	142	107	110	109	256	284	284	29	143
1955	5	8	147	148	148	159	174	84	256	284	115	8	128
1956	3	3	28	148	148	159	174	73	256	284	284	218	148
1957	180	159	17	17	148	159	174	84	256	284	284	26	149
1958	15	139	152	68	87	55	93	73	256	284	284	218	144
1959	180	159	39	45	148	159	174	126	256	284	234	14	152
1960	6	23	33	40	126	159	174	128	256	284	32	4	106
1961	2	3	35	96	148	159	174	126	256	284	124	12	118
1962	4	18	43	118	101	159	174	210	256	284	284	12	139
1963	34	159	152	148	94	90	106	73	256	284	284	84	147
1964	41	150	133	136	141	159	174	152	256	284	51	6	140
1965	3	3	19	148	148	159	174	109	256	284	284	98	141
1966	10	49	152	103	113	129	174	126	256	284	278	12	140
1967	4	16	152	148	148	99	106	109	256	284	284	218	152
1968	180	159	134	91	109	121	174	126	256	284	256	11	158
1969	4	20	84	148	148	159	174	109	256	284	284	218	157
1970	180	152	95	68	113	108	174	126	256	284	284	120	163
1971	6	8	152	148	115	132	163	73	256	284	284	218	153
1972	170	49	21	148	142	135	174	126	256	284	227	10	145
1973	4	34	152	148	148	89	165	126	256	284	284	31	143
1974	8	100	152	103	113	106	109	109	256	284	284	218	153
1975	180	159	133	129	94	94	163	109	256	284	284	218	175
1976	180	154	135	106	85	159	174	152	207	47	15	2	118
1977	1	3	3	18	43	70	123	105	75	81	71	27	52
1978	15	15	23	77	148	159	174	210	256	284	284	38	140
1979	8	21	20	52	148	159	174	126	256	284	284	13	129
1980	4	17	58	148	148	159	174	126	256	284	284	36	141
1981	8	5	20	85	148	153	174	126	256	284	30	4	108
1982	2	10	152	148	148	135	174	109	256	284	284	218	160
1983	157	122	95	41	57	52	103	109	256	275	284	209	147
1984	159	122	95	103	109	121	174	126	256	284	284	100	161
1985	8	90	123	136	147	136	174	126	256	284	33	5	127
1986	3	3	7	129	148	159	174	210	256	284	284	131	149
1987	12	6	4	12	148	153	174	126	256	284	37	4	101
1988	4	5	18	148	148	159	128	92	256	186	64	5	101
1989	3	15	18	33	94	159	174	126	256	284	53	6	102
1990	25	27	37	84	148	86	174	190	223	82	55	10	95
1991	17	15	17	27	39	159	174	126	256	97	50	5	82
AVG:	40	47	67	97	131	137	162	122	249	260	205	63	132
MIN:	1	3	2	12	39	52	93	73	62	47	15	2	52
MAX:	180	159	152	148	148	159	174	210	256	284	284	218	175

Table 4.3.4-2b Differences between Alternatives 2 through 5 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Rock Slough intake at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922			-0.1	0.3	0.3	0.4	0.4		0.6	0.6	0.6	-0.3	0.2
1923	-0.1		-0.2			0.4			0.6	0.6	0.6	-0.1	0.2
1924	0.0	0.0	0.2	0.5	1.8		0.4		-0.7	-0.5	-3.0	-0.6	-0.2
1925	0.0	0.2	0.4	2.2	0.3	0.4	0.4		0.6	0.6	6.9	0.3	1.0
1926	0.0	0.0	0.1	0.3	0.3	0.4	0.4		0.6	0.6	0.5	0.1	0.3
1927	0.1	-0.4	0.3	0.3	0.3	0.4	0.4		0.6	0.6	0.6	-0.9	0.2
1928	-0.1								0.6	0.6	0.6	-0.1	0.1
1929	0.0	0.0	-0.1	0.1	-4.5		0.4		0.6	0.3	-0.7	-0.1	-0.3
1930	0.0	0.0	-0.3		0.3		0.4		0.6	0.6	-3.0	-0.5	-0.2
1931	-0.6	-0.2	-0.5	0.7	0.3	0.4	0.4	6.1		1.1	1.3	0.1	0.8
1932	0.1	0.1	0.0	0.3	0.3	0.4	0.4		0.6	0.6	-2.6	-0.1	0.0
1933	0.0	0.0	0.0	-1.9	0.3	0.4	0.4		0.6	0.2	-0.1	-0.1	0.0
1934	0.1	0.1	0.0	0.3		0.4	0.4		0.6	0.4	0.1	0.0	0.2
1935	0.1	0.3	0.4	1.6	0.3	0.4	0.4	0.5	0.6	0.6	0.6	-0.1	0.5
1936	-0.2	-0.3	0.5	4.9	0.3	0.4	0.4		0.6	0.6	0.6	-0.1	0.7
1937	0.0	0.1	0.4	0.1	0.3		0.4		0.6	0.6	0.6	0.0	0.3
1938	0.0	-0.1	0.3	0.3	0.3				0.6	0.6	0.6	0.5	0.3
1939	0.4						0.4		0.6	0.6	0.0	0.0	0.2
1940	0.0	0.0	0.0	-0.5	0.3	0.4	0.4	0.5	0.6	0.6	0.6	-0.1	0.2
1941	0.0	0.0	1.4	0.3	0.3		0.4		0.6	0.6	0.6	0.5	0.4
1942	-11.5	-5.8							0.6	0.6	0.6	0.5	-1.2
1943	-14.3								0.6	0.6	0.6	-0.5	-1.1
1944	0.0	0.0	0.0	0.0	0.3	0.4	0.4		0.6	0.6	-0.6	0.0	0.1
1945	0.0	0.0	-0.3	0.3	0.3	0.4	0.4		0.6	0.6	0.6	-0.1	0.2
1946	0.0	-0.3	0.3	0.3		0.4	0.4		0.6	0.6	0.6	-0.2	0.2
1947	0.0	-0.1	-0.8	-4.9	0.3	0.4	0.4		0.6	0.6	0.1	0.0	-0.3
1948	0.0	0.0	0.0	-0.5	0.3	0.4	0.4	0.5	0.6	0.6	0.6	-0.3	0.2
1949	-0.1	-0.2	-0.6	-1.3	0.3		0.4		0.6	0.6	-1.2	-0.1	-0.1
1950	0.0	0.0	0.0	-1.7	0.3	0.4	0.4		0.6	0.6	0.6	-0.1	0.1
1951	0.1	3.2	0.3	0.3	0.3		0.4		0.6	0.6	0.6	-0.3	0.5
1952	0.0	0.0	1.1	0.3	0.3				0.6	0.6	0.6	0.5	0.3
1953	0.4								0.6	0.6	0.6	0.5	0.2
1954	-9.5	-8.3	-7.3						0.6	0.6	0.6	0.0	-1.9
1955	0.0	0.0	-3.5	0.3	0.3	0.4	0.4		0.6	0.6	-0.4	0.0	-0.1
1956	0.0	0.0	-0.3	0.3	0.3	0.4	0.4		0.6	0.6	0.6	0.5	0.3
1957	0.4	0.4	-0.4	-0.3	0.3	0.4	0.4		0.6	0.6	0.6	0.0	0.3
1958	-0.5	-19.9	0.3						0.6	0.6	0.6	0.5	-1.5
1959	0.4	0.4	-1.2		0.3	0.4	0.4		0.6	0.6		0.3	0.2
1960	0.1	0.0	-1.0	-1.4		0.4	0.4		0.6	0.6	0.2	0.0	0.0
1961	0.0	0.0	-0.3		0.3	0.4	0.4		0.6	0.6	0.4	0.0	0.2
1962	-0.1	-0.3	0.4	-0.6		0.4	0.4	0.5	0.6	0.6	0.6	0.1	0.2
1963	0.0	0.4	0.3	0.3					0.6	0.6	0.6	2.8	0.5
1964	1.1					0.4	0.4		0.6	0.6	-0.4	0.0	0.2
1965	0.0	0.0	0.0	0.3	0.3	0.4	0.4		0.6	0.6	0.6	-1.3	0.2
1966	-0.1	-1.8	0.3				0.4		0.6	0.6		0.0	0.0
1967	0.0	-0.1	2.6	0.3	0.3				0.6	0.6	0.6	0.5	0.5
1968	0.4	0.4					0.4		0.6	0.6		0.0	0.2
1969	0.0	0.1	0.1	0.3	0.3	0.4	0.4		0.6	0.6	0.6	0.5	0.3
1970	0.4						0.4		0.6	0.6	0.6	-0.3	0.2
1971	0.0	-0.1	0.3	0.3					0.6	0.6	0.6	0.5	0.2
1972	-10.1	-1.0	-1.3	0.3			0.4		0.6	0.6		0.0	-0.9
1973	0.0	-0.3	0.3	0.3	0.3				0.6	0.6	0.6	-1.7	0.1
1974	-0.8		0.3						0.6	0.6	0.6	0.5	0.2
1975	0.4	0.4	-2.0	-6.9					0.6	0.6	0.6	0.5	-0.5
1976	0.4			-0.8	1.5	0.4	0.4			0.0	0.2	0.0	0.2
1977	0.0	0.0	0.1	0.6	1.5	1.5	1.4	0.3	0.2	0.1	-0.1	0.0	0.5
1978	0.0	0.0	-0.1		0.3	0.4	0.4	0.5	0.6	0.6	0.6	-0.9	0.2
1979	-0.2	0.2	0.3	-0.9	0.3	0.4	0.4		0.6	0.6	0.6	-0.2	0.2
1980	0.0	-0.2	-3.0	0.3	0.3	0.4	0.4		0.6	0.6	0.6	-0.7	-0.1
1981	-0.2	0.0	-0.1		0.3		0.4		0.6	0.6	-0.1	0.0	0.1
1982	0.0	-0.1	0.3	0.3	0.3		0.4		0.6	0.6	0.6	0.5	0.3
1983									0.6		0.6		0.1
1984							0.4		0.6	0.6	0.6	-0.1	0.2
1985	0.0						0.4		0.6	0.6	0.0	0.0	0.1
1986	0.0	0.0	-0.1		0.3	0.4	0.4	0.5	0.6	0.6	0.6	-5.5	-0.2
1987	-0.3	0.0	0.0	0.0	0.3		0.4		0.6	0.6	-0.6	0.0	0.1
1988	0.0	0.0	-0.3	0.3	0.3	0.4			0.6	0.3	-1.3	-0.1	0.0
1989	0.0	0.0	-0.3	-1.4	-5.5	0.4	0.4		0.6	0.6	-0.6	-0.1	-0.5
1990	-0.5	-1.0	-2.1	-4.4	0.3		0.4			-0.3	0.3	0.0	-0.6
1991	0.0	0.2	0.3	0.1	-0.5	0.4	0.4		0.6	-1.4	-1.6	-0.3	-0.1
AVG:	-0.6	-0.5	-0.2	-0.1	0.1	0.2	0.3	0.1	0.5	0.6	0.3	-0.1	0.0
MIN:	-14.3	-19.9	-7.3	-6.9	-5.5				-0.7	-1.4	-3.0	-5.5	-1.9
MAX:	1.1	3.2	2.6	4.9	1.8	1.5	1.4	6.1	0.6	1.1	6.9	2.8	1.0

Table 4.3.4-2c Differences between Alternative 6 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Rock Slough intake at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922			-0.1									-1.4	-0.1
1923	-0.2		-0.5									-0.3	-0.1
1924	-0.1	-0.1	0.1	0.2	1.6				0.0	-0.1	-0.4	-0.1	0.1
1925	0.1	0.2	0.4	2.5							-0.3	-0.1	0.2
1926	0.0	0.0	0.0	-0.1							2.0	0.2	0.2
1927	0.3	0.1										-6.4	-0.5
1928	-0.4											0.0	0.0
1929	0.0	0.0	-0.5	0.2	-2.3					0.0	-0.6	-0.1	-0.3
1930	0.0	-0.1	-0.4								-0.1	0.0	-0.1
1931	0.0	-0.1	-0.3	-0.4				0.5		0.1	-0.2	0.0	0.0
1932	0.0	0.0	0.1								-2.9	-0.1	-0.2
1933	0.0	0.0	0.0	-1.9						0.0	-0.1	0.0	-0.2
1934	0.0	0.0	0.0							0.0	-0.4	0.0	0.0
1935	-0.1	0.0	0.0	-0.1								-0.2	0.0
1936	-0.2	-0.2	0.8	6.4								-0.1	0.6
1937	0.0	0.2	0.6	0.2								0.0	0.1
1938	0.0	0.7											0.1
1939											0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0								-0.8	-0.1
1941	-0.1	0.0	3.7										0.3
1942	-34.1	-17.7											-4.3
1943	-37.9	-0.5										-6.2	-3.7
1944	-0.2	-0.1	0.0	-0.1							-0.6	0.0	-0.1
1945	0.0	-0.1	-0.3									-0.1	0.0
1946	0.0	-0.8										0.1	-0.1
1947	0.0	-0.1	-0.6	-1.6							0.4	0.0	-0.2
1948	0.0	0.0	0.0	-1.3								-0.1	-0.1
1949	0.0	0.5	1.0	3.2							-11.2	-0.8	-0.6
1950	-0.1	0.0	-0.1	-5.3								-0.5	-0.5
1951	-0.1	0.7										-0.7	0.0
1952	-0.1	0.0	1.5										0.1
1953													
1954	-11.3	-9.6	-8.4									0.0	-2.4
1955	0.0	0.1	1.1								-0.6	0.0	0.1
1956	0.0	0.0	-0.1										0.0
1957			2.8	0.9								1.4	0.4
1958	0.6	-14.8											-1.2
1959			-1.7									0.1	-0.1
1960	0.0	0.1	0.2	0.3							0.0	0.0	0.0
1961	0.0	0.0	-0.2	2.8							0.1	-0.1	0.2
1962	0.0	0.2	1.5	4.0								0.0	0.5
1963	0.0											2.6	0.2
1964	1.1										-0.2	0.0	0.1
1965	0.0	0.0	0.0									-7.3	-0.6
1966	-0.4	-2.4										0.0	-0.2
1967	0.0	0.0	5.1										0.4
1968												0.0	0.0
1969	0.0	0.1	0.4										0.0
1970												-0.8	-0.1
1971	0.0	-0.1											0.0
1972	-11.9	-1.2	-1.4									0.0	-1.2
1973	0.0	1.1										-2.4	-0.1
1974	-1.1												-0.1
1975			-10.3	-10.1									-1.7
1976				-2.6	4.8					-0.1	-0.1	0.0	0.2
1977	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	-0.2	-0.4	-0.1	0.0
1978	0.0	0.0	0.0									-0.9	-0.1
1979	-0.2	-0.3	-0.1	-0.8								0.0	-0.1
1980	0.0	0.0	0.0									-1.4	-0.1
1981	-0.3	-0.1	-0.1								0.0	0.0	0.0
1982	0.0	0.0											0.0
1983													
1984												-1.7	-0.1
1985	-0.1										0.1	0.0	0.0
1986	0.0	0.0	-0.1									-15.3	-1.3
1987	-0.8	-0.1	0.0	-0.1							-1.5	-0.1	-0.2
1988	0.0	0.0	0.1							0.0	-0.5	-0.1	0.0
1989	0.0	0.1	0.1	0.2	0.2						0.0	0.0	0.1
1990	0.1	-0.3	-1.0	-2.4						0.0	0.4	0.1	-0.3
1991	0.0	0.0	0.0	-0.1	-0.3					0.8	0.3	0.0	0.1
AVG:	-1.4	-0.6	-0.1	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.2	-0.6	-0.2
MIN:	-37.9	-17.7	-10.3	-10.1	-2.3					-0.2	-11.2	-15.3	-4.3
MAX:	1.1	1.1	5.1	6.4	4.8	0.2	0.1	0.5	0.1	0.8	2.0	2.6	0.6

Table 4.3.4-3a Monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River in Alternative 1 at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	31	86	104	188	42	4	84		146	17	28	44	65
1923	33	250	228			9			167	37	16	41	65
1924	23	64	114	119	52		18		124	211	215	161	92
1925	189	150	118	95	40	9	31		198	208	97	55	99
1926	22	60	118	92	49	31	54		198	208	96	26	79
1927	126	122	182	188	42	4	31		209	220	78	176	115
1928	53	250							172	37	12	69	49
1929	34	23	94	102	17		18		217	167	229	34	78
1930	22	123	108		90		118		198	208	70	25	80
1931	136	146	113	64	10	4	24	55	250	212	216	73	109
1932	189	149	88	165	47	21	118		198	208	7	58	104
1933	27	22	20	29	10	3	24		217	165	222	72	68
1934	187	149	114	0		103	118		217	103	228	37	105
1935	189	149	117	32	98	199	46	19	209	220	16	42	111
1936	51	142	113	28	21	4	84		209	220	16	45	78
1937	26	66	109	73	40		44		209	220	16	74	73
1938	29	93	143	155	21				126	17	28	38	54
1939	6						23		137	25	69	21	23
1940	17	18	23	48	19	126	109	18	209	220	12	67	74
1941	29	132	41	120	29		31		91	17	28	39	46
1942	67	90							85	17	28	39	27
1943	14								154	37	28	181	35
1944	31	24	12	71	43	4	54		198	208	88	22	63
1945	16	19	16	131	69	157	118		209	220	16	42	84
1946	26	127	172	155		5	23		128	37	16	44	61
1947	25	55	91	187	97	7	118		217	98	56	22	81
1948	20	18	13	74	5	104	156	24	209	220	16	38	75
1949	49	139	103	76	10		118		198	208	119	50	89
1950	22	18	17	8	98	225	118		209	220	16	50	83
1951	40	97	143	155	50		22		128	37	12	70	63
1952	31	27	158	113	57				126	17	28	19	48
1953	8								115	17	28	39	17
1954	54	74	78						153	37	12	53	39
1955	25	34	106	143	98	21	15		116	25	157	41	65
1956	24	21	29	117	57	4	31		209	97	28	37	54
1957	5	6	35	40	50	4	8		123	39	12	57	32
1958	32	221	119						47	16	29	40	42
1959	9	5	10		46	4	27		176	39		37	29
1960	33	111	104	113		21	118		198	208	61	22	82
1961	19	18	99		82	28	118		198	208	165	43	81
1962	24	102	94	35		165	243	68	209	220	16	34	101
1963	15	191	172	30					107	16	26	174	61
1964	162					5	18		163	25	61	23	38
1965	19	20	8	155	65	97	31		209	220	77	162	88
1966	52	216	11				24		172	35		41	46
1967	24	75	182	112	21				109	17	28	38	50
1968	8	2					24		174	38		35	23
1969	21	105	46	107	46	4	84		147	17	28	37	54
1970	6						23		172	38	28	137	34
1971	28	28	143	37					111	18	29	39	36
1972	37	114	32	64			23		170	37		35	43
1973	24	104	172	113	9				174	17	12	61	57
1974	42	250	70						156	17	30	40	50
1975	8	3		8					158	15	27	38	21
1976	3			45	47	21	18		250	249	113	20	64
1977	17	31	19	69	115	90	82	83	198	237	227	212	115
1978	189	149	115		26	111	101	20	209	200	12	44	98
1979	34	129	117	37	37	4	84		209	220	16	41	77
1980	25	103	72	120	39	4	84		181	17	12	60	60
1981	37	30	95		65		118		198	132	60	19	63
1982	16	15	143	120	65		31		181	155	28	16	64
1983									89		9		8
1984							23		178	19	30	150	33
1985	38	250					24		168	27	61	20	49
1986	16	17	14		38	154	84	17	209	200	150	128	85
1987	45	35	19	44	74		118		217	208	81	28	72
1988	26	24	17	115	90	21			217	110	225	35	73
1989	35	149	120	120	64	53	84		198	194	78	25	93
1990	167	137	101	64	61		25		250	214	234	75	111
1991	188	149	120	126	119	66	118		217	198	239	38	132
AVG:	47	82	73	63	34	27	50	4	176	115	65	56	66
MIN:									47				8
MAX:	189	250	228	188	119	225	243	83	250	249	239	212	132

Table 4.3.4-3b Differences between Alternatives 2 through 5 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922			0.1	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.3	-0.2
1923	0.1		0.2			-0.4			-0.6	-0.6	-0.6	0.1	-0.2
1924	0.0	0.0	-0.2	-0.5	-1.8		-0.4		0.7	0.5	3.0	0.6	0.2
1925	0.0	-0.2	-0.4	-2.2	-0.3	-0.4	-0.4		-0.6	-0.6	-6.9	-0.3	-1.0
1926	0.0	0.0	-0.1	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.5	-0.1	-0.3
1927	-0.1	0.4	-0.3	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.9	-0.2
1928	0.1								-0.6	-0.6	-0.6	0.1	-0.1
1929	0.0	0.0	0.1	-0.1	4.5		-0.4		-0.6	-0.3	0.7	0.1	0.3
1930	0.0	0.0	0.3		-0.3		-0.4		-0.6	-0.6	3.0	0.5	0.2
1931	0.6	0.2	0.5	-0.7	-0.3	-0.4	-0.4	-6.1		-1.1	-1.3	-0.1	-0.8
1932	-0.1	-0.1	0.0	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	2.6	0.1	0.0
1933	0.0	0.0	0.0	1.9	-0.3	-0.4	-0.4		-0.6	-0.2	0.1	0.1	0.0
1934	-0.1	-0.1	0.0	-0.3		-0.4	-0.4		-0.6	-0.4	-0.1	0.0	-0.2
1935	-0.1	-0.3	-0.4	-1.6	-0.3	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	0.1	-0.5
1936	0.2	0.3	-0.5	-4.9	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.1	-0.7
1937	0.0	-0.1	-0.4	-0.1	-0.3		-0.4		-0.6	-0.6	-0.6	0.0	-0.3
1938	0.0	0.1	-0.3	-0.3	-0.3				-0.6	-0.6	-0.6	-0.5	-0.3
1939	-0.4						-0.4		-0.6	-0.6	0.0	0.0	-0.2
1940	0.0	0.0	0.0	0.5	-0.3	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	0.1	-0.2
1941	0.0	0.0	-1.4	-0.3	-0.3		-0.4		-0.6	-0.6	-0.6	-0.5	-0.4
1942	11.5	5.8							-0.6	-0.6	-0.6	-0.5	1.2
1943	14.3								-0.6	-0.6	-0.6	0.5	1.1
1944	0.0	0.0	0.0	0.0	-0.3	-0.4	-0.4		-0.6	-0.6	0.6	0.0	-0.1
1945	0.0	0.0	0.3	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.1	-0.2
1946	0.0	0.3	-0.3	-0.3		-0.4	-0.4		-0.6	-0.6	-0.6	0.2	-0.2
1947	0.0	0.1	0.8	4.9	-0.3	-0.4	-0.4		-0.6	-0.6	-0.1	0.0	0.3
1948	0.0	0.0	0.0	0.5	-0.3	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	0.3	-0.2
1949	0.1	0.2	0.6	1.3	-0.3		-0.4		-0.6	-0.6	1.2	0.1	0.1
1950	0.0	0.0	0.0	1.7	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.1	-0.1
1951	-0.1	-3.2	-0.3	-0.3	-0.3		-0.4		-0.6	-0.6	-0.6	0.3	-0.5
1952	0.0	0.0	-1.1	-0.3	-0.3				-0.6	-0.6	-0.6	-0.5	-0.3
1953	-0.4								-0.6	-0.6	-0.6	-0.5	-0.2
1954	9.5	8.3	7.3						-0.6	-0.6	-0.6	0.0	1.9
1955	0.0	0.0	3.5	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	0.4	0.0	0.1
1956	0.0	0.0	0.3	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	-0.5	-0.3
1957	-0.4	-0.4	0.4	0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.0	-0.3
1958	0.5	19.9	-0.3						-0.6	-0.6	-0.6	-0.5	1.5
1959	-0.4	-0.4	1.2		-0.3	-0.4	-0.4		-0.6	-0.6		-0.3	-0.2
1960	-0.1	0.0	1.0	1.4		-0.4	-0.4		-0.6	-0.6	-0.2	0.0	0.0
1961	0.0	0.0	0.3		-0.3	-0.4	-0.4		-0.6	-0.6	-0.4	0.0	-0.2
1962	0.1	0.3	-0.4	0.6		-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	-0.1	-0.2
1963	0.0	-0.4	-0.3	-0.3					-0.6	-0.6	-0.6	-2.8	-0.5
1964	-1.1					-0.4	-0.4		-0.6	-0.6	0.4	0.0	-0.2
1965	0.0	0.0	0.0	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	1.3	-0.2
1966	0.1	1.8	-0.3				-0.4		-0.6	-0.6		0.0	0.0
1967	0.0	0.1	-2.6	-0.3	-0.3				-0.6	-0.6	-0.6	-0.5	-0.5
1968	-0.4	-0.4					-0.4		-0.6	-0.6		0.0	-0.2
1969	0.0	-0.1	-0.1	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	-0.5	-0.3
1970	-0.4						-0.4		-0.6	-0.6	-0.6	0.3	-0.2
1971	0.0	0.1	-0.3	-0.3					-0.6	-0.6	-0.6	-0.5	-0.2
1972	10.1	1.0	1.3	-0.3			-0.4		-0.6	-0.6		0.0	0.9
1973	0.0	0.3	-0.3	-0.3	-0.3				-0.6	-0.6	-0.6	1.7	-0.1
1974	0.8		-0.3						-0.6	-0.6	-0.6	-0.5	-0.2
1975	-0.4	-0.4	2.0	6.9					-0.6	-0.6	-0.6	-0.5	0.5
1976	-0.4			0.8	-1.5	-0.4	-0.4			0.0	-0.2	0.0	-0.2
1977	0.0	0.0	-0.1	-0.6	-1.5	-1.5	-1.4	-0.3	-0.2	-0.1	0.1	0.0	-0.5
1978	0.0	0.0	0.1		-0.3	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	0.9	-0.2
1979	0.2	-0.2	-0.3	0.9	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.2	-0.2
1980	0.0	0.2	3.0	-0.3	-0.3	-0.4	-0.4		-0.6	-0.6	-0.6	0.7	0.1
1981	0.2	0.0	0.1		-0.3		-0.4		-0.6	-0.6	0.1	0.0	-0.1
1982	0.0	0.1	-0.3	-0.3	-0.3		-0.4		-0.6	-0.6	-0.6	-0.5	-0.3
1983									-0.6		-0.6		-0.1
1984							-0.4		-0.6	-0.6	-0.6	0.1	-0.2
1985	0.0						-0.4		-0.6	-0.6	0.0	0.0	-0.1
1986	0.0	0.0	0.1		-0.3	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	5.5	0.2
1987	0.3	0.0	0.0	0.0	-0.3		-0.4		-0.6	-0.6	0.6	0.0	-0.1
1988	0.0	0.0	0.3	-0.3	-0.3	-0.4			-0.6	-0.3	1.3	0.1	0.0
1989	0.0	0.0	0.3	1.4	5.5	-0.4	-0.4		-0.6	-0.6	0.6	0.1	0.5
1990	0.5	1.0	2.1	4.4	-0.3		-0.4			0.3	-0.3	0.0	0.6
1991	0.0	-0.2	-0.3	-0.1	0.5	-0.4	-0.4		-0.6	1.4	1.6	0.3	0.1
AVG:	0.6	0.5	0.2	0.1	-0.1	-0.2	-0.3	-0.1	-0.5	-0.6	-0.3	0.1	0.0
MIN:	-1.1	-3.2	-2.6	-4.9	-1.8	-1.5	-1.4	-6.1	-0.6	-1.1	-6.9	-2.8	-1.0
MAX:	14.3	19.9	7.3	6.9	5.5				0.7	1.4	3.0	5.5	1.9

Table 4.3.4-3c Differences between Alternative 6 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River at 2001 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922			0.1									1.4	0.1
1923	0.2		0.5									0.3	0.1
1924	0.1	0.1	-0.1	-0.2	-1.6				0.0	0.1	0.4	0.1	-0.1
1925	-0.1	-0.2	-0.4	-2.5							0.3	0.1	-0.2
1926	0.0	0.0	0.0	0.1							-2.0	-0.2	-0.2
1927	-0.3	-0.1										6.4	0.5
1928	0.4											0.0	0.0
1929	0.0	0.0	0.5	-0.2	2.3					0.0	0.6	0.1	0.3
1930	0.0	0.1	0.4								0.1	0.0	0.1
1931	0.0	0.1	0.3	0.4				-0.5		-0.1	0.2	0.0	0.0
1932	0.0	0.0	-0.1								2.9	0.1	0.2
1933	0.0	0.0	0.0	1.9						0.0	0.1	0.0	0.2
1934	0.0	0.0	0.0							0.0	0.4	0.0	0.0
1935	0.1	0.0	0.0	0.1								0.2	0.0
1936	0.2	0.2	-0.8	-6.4								0.1	-0.6
1937	0.0	-0.2	-0.6	-0.2								0.0	-0.1
1938	0.0	-0.7											-0.1
1939											0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0								0.8	0.1
1941	0.1	0.0	-3.7										-0.3
1942	34.1	17.7											4.3
1943	37.9	0.5										6.2	3.7
1944	0.2	0.1	0.0	0.1							0.6	0.0	0.1
1945	0.0	0.1	0.3									0.1	0.0
1946	0.0	0.8										-0.1	0.1
1947	0.0	0.1	0.6	1.6							-0.4	0.0	0.2
1948	0.0	0.0	0.0	1.3								0.1	0.1
1949	0.0	-0.5	-1.0	-3.2							11.2	0.8	0.6
1950	0.1	0.0	0.1	5.3								0.5	0.5
1951	0.1	-0.7										0.7	0.0
1952	0.1	0.0	-1.5										-0.1
1953													
1954	11.3	9.6	8.4									0.0	2.4
1955	0.0	-0.1	-1.1								0.6	0.0	-0.1
1956	0.0	0.0	0.1										0.0
1957			-2.8	-0.9								-1.4	-0.4
1958	-0.6	14.8											1.2
1959			1.7									-0.1	0.1
1960	0.0	-0.1	-0.2	-0.3							0.0	0.0	0.0
1961	0.0	0.0	0.2	-2.8							-0.1	0.1	-0.2
1962	0.0	-0.2	-1.5	-4.0								0.0	-0.5
1963	0.0											-2.6	-0.2
1964	-1.1										0.2	0.0	-0.1
1965	0.0	0.0	0.0									7.3	0.6
1966	0.4	2.4										0.0	0.2
1967	0.0	0.0	-5.1										-0.4
1968												0.0	0.0
1969	0.0	-0.1	-0.4										0.0
1970												0.8	0.1
1971	0.0	0.1											0.0
1972	11.9	1.2	1.4									0.0	1.2
1973	0.0	-1.1										2.4	0.1
1974	1.1												0.1
1975			10.3	10.1									1.7
1976				2.6	-4.8					0.1	0.1	0.0	-0.2
1977	0.0	-0.1	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.1	0.2	0.4	0.1	0.0
1978	0.0	0.0	0.0									0.9	0.1
1979	0.2	0.3	0.1	0.8								0.0	0.1
1980	0.0	0.0	0.0									1.4	0.1
1981	0.3	0.1	0.1								0.0	0.0	0.0
1982	0.0	0.0											0.0
1983													
1984												1.7	0.1
1985	0.1										-0.1	0.0	0.0
1986	0.0	0.0	0.1									15.3	1.3
1987	0.8	0.1	0.0	0.1							1.5	0.1	0.2
1988	0.0	0.0	-0.1							0.0	0.5	0.1	0.0
1989	0.0	-0.1	-0.1	-0.2	-0.2						0.0	0.0	-0.1
1990	-0.1	0.3	1.0	2.4						0.0	-0.4	-0.1	0.3
1991	0.0	0.0	0.0	0.1	0.3					-0.8	-0.3	0.0	-0.1
AVG:	1.4	0.6	0.1	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.2
MIN:	-1.1	-1.1	-5.1	-6.4	-4.8	-0.2	-0.1	-0.5	-0.1	-0.8	-2.0	-2.6	-0.6
MAX:	37.9	17.7	10.3	10.1	2.3					0.2	11.2	15.3	4.3

Table 4.3.4-4a Monthly-average diversion of Contra Costa Water District at its Rock Slough intake in Alternative 1 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	18	13	29	120	74	99	86	220	269	299	299	98	135
1923	29	26	106	120	104	99		220	269	299	299	61	136
1924	29	25	27	29	96	168		221	83	52	46	12	66
1925	3	15	24	68	156	99	111	220	269	299	300	55	135
1926	24	19	19	42	103	99		220	269	299	95	34	102
1927	20	42	160	120	103	168		220	269	299	299	78	148
1928	28	33	91	120	99	101		220	269	299	299	60	135
1929	25	24	27	33	86	168		221	249	103	47	30	84
1930	9	4	14	143	156	99	111	220	269	299	99	180	134
1931	20	17	20	30	103	168		156	79	42	58	29	60
1932	17	16	46	143	156	168	180	221	269	299	273	63	154
1933	25	20	27	71	156	168	45	221	249	139	63	34	101
1934	18	15	28	143	156	168	180	221	249	203	59	29	122
1935	16	17	25	120	156	99	111	220	269	299	299	214	154
1936	25	23	17	73	99	99		220	269	299	299	49	123
1937	23	22	18	25	103	81		220	269	299	299	52	118
1938	22	39	145	120	45	125		220	269	299	299	229	151
1939	189	168	146	120	103	99		220	269	299	90	34	145
1940	22	23	21	43	70	168		220	269	299	299	68	125
1941	25	26	142	120	81	99		220	269	299	299	229	151
1942	84	42	116	120	103	99		220	269	299	299	229	157
1943	103	112	145	120	103	99		220	269	299	299	72	153
1944	25	20	18	29	99	99		220	269	299	118	32	102
1945	22	29	69	148	103	99		220	269	299	299	51	134
1946	22	24	148	120	104	99		220	269	299	299	58	139
1947	29	25	46	146	103	99		220	269	299	125	39	117
1948	24	23	21	33	99	99		220	269	299	299	60	120
1949	28	27	33	44	61	99		220	269	299	157	39	106
1950	23	21	19	71	103	99		220	269	299	299	56	123
1951	25	60	145	120	103	99		220	269	299	299	89	144
1952	30	29	146	120	99	99		220	269	299	299	229	153
1953	189	168	145	120	104	99		111	269	299	299	229	169
1954	106	57	41	120	103	99		220	269	299	299	72	140
1955	31	30	117	120	103	99		220	269	299	119	33	120
1956	21	21	66	94	99	137		220	269	299	299	229	146
1957	140	86	40	33	103	99		220	269	299	299	72	138
1958	44	58	146	120	40	37		220	269	299	299	229	147
1959	189	168	89	120	103	99		220	269	299	299	57	159
1960	27	26	32	46	99	99		220	240	299	114	39	104
1961	23	23	42	120	103	99		220	269	299	126	43	114
1962	25	22	38	100	103	99		220	269	299	299	54	127
1963	104	168	146	120	103	99		220	269	299	299	105	161
1964	30	61	145	120	99	99		220	269	299	125	45	126
1965	25	24	107	120	104	99		220	269	299	299	98	139
1966	29	47	145	120	103	99		220	269	299	299	47	140
1967	27	31	160	120	103	99		220	269	299	299	229	155
1968	189	168	146	120	99	99		220	269	299	291	48	162
1969	25	26	93	120	103	85		220	269	299	299	121	138
1970	142	168	145	37	77	168		220	269	299	299	110	161
1971	30	37	145	120	103	102		220	269	299	299	229	154
1972	84	39	40	101	99	99		220	269	299	299	52	133
1973	25	42	145	120	40	99		220	269	299	299	72	136
1974	27	60	145	120	104	101		220	269	299	299	229	156
1975	189	91	53	62	104	99		220	269	299	299	229	160
1976	189	168	126	53	80	168		145	106	28	20	29	93
1977	15	6	6	25	49	77	130	124	74	82	62	29	57
1978	16	15	27	143	156	99	111	220	269	299	299	214	156
1979	163	21	29	120	103	168		220	269	299	299	53	145
1980	25	24	64	120	61	99		220	269	299	299	129	134
1981	37	24	27	120	103	99		220	269	299	106	41	112
1982	25	64	145	120	103	34		220	269	299	299	229	151
1983	189	168	145	120	103	99		220	269	299	299	229	178
1984	189	143	160	122	101	99		220	269	299	299	105	167
1985	32	72	145	120	103	99		220	269	299	110	48	126
1986	29	23	46	120	56	150		220	269	299	299	117	136
1987	36	24	23	27	103	99		220	269	299	88	29	101
1988	11	11	47	120	99	99		220	269	101	51	12	87
1989	17	16	20	30	85	99	111	220	269	299	288	46	125
1990	28	28	31	61	103	168		221	249	75	42	21	85
1991	16	15	20	21	31	168	180	221	249	105	47	29	92
AVG:	53	49	78	96	99	111	19	215	257	270	228	95	131
MIN:	3	4	6	21	31	34		111	74	28	20	12	57
MAX:	189	168	160	148	156	168	180	221	269	299	300	229	178

Table 4.3.4-4b Differences between Alternatives 2 through 5 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Rock Slough intake at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.0		-0.1						0.6	0.7	0.7	-0.7	0.1
1923	-0.2	-0.1	-0.5						0.6	0.7	0.7	0.3	0.1
1924	0.1	0.1	0.1	0.2	1.5	0.4		0.5	-0.6	-0.2	-0.8	0.0	0.1
1925	0.0	0.1	0.8	5.0	0.3				0.6	0.7	4.0	0.8	1.0
1926	0.2	0.1	0.1	0.3					0.6	0.7	0.5	0.2	0.2
1927	0.2	0.3	0.4			0.4			0.6	0.7	0.7	-1.7	0.1
1928	0.1	0.7	4.7						0.6	0.7	0.7	0.1	0.6
1929	0.0	0.0	0.0	0.0	-0.6	0.4		0.5		0.1	0.2	0.2	0.0
1930	0.0	0.0	0.1		0.3				0.6	0.7	-0.4		0.1
1931	-0.1	0.1	0.2	0.1		0.4		1.6	-0.4	0.2	0.6		0.2
1932	0.0	0.0	0.3		0.3	0.4		0.5	0.6	0.7		-0.2	0.2
1933	0.0	0.1	0.4	2.2	0.3	0.4		0.5		-0.7	-0.1	0.1	0.3
1934	0.1	0.1	0.2		0.3	0.4		0.5		0.4	3.6		0.5
1935	0.5	0.3	1.3	13.2	0.3				0.6	0.7	0.7		1.5
1936	0.0	0.0	0.0	-0.8					0.6	0.7	0.7	0.1	0.1
1937	0.0	0.0	0.0	0.0					0.6	0.7	0.7	0.1	0.2
1938	0.1	-0.1							0.6	0.7	0.7	0.5	0.2
1939	0.4	0.4							0.6	0.7	0.0	-0.1	0.2
1940	0.1	0.3	0.0	-0.7		0.4			0.6	0.7	0.7	12.0	1.2
1941	5.8	3.6	-0.2						0.6	0.7	0.7	1.1	1.0
1942	1.7	-0.1	-1.1						0.6	0.7	0.7	7.7	0.8
1943	-5.4	-11.4							0.6	0.7	0.7	0.0	-1.2
1944	0.0	0.0	0.0	-0.1					0.6	0.7	0.1	0.0	0.1
1945	0.0	-0.3	-3.1						0.6	0.7	0.7	0.0	-0.1
1946	0.0	-0.1							0.6	0.7	0.7	0.1	0.2
1947	0.0	0.0	0.2						0.6	0.7	-0.5	-0.2	0.1
1948	0.0	0.1	0.0	0.2					0.6	0.7	0.7	-0.1	0.2
1949	-0.3	-0.2	-0.2	-0.5	-2.2				0.6	0.7	-1.0	-0.3	-0.3
1950	-0.1	0.1	0.0	-0.2					0.6	0.7	0.7	0.0	0.1
1951	0.0	-0.1							0.6	0.7	0.7	0.2	0.2
1952	0.0	0.0							0.6	0.7	0.7	0.5	0.2
1953	0.4	0.4							0.6	0.7	0.7	0.5	0.3
1954	-6.6	-2.8	-0.8						0.6	0.7	0.7	0.1	-0.7
1955	0.0	0.0	-1.6						0.6	0.7	0.0	0.0	0.0
1956	0.0	0.0	0.0						0.6	0.7	0.7	-3.7	-0.1
1957	-11.9	-5.8	-0.1	0.6					0.6	0.7	0.7	-0.4	-1.3
1958	-0.8	-2.0							0.6	0.7	0.7	0.5	0.0
1959	0.4	0.4	-2.2						0.6	0.7	0.7	-3.1	-0.2
1960	-0.3	0.4	-1.0	-3.2						0.7	2.1	1.1	0.0
1961	0.0	-0.1	0.5						0.6	0.7	2.0	0.4	0.3
1962	0.1	0.0	0.5	4.4					0.6	0.7	0.7	-0.3	0.6
1963	-1.1	0.4							0.6	0.7	0.7	0.0	0.1
1964	-0.1	-0.7							0.6	0.7	0.7	-0.4	0.1
1965	-0.1	0.1	0.7						0.6	0.7	0.7	-0.4	0.2
1966	-0.1	-1.1							0.6	0.7	0.7	0.1	0.1
1967	0.1	-0.3	0.4						0.6	0.7	0.7	0.5	0.2
1968	0.4	0.4							0.6	0.7	-9.2	-0.4	-0.6
1969	0.0	-0.1	-2.5						0.6	0.7	0.7	-4.4	-0.4
1970	-10.1	0.4				0.4			0.6	0.7	0.7	-0.8	-0.7
1971	-0.2	-0.5							0.6	0.7	0.7	0.5	0.1
1972	-2.6	-0.6	-0.6	-8.6					0.6	0.7	0.7	0.1	-0.9
1973	0.0	-0.3							0.6	0.7	0.7	-0.4	0.1
1974	-0.2	-0.8							0.6	0.7	0.7	0.5	0.1
1975	0.4	-9.4	-3.7	-3.4					0.6	0.7	0.7	0.5	-1.1
1976	0.4	0.4	-7.6	-0.6	0.3	0.4			-7.0	-0.4	0.0		-1.2
1977	0.1	0.1	0.1	0.1	0.2	0.5	0.2	0.2	0.0	0.0	-0.3		0.1
1978	0.0	0.0	0.0		0.3				0.6	0.7	0.7		0.2
1979		0.1	0.2			0.4			0.6	0.7	0.7	0.1	0.2
1980	0.3	0.3	-0.5						0.6	0.7	0.7	-2.0	0.0
1981	-0.5	-0.1	-0.1						0.6	0.7		-0.6	0.0
1982	0.0	1.3							0.6	0.7	0.7	0.5	0.3
1983	0.4	0.4							0.6	0.7	0.7	0.5	0.3
1984	0.4		0.4						0.6	0.7	0.7	-0.3	0.2
1985	0.0	0.0							0.6	0.7	0.2	0.1	0.1
1986	0.0	-0.1	-0.2						0.6	0.7	0.7	-0.8	0.1
1987	-0.1	0.0	0.0	0.0					0.6	0.7		0.1	0.1
1988	0.0	-0.1	-1.0						0.6	-1.2	-0.1	0.0	-0.2
1989	0.0	0.1	0.0	0.0	-0.1				0.6	0.7		0.3	0.1
1990	0.4	0.0	-0.9	-2.8		0.4		0.5		-0.7	0.6	0.0	-0.2
1991	0.2	0.3	0.5	1.1	1.5	0.4		0.5		-1.7	-0.4		0.2
AVG:	-0.4	-0.4	-0.2	0.1	0.0	0.1	0.0	0.1	0.4	0.5	0.4	0.1	0.1
MIN:	-11.9	-11.4	-7.6	-8.6	-2.2				-7.0	-1.7	-9.2	-4.4	-1.3
MAX:	5.8	3.6	4.7	13.2	1.5	0.5	0.2	1.6	0.6	0.7	4.0	12.0	1.5

Table 4.3.4-4c Differences between Alternative 6 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Rock Slough intake at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.0		-0.1						0.6	0.7	0.7	-4.8	-0.2
1923	-1.5	-0.6	1.7						0.6	0.7	0.7	0.0	0.1
1924	0.0	0.3	0.8	0.9	3.5	0.4		0.5	0.0	0.0	0.9	0.4	0.6
1925	0.0	0.1	0.6	3.8	0.3				0.6	0.7	-3.4	-0.5	0.2
1926	-0.1	0.0	-0.1	-0.4					0.6	0.7	0.2	0.1	0.1
1927	0.1	0.0	0.4			0.4			0.6	0.7	0.7	-2.8	0.0
1928	0.1	0.3	-10.1						0.6	0.7	0.7	0.1	-0.6
1929	0.1	0.0	-0.2	0.0	-1.7	0.4		0.5		0.0	0.3	0.3	0.0
1930	0.0	0.0	0.1		0.3				0.6	0.7	-2.1		0.0
1931	-0.1	0.1	-0.1	-0.4		0.4		1.7	-0.4	0.1	0.3		0.1
1932	0.0	0.0	0.1		0.3	0.4		0.5	0.6	0.7		-0.2	0.2
1933	0.0	0.0	0.0	-0.4	0.3	0.4		0.5		-0.4	-0.1	0.1	0.0
1934	0.0	0.0	0.1		0.3	0.4		0.5		0.5	1.0		0.2
1935	0.2	0.3	0.9	9.6	0.3				0.6	0.7	0.7		1.1
1936	-0.1	0.0	0.0	-0.2					0.6	0.7	0.7	0.1	0.1
1937	0.0	-0.1	-0.1	0.0					0.6	0.7	0.7	0.2	0.2
1938	0.1	-0.1							0.6	0.7	0.7	0.5	0.2
1939	0.4	0.4							0.6	0.7	-0.6	0.0	0.1
1940	0.0	0.0	-0.1	-0.4		0.4			0.6	0.7	0.7	10.9	1.1
1941	5.7	3.5	-2.1						0.6	0.7	0.7	3.2	1.0
1942	-6.5	-2.3	-7.5						0.6	0.7	0.7	-15.5	-2.5
1943	-16.2	-27.9							0.6	0.7	0.7	-5.2	-3.9
1944	-1.0	-0.4	-0.1	-0.2					0.6	0.7	0.1	0.1	0.0
1945	0.1	-1.1	-8.6						0.6	0.7	0.7	-0.8	-0.7
1946	-0.2	-0.1							0.6	0.7	0.7	0.3	0.2
1947	0.5	0.1	-1.8	-11.0					0.6	0.7	-1.0	-0.1	-1.0
1948	-0.1	-0.1	-0.2	-0.2					0.6	0.7	0.7	-0.1	0.1
1949	0.4	0.5	-0.1	-0.7	-1.2				0.6	0.7	8.7	1.9	0.9
1950	0.3	-0.2	-0.1	-0.1					0.6	0.7	0.7	-1.0	0.1
1951	-0.4	-0.8							0.6	0.7	0.7	0.4	0.1
1952	-0.1	0.3							0.6	0.7	0.7	0.5	0.2
1953	0.4	0.4							0.6	0.7	0.7	0.5	0.3
1954	-7.3	-3.0	-0.9						0.6	0.7	0.7	0.1	-0.8
1955	0.3	0.4	0.1						0.6	0.7	0.2	0.1	0.2
1956	0.1	0.2	0.6						0.6	0.7	0.7	-41.9	-3.3
1957	-39.1	-15.4	-1.2	0.0					0.6	0.7	0.7	-0.7	-4.5
1958	-1.8	-5.0							0.6	0.7	0.7	0.5	-0.4
1959	0.4	0.4	-12.1						0.6	0.7	0.7	1.3	-0.7
1960	0.3	0.1	0.3	0.7						0.7	2.4	1.1	0.5
1961	0.0	-0.1	0.6						0.6	0.7	1.2	0.2	0.3
1962	0.1	0.4	1.6	4.7					0.6	0.7	0.7	0.2	0.7
1963	0.7	0.4							0.6	0.7	0.7	-2.4	0.1
1964	-0.9	-2.6							0.6	0.7	-0.5	-0.9	-0.3
1965	-0.4	0.0	1.8						0.6	0.7	0.7	-5.7	-0.2
1966	-0.9	-1.2							0.6	0.7	0.7	0.1	0.0
1967	0.0	-0.2	0.4						0.6	0.7	0.7	0.5	0.2
1968	0.4	0.4							0.6	0.7	-1.3	0.0	0.1
1969	0.1	0.1	0.1						0.6	0.7	0.7	-9.1	-0.6
1970	-23.8	0.4				0.4			0.6	0.7	0.7	-1.3	-1.9
1971	-0.2	-0.6							0.6	0.7	0.7	0.5	0.1
1972	-3.2	-0.7	-0.7	-8.7					0.6	0.7	0.7	0.1	-0.9
1973	0.3	0.8							0.6	0.7	0.7	-2.2	0.1
1974	-1.0	-3.1							0.6	0.7	0.7	0.5	-0.1
1975	0.4	-20.8	-7.1	-4.4					0.6	0.7	0.7	0.5	-2.5
1976	0.4	0.4	-17.2	-2.1	2.1	0.4			-1.9	-0.1	0.0		-1.5
1977	0.2	0.1	0.1	0.5	1.2	1.2	0.8	0.1	0.2	-0.2	-1.1		0.3
1978	0.0	0.0	0.0		0.3				0.6	0.7	0.7		0.2
1979		0.0	0.1			0.4			0.6	0.7	0.7	0.1	0.2
1980	0.0	0.0	-0.7						0.6	0.7	0.7	-8.4	-0.6
1981	-2.2	-0.5	-0.1						0.6	0.7		-0.1	-0.1
1982	0.1	1.1							0.6	0.7	0.7	0.5	0.3
1983	0.4	0.4							0.6	0.7	0.7	0.5	0.3
1984	0.4		0.4						0.6	0.7	0.7	-2.3	0.0
1985	-0.3	-0.5							0.6	0.7	0.2	0.1	0.1
1986	0.0	0.0	0.4						0.6	0.7	0.7	-9.6	-0.6
1987	-1.8	-0.4	-0.1	-0.1					0.6	0.7		0.0	-0.1
1988	0.0	0.0	-0.2						0.6	0.0	0.1	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.5				0.6	0.7		-0.2	0.1
1990	0.1	0.1	-0.6	-1.8		0.4		0.5		-0.4	0.1	0.1	-0.1
1991	0.2	0.1	0.0	0.7	1.4	0.4		0.5		-1.0	-0.2		0.2
AVG:	-1.4	-1.1	-0.9	-0.1	0.1	0.1	0.0	0.1	0.5	0.5	0.5	-1.3	-0.2
MIN:	-39.1	-27.9	-17.2	-11.0	-1.7				-1.9	-1.0	-3.4	-41.9	-4.5
MAX:	5.7	3.5	1.8	9.6	3.5	1.2	0.8	1.7	0.6	0.7	8.7	10.9	1.1

Table 4.3.4-5a Monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River in Alternative 1 at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	195	123	116						211	212	190	166	101
1923	206	161	39						156	28	55	202	71
1924	206	158	118	91	4	29		19	166	122	128	83	94
1925	33	158	151	73	7				211	212	38	209	91
1926	189	164	126	79					211	212	243	230	121
1927	193	142	185			33			206	28	55	186	86
1928	206	151	55						153	28	55	204	71
1929	211	159	102	87	17	29		19		124	169	196	93
1930	89	44	44		7				211	212	239	250	91
1931	193	134	104	60		29		85	170	103	176	250	109
1932	224	178	131		1	29		19	179	25		216	84
1933	215	174	150	72	7	29		19		185	210	245	109
1934	223	178	149		7	29		19		121	214	250	99
1935	224	177	152	23	7				211	212	239	250	125
1936	222	160	87	47					211	212	83	237	105
1937	198	162	90	78					190	28	39	237	85
1938	206	147							153	28	55	35	52
1939	46	19							11	12	182	222	41
1940	191	160	123	47		33			211	176	55	196	99
1941	210	158	3						132	28	55	35	52
1942	152	145	29						149	28	55	35	49
1943	133	74							151	28	55	192	53
1944	211	163	98	92					181	28	236	232	103
1945	191	146	75						154	28	55	212	72
1946	212	159							158	28	55	206	68
1947	207	131	99						156	28	230	225	90
1948	189	161	115	87					185	28	55	204	85
1949	207	156	97	77	42				171	28	181	225	99
1950	190	162	98	37					211	44	57	229	86
1951	196	125							156	28	55	175	61
1952	206	154							151	28	55	35	52
1953	46	19							58	212	67	56	38
1954	117	131	105						153	28	55	192	65
1955	204	153	31						156	28	219	230	85
1956	192	162	79						156	12	64	56	60
1957	81	102	108	87					149	29	57	191	67
1958	188	128							166	12	62	51	51
1959	40	22	59						168	29	57	207	48
1960	207	157	104	74						212	247	224	102
1961	221	150	102						163	28	212	221	91
1962	188	132	106	21					205	12	62	230	80
1963	114	17							139	12	64	177	44
1964	189	124							166	12	236	219	79
1965	189	159	67						151	12	64	186	69
1966	192	136							161	12	62	239	67
1967	196	132	3						132	12	62	56	49
1968	33	21							158	29	47	240	44
1969	204	157	52						164	12	64	165	68
1970	80	19				20			161	12	64	176	44
1971	193	146							151	12	64	58	52
1972	139	149	107	19					163	12	64	234	74
1973	193	141							188	12	64	214	68
1974	194	125							151	29	57	35	49
1975	50	97	94	59					154	12	64	55	49
1976	30	19	22	68	19	29			143	136	147	250	72
1977	225	60	43	90	113	120	50	116	175	242	212	250	141
1978	225	178	151		7				11	212	239	250	106
1979	250	162	144			33			205	29	57	211	91
1980	211	159	82						149	28	55	135	68
1981	199	164	120						161	33	250	223	96
1982	211	121							210	28	55	35	55
1983	43	17							141	29	57	50	28
1984	33		21						166	29	57	175	40
1985	193	112							164	31	246	216	80
1986	208	127	99						151	28	55	147	68
1987	198	159	122	93					168	29	250	235	105
1988	85	60	52						11	51	180	91	44
1989	196	167	125	90	18				211	212	250	218	124
1990	186	155	114	59		29		19		176	190	146	90
1991	168	179	158	122	131	29		19		219	227	250	125
AVG:	170	127	69	25	5	7	1	5	147	70	117	178	77
MIN:	30									12		35	28
MAX:	250	179	185	122	131	120	50	116	211	242	250	250	141

Table 4.3.4-5b Differences between Alternatives 2 through 5 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.0		0.1						-0.6	-0.7	-0.7	0.7	-0.1
1923	0.2	0.1	0.5						-0.6	-0.7	-0.7	-0.3	-0.1
1924	-0.1	-0.1	-0.1	-0.2	-1.5	-0.4		-0.5	0.6	0.2	0.8	0.0	-0.1
1925	0.0	-0.1	-0.8	-5.0	-0.3				-0.6	-0.7	-4.0	-0.8	-1.0
1926	-0.2	-0.1	-0.1	-0.3					-0.6	-0.7	-0.5	-0.2	-0.2
1927	-0.2	-0.3	-0.4			-0.4			-0.6	-0.7	-0.7	1.7	-0.1
1928	-0.1	-0.7	-4.7						-0.6	-0.7	-0.7	-0.1	-0.6
1929	0.0	0.0	0.0	0.0	0.6	-0.4		-0.5		-0.1	-0.2	-0.2	0.0
1930	0.0	0.0	-0.1		-0.3				-0.6	-0.7	0.4		-0.1
1931	0.1	-0.1	-0.2	-0.1		-0.4		-1.6	0.4	-0.2	-0.6		-0.2
1932	0.0	0.0	-0.3		-0.3	-0.4		-0.5	-0.6	-0.7		0.2	-0.2
1933	0.0	-0.1	-0.4	-2.2	-0.3	-0.4		-0.5		0.7	0.1	-0.1	-0.3
1934	-0.1	-0.1	-0.2		-0.3	-0.4		-0.5		-0.4	-3.6		-0.5
1935	-0.5	-0.3	-1.3	-13.2	-0.3				-0.6	-0.7	-0.7		-1.5
1936	0.0	0.0	0.0	0.8					-0.6	-0.7	-0.7	-0.1	-0.1
1937	0.0	0.0	0.0	0.0					-0.6	-0.7	-0.7	-0.1	-0.2
1938	-0.1	0.1							-0.6	-0.7	-0.7	-0.5	-0.2
1939	-0.4	-0.4							-0.6	-0.7	0.0	0.1	-0.2
1940	-0.1	-0.3	0.0	0.7		-0.4			-0.6	-0.7	-0.7	-12.0	-1.2
1941	-5.8	-3.6	0.2						-0.6	-0.7	-0.7	-1.1	-1.0
1942	-1.7	0.1	1.1						-0.6	-0.7	-0.7	-7.7	-0.8
1943	5.4	11.4							-0.6	-0.7	-0.7	0.0	1.2
1944	0.0	0.0	0.0	0.1					-0.6	-0.7	-0.1	0.0	-0.1
1945	0.0	0.3	3.1						-0.6	-0.7	-0.7	0.0	0.1
1946	0.0	0.1							-0.6	-0.7	-0.7	-0.1	-0.2
1947	0.0	0.0	-0.2						-0.6	-0.7	0.5	0.2	-0.1
1948	0.0	-0.1	0.0	-0.2					-0.6	-0.7	-0.7	0.1	-0.2
1949	0.3	0.2	0.2	0.5	2.2				-0.6	-0.7	1.0	0.3	0.3
1950	0.1	-0.1	0.0	0.2					-0.6	-0.7	-0.7	0.0	-0.1
1951	0.0	0.1							-0.6	-0.7	-0.7	-0.2	-0.2
1952	0.0	0.0							-0.6	-0.7	-0.7	-0.5	-0.2
1953	-0.4	-0.4							-0.6	-0.7	-0.7	-0.5	-0.3
1954	6.6	2.8	0.8						-0.6	-0.7	-0.7	-0.1	0.7
1955	0.0	0.0	1.6						-0.6	-0.7	0.0	0.0	0.0
1956	0.0	0.0	0.0						-0.6	-0.7	-0.7	3.7	0.1
1957	11.9	5.8	0.1	-0.6					-0.6	-0.7	-0.7	0.4	1.3
1958	0.8	2.0							-0.6	-0.7	-0.7	-0.5	0.0
1959	-0.4	-0.4	2.2						-0.6	-0.7	-0.7	3.1	0.2
1960	0.3	-0.4	1.0	3.2						-0.7	-2.1	-1.1	0.0
1961	0.0	0.1	-0.5						-0.6	-0.7	-2.0	-0.4	-0.3
1962	-0.1	0.0	-0.5	-4.4					-0.6	-0.7	-0.7	0.3	-0.6
1963	1.1	-0.4							-0.6	-0.7	-0.7	0.0	-0.1
1964	0.1	0.7							-0.6	-0.7	-0.7	0.4	-0.1
1965	0.1	-0.1	-0.7						-0.6	-0.7	-0.7	0.4	-0.2
1966	0.1	1.1							-0.6	-0.7	-0.7	-0.1	-0.1
1967	-0.1	0.3	-0.4						-0.6	-0.7	-0.7	-0.5	-0.2
1968	-0.4	-0.4							-0.6	-0.7	9.2	0.4	0.6
1969	0.0	0.1	2.5						-0.6	-0.7	-0.7	4.4	0.4
1970	10.1	-0.4				-0.4			-0.6	-0.7	-0.7	0.8	0.7
1971	0.2	0.5							-0.6	-0.7	-0.7	-0.5	-0.1
1972	2.6	0.6	0.6	8.6					-0.6	-0.7	-0.7	-0.1	0.9
1973	0.0	0.3							-0.6	-0.7	-0.7	0.4	-0.1
1974	0.2	0.8							-0.6	-0.7	-0.7	-0.5	-0.1
1975	-0.4	9.4	3.7	3.4					-0.6	-0.7	-0.7	-0.5	1.1
1976	-0.4	-0.4	7.6	0.6	-0.3	-0.4			7.0	0.4	0.0		1.2
1977	-0.1	-0.1	-0.1	-0.1	-0.2	-0.5	-0.2	-0.2	0.0	0.0	0.3		-0.1
1978	0.0	0.0	0.0		-0.3				-0.6	-0.7	-0.7		-0.2
1979		-0.1	-0.2			-0.4			-0.6	-0.7	-0.7	-0.1	-0.2
1980	-0.3	-0.3	0.5						-0.6	-0.7	-0.7	2.0	0.0
1981	0.5	0.1	0.1						-0.6	-0.7		0.6	0.0
1982	0.0	-1.3							-0.6	-0.7	-0.7	-0.5	-0.3
1983	-0.4	-0.4							-0.6	-0.7	-0.7	-0.5	-0.3
1984	-0.4		-0.4						-0.6	-0.7	-0.7	0.3	-0.2
1985	0.0	0.0							-0.6	-0.7	-0.2	-0.1	-0.1
1986	0.0	0.1	0.2						-0.6	-0.7	-0.7	0.8	-0.1
1987	0.1	0.0	0.0	0.0					-0.6	-0.7		-0.1	-0.1
1988	0.0	0.1	1.0						-0.6	1.2	0.1	0.0	0.2
1989	0.0	-0.1	0.0	0.0	0.1				-0.6	-0.7		-0.3	-0.1
1990	-0.4	0.0	0.9	2.8		-0.4		-0.5		0.7	-0.6	0.0	0.2
1991	-0.2	-0.3	-0.5	-1.1	-1.5	-0.4		-0.5		1.7	0.4		-0.2
AVG:	0.4	0.4	0.2	-0.1	0.0	-0.1	0.0	-0.1	-0.4	-0.5	-0.4	-0.1	-0.1
MIN:	-5.8	-3.6	-4.7	-13.2	-1.5	-0.5	-0.2	-1.6	-0.6	-0.7	-4.0	-12.0	-1.5
MAX:	11.9	11.4	7.6	8.6	2.2				7.0	1.7	9.2	4.4	1.3

Table 4.3.4-5c Differences between Alternative 6 and Alternative 1 in monthly-average diversion of Contra Costa Water District at its Los Vaqueros intake at Old River at 2020 LoD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.0		0.1						-0.6	-0.7	-0.7	4.8	0.2
1923	1.5	0.6	-1.7						-0.6	-0.7	-0.7	0.0	-0.1
1924	0.0	-0.3	-0.8	-0.9	-3.5	-0.4		-0.5	0.0	0.0	-0.9	-0.4	-0.6
1925	0.0	-0.1	-0.6	-3.8	-0.3				-0.6	-0.7	3.4	0.5	-0.2
1926	0.1	0.0	0.1	0.4					-0.6	-0.7	-0.2	-0.1	-0.1
1927	-0.1	0.0	-0.4			-0.4			-0.6	-0.7	-0.7	2.8	0.0
1928	-0.1	-0.3	10.1						-0.6	-0.7	-0.7	-0.1	0.6
1929	-0.1	0.0	0.2	0.0	1.7	-0.4		-0.5		0.0	-0.3	-0.3	0.0
1930	0.0	0.0	-0.1		-0.3				-0.6	-0.7	2.1		0.0
1931	0.1	-0.1	0.1	0.4		-0.4		-1.7	0.4	-0.1	-0.3		-0.1
1932	0.0	0.0	-0.1		-0.3	-0.4		-0.5	-0.6	-0.7		0.2	-0.2
1933	0.0	0.0	0.0	0.4	-0.3	-0.4		-0.5		0.4	0.1	-0.1	0.0
1934	0.0	0.0	-0.1		-0.3	-0.4		-0.5		-0.5	-1.0		-0.2
1935	-0.2	-0.3	-0.9	-9.6	-0.3				-0.6	-0.7	-0.7		-1.1
1936	0.1	0.0	0.0	0.2					-0.6	-0.7	-0.7	-0.1	-0.1
1937	0.0	0.1	0.1	0.0					-0.6	-0.7	-0.7	-0.2	-0.2
1938	-0.1	0.1							-0.6	-0.7	-0.7	-0.5	-0.2
1939	-0.4	-0.4							-0.6	-0.7	0.6	0.0	-0.1
1940	0.0	0.0	0.1	0.4		-0.4			-0.6	-0.7	-0.7	-10.9	-1.1
1941	-5.7	-3.5	2.1						-0.6	-0.7	-0.7	-3.2	-1.0
1942	6.5	2.3	7.5						-0.6	-0.7	-0.7	15.5	2.5
1943	16.2	27.9							-0.6	-0.7	-0.7	5.2	3.9
1944	1.0	0.4	0.1	0.2					-0.6	-0.7	-0.1	-0.1	0.0
1945	-0.1	1.1	8.6						-0.6	-0.7	-0.7	0.8	0.7
1946	0.2	0.1							-0.6	-0.7	-0.7	-0.3	-0.2
1947	-0.5	-0.1	1.8	11.0					-0.6	-0.7	1.0	0.1	1.0
1948	0.1	0.1	0.2	0.2					-0.6	-0.7	-0.7	0.1	-0.1
1949	-0.4	-0.5	0.1	0.7	1.2				-0.6	-0.7	-8.7	-1.9	-0.9
1950	-0.3	0.2	0.1	0.1					-0.6	-0.7	-0.7	1.0	-0.1
1951	0.4	0.8							-0.6	-0.7	-0.7	-0.4	-0.1
1952	0.1	-0.3							-0.6	-0.7	-0.7	-0.5	-0.2
1953	-0.4	-0.4							-0.6	-0.7	-0.7	-0.5	-0.3
1954	7.3	3.0	0.9						-0.6	-0.7	-0.7	-0.1	0.8
1955	-0.3	-0.4	-0.1						-0.6	-0.7	-0.2	-0.1	-0.2
1956	-0.1	-0.2	-0.6						-0.6	-0.7	-0.7	41.9	3.3
1957	39.1	15.4	1.2	0.0					-0.6	-0.7	-0.7	0.7	4.5
1958	1.8	5.0							-0.6	-0.7	-0.7	-0.5	0.4
1959	-0.4	-0.4	12.1						-0.6	-0.7	-0.7	-1.3	0.7
1960	-0.3	-0.1	-0.3	-0.7						-0.7	-2.4	-1.1	-0.5
1961	0.0	0.1	-0.6						-0.6	-0.7	-1.2	-0.2	-0.3
1962	-0.1	-0.4	-1.6	-4.7					-0.6	-0.7	-0.7	-0.2	-0.7
1963	-0.7	-0.4							-0.6	-0.7	-0.7	2.4	-0.1
1964	0.9	2.6							-0.6	-0.7	0.5	0.9	0.3
1965	0.4	0.0	-1.8						-0.6	-0.7	-0.7	5.7	0.2
1966	0.9	1.2							-0.6	-0.7	-0.7	-0.1	0.0
1967	0.0	0.2	-0.4						-0.6	-0.7	-0.7	-0.5	-0.2
1968	-0.4	-0.4							-0.6	-0.7	1.3	0.0	-0.1
1969	-0.1	-0.1	-0.1						-0.6	-0.7	-0.7	9.1	0.6
1970	23.8	-0.4				-0.4			-0.6	-0.7	-0.7	1.3	1.9
1971	0.2	0.6							-0.6	-0.7	-0.7	-0.5	-0.1
1972	3.2	0.7	0.7	8.7					-0.6	-0.7	-0.7	-0.1	0.9
1973	-0.3	-0.8							-0.6	-0.7	-0.7	2.2	-0.1
1974	1.0	3.1							-0.6	-0.7	-0.7	-0.5	0.1
1975	-0.4	20.8	7.1	4.4					-0.6	-0.7	-0.7	-0.5	2.5
1976	-0.4	-0.4	17.2	2.1	-2.1	-0.4			1.9	0.1	0.0		1.5
1977	-0.2	-0.1	-0.1	-0.5	-1.2	-1.2	-0.8	-0.1	-0.2	0.2	1.1		-0.3
1978	0.0	0.0	0.0		-0.3				-0.6	-0.7	-0.7		-0.2
1979		0.0	-0.1			-0.4			-0.6	-0.7	-0.7	-0.1	-0.2
1980	0.0	0.0	0.7						-0.6	-0.7	-0.7	8.4	0.6
1981	2.2	0.5	0.1						-0.6	-0.7		0.1	0.1
1982	-0.1	-1.1							-0.6	-0.7	-0.7	-0.5	-0.3
1983	-0.4	-0.4							-0.6	-0.7	-0.7	-0.5	-0.3
1984	-0.4		-0.4						-0.6	-0.7	-0.7	2.3	0.0
1985	0.3	0.5							-0.6	-0.7	-0.2	-0.1	-0.1
1986	0.0	0.0	-0.4						-0.6	-0.7	-0.7	9.6	0.6
1987	1.8	0.4	0.1	0.1					-0.6	-0.7		0.0	0.1
1988	0.0	0.0	0.2						-0.6	0.0	-0.1	0.0	0.0
1989	0.0	0.0	0.0	0.0	-0.5				-0.6	-0.7		0.2	-0.1
1990	-0.1	-0.1	0.6	1.8		-0.4		-0.5		0.4	-0.1	-0.1	0.1
1991	-0.2	-0.1	0.0	-0.7	-1.4	-0.4		-0.5		1.0	0.2		-0.2
AVG:	1.4	1.1	0.9	0.1	-0.1	-0.1	0.0	-0.1	-0.5	-0.5	-0.5	1.3	0.2
MIN:	-5.7	-3.5	-1.8	-9.6	-3.5	-1.2	-0.8	-1.7	-0.6	-0.7	-8.7	-10.9	-1.1
MAX:	39.1	27.9	17.2	11.0	1.7				1.9	1.0	3.4	41.9	4.5

4.4 MODELING RESULTS AND POTENTIAL CHANGES

Results from regression and numerical models are used to quantify the potential impacts of the Freeport Project alternatives on the water quality and beneficial uses in the Sacramento-San Joaquin River Delta. Modeling results using the Kimmerer-Monismith equation, G-Model, ANN, FDM, and DSM2 are analyzed to delineate the effects of Project induced changes in Delta hydrology on salinity in the Delta. The corresponding potential changes in disinfection by-products are estimated using two regression equations developed by Dr. Ozekin and by Malcolm-Pirnie. An overview of these models and the assumptions used in model simulations are discussed in Section 4.2 and Section 4.3, respectively.

Potential changes in seawater intrusion as a result of changes in Delta outflow is the major factor leading to water quality changes in interior Delta. Salinity at the western end of the Delta is used as input to numerical models[1] and is critical in quantifying potential changes in Delta salinity. As a basis to understand this dependence of water quality impacts on hydrological changes, potential changes in salinity at Martinez would be presented first. Section 4.4.1 compares the estimates on salinity changes at Martinez from the four models. The extent of seawater intrusion also determines the extent to which changes in Delta inflows and exports would change salinity in the interior Delta.[2] The comparison in Section 4.4.1 therefore also serves as a basis to assess model estimates for salinity changes in interior Delta due to the so-called "carriage-water" effect.

Potential impacts at locations further upstream will then be discussed in order. Section 4.4.2 discusses potential changes in ecosystem beneficial uses and compares model results for X2 and salinity at Chipps Island, Jersey Point, Collinsville, and Prisoner's Point. Section 4.4.3 briefly discusses the effects of the potential changes in water quality on agricultural beneficial uses.

Potential changes at drinking water intakes will be discussed in Section 4.4.4 in detail because of the sensitivity of drinking water beneficial uses to salinity changes. Chloride concentration will be used as the salinity parameter, both because it is used in regulatory standards in the Delta and because of its high correlation with bromide concentration in Delta water.[3] FDM simulations are based on chloride concentrations. Electrical conductivity (EC) output from ANN and DSM2 are converted to chloride concentration using regression relationships developed from simultaneous measurements at the location of interest made by the Municipal Water Quality Investigation Program at the Department of Water Resources, as discussed in Section 4.3.2.3.

Changes in Delta hydrology estimated using CALSIM II and a higher Sacramento inflow salinity (due to the return flow from the Sacramento County Water District diversion) are the only factors leading to salinity changes in the Delta caused by the Freeport Project alternatives. Hydrological output from CALSIM II is designed to meet all applicable regulatory standards through the application of two water quality models, the Kimmerer-Monismith equation (Section 4.2.1) and ANN (Section 4.2.3). The extent to which the results of other water quality models (G, FDM, or DSM2), based on these hydrological data, exceed applicable salinity standards reflects the discrepancies between different water quality models. In real time operations, water projects are operated to meet all applicable standards.

[1] Eckley (Crockett) is the downstream boundary in FDM and Martinez is the boundary in DSM2.
[2] The extent of seawater intrusion is the key factor in determining the magnitude of the "carriage water effect".
[3] Chloride concentration is the only enforceable water quality standard for the protection of municipal and industrial uses. Federal regulations for municipal uses also include a secondary MCL of 500 mg/L in total dissolved solids (TDS), which corresponds to a chloride concentration of between 200 and 250 mg/L in the Delta. Project impacts on TDS will be analyzed in the context of meeting the salinity goals of SWP and CUWA's recommendation to CALFED.

The following analyses will be based on a 70-year simulation period, from water year 1922 through 1991. Historical hydrology is used as a surrogate for the variety of conditions that the alternatives will be operating under. The results serve as an indicator of the performance of the alternatives if they are to be implemented. All references to potential changes at any time in the simulation period are indications of project performance under those prevailing hydrological conditions at the time. The hydrological conditions and hydrological year types of the simulation period are shown in Table 4.4-1.

Model results for six scenarios – two level-of-developments (LoD, one at 2001 and one at 2020) for each of Alternative 1 (Alt.1, the No Action alternative), Alternatives 2 through 5 (Alts.2-5, Joint Project alternative for EBMUD and SCWA),[4] and Alternative 6 (Alt.6, SCWA only diversion at Freeport and Enlarged Pardee for EBMUD) – have been analyzed. The impacts of Alternative 6 are qualitatively similar to Alternatives 2 through 5 at both 2001 and 2020 LoD. Discussion on modeling results will focus on a comparison of Alts.2-5 and Alt.1 at 2001 LoD. The other three comparisons[5] will be briefly summarized and only significant differences will be discussed. Discussions on the magnitude of potential salinity changes will be based primarily on FDM results. Results from the other models are used mainly to highlight any differences between models and for comparison purposes. DSM2 results are available only for 2001 LoD.[6] Detailed results are provided in tabular form in Section 4.4.5 and Section 4.4.6.

Table 4.4-1 Historical hydrological year types based on measured unimpaired runoffs. Source: Division of Flood Management, California Department of Water Resources

	Sacramento Valley					San Joaquin Valley				
	Runoff in MAF		Water Year			Runoff in MAF		Water Year		
WY	Oct-Mar	Apr-Jul	Total	Index	Yr-type	Oct-Mar	Apr-Jul	Total	Index	Yr-type
1922	6.63	10.57	17.98	8.97	AN	1.51	5.99	7.68	4.54	W
1923	6.21	6.27	13.21	7.06	BN	1.39	3.95	5.51	3.55	AN
1924	3.27	1.94	5.74	3.87	C	0.45	1.03	1.5	1.42	C
1925	8.76	6.51	15.99	6.39	D	1.45	3.93	5.51	2.93	BN
1926	6.37	4.79	11.76	5.75	D	0.89	2.56	3.49	2.3	D
1927	14.34	8.75	23.83	9.52	W	1.8	4.56	6.5	3.56	AN
1928	10.24	5.86	16.76	8.27	AN	1.69	2.64	4.37	2.63	BN
1929	4	3.84	8.4	5.22	C	0.52	2.29	2.84	2	C
1930	8.24	4.65	13.52	5.9	D	0.76	2.44	3.25	2.02	C
1931	3.52	2.09	6.1	3.66	C	0.46	1.18	1.66	1.2	C
1932	6.28	6.24	13.12	5.48	D	1.79	4.69	6.63	3.41	AN
1933	3.73	4.66	8.94	4.63	C	0.49	2.77	3.34	2.44	D
1934	5.68	2.45	8.63	4.07	C	0.98	1.26	2.28	1.44	C
1935	6.27	9.69	16.59	6.98	BN	1.26	5.03	6.41	3.56	AN
1936	10.32	6.41	17.35	7.75	BN	2	4.38	6.49	3.74	AN
1937	5.5	7.24	13.33	6.87	BN	1.78	4.66	6.53	3.9	W
1938	17.96	12.93	31.83	12.62	W	3.58	7.33	11.24	5.89	W
1939	4.56	3.04	8.18	5.58	D	1	1.83	2.9	2.2	D
1940	14.78	6.93	22.43	8.88	AN	2.49	4.04	6.59	3.36	AN
1941	16.32	9.77	27.08	11.47	W	2.22	5.51	7.93	4.43	W
1942	14.33	9.93	25.24	11.27	W	1.93	5.28	7.38	4.44	W
1943	13.37	6.9	21.13	9.77	W	2.86	4.28	7.28	4.03	W
1944	4.81	4.93	10.43	6.35	D	0.87	2.97	3.92	2.76	BN
1945	8.42	5.92	15.06	6.8	BN	2.07	4.37	6.6	3.59	AN

[4] Alternatives 2, 3, 4, and 5 have identical impacts on Delta hydrology and hence on Delta water quality. They will be discussed as one in this impact analysis.
[5] That is, Alt.6 *versus* Alt.1 at 2001 LoD, Alts.2-5 *versus* Alt.1 at 2020 LoD, and Alt.6 *versus* Alt.1 at 2020 LoD.
[6] The first three months in water year 1922 in DSM2 results are not analyzed because of start-up effects. For FDM simulations, a six-month start-up prior to October 1921 is used and the entire water year 1922 is analyzed.

Table 4.4-1 (continued) Historical hydrological year types based on measured unimpaired runoffs. Source: Division of Flood Management, California Department of Water Resources

	Sacramento Valley					San Joaquin Valley				
	Runoff in MAF		Water Year			Runoff in MAF		Water Year		
WY	Oct-Mar	Apr-Jul	Total	Index	Yr-type	Oct-Mar	Apr-Jul	Total	Index	Yr-type
1946	10.89	5.97	17.62	7.7	BN	1.99	3.65	5.73	3.3	AN
1947	5.9	3.83	10.39	5.61	D	1.26	2.12	3.42	2.18	D
1948	5.39	9.55	15.75	7.12	BN	0.56	3.58	4.21	2.7	BN
1949	5.73	5.59	11.97	6.09	D	0.62	3.12	3.79	2.53	BN
1950	7.01	6.72	14.44	6.62	BN	1.02	3.57	4.65	2.85	BN
1951	16.77	5.42	22.95	9.18	AN	4.35	2.83	7.25	3.14	AN
1952	13.86	13.68	28.6	12.38	W	2.18	6.84	9.3	5.17	W
1953	10.84	8.26	20.09	9.55	W	1.07	3.18	4.35	3.03	BN
1954	9.74	6.81	17.43	8.51	AN	1.1	3.16	4.3	2.72	BN
1955	5.19	5.07	10.98	6.14	D	0.78	2.67	3.5	2.3	D
1956	20.32	8.6	29.89	11.38	W	4.14	5.29	9.67	4.46	W
195.7	7.72	6.29	14.89	7.83	AN	1.02	3.19	4.29	3.01	BN
1958	16.37	12.24	29.71	12.16	W	1.67	6.4	8.36	4.77	W
1959	7.4	3.84	12.05	6.75	BN	0.98	1.85	2.98	2.21	D
1960	7.72	4.65	13.06	6.2	D	0.85	2.07	2.96	1.85	C
1961	6.87	4.39	11.97	5.68	D	0.54	1.5	2.1	1.38	C
1962	8.17	6.23	15.11	6.65	BN	1.26	4.24	5.61	3.07	BN
1963	12.01	10.09	22.99	9.63	W	1.68	4.37	6.24	3.57	AN
1964	5.9	4.37	10.92	6.41	D	0.93	2.14	3.14	2.19	D
1965	16.59	8.13	25.64	10.15	W	3.2	4.55	8.13	3.81	W
1966	7.42	4.84	12.95	7.16	BN	1.49	2.42	3.98	2.51	BN
1967	12.14	11.01	24.06	10.2	W	2.46	7.09	9.98	5.25	W
1968	8.66	4.12	13.64	7.24	BN	1.02	1.85	2.94	2.21	D
1969	15.33	10.68	26.98	11.05	W	3.84	8.14	12.29	6.09	W
1970	18.87	4.35	24.06	10.4	W	2.55	2.96	5.61	3.18	AN
1971	12.71	8.9	22.57	10.37	W	1.56	3.23	4.91	2.89	BN
1972	7.61	5.02	13.43	7.29	BN	1.25	2.22	3.57	2.16	D
1973	12.8	6.38	20.05	8.58	AN	1.87	4.48	6.47	3.5	AN
1974	21.69	9.78	32.5	12.99	W	2.43	4.53	7.12	3.9	W
1975	9.24	8.95	19.23	9.35	W	1.37	4.65	6.18	3.85	W
1976	4.63	2.75	8.2	5.29	C	0.78	1.07	1.97	1.57	C
1977	2.49	1.93	5.12	3.11	C	0.22	0.8	1.05	0.84	C
1978	14.9	8.12	23.92	8.65	AN	2.57	6.5	9.65	4.58	W
1979	6.06	5.64	12.41	6.67	BN	1.87	3.99	5.98	3.67	AN
1980	15.49	6	22.33	9.04	AN	3.74	5.41	9.47	4.73	W
1981	6.81	3.63	11.1	6.21	D	0.85	2.29	3.22	2.44	D
1982	20.56	11.82	33.41	12.76	W	3.78	7	11.41	5.45	W
1983	22.75	13.66	37.68	15.29	W	5.42	8.73	15.01	7.22	W
1984	15.98	5.52	22.35	10	W	3.51	3.48	7.13	3.69	AN
1985	6.24	4	11.04	6.47	D	1.11	2.41	3.6	2.4	D
1986	19.45	5.45	25.83	9.96	W	4.36	4.92	9.5	4.31	W
1987	5.85	2.8	9.27	5.86	D	0.55	1.48	2.08	1.86	C
1988	5.78	2.9	9.23	4.65	C	0.86	1.55	2.48	1.48	C
1989	9.01	5.07	14.79	6.12	D	1.07	2.42	3.56	1.96	C
1990	4.94	3.73	9.27	4.81	C	0.83	1.59	2.46	1.51	C
1991	3.89	4.01	8.44	4.21	C	0.56	2.57	3.2	1.96	C

4.4.1 Martinez

Model results at Martinez give a quantitative estimate of potential changes in seawater intrusion as a result of potential changes in Delta outflow. They provide a basis to understand salinity changes in interior Delta. Figure 4.4.1-1 shows the monthly-average Delta outflow for Alt.1 and the difference between Alts.2-5 and Alt.1 (as a percentage of the outflow under Alternative 1 in the same month). Percentage differences are shown for impacts because the range of Delta outflow is large, spanning two orders-of-magnitude. Monthly-average outflow under Alt.1 ranges from 3,000 cfs to over 254,000 cfs, with an average of 20,253 cfs and a median of 8,392 cfs over the 70-year simulation period. CALSIM II estimates that Alts.2-5 could decrease the corresponding outflow under Alt.1 by up to 7.7% or increase it by 5.2%, with an average of a 0.3% decrease and a median of 0.1% decrease. The decrease in Delta outflow is less than 5% in all except 5 months, and less than 3% in all but 24 months. At the other end, 10 months are estimated to have increase in Delta outflow of 3% or higher, including 2 months of over 5%.

Figure 4.4.1-1 shows that many of the large percentage changes in Delta outflow estimated in CALSIM II are preceded within a couple of months by changes of comparable magnitudes in the opposite direction. Some of these examples are August 1930 through March 1931, September through November 1973, August through December 1976, and November 1978 through January 1979. In each one of these periods, the sum total of all changes in upstream releases (Delta inflows) and/or exports over the few months is much smaller than the magnitude of changes in individual months. The overall effect of these changes on water supply in each period is small. These sequences of changes in Delta outflow, however, would also lead to changes in Delta salinity over the same periods, as discussed in Section 4.4.4.

Figure 4.4.1-2 shows the differences in those months when the No Action alternative (Alt.1) outflow is 100,000 cfs or less. The solid lines represent the limits for differences of ±2.5%, ±5%, and ±10% of the Alt.1 value. Negative values denote a decrease in Delta outflow under Alts.2-5 compared to Alt.1. Simulated changes in all months are under 10% of the Alt.1 outflow in the same month, and less than 500 cfs when Delta outflow in Alt.1 is under 10,000 cfs. Except for three months (of which two are increases), all changes are less than 1000 cfs. Most of the impacts in the 840 months of comparison are within 500 cfs except in 19 months, of which six are increases (by up to 1900 cfs).

Figure 4.4.1-3 shows the effects of these potential changes in Delta outflow on salinity in west Delta close to or at the downstream boundary of the numerical salinity models. Salinity output at Martinez from three models (G-model, FDM, DSM2) is plotted. Recall that the downstream boundary is at Eckley for FDM[7] and at Martinez for DSM2. DSM2 boundary salinity is estimated using an ANN algorithm, and FDM boundary salinity is computed from a two-dimensional Bay model BRTSAL. Model output for chloride concentration from FDM is converted to EC using a relationship discussed in Section 4.3.2.3.

The G-model result is the average of two separate predictions, one for near surface electrical conductivity (EC) and one for near bottom EC. FDM simulates salinity averaged over the channel cross-section. The two model predictions for Alternative 1 are close despite their different approaches and the conversion of chloride concentration in FDM to electrical conductivity. FDM predictions are generally lower. As percentages of the G-model predicted value, FDM salinity averages 21% smaller, with a median of 18% and a standard deviation of 19%. However, the peak salinity in late summer and fall are higher in FDM predictions (by up to 10%) of most years. The G-model shows a generally faster response to changing Delta outflow than FDM.

[7] Eckley (or Crockett) is at the western end of Carquinez Strait, at approximately 5.5 miles downstream (to the west) of Martinez.

Both the G-model and FDM give higher salinity values than DSM2 in most months, which is expected since DSM2 simulates surface salinity. During times of high Delta outflow, however, FDM often predicts a lower salinity than DSM2. This discrepancy arises in part due to the conversion of FDM results from chloride to electrical conductivity.[8]

Figure 4.4.1-3 shows that the percentage difference in Martinez salinity between Alts.2-5 and Alt.1 is highest in FDM estimates. This is true for both increases and decreases. However, the larger percentage changes invariably occur at low salinity and would have little impact on the salinity difference between alternatives further east into the Delta.

Table 4.4.1-1 gives a summary of the potential changes under Alts.2-5. Both G and DSM2 estimate a higher Martinez salinity by an average of 0.2% over the 70-year period. The increase is higher in FDM results, which averages 0.3%. The range of potential changes in FDM results is also larger, in both percentage and actual values. The ranges in the G-model and DSM2 are similar.

Table 4.4.1-1 Summary statistics of 70 years of simulated monthly average electrical conductivity at Martinez and potential changes in Alts.2-5 compared to Alt.1

	DSM2				FDM				G			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
maximum	25.77	25.77	0.45	3.4	32.35	32.35	0.74	7.2	30.23	30.24	0.60	3.5
median	18.67	18.62	0.01	0.1	18.36	18.38	0.02	0.2	22.50	22.42	0.01	0.1
average	16.41	16.38	0.03	0.2	16.95	16.90	0.05	0.3	19.64	19.61	0.03	0.2
minimum	0.15	0.15	-0.20	-2.9	0.16	0.16	-0.58	-10.8	0.21	0.21	-0.30	-5.2

Alternative 6 compared to Alternative 1 at 2001 Level-of-Development

Figures 4.4.1-5 and 4.4.1-6 shows the potential changes in Delta outflow under Alt.6 could be considerably larger than under Alts.2-5 (Figure 4.4.1-2). In two months, October 1941 and November 1942, Delta outflow is lower by 13% (734 cfs) and 20% (1696 cfs), respectively. These relatively large changes in Delta hydrology are caused by lower flood control releases from CVP or SWP reservoirs in those months, in particular in the fall of 1941, 1942, and 1974, and are discussed in Section 3.4.9.2. At the other extreme, Delta outflow in one month is higher by 13% (898 cfs), in October 1956.

Table 4.4.1-3 gives a summary statistics of the changes in monthly average electrical conductivity. It shows similar long-term averages as in the comparisons between Alts.2-5 and Alt.1 (Table 4.4.1-1). However, the large decrease in Delta outflow in some months lead to larger differences in Martinez salinity. This is shown in Figure 4.4.1-7. FDM results show six months (October 1941, January and February 1964, September 1967, and September and October 1974) in which Alt.6 could increase salinity

[8] The chloride to electrical conductivity ratio is much higher in seawater and agricultural drainage than in the Sacramento River inflow, which could dominate at times of high Delta outflow.

at Martinez under Alt.1 in the same month by more than 5% and 0.5 mS/cm.[9] These increases are a consequence of large percentage changes in Delta outflow in the same or previous month. They would in turn lead to large differences between Alt.6 and Alt.1 salinity at Delta intakes, and will be discussed in more detail in Section 4.4.4.

Table 4.4.1-3 Summary statistics of 70 years of simulated monthly average electrical conductivity at Martinez and potential changes in Alt.6 compared to Alt.1 at 2001 LoD

	DSM2				FDM				G			
	Alt.6	Alt.1	Alt.6 minus Alt.1	Alt.6 minus Alt.1 as % of Alt.1 value	Alt.6	Alt.1	Alt.6 minus Alt.1	Alt.6 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
max	25.79	25.77	1.16	7.34	32.35	32.35	1.53	18.67	30.23	30.24	1.02	7.1
med	18.66	18.62	0.01	0.07	18.48	18.38	0.01	0.09	22.52	22.42	0.01	0.08
avg	16.41	16.38	0.03	0.20	16.94	16.90	0.04	0.26	19.64	19.61	0.03	0.19
min	0.15	0.15	0.47	2.70	0.16	0.16	1.11	14.31	0.21	0.21	2.63	8.93

Alternatives 2 through 5 compared to Alternative 1 at 2020 Level-of-Development

Figure 4.4.1-8 shows the slightly smaller changes in Delta outflow at 2020 LoD in most months compared to at 2001 LoD (Figure 4.4.1-2). As in the 2001 LoD comparison, there are a number of instances in which Delta outflow under Alts.2-5 is increased in a month and decreased by a comparable magnitude, or vice versa, within a couple of months. This could lead to appreciable salinity differences in the Delta between the alternatives, even though their effects on the overall water supply are small. Two examples are in the summer and fall of 1934 and in 1940, in both cases a relatively large increase in Delta outflow followed by a decrease of similar magnitude lead to a lower Martinez salinity by up to 2% and 5%, respectively, in FDM estimates. The reasons leading to these changes in Delta outflow have been discussed in Section 3.5.9.

Figure 4.4.1-9 shows the differences in outflow as a function of the corresponding Alt.1 value. The largest percentage decrease occurs in April 1988, at 12%. Its effect on Delta salinity, however, is smaller as the outflow under Alts.2-5 in the following month is higher by 4%. The largest percentage increase in outflow (by 22%) occurs in September 1940 (a 723 cfs increase), in a scenario discussed in the previous paragraph. This large percentage increase, in a month when Alt.1 outflow is only 3337 cfs, leads to a FDM estimated decrease in Rock Slough chloride concentration of 9, 36, and 12 mg/L in that and the two following months.[10] The only other month with an increase in Delta outflow that exceeds 10%, in October 1959 (by 500 cfs), is preceded by a comparable magnitude decrease the month before, and thus did not result in any reduction in Delta salinity (monthly average salinity in Rock Slough is higher by 6 mg/L and 1 mg/L in those two months).

[9] By contrast, FDM results do not show any month when Alts.2-5 would change Martinez salinity by this magnitude (see Figure 4.4.1-4). Note that changes in Martinez salinity are estimated to be a bit smaller in DSM2 and G-model results.

[10] The net impact on the long-term average of these three months is 0.068 mg/L in Rock Slough at Old River.

Figure 4.4.1-10 shows the differences in Martinez salinity as a consequence of changes in Delta outflow. All the months (April 1927, February and December 1937 and April 1952) in which the percentage increase is high occur when Martinez salinity is low and consequently do not lead to appreciable changes in salinity in interior Delta. A statistical summary of these changes is given in Table 4.4.1-4.

Table 4.4.1-4 Summary statistics of 70 years of simulated monthly average electrical conductivity at Martinez and potential changes in Alts.2-5 compared to Alt.1 at 2020 LoD

	FDM				G			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
max	32.41	32.81	1.38	67.02	30.29	30.36	0.63	6.98
med	18.67	18.69	0.01	0.11	22.67	22.69	0.01	0.06
avg	17.02	17.00	0.02	0.28	19.73	19.71	0.02	0.15
min	0.16	0.16	1.33	11.90	0.21	0.21	0.57	3.69

Alternative 6 compared to Alternative 1 at 2020 Level-of-Development

Figure 4.4.1-11 shows the potential changes in Delta outflow under Alt.6 at 2020 LoD. Similar to the comparisons at 2001 LoD, the differences are considerably larger than those between Alts.2-5 and Alt.1. Instances when Delta outflow under Alt.6 is increased in one month and decreased by a comparable magnitude (or vice versa) within a couple of months are found as in the other three comparisons. This could lead to appreciable salinity changes in the Delta even though the potential water supply impacts are much smaller. The reasons leading to these changes in Delta outflow have been discussed in Section 3.5.9. Figure 4.4.1-12 shows the differences as a function of the corresponding Alt.1 outflow. All the percentage changes are less than 10% except in September 1940, when Delta outflow increases by 723 cfs (same as under Alts.2-5) from the Alt.1 estimate of 3,337 cfs. Coupled with a 158 cfs increase in the following month, this leads to two of the largest percentage decrease in Martinez salinity, by 4.0% and 4.6% in September and October, respectively.

Figure 4.4.1-13 shows the potential changes in Martinez salinity as a consequence of changes in Delta outflow. All the potential percentage changes that are larger than 10% occur when Martinez salinity is low and consequently do not lead to appreciable changes in salinity in interior Delta. A statistical summary of these changes is given in Table 4.4.1-5.

Table 4.4.1-5 Summary statistics of 70 years of simulated monthly average electrical conductivity at Martinez and potential changes in Alt.6 compared to Alt.1 at 2020 LoD

	FDM				G			
	Alt.6	Alt.1	Alt.6 minus Alt.1	Alt.6 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
max	32.43	32.81	1.12	66.08	30.31	30.36	0.69	6.10
med	18.72	18.69	0.01	0.12	22.77	22.69	0.01	0.06
avg	17.03	17.00	0.03	0.25	19.74	19.71	0.02	0.15
min	0.16	0.16	1.35	19.59	0.21	0.21	0.57	2.88

4.4.2 X2 and other Ecosystem Measures

The Water Quality Control Plan (SWRCB, 1995) includes salinity objectives at over 10 Delta locations for the protection of fish and wildlife beneficial uses. However, potential changes at these compliance locations that Project alternatives might cause are limited to where Delta inflows and exports, and consequently Delta outflow, are significant controlling factors. At other stations, for example in Suisun Marsh (except at Collinsville), the key salinity control is through operations of flow control structures. Project impacts at these other stations would be small.[11] The following discussion will therefore focus on those compliance locations most influenced by Delta inflows and exports, and in particular on X2.

Delta outflow is a major standard to protect fish and wildlife beneficial uses in the Delta. Potential changes under Project alternatives are discussed in the previous section. An alternative to meeting this Delta outflow standard between February and June every year is by keeping the location of X2 at or to the west of specific stations.[12] A summary of the potential changes due to Project Alternatives 2-5 on X2 is given in Table 4.4.2-1 for estimates based on the Kimmerer-Monismith equation, and, for comparison purpose, in Table 4.4.2-2 based on DSM2, FDM, and G-model results at Chipps Island (approximately 31 km upstream of Martinez). Potential changes estimated by the three models are close. Note that, whereas FDM results give a larger range and higher mean than DSM2 at Martinez under Alternative 1, DSM2 estimates are higher at Chipps Island. This is due in part to the conversion of chloride concentration in FDM results to electrical conductivity.

[11] As flows in Delta only have a minor effect at these stations, the small percentage change the Project could have on Delta hydrology would be insignificant.

[12] The location of X2 has to be west of Collinsville in all except the driest years. Additional stations, at Chipps Island (sometimes referred to as Mallard Island) and Port Chicago (sometimes referred to as Roe Island), are in effect depending on the hydrological conditions at the time. Details are specified in Table 3 in SWRCB (1995).

Table 4.4.2-1 Summary statistics of potential changes resulting from Project alternatives on X2 (km) for the months February through June at 2001 LoD. Estimates from CALSIM II output and based on a regression developed by Drs. Kimmerer and Monismith

	Alt.1	Alts.2-5	Alts.2-5 - Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	86.20	86.19	0.48	86.21	0.47
median	70.23	70.28	0.020	70.26	0.011
average	68.94	68.97	0.032	68.95	0.017
minimum	42.04	42.04	-0.26	42.04	-0.27

Table 4.4.2-2 Summary statistics of potential changes caused by Project alternatives on electrical conductivity at Chipps Island for the months February through June

	DSM2				FDM				G-model			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
maximum	12.03	12.00	0.21	11.16	9.52	9.43	0.31	14.72	10.12	10.11	0.16	9.76
median	1.49	1.47	0.01	0.62	0.43	0.43	0.00	0.41	0.92	0.90	0.00	0.20
average	2.80	2.78	0.02	0.81	1.33	1.32	0.01	0.75	1.92	1.91	0.01	0.51
minimum	0.15	0.15	-0.21	-2.75	0.14	0.14	-0.17	-4.21	0.18	0.18	-0.20	-3.48

Details of the estimated potential changes in X2 are shown in Figure 4.4.2-1. As a comparison, potential changes in salinity (quantified as percentages of Alt.1 salinity) at Chipps Island computed by G, FDM and DSM2 are also plotted. These comparisons also serve to assess the performance of the more complex numerical models to the regression models. Results from the four models follow the same qualitative pattern. Even though FDM predicts most of the highest percentage changes, none of the models predict a consistently larger or smaller change than the others.

The largest percentage increase in salinity estimated by both FDM and DSM2, by 15% and 11%, respectively, and which also corresponds to the month of highest X2 impact, occurs in May 1950 when a Delta outflow of 15,750 cfs under Alt.1 is reduced by 918 cfs under Alts.2-5. Salinity increases in all other months are under 7.5% with X2 displaced by less than 0.32 km. Potential changes in X2 are plotted as a function of the Alt.1 location in Figure 4.4.2-2.

A summary statistics of the potential changes in salinity at three other compliance stations, at Collinsville (effective Oct to May), Jersey Point, and Prisoners Point (both effective between April and May) are provided in Tables 4.4.2-3 through 4.4.2-5. No conversions between chloride concentration and electrical conductivity are made because of their variability at these locations under different hydrological conditions. Potential changes at these stations are small during the periods when salinity objectives are in effect. Potential changes at Collinsville are generally larger in FDM estimates than in DSM2.

Table 4.4.2-3 Summary statistics of potential changes in monthly average salinity at Collinsville between October and May at 2001 LoD

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	11.48	11.45	0.31	11.48	0.04	2,628	2,623	161	2,627	30
median	1.63	1.64	0.006	1.65	0.011	112	117	0.4	115	2.5
average	3.30	3.32	0.014	3.32	0.013	518	522	3.4	522	4.8
minimum	0.16	0.16	-0.17	0.16	-0.03	8	8	-60	8	-17

Table 4.4.2-4 Summary statistics of potential changes in monthly-average salinity at Jersey Point in April and May at 2001 LoD

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	1.18	1.21	0.13	1.19	0.00	159	165	6	160	5
median	0.19	0.20	0.010	0.20	0.000	16	16	0.2	16	0.7
average	0.26	0.26	0.010	0.26	0.000	23	24	0.3	23	1.0
minimum	0.16	0.16	-0.08	0.16	0.00	9	9	-2	9	-2

Table 4.4.2-5 Summary statistics of potential changes in monthly-average salinity at Prisoner's Point in April and May at 2001 LoD

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	0.40	0.41	0.05	0.41	0.00	50	50	6	50	0
median	0.25	0.26	0.008	0.26	0.000	31	31	0.1	31	0.0
average	0.26	0.26	0.008	0.26	0.000	30	31	0.2	31	0.0
minimum	0.16	0.16	-0.01	0.16	0.00	9	9	0	9	0

Alternative 6 compared to Alternative 1 at 2001 Level-of-Development

The summary statistics of X2 and salinity at Chipps Island in the February through June under Alt.6 are close to that of Alts.2-5 (Table 4.4.2-1).[13] However, there are more months with an X2 displacement of more than 0.10 km, both eastward and westward either (Figure 4.4.2-3). Compared to Alts.2-5 (Figure 4.4.2-2), there are a higher number of months with moderate westward displacement of X2, by between 0.1 and 0.3 km, when X2 is west of Chipps Island (at 74 km) under Alt.1.

[13] The larger differences in Delta outflow discussed in §4.4.1 occur in late summer and fall.

At the other compliance locations Collinsville, Jersey Point, and Prisoner's Point, potential changes are small in both the range and long-term average, as in the case of Alts.2-5 (Tables 4.4.2-3 through 4.4.2-5).

Alternatives 2 through 6 compared to Alternative 1 at 2020 Level-of-Development

Potential changes in X2 are shown in Figures 4.4.2-4 and 4.4.2-5. Except for the month of April 1988 (see discussion in Section 4.4.1) in which X2 is displaced eastward by 0.97 km, changes in all other months are less than 0.41 km. The statistical parameters of these differences (Table 4.4.2-6) are smaller than at 2001 LoD (Table 4.4.2-1). Similarly, the statistical parameters for the potential changes in chloride concentration at Chipps Island are also smaller (Table 4.4.2-7). Potential changes at Collinsville, Jersey Point, and Prisoner's Point are small and are shown in Tables 4.4.2-8 through 4.4.2-10.

Table 4.4.2-6 Summary statistics of potential changes resulting from Project alternatives on X2 (km) for the months February through June at 2020 LoD. Estimates from CALSIM II output and based on a regression developed by Drs. Kimmerer and Monismith relating X2 to Delta outflow.

	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	86.05	86.00	0.97	86.05	0.39
median	70.19	70.28	0.015	70.23	0.012
average	68.93	68.96	0.028	68.94	0.013
minimum	42.09	42.09	-0.25	42.09	-0.29

Table 4.4.2-7 Summary statistics of potential changes caused by Project alternatives on electrical conductivity at Chipps Island for the months February through June at 2020 LoD

	FDM				G-model			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1
	mS/cm	mS/cm	mS/cm	%	mS/cm	mS/cm	mS/cm	%
maximum	9.69	9.59	0.37	12.79	10.02	9.90	0.47	10.25
median	0.46	0.46	0.00	0.01	0.95	0.94	0.00	0.16
average	1.30	1.29	0.00	0.33	1.90	1.89	0.01	0.45
minimum	0.13	0.13	-0.19	-6.46	0.18	0.18	-0.15	-2.77

Table 4.4.2-8 Summary statistics of potential Project impacts on monthly average chloride concentration at Collinsville between October and May at 2020 LoD

	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	2,748	2,680	63	2,707	90
median	102	104	0.2	101	0.2
average	529	530	1.1	532	2.1
minimum	8	8	-277	8	-231

Table 4.4.2-9 Summary statistics of potential Project impacts on monthly average chloride concentration at Jersey Point in April and May at 2020 LoD

	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	164	168	8	164	37
median	15	16	0.2	15	1
average	23	23	0.4	23	3
minimum	9	9	-2	9	-27

Table 4.4.2-10 Summary statistics of potential Project impacts on monthly average chloride concentration at Prisoner's Point in April and May at 2020 LoD

	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	55	55	2	54	4
median	30	30	0.1	30	0.6
average	30	30	0.2	30	0.8
minimum	9	9	-1	9	-2

4.4.3 Vernalis salinity and agricultural beneficial uses

Section 4.1.2.3 discusses the significance of the salinity of San Joaquin River inflow at Vernalis as an additional parameter to assess potential effects on agricultural beneficial uses of Delta water. Tables 4.1.3-1 and 4.1.3-2 show that the potential changes in flow and salinity of the San Joaquin River at

Vernalis are small in all alternatives. Salinity increases under Alternatives 2-6 are infrequent and are less than 4 mg/L in all months at both the 2001 and 2020 LoD.

4.4.4 Delta drinking water intakes

Freeport Project alternatives could affect salinity at Delta intakes by changing Delta outflow and, for intakes in south Delta, through changes in the rates of inflows and exports through the so-called "carriage water" effects.[14] To delineate these effects, results from the G-model, which accounts only for Delta outflow, are compared with ANN and the more detailed numerical models FDM and DSM2.

For the purpose of addressing potential changes due to Project alternatives on drinking water beneficial uses from the Delta, the Rock Slough station is discussed in detail because of its location furthest downstream, and is thus subject to the largest salinity difference between Project alternatives among all Delta intakes. Salinity in Rock Slough at Old River estimated by ANN, FDM, and DSM2 will be analyzed and compared with G-model results at the nearby Contra Costa Canal Pumping Plant No.1 (PP1, approximately eight miles to the west of the Old River junction). The key difference between the two stations is that water quality at PP1 could at times be dominated by local drainage and runoffs.[15] Chloride concentrations are direct outputs of the G-model and FDM, and are converted from electrical conductivity output from ANN and DSM2 using the regression relationship described in Section 4.3.2.3.

Potential salinity changes at the Clifton Court Forebay, Tracy Pumping Plant, and the Los Vaqueros intake of the Contra Costa Water District at Old River will also be presented. The primary focus of the discussion at the two export locations is on salt load and its implication to the CUWA and SWP salinity goal. The primary focus of the analysis at the Los Vaquero intake is on CCWD's delivered water goal of 65 mg/L in chloride concentration.

Table 4.4.4-1 provides a summary statistics of the results from the four models. Figure 4.4.4-1 shows the monthly-average chloride concentration and potential changes under Project alternatives in Rock Slough. Figure 4.4.4-2 provides a summary of potential changes in monthly average chloride concentration in Rock Slough under Alts.2-5 as a function of the salinity under Alt.1. Potential changes under Alts.2-5 are less than 5 mg/L and within 5% of Alt.1 concentration in most months in the four model estimates. Except for seven months, all potential changes are within 10% of the corresponding Alt.1 concentration. The 70-year average increase in the four model results ranges between 0.3 and 1.3 mg/L.

There are a number of months in which the 250 mg/L objective is exceeded in FDM and/or DSM2 results,[16] even though ANN predicted salinity are under 250 mg/L. These exceedances reflect the differences between the more detailed models FDM and DSM2 and ANN. CALSIM II outputs are intended to meet all applicable water quality standards in the Delta. Water quality in the Delta is simulated in CALSIM II using an "artificial neural network" algorithm (ANN) to relate inflows and exports to salinity at five salinity compliance stations[17]. In real time operations, Delta inflows and exports are adjusted to meet the 250 mg/L chloride concentration objective.

Both FDM and DSM2 estimate maximum increases in monthly-average chloride concentration to be 18 mg/L in September and October 1930, respectively. These increases are due to a decrease in Delta outflow (in August 1930, by 367 cfs or 7.7% of Alternative 1 outflow) followed by an increase of

[14] Other factors determining salinity at Delta intakes, such as agricultural drainage and flow control structure operations, will not be affected by Freeport Project alternatives.

[15] However, the G-model does not account for local effects of agricultural drainage even though it is calibrated using data at PP1. It estimates salinity at PP1 based on a weighted average of antecedent salinity at Jersey Point.

[16] Monthly-average salinity exceeds 250 mg/L in 18 of the 840 months in the FDM simulation and eight of the 837 months in the DSM2 simulation under Alternative 1.

[17] The stations are at Collinsville, Emmaton, Jersey Point, Rock Slough, and Vernalis.

comparable magnitude two months later (in October 1930, by 218 cfs or 5.2% of Alternative 1 value).[18] The decrease in outflow in August 1930, when Delta salinity is already high (Delta outflow is under 6,000 cfs in June and July 1930) leads to the salinity increase at Rock Slough. Even though Delta outflow under Alternatives 2-5 is higher in subsequent months such that the sum total of Delta outflows in those months is higher under Alternatives 2-5, the net result is a higher average salinity in Rock Slough over the same period. CALSIM II determines Delta inflows and exports in a month through a complex algorithm that maximizes delivery and other beneficial uses while meeting all regulatory constraints. Such variations in the differences in Delta outflow between different alternatives could be triggered by assumptions and approximations in the algorithm used in CALSIM II, but may not occur in real time operations.

Table 4.4.4-1. Summary statistics of 70-years of simulated monthly average chloride concentration in Rock Slough at Old River and potential changes under Alts.2-5 compared to Alt.1.

	FDM				DSM2				ANN				G			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	%
maximum	313	315	18	10	317	318	18	13	238	240	10	6	233	234	10	8
median	45.8	45.8	0.3	0.6	41.7	40.6	0.9	1.7	49.5	49.0	0.0	0.1	36.1	36.0	0.0	0.0
average	78.1	77.6	0.5	0.8	77.4	76.1	1.3	2.2	84.5	84.2	0.3	0.3	64.2	64.0	0.3	0.4
minimum	9	9	-9	-12	11	11	-8	-25	22	22	-6	-8	22	22	-3	-5

The main reason for the higher DSM2 estimate may be its apparent higher carriage water estimate than that in FDM. An example is in the very different response to a simultaneous increase in Sacramento River inflow and Banks pumping by the same amount in July 1978. These flows are 2045 cfs higher in Alts.2-5 than in Alt.1 (while Delta outflow remains unchanged). DSM2 estimates a resulting increase of 6.3 mg/L, 4.8 mg/L, and 5.2 mg/L at Rock Slough in the three subsequent months (August through October) while FDM estimates a much more modest increase of 1.9, 2.4, and 3.0 mg/L.[19] Despite that Delta outflow has been over 14,000 cfs until July (and much higher in the spring), DSM2 predicts a salinity increase of 13% in August over the Alt.1 salinity 48 mg/L for a simultaneous increase in Delta inflow and export by 2045 cfs.

Operations of the Delta cross channel gates could have significant effects on salinity in south Delta at times of seawater intrusion. The gates operations are identical in the No Action (Alt.1) and the Project alternatives (Alts.2-6) scenarios except in January 1986, when the gates are closed in Alt.1 but are opened for 11 days in Alts.2-6.[20] This difference leads to the largest single month percentage decrease in chloride concentration in Rock Slough in results from both the FDM (by 4 mg/L or 12% of Alt.1 salinity) and

[18] Changes in Delta outflow in subsequent months are a decrease of 271 cfs in November and increases of 194 cfs, 90 cfs, 239 cfs, and 78 cfs in the four following months. Delta outflow remains below 8,500 cfs under Alternative 1 in all these months.

[19] By contrast, ANN estimates a salinity increase of 0.3 mg/L in August, a decrease of 3.6 mg/L in September, and an increase of 1.3 mg/L in October.

[20] This difference arises because the Sacramento River flow is just above the 25,000 cfs threshold under the No Action case and decreases slightly in Alts.2-6.

DSM2 (by 7 mg/L or 25%). To put the impact of this difference on long-term average into perspective, note that each 1 mg/L difference in one month corresponds to 0.0012 mg/L in the 70-year average.

Detailed statistics, including statistics for all the drought periods in the 70-year simulation, are given in Table 4.4.4-2.

Table 4.4.4-2 Statistics of potential Project changes under Alts.2-5 in monthly-average chloride concentration in Rock Slough at Old River from Alt.1, at 2001 LOD. A positive number denotes a salinity increase. In addition to the 70-year long-term average, statistics for seven dry periods are shown.

Period of Statistics		FDM			G			ANN			DSM2		
		max	avg	min	max	avg	min	max	avg	min	max	avg	min
1922	**1991**	**17.7**	**0.5**	**-9.0**	**9.8**	**0.3**	**-2.7**	**9.9**	**0.3**	**-5.6**	**18.0**	**1.3**	**-8.3**
1923	1926	4.3	0.0	-6.8	3.1	0.0	-2.2	1.5	-0.2	-2.5	6.1	1.1	-4.2
1929	1934	17.7	1.2	-4.7	8.4	0.3	-2.3	6.7	0.1	-3.3	18.0	2.7	-3.9
1929	1937	17.7	0.8	-6.2	8.4	0.2	-2.7	6.7	-0.1	-5.6	18.0	1.8	-8.0
1944	1950	4.2	0.6	-1.5	1.8	0.3	-0.6	2.7	0.3	-1.2	7.2	1.6	-0.3
1959	1962	4.2	0.3	-2.7	2.3	0.2	-1.5	2.3	0.2	-2.1	3.8	1.0	-2.4
1976	1977	2.3	-0.7	-8.7	0.8	-0.4	-2.4	1.2	-0.5	-2.1	4.7	0.7	-5.8
1987	1991	16.0	1.1	-9.0	6.7	0.8	-2.1	9.8	0.6	-2.1	17.2	1.9	-2.6

Actual changes to CCWD's water delivery would be smaller due to blending with Los Vaqueros releases that would take place under all alternatives. Potential changes at other Delta drinking water intakes are smaller because of the smaller effects of seawater intrusion at these locations, as is illustrated in the summary statistics in Tables 4.4.4-3 through 4.4.4-5.

Table 4.4.4-3. Summary statistics of potential changes in monthly average salinity in Old River south of Highway 4 crossing at 2001 LoD.

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	1.07	1.06	0.06	1.08	1.10	232	230	12	230	16
median	0.359	0.359	0.004	0.361	0.004	51.3	51.8	0.2	51.8	0.2
average	0.420	0.424	0.005	0.426	0.017	67.2	67.7	0.4	67.7	0.6
minimum	0.12	0.12	-0.05	0.12	-0.38	7	7	-6	7	-6

Table 4.4.4-4. Summary statistics of potential changes in monthly average salinity in Clifton Court Forebay at 2001 LoD.

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	0.92	0.92	0.04	0.92	0.04	214	213	11	215	15
median	0.419	0.423	0.002	0.425	0.002	54.5	54.6	0.2	55.1	0.2
average	0.447	0.451	0.003	0.452	0.004	66.6	67.0	0.4	67.1	0.6
minimum	0.12	0.12	-0.02	0.12	-0.02	6	6	-6	6	-5

Table 4.4.4-5. Summary statistics of potential changes in monthly average salinity at Tracy Pumping Plant at 2001 LoD.

	DSM2 (EC in mS/cm)					FDM (chloride in mg/L)				
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	0.92	0.92	0.04	0.93	0.03	192	191	8	193	9
median	0.452	0.453	0.002	0.454	0.003	68.3	68.6	0.1	68.6	0.1
average	0.474	0.477	0.003	0.478	0.005	75.1	75.3	0.2	75.4	0.3
minimum	0.14	0.14	-0.02	0.14	-0.03	6	6	-12	6	-10

Alternative 6 compared to Alternative 1 at 2001 Level-of-Development

Figures 4.4.4-3 and 4.4.4-4 illustrate the potential changes in Rock Slough salinity estimated by the four models (FDM, DSM2, ANN, and G) under Alternative 6. Both the range and average of these changes are larger than those under Alternatives 2-5, and are more than 10% of the corresponding monthly average chloride concentration under Alt.1in fourteen of the 840 months in the FDM simulations. Six of these months exceed 15% of the corresponding Alt.1 value (by up to 23 mg/L) and occur in the fall of 1941, 1942, and 1974. These relatively large changes are due to changes in Delta outflow, which were discussed in Section 3.4.9.2. Tables 4.4.4-6 and 4.4.4-7 provides a statistical summary of these results. Note that the larger changes discussed above occur in wet years, and potential changes during droughts are very similar to those under Alts.2-5.

Similar to potential changes in Rock Slough salinity, those at other urban water intakes are larger under Alternative 6 than under Alternatives 2-5 (see Tables 4.4.4-3 through 4.4.4-5 for a summary).

Table 4.4.4-6. Summary statistics of 70 years of simulated monthly average chloride concentration in Rock Slough at Old River and potential changes of Alt.6 compared to Alt.1.

	FDM				DSM2				ANN				G			
	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1
	Cl	Cl	Cl	%	Cl	Cl	Cl	%	Cl	Cl	Cl	%	Cl	Cl	Cl	%
maximum	313	315	23	37	319	318	27	44	237	240	22	28	233	234	15	20
median	45.9	45.9	0.2	0.5	42.3	40.6	0.9	1.8	49.8	49.0	0.0	0.0	36.0	36.0	0.0	0.0
average	78.4	77.6	0.7	1.1	77.8	76.1	1.7	2.7	84.6	84.3	0.4	0.5	64.3	64.0	0.3	0.5
minimum	9	9	-9	-15	11	11	-8	-25	22	22	-11	-10	22	22	-6	-10

Table 4.4.4-7 Statistics of potential changes under Alt.6 in monthly-average chloride concentration in Rock Slough at Old River at 2001 LoD. A positive number denotes a salinity increase. In addition to the 70-year long-term average, statistics for seven dry periods are shown.

Period of Statistics		FDM			DSM2			ANN			G		
		max	avg	min	max	avg	min	max	avg	min	max	avg	min
1922	**1991**	**22.6**	**0.7**	**-8.6**	**26.8**	**1.7**	**-8.3**	**22.1**	**0.4**	**-11.3**	**15.2**	**0.3**	**-6.5**
1923	1926	7.4	0.1	-8.6	9.0	1.6	-5.1	2.6	-0.2	-4.1	3.1	0.0	-3.9
1929	1934	3.7	0.8	-1.5	6.2	2.3	-0.7	2.1	0.3	-1.2	1.7	0.3	-0.4
1929	1937	5.9	0.6	-6.3	11.1	2.0	-5.9	2.1	0.0	-7.8	2.4	0.2	-2.8
1944	1950	13.3	0.8	-5.9	16.3	2.2	-4.3	6.7	0.2	-9.1	5.1	0.5	-2.0
1959	1962	1.6	0.1	-4.4	2.5	0.8	-4.1	2.2	0.1	-1.9	1.7	0.0	-1.6
1976	1977	6.4	0.1	-7.0	9.0	1.2	-5.8	2.6	0.1	-2.8	1.8	-0.1	-3.4
1987	1991	11.2	0.6	-2.7	9.9	1.6	-1.1	4.7	0.1	-1.6	5.0	0.3	-1.1

Alternatives 2 through 5 compared to Alternative 1 at 2020 Level-of-Development

Figure 4.4.4-5 shows the potential change in chloride concentration in Rock Slough at Old River computed using FDM. Most changes are small except in the summer and fall of 1934 and again in 1940, which are direct consequences of changing outflow discussed in Section 4.4.1. These potential changes are plotted as a function of the corresponding Alt.1 chloride concentration in Figure 4.4.4-6. Summary statistics are provided in Tables 4.4.4-8 and 4.4.4-9.

Table 4.4.4-8. Summary statistics of simulated monthly average chloride concentration in Rock Slough at Old River from water years 1922 to 1991at 2020 LoD and potential changes of Alts.2-5 compared to Alt.1.

	FDM				G				ANN			
	Alts.2-5	Alt.1	Alts.2-5-Alt.1	Alts.2-5-Alt.1 as % of Alt.1	Alts.2-5	Alt.1	Alts.2-5-Alt.1	Alts.2-5-Alt.1 as % of Alt.1	Alts.2-5	Alt.1	Alts.2-5-Alt.1	Alts.2-5-Alt.1 as % of Alt.1
	Cl (mg/L)			%	Cl (mg/L)			%	Cl (mg/L)			%
maximum	320.0	318.3	7.73	8.83	235.8	236.9	4.01	9.94	234.1	233.2	5.55	8.36
median	47.3	46.9	0.21	0.43	37.4	36.9	0.00	0.01	51.2	51.4	0.01	0.01
average	79.52	79.30	0.22	0.54	65.22	65.19	0.03	0.15	86.26	86.18	0.08	0.19
minimum	8.4	8.4	-35.54	-15.68	22.0	22.0	-20.67	-12.77	21.9	21.9	-16.83	-7.59

Table 4.4.4-9 Statistics of potential changes under Alts.2-5 in monthly-average chloride concentration in Rock Slough at Old River at 2020 LoD. A positive number denotes a salinity increase. In addition to the 70-year long-term average, statistics for seven drought periods are shown.

Period of Statistics		FDM			G			ANN		
		max	*avg*	*min*	*max*	*avg*	*min*	*max*	*avg*	*min*
1922	**1991**	**7.7**	**0.2**	**-35.5**	**4.0**	**0.0**	**-20.7**	**5.6**	**0.1**	**-16.8**
1923	1926	3.6	0.0	-4.9	1.0	-0.1	-2.9	1.2	-0.3	-3.2
1929	1934	7.7	0.3	-19.1	1.9	-0.3	-10.5	1.9	-0.5	-12.5
1929	1937	7.7	0.2	-19.1	1.9	-0.3	-10.5	1.9	-0.4	-12.5
1944	1950	3.5	0.5	-0.7	1.5	0.2	-0.3	2.6	0.1	-0.9
1959	1962	5.7	0.4	-5.7	3.5	0.2	-2.2	3.3	0.3	-3.8
1976	1977	5.4	0.1	-5.0	2.5	0.2	-2.5	2.1	0.2	-2.1
1987	1991	4.0	-0.3	-17.7	4.0	0.0	-4.9	3.9	0.2	-5.0

Table 4.4.4-10. Summary statistics of potential changes in monthly average salinity in Old River south of Highway 4 crossing at 2020 LoD.

	Alt.1	Alts.2-5	Alts.2-5 - Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	240	235	7	235	12
median	52.1	52.2	0.2	52.5	0.2
average	68.3	68.5	0.2	68.8	0.5
minimum	6	6	-25	6	-24

Table 4.4.4-11. Summary statistics of potential changes in monthly average salinity in Clifton Court Forebay at 2020 LoD.

	Alt.1	Alts.2-5	Alts.2-5 - Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	220	221	7	221	10
median	56.0	56.1	0.2	56.5	0.2
average	67.7	67.9	0.2	68.1	0.5
minimum	6	6	-22	6	-21

Table 4.4.4-12. Summary statistics of potential changes in monthly average salinity at Tracy Pumping Plant at 2020 LoD.

	Alt.1	Alts.2-5	Alts.2-5 - Alt.1	Alt.6	Alt.6 minus Alt.1
maximum	195	196	8	196	7
median	70.0	70.3	0.1	70.3	0.1
average	76.4	76.5	0.1	76.6	0.2
minimum	6	6	-14	6	-12

Alternative 6 compared to Alternative 1 at 2020 Level-of-Development

Figures 4.4.4-7 and 4.4.4-8 shows the monthly average chloride concentration in Rock Slough at Old River over the 70-year simulation period. Potential changes are small except in September through November of 1940. These relatively large changes are a consequence of the differences in Delta outflows, and have been discussed in Section 4.4.1. Tables 4.4.4-13 and 4.4.4-14 provide summary

statistics of these changes. As is found in the comparisons at 2001 LoD, potential changes under Alt.6 are slightly higher than Alts.2-5 at the other urban intakes, as summarized in Tables 4.4.4-10 through 4.4.4-12.

Table 4.4.4-13. Summary statistics of simulated monthly average chloride concentration in Rock Slough at Old River from water years 1922 to 1991 at 2020 LoD and potential changes of Alt.6 compared to Alt.1.

	FDM				G				ANN			
	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1	Alt.6	Alt.1	Alt.6-Alt.1	Alt.6-Alt.1 as % of Alt.1
	Cl	Cl	Cl	%	Cl	Cl	Cl	%	Cl	Cl	Cl	%
maximum	319.4	318.3	16.56	21.30	235.3	236.9	8.24	11.58	237.0	233.2	13.98	12.49
median	47.5	46.9	0.23	0.45	37.9	36.9	0.00	0.01	51.6	51.4	0.00	0.01
average	79.89	79.30	0.59	0.95	65.41	65.19	0.22	0.39	86.49	86.18	0.31	0.38
minimum	8.4	8.4	-34.39	-15.17	22.0	22.0	-20.24	-12.50	21.9	21.9	-16.65	-7.51

Table 4.4.4-14 Statistics of potential changes under Alt.6 in monthly-average chloride concentration in Rock Slough at Old River at 2020 LoD. A positive number denotes a salinity increase. In addition to the 70-year long-term average, statistics for seven drought periods are shown.

Period of Statistics		FDM			G			ANN		
		max	*avg*	*min*	*max*	*avg*	*min*	*max*	*avg*	*min*
1922	**1991**	**16.6**	**0.6**	**-34.4**	**8.2**	**0.2**	**-20.2**	**14.0**	**0.3**	**-16.7**
1923	1926	10.5	0.2	-9.4	5.3	-0.1	-3.4	3.6	-0.2	-4.2
1929	1934	9.1	0.5	-6.2	3.1	0.0	-2.9	3.9	0.0	-2.8
1929	1937	9.1	0.4	-6.2	3.1	-0.1	-3.2	3.9	0.0	-2.8
1944	1950	9.8	0.7	-6.8	4.8	0.3	-3.9	8.0	0.2	-4.4
1959	1962	5.3	0.4	-3.5	4.9	0.1	-2.2	7.4	0.3	-4.1
1976	1977	5.5	0.0	-6.3	2.8	0.2	-2.8	5.4	0.3	-3.0
1987	1991	6.5	0.0	-9.9	4.3	0.1	-3.1	3.8	0.0	-4.9

The implication of potential changes in Delta salinity to the beneficial uses identified in Section 4.1.2.2.1 is discussed in Section 4.4.4.1 below. Potential changes in chloride concentration in Rock Slough are used to assess maximum potential effects, but likely changes in CCWD's delivered water would be smaller due to blending with Los Vaqueros releases. Potential changes at other drinking water treatment plants using Delta water would also be smaller because of the smaller effects of seawater intrusion at other Delta intakes. Potential changes in the salt loads and weighted salinity exported at Delta intakes are discussed in Section 4.4.4.2 and Section 4.4.4.3.

In the comments to the Notice of Preparation in the environmental impact review process of the Freeport Regional Water Project, specific suggestions were received from interested parties regarding significance thresholds for the water quality analysis. These comments suggested that criteria used by Contra Costa Water District in the EIR/EIS for the Los Vaqueros Reservoir Project (CCWD, 1993) be considered. The

significance criteria are different from that used in this EIR in that it is based entirely on monthly salinity, and does not assess potential impacts of these changes on specific beneficial uses. To be responsive to stakeholders comments, modeling results are analyzed in Section 4.4.7 based on these criteria.

4.4.4.1 Potential changes in compliance with Safe Drinking Water Act

Drinking water is the beneficial use most sensitive to salinity changes in the Delta. A higher salinity could increase the formation of disinfection by-products that are suspected to be carcinogenic or toxic. Potential changes in bromate and total trihalomethanes in treated water discussed in the following subsections are estimated based on potential changes in bromide concentration in Delta source water. The latter is inferred from potential changes in chloride concentration using a regression relation developed from simultaneous measurements made in the MWQI program (see Section 4.3.2.3).

Results from the four models for Project alternatives under 2001 and 2020 LoD estimate that Alternatives 2 through 6 could increase average chloride concentration in Rock Slough over the 70-year simulation period by between 0.0 and 1.7 mg/L, from Alternative 1 (No Action) averages of between 64 and 86 mg/L. This corresponds to an increase in bromide concentration of between 0 and 6 μg/L, for Alt.1 averages that range between 256 and 331 μg/L.

4.4.4.1.1 Ozonation By-products

Bromate produced in ozonated water is a chronic health concern. Table 4.4.4.1.1-1 provides a summary of the potential changes in bromate concentration in ozonated water from Rock Slough based on salinity estimates from the four models at 2001 LoD. The potential increase in long-term average ranges from 0.01 μg/L (based on G and ANN chloride estimates) to 0.07μg/L (based on FDM chloride estimates) under Alts.2-5. This corresponds to an increase of between 0.2% (ANN estimates) and 1.3% (DSM2 estimates). Long-term bromate levels in both Alt.1 and Alts.2-5 are well below the federal MCL of 10 μg/L, and the potential increase under Alts.2-5 is less than one-tenth of 1 μg/L.[21] The maximum difference in the 277 quarterly running annual averages is also much smaller than 1 μg/L.[22] The differences between the highest annual average bromate concentration under Alts.2-5 and that under Alt.1 range from a decrease of 0.06 μg/L (based on FDM salinity estimates) to an increase of 0.03 μg/L (based on DSM2 salinity). As discussed in Section 4.2.6.1 and Section 4.2.7, actual values would vary according to the level of disinfection and other operating conditions at a specific treatment plant.

[21] Detection limit and resolution of bromate measurements is around 1 μg/L with current technology.

[22] The largest change in monthly estimates is 0.7 μg/L. However, monthly comparisons would not be appropriate as is discussed further below in §4.4.4.1.1.

Table 4.4.4.1.1-1 Summary statistics of 70-years of annual mean bromate concentration (computed quarterly) in ozonated water from Rock Slough at Old River and potential changes under Alts.2-5 compared to Alt.1 at 2001 LoD.

	DSM2				FDM				G				ANN			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%
max	9.40	9.37	0.21	3.16	9.85	9.91	0.12	2.06	9.07	9.12	0.07	1.69	9.51	9.51	0.08	1.47
med	6.06	6.00	0.07	1.27	5.86	5.87	0.02	0.38	5.15	5.15	0.01	0.17	6.24	6.25	0.01	0.15
avg	5.84	5.77	0.07	1.32	5.90	5.88	0.02	0.45	5.24	5.23	0.01	0.25	6.25	6.26	0.01	0.21
min	2.22	2.20	-0.06	-0.82	2.78	2.77	-0.08	-0.99	3.01	3.01	-0.05	-0.64	3.04	3.04	-0.05	-0.64

Comparisons between Alternative 6 and Alternative 1 at 2001 LoD, and between Alts.2-6 and Alt.1 at 2020 LoD are similar, with both the long-term average and maximum increase in running annual average much smaller than 1 µg/L. Numerical values are provided in Section 4.4.5 and Section 4.4.6. Aside from uncertainties in the Ozekin equation, the magnitude of these potential changes also depends on the predictions of the salinity models and hydrological input discussed in Section 4.4.1 and Section 4.4.4 above.

Proposed Stage 2 of the Microbial/Disinfection Byproduct Rule[23] is unlikely to lower existing bromate MCL, or to impose disinfection requirement for *Cryptosporidium parvum* that could lead to higher bromate formation. Bromate concentration is also likely to continue to be regulated as annual averages. Bromate in finished water in the future will change as a result of ongoing research and improvements in the ozonation process and potential changes in disinfection requirements based on monitoring results of Delta water for *Cryptosporidium parvum*. The relationship between bromide and bromate formation used in this analysis could consequently be different. However, the above characterization of potential effects on Delta water urban agencies to comply with bromate MCL will remain valid under regulations into the foreseeable future.

The above analysis examines potential changes in bromate concentration on a running annual average basis. Even though it is mathematically possible to compare bromate levels at a finer temporal scale (e.g. monthly), such an analysis would not provide more detailed information for a number of reasons. Seasonal variations in temperature and organic carbon concentration in source water, two factors not accounted for in the Ozekin equation, would have to be taken into account to properly assess the effects of changes in source water salinity on a monthly scale.

The dependence of bromate production on temperature was discussed in a recent study (AWWARF, 1997, 1999, 2001) which suggests a higher level at lower water temperature. Organic carbon

[23] See Agreement in Principle of the Federal Advisory Committee dated September 2000, available on the web at http://www.epa.gov/OGWDW/mdbp/st2aip.html.

concentration at Delta intakes varies considerably, and ranges from 2.5 to over 11 mg/L.[24] There have been a number of efforts to model organic carbon concentrations in the Delta. However, the incomplete understanding on the sources and sinks of this non-conservative constituent limits the success of such efforts.[25] The characteristics of organic carbon (aromaticity, hydrophobic/hydrophilic nature, etc.) at different times of the year could also affect its role in bromate formation. The concentration of organic carbon could also change significantly between Delta intakes and water treatment plant intakes,[26] and from the plant intakes to the ozonation chambers[27]. Furthermore, blending of different source waters at individual Delta water agencies[28] could change the bromide level in treatment plant source water from those at the intakes in any particular month.

It is not possible at present to reliably predict changes in the seasonal variation of bromate formation. The uncertainties in estimating monthly variations do not justify a more detailed analysis and would not provide more insight on potential Project impacts than an analysis based on annual averages. Applying Ozekin equation to infer and contrast bromate formation at different times of the year would not be appropriate.

4.4.4.1.2 Chlorination By-products

Potential change in total trihalomethanes (TTHM) formation in chlorinated water due to potential changes in source water salinity is estimated using an equation developed at Malcolm-Pirnie, Inc. discussed in Section 4.2.6.2.[29] A summary statistics of the results is given in Table 4.4.4.1.2-1. The potential increase in long-term average TTHM under Alts.2-5 at 2001 LoD ranges from 0.1 μg/L (based on G and ANN salinity estimates) to 0.6 μg/L (based on DSM2 estimates). The long-term average under Alt.1 ranges between 65 μg/L (based on G-model salinity) and 72 μg/L (based on ANN salinity). This estimate would vary according to the level of disinfection and other operating conditions at a specific treatment plant.

[24] MWQI measurements of dissolved organic carbon concentration (DOC) between Jan 1990 and Jan 1998 ranged from 2.3 to 11.0 mg/L and averaged 3.8 mg/L. Total organic carbon concentration (TOC) is estimated to be 10% to 20% higher than DOC. The factor of more than 4 in source water organic carbon concentration would result in a factor of 1.6 in bromate production estimated in the Ozekin equation.

[25] Indeed, latest research findings (studies performed at the U.S. Geological Survey and funded by the CALFED Bay-Delta Program) suggest that the major source of organic carbon in Delta water might be from water within the Delta, a source that has not been quantified in details.

[26] Transit and detention time, effects such as algal blooms in terminal reservoirs or treatment plant forebays, and blending with other sources of water could lead to substantial changes.

[27] Coagulation, flocculation, and filtration in pretreatment could substantially reduce TOC in source water.

[28] For example, CCWD's Delta diversion could be blended with Los Vaqueros Reservoir stored water.

[29] Seasonal variation and differences between year types in organic carbon concentration is not accounted for because of the reasons discussed in the previous section.

Table 4.4.4.1.2-1 Summary statistics of 70-years of annual mean TTHM concentration (computed quarterly) in chlorinated water from Rock Slough at Old River and potential changes under Alts.2-5 compared to Alt.1 at 2001 LOD

	DSM2				FDM				ANN				G			
	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alts.2-5	Alt.1	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value
	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	%
maximum	99.5	99.0	2.27	2.84	105.8	106.3	1.52	1.89	98.2	98.5	0.71	1.08	95.2	95.5	0.73	1.07
median	72.6	71.9	0.52	0.74	70.2	70.2	0.17	0.26	72.9	72.7	0.06	0.08	64.0	63.9	0.07	0.11
average	71.0	70.4	0.56	0.79	70.9	70.7	0.20	0.29	72.5	72.4	0.08	0.12	64.7	64.6	0.09	0.14
minimum	46.4	46.3	-0.29	-0.39	48.8	48.8	-0.84	-0.96	49.9	49.9	-0.45	-0.60	49.8	49.8	-0.38	-0.42

Existing regulation on TTHM is based on running annual averages and reported quarterly. Even though both the long-term TTHM averages under Alt.1 and under Alts.2-5 are below the federal MCL of 80.0 µg/L, between 5% (based on G-model salinity estimates) and 24% (based on ANN salinity estimates) of the 277 quarterly running annual averages exceed 80.0 µg/L under Alt.1, and between 50% (based on G-model salinity) and 84% (based on ANN salinity) of the quarterly reports are more than 80% (64 µg/L) of the MCL under Alt.1. Ongoing research on chlorination, and alternatives such as chloramination and chlorine dioxide, could plausibly lower TTHM formation. Improvements to the chlorination processes in utilities using Delta water are critical to avoid the high frequency of non-compliance. Nevertheless, the above analysis provides a reasonable characterization of potential effects of Alts.2-5. Comparisons between Alt.6 and Alt.1 at 2001 LoD and between Alts.2-6 and Alt.1 at 2020 LoD are similar and are tabulated in Section 4.4.5 and Section 4.4.6.

Proposed Stage 2 of the Microbial/Disinfection Byproduct Rule is unlikely to lower existing MCL for TTHM and applied as annual averages. Estimates of disinfection by-products in treated water discussed in Section 4.4.4.1 give the maximum and possibly exaggerated potential changes under Project alternatives. The Delta intake with the largest change in salinity is used. Actual Project impacts, especially to agencies using water exported from Clifton Court and subjected to less salinity impact, would likely be smaller.

4.4.4.2 Potential effects on meeting CUWA and SWP salinity targets

Aside from potential effects on disinfection by-products, changes in Delta salinity could change the salt load exported to the State Water Project and have potential effects on water reuse and other water management actions (see Section 4.1.2.1.2). To assess potential Project impacts, the total salt loads exported at Banks Pumping Plant under Alt.1 and Alts.2-5 are computed over the 70-year simulation period.[30] Results from FDM and DSM2 are summarized in Table 4.4.4.2-1. Salinity under Alt.1 exceeds the State Water Project delivery goal of 220 mg/L in TDS by 13% and 7% in monthly and weighted average concentration, respectively, based on FDM estimates. Under Alts.2-5, the net result of a 0.16%

[30] The conversions from chloride concentration or electrical conductivity to total dissolved solids (TDS) concentration are discussed in §4.3.2.3.

reduction in long-term mean Banks export pumping and a 0.31% increase in mean monthly salinity leads to a 0.24% increase in the long-term weighted-average salinity of all water exported.

Table 4.4.4.2-1 Salt Load exported at Banks Pumping Plant between 1922 and 1991 under 2001 LoD.

	FDM				DSM2*			
	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1, as % of Alt.1 value	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1, as % of Alt.1 value
Mean annual salt load (million tons)	1.06	1.06	0.00	0.08	1.07	1.08	0.01	0.50
Mean annual export (MAF)	3.30	3.30	-0.01	-0.16	3.31	3.30	-0.01	-0.16
Weighted average TDS (mg/L)	236	236	0.58	0.24	238	240	1.58	0.66
Monthly averaged TDS (mg/L)	247	248	0.76	0.31	252	254	1.74	0.69

* Statistics over 837 months only.

The actual salt load delivered to southern California would vary according to the percentage of Banks export commingled with Tracy Pumping Plant exports in San Luis, and seasonal variations in the percentage delivery to Kern County Water Agency and other SWP agricultural contractors.

The larger potential change in Delta salinity under Alternative 6 compared to Alternatives 2-5 lead to a slightly higher increase in the salt load in export water at CCFB as is shown in Table 4.4.4.2-2. Table 4.4.4.2-3 shows that the potential change in salt load export at 2020 LoD is slightly smaller than at 2001 LoD.

Table 4.4.4.2-2 Salt Load exported at Banks Pumping Plant between 1922 and 1991 under 2001 LoD.

	FDM				DSM2*			
	Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.6 minus Alt.1, as % of Alt.1 value	Alt.1	Alt.6	Alt.6 minus Alt.1	Alt.6 minus Alt.1, as % of Alt.1 value
Total salt load in million tons	1.06	1.06	0.00	0.23	1.07	1.08	0.01	0.74
Total export (MAF)	3.3	3.3	-0.01	-0.23	3.31	3.30	-0.01	-0.23
Weighted average TDS (mg/L)	236	237	1.08	0.46	238	240	2.32	0.97
Monthly averaged TDS (mg/L)	247	248	1.02	0.41	252	254	2.21	0.88

* Statistics over 837 months only.

Table 4.4.4.2-3 Salt Load exported at Banks Pumping Plant between 1922 and 1991 at 2020 LoD based on FDM estimates.

	Alt.1	Alts.2-5	Alts.2-5 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value.	Alt.6	Alt.6 minus Alt.1	Alt.6 minus Alt.1 as % of Alt.1 value.
Total salt load in million tons	1.08	1.08	0.00	0.06	1.1	0.00	0.36
Total export (MAF)	3.35	3.34	0.00	-0.11	3.3	0.00	-0.03
Weighted average TDS (mg/L)	237	238	0.42	0.18	238	0.91	0.38
Monthly averaged TDS (mg/L)	249	250	0.43	0.17	250	0.82	0.33

4.4.4.3 Contra Costa Water District Delivery Water Quality

Sections 4.1.2.1.3 and 4.3.4 discuss Delta diversions of the Contra Costa Water District and the modeling approach used in the impact analysis. It is possible to estimate the magnitude of Project impacts using two different approaches. In the first approach, CCWD's Delta diversion in each month is divided between Rock Slough and Old River according to the algorithm described in Section 4.3.4. The differences between Alt.1 and Alts.2-5 in diversions at the two intakes give an estimate of the additional pumping cost. Table 4.4.4.3-1 shows that, over the 70-year simulation period, Rock Slough diversion under Alts.2-5 is increased by an average of 0.05 cfs, or 0.04% of the 131.61 cfs average under Alt.1 at 2001 LoD. The corresponding decrease in diversion at the Los Vaqueros intake amounts to 0.08% of the 65.97 cfs average under Alt.1. This amounts to a difference of 36 AF per year. Under Alt.6, diversion at Rock Slough is lower by an average of 0.25 cfs or 181 AF per year.

The second approach is based on the salt load diverted at CCWD's two intakes. Potential changes in the weighted average salinity are shown in Table 4.4.4.3-1. The weighted average of chloride concentration increases by 0.40 mg/L under Alts.2-5, a 0.73% difference from 54.4 mg/L to 54.8 mg/L. The increase under Alt.6 is higher, at 0.63 mg/L or 1.16%. Note that the weighted salinity of Rock Slough diversion is much lower than the monthly average salinity at Rock Slough, since diversion is decreased in preference to the Old River intake when Rock Slough chloride concentration is above 65 mg/L.

Table 4.4.4.3-1 Mean monthly diversions and salt loads at CCWD intakes over the 70-year simulation period at 2001 LoD.

		Alt.1	Alts.2-5	Alt.6	Alts.2-5 minus Alt.1	Alt.6 minus Alt.1	Alts.2-5 minus Alt.1 as % of Alt.1 value	Alt.6 minus Alt.1 as % of Alt.1 value
Rock Slough								
maximum diversion (cfs)		284.5	285.1	284.5				
average diversion (cfs)		131.6	131.7	131.4	0.05	-0.25	0.04	-0.19
weighted average chloride concentration (mg/L)	**FDM**	45.7	46.0	46.3	0.32	0.58	0.71	1.26
	DSM2	43.3	44.3	44.7	1.04	1.44	2.40	3.33
Old River								
max monthly (cfs)		250.0	250.0	250.0				
average monthly (cfs)		66.0	66.0	66.3	-0.05	0.25	-0.08	0.38
weighted average chloride concentration (mg/L)	**FDM**	71.8	72.4	72.4	0.57	0.64	0.80	0.89
	DSM2	72.7	74.3	74.6	1.54	1.86	2.12	2.56
Total								
weighted average chloride concentration (mg/L)	**FDM**	54.4	54.8	55.0	0.40	0.63	0.73	1.16
	DSM2	53.1	54.3	54.7	1.20	1.62	2.26	3.05

Potential changes at 2020 LoD are smaller than at 2001 LoD and are summarized in Table 4.4.4.3-2. Note that the delivered water salinity is much higher than that at 2001 LoD, which appears to be inconsistent with the small increase in salinity between 2001 LoD and 2020 LoD at the intakes. The difference in delivered water salinity results from a different diversion pattern in CALSIM II at 2020 LoD which, in comparison to diversions at 2001 LoD, tends to divert more during times of high Delta salinity.

Table 4.4.4.3-2 Statistics of salt load diverted at CCWD intakes at 2020 LoD.

	Alt.1	Alts.2-5	Alt.6	Alts.2-5 - Alt.1	Alt.6 - Alt.1	Alts.2-5 - Alt.1 as % of Alt.1	Alt.6 - Alt.1 as % of Alt.1
Rock Slough							
maximum diversion (cfs)	300.4	304.5	299.8				
average diversion (cfs)	130.8	130.9	130.6	0.06	-0.25	0.05	-0.19
monthly average chloride concentration (mg/L)	79.3	79.5	79.9	0.22	0.59	0.28	0.75
weighted average chloride concentration (mg/L)	52.7	53.0	53.3	0.30	0.54	0.57	1.03
Old River							
max monthly (cfs)	250.0	250.0	250.0				
average monthly (cfs)	76.7	76.7	77.0	-0.06	0.25	-0.08	0.32
monthly average chloride concentration (mg/L)	68.3	68.5	68.8	0.21	0.47	0.31	0.69
weighted average chloride concentration (mg/L)	101.5	101.8	102.1	0.29	0.61	0.28	0.61
Total							
weighted average chloride concentration (mg/L)	70.8	71.1	71.4	0.28	0.63	0.40	0.88

Changes under real time operations might be different from the above estimates given the approximations used in CALSIM II in determining CCWD's diversion pattern.

4.4.5 Monthly results at 2001 LOD

This section contains tables of the results for each of the 2001 Level-of-Development water quality modeling studies. Results are included for five models, in the following order: FDM, DSM2, G model, ANN and X2. The presented results are for key locations within the Delta.

Simulated salinity is presented for each month in the Alternative 1 studies. For all the models other than X2, the results for the Alternatives 2-5 and Alternative 6 studies are displayed in the tables as percent change from Alternative 1 (No-Action). Percent change is the value for the alternative minus the value for Alternative 1, divided by the Alternative 1 value, expressed as a percentage. This method of presentation facilitates comparison of the results from the various models, which have output in differing units. For X2, the simulations for the action alternatives are shown as absolute change from the Alternative 1 values.

Table 4.4.5-1 Simulated monthly average chloride concentration (mg/L) at Martinez / Benicia, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	8149	8245	6201	4953	1640	1607	1992	791	957	3698	6290	7619	4345
1923	8141	7774	2514	1487	2619	3960	2441	2768	4488	5611	6958	7883	4720
1924	8346	7940	7559	7056	5626	4912	5490	6761	7527	7122	7831	8897	7089
1925	8953	8477	7074	6143	691	1351	2208	3043	4661	6279	7433	8393	5392
1926	8624	8330	7752	5683	1524	3381	2936	3637	5529	6822	7537	8413	5847
1927	8743	5837	4341	2445	65	757	884	1757	3664	4999	6458	7861	3984
1928	8426	6654	5678	4445	3003	161	1249	2646	4699	5834	6822	8029	4804
1929	8381	7583	6753	6770	5761	5073	5449	6043	6474	7367	8037	8628	6860
1930	9055	8474	6524	3716	3244	2113	3496	4575	5635	6715	7426	8327	5775
1931	8668	8087	7211	6265	5933	6043	6204	6797	7462	7046	7838	8894	7204
1932	8963	8400	4538	2848	2683	3708	4180	4075	4493	6038	7322	8296	5462
1933	8749	8354	7106	5895	5282	5009	4884	5674	6527	7383	7862	8413	6761
1934	9170	8463	6755	4581	3818	4086	4572	5705	6283	7135	8123	8858	6462
1935	8982	8173	7447	3110	3396	2829	817	1485	3219	5023	6780	8180	4953
1936	8091	7056	6833	1695	129	848	1178	1642	3531	4734	6104	7394	4103
1937	8157	7665	7400	6798	1646	750	1517	2361	3969	5332	6864	8216	5056
1938	8738	6072	418	1116	54	21	125	135	677	3512	6207	6611	2807
1939	5076	5836	6098	5628	5277	4773	4653	4910	6031	6932	7580	8413	5934
1940	8414	8109	7945	2582	578	70	156	1891	4261	5597	6860	7969	4536
1941	8222	7086	1228	63	29	58	94	331	1691	3776	5606	5881	2839
1942	6120	6940	830	130	29	1211	755	1034	2194	4458	6521	6633	3072
1943	6308	6005	3229	193	430	110	1080	2170	3976	5147	6488	7887	3585
1944	8458	8111	7752	6856	3608	3018	3822	4338	5268	6418	7606	8301	6130
1945	8038	7342	6276	5714	1599	2117	3171	3435	4554	5599	6971	8051	5239
1946	8484	7045	644	774	1740	2721	3809	3766	4797	5702	7002	7973	4538
1947	8258	7572	6144	6118	4970	3705	3956	4849	5493	6468	7424	8196	6096
1948	8084	7801	7506	6333	5024	4513	2430	1817	3226	4995	6763	7738	5519
1949	8066	7691	6783	6239	5778	1450	2812	3956	4871	6162	7284	8232	5777
1950	8520	8061	7373	4268	1902	2861	2964	3093	4314	5499	6938	7919	5309
1951	8238	1855	92	162	168	1353	2695	2535	4204	5494	6761	7900	3455
1952	8411	7538	1820	133	149	394	200	156	769	3571	6253	5692	2924
1953	4415	5618	1566	101	1430	2781	2802	2331	2875	4279	6207	6667	3423
1954	7096	6772	6902	3324	816	774	953	2071	4331	5559	6736	7736	4422
1955	8100	7145	4776	3936	4101	4750	4382	4534	5320	6420	7534	8486	5790
1956	8191	7387	452	19	77	561	1270	530	1730	3763	5808	5742	2961
1957	5450	6543	7362	6659	2627	968	2075	2895	4362	5500	6800	7967	4934
1958	6524	5878	3244	744	30	53	49	233	597	3142	5645	5300	2620
1959	4488	5910	7131	2885	776	2071	4031	5116	5524	5804	6974	7732	4870
1960	8147	7429	7204	6969	3083	2924	3805	4346	5686	6749	7583	8468	6033
1961	8593	7732	6302	5719	2653	3156	4272	5074	5905	6657	7183	7897	5928
1962	8312	7503	6160	6227	1586	1945	3448	3979	5055	5694	6855	7782	5379
1963	3380	4265	3432	3928	454	1383	153	1028	3257	4857	6471	7632	3353
1964	7287	4071	5018	3991	3859	4862	4566	4736	5391	6403	7339	7994	5460
1965	8263	7340	634	53	1102	2321	1140	1882	3847	4733	6163	7727	3767
1966	8314	5860	4527	2644	2329	2344	3133	3981	5063	5790	7026	8186	4933
1967	8069	7204	2097	834	813	578	599	581	862	3079	5701	5345	2980
1968	4012	5011	5570	2295	259	609	1928	3705	4638	5067	6231	7234	3880
1969	7404	6717	3479	94	26	199	197	129	507	3117	5597	4944	2701
1970	4019	4945	1117	24	96	855	2562	3862	4886	4644	6009	7541	3380
1971	8126	7110	1022	762	1607	1095	2205	1799	3236	4224	6039	6625	3654
1972	7025	7633	6387	5446	3490	2071	3572	4795	4782	5387	6895	8230	5476
1973	8208	5977	3155	229	87	527	2151	2906	4048	5368	6793	7844	3941
1974	8067	1615	448	44	803	82	142	1532	3075	4710	6503	5852	2739
1975	5351	6370	6502	6019	1029	126	1297	1529	2543	4565	6380	6194	3992
1976	5183	5392	6085	6730	6309	5196	5094	6424	7761	8285	8537	8926	6660
1977	8975	8669	7551	7169	6942	6640	6438	6933	7574	7099	7834	8839	7555
1978	8662	7852	6187	521	261	174	329	963	1903	3839	5808	6802	3608
1979	7622	8025	7661	3855	954	1253	2543	3185	4072	5342	6881	8209	4967
1980	8311	7544	5443	248	36	516	2007	2582	4209	5530	6797	7650	4240
1981	8144	8277	7173	3846	2434	1863	2681	4381	6023	6879	7529	8128	5613
1982	8100	3254	190	139	99	128	23	572	2008	4399	6480	5413	2567
1983	2697	1240	173	73	19	13	82	138	95	1221	3425	2907	1007
1984	2524	233	20	121	857	1181	2491	3867	4845	4853	6185	7780	2913
1985	8148	3846	3245	4940	5123	4509	4307	4465	5638	6690	7534	7908	5529
1986	7732	7221	5535	2463	52	21	989	1858	3254	4515	5393	6373	3784
1987	7498	7998	7639	6944	4709	2858	3665	5195	5905	6738	7776	8686	6301
1988	8092	7617	5560	2884	3656	4722	5390	5892	6175	7144	8148	8796	6173
1989	8942	8378	7720	6716	5875	1578	2341	3847	5496	6685	7378	7936	6074
1990	8141	7236	7063	6101	4780	4809	4921	5722	7165	7613	7988	8812	6696
1991	8836	8606	7772	7401	6862	2887	3215	4731	6447	7679	8130	8625	6766
AVG:	7564	6743	4933	3476	2293	2148	2564	3179	4308	5521	6861	7609	4766
MIN:	2524	233	20	19	19	13	23	129	95	1221	3425	2907	1007
MAX:	9170	8669	7945	7401	6942	6640	6438	6933	7761	8285	8537	8926	7555

Table 4.4.5-2 Difference in simulated monthly average chloride concentration (%) at Martinez / Benicia, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.01%	0.01%	0.17%	1.29%	2.33%	-0.81%	0.12%	-1.90%	0.19%	0.06%	0.01%	0.11%	0.13%
1923	0.17%	0.04%	0.42%	0.59%	0.43%	0.19%	0.17%	-0.76%	0.03%	0.91%	0.01%	0.18%	0.20%
1924	0.20%	-0.04%	-0.24%	0.04%	0.15%	0.17%	0.70%	0.67%	-0.18%	0.46%	0.78%	0.05%	0.23%
1925	-0.20%	-0.31%	-0.43%	-0.43%	1.01%	0.16%	0.14%	0.17%	0.04%	-0.01%	-0.38%	-0.40%	-0.05%
1926	0.16%	0.01%	-0.10%	0.02%	-0.04%	0.00%	0.60%	0.90%	-0.13%	-0.23%	-0.27%	-0.50%	0.03%
1927	-0.19%	1.14%	1.73%	2.29%	0.88%	0.11%	1.18%	-0.33%	1.40%	-0.67%	0.05%	0.13%	0.64%
1928	0.12%	0.60%	0.77%	0.72%	0.32%	0.32%	0.22%	0.05%	0.02%	0.07%	0.04%	0.03%	0.27%
1929	0.03%	0.06%	0.01%	-0.02%	0.85%	0.62%	0.10%	0.02%	0.02%	-0.03%	0.35%	0.32%	0.19%
1930	-0.02%	0.04%	0.28%	-0.01%	0.71%	0.67%	-0.02%	0.63%	0.23%	-0.06%	1.42%	1.46%	0.45%
1931	0.32%	0.51%	0.80%	-1.17%	-1.82%	-1.17%	0.67%	2.09%	1.35%	-0.25%	-0.42%	-0.16%	0.06%
1932	-0.06%	-0.50%	2.23%	1.37%	3.29%	0.95%	0.42%	0.13%	0.14%	-0.02%	0.08%	0.10%	0.68%
1933	0.05%	0.00%	-0.01%	1.46%	1.90%	1.02%	0.38%	0.08%	0.02%	0.03%	0.36%	0.26%	0.46%
1934	-0.01%	0.06%	-0.02%	-0.89%	-0.60%	-0.11%	-0.05%	0.00%	-0.19%	-0.23%	1.44%	0.86%	0.02%
1935	0.15%	-0.28%	-0.16%	1.32%	0.37%	1.50%	1.91%	0.03%	1.23%	1.61%	0.37%	0.22%	0.69%
1936	0.69%	0.20%	-0.58%	0.58%	3.67%	4.45%	0.41%	0.76%	0.20%	1.51%	1.29%	0.67%	1.15%
1937	0.19%	-0.16%	-0.12%	0.11%	-3.07%	1.28%	0.38%	0.33%	0.01%	-0.04%	-0.02%	0.01%	-0.09%
1938	0.01%	0.37%	0.18%	0.17%	-0.02%	-1.52%	-0.14%	0.28%	0.27%	0.07%	0.02%	0.46%	0.01%
1939	1.91%	0.27%	-0.78%	-0.69%	-1.43%	0.20%	0.33%	-0.25%	-0.09%	0.02%	0.00%	0.11%	-0.03%
1940	-0.12%	-0.03%	0.11%	0.68%	0.65%	12.30%	1.18%	0.22%	-0.42%	-0.27%	-0.06%	0.00%	1.19%
1941	-1.10%	-0.51%	-0.07%	1.31%	-0.60%	-1.34%	0.18%	-0.39%	0.14%	-0.03%	0.09%	0.59%	-0.14%
1942	1.34%	1.00%	1.35%	0.18%	0.14%	0.20%	0.20%	0.34%	0.67%	0.18%	0.02%	0.42%	0.50%
1943	0.85%	1.21%	1.27%	1.45%	0.18%	-2.46%	0.25%	0.17%	0.03%	0.10%	0.06%	0.12%	0.27%
1944	0.12%	0.01%	0.02%	-0.02%	0.45%	0.25%	0.25%	0.30%	0.33%	0.16%	0.05%	0.06%	0.17%
1945	0.04%	0.69%	0.74%	0.32%	-0.21%	0.49%	0.23%	-0.49%	0.01%	0.01%	0.00%	0.11%	0.16%
1946	0.12%	0.24%	0.73%	0.43%	-0.07%	0.03%	0.12%	0.59%	0.25%	0.06%	0.03%	0.18%	0.23%
1947	0.00%	0.29%	0.45%	0.16%	0.99%	-0.31%	-0.31%	0.08%	-0.13%	-0.09%	0.07%	-0.82%	0.03%
1948	-0.60%	-0.15%	0.12%	0.12%	0.02%	0.06%	0.29%	0.48%	0.40%	0.14%	0.04%	0.18%	0.09%
1949	0.13%	0.27%	0.02%	-1.13%	-1.46%	3.47%	0.27%	0.05%	-0.02%	0.05%	0.14%	0.20%	0.17%
1950	0.29%	0.20%	0.18%	1.66%	1.80%	0.35%	0.25%	0.99%	4.70%	1.97%	0.46%	0.27%	1.09%
1951	-0.61%	4.29%	4.83%	-0.54%	-0.10%	1.37%	0.09%	0.35%	0.25%	0.24%	0.12%	0.22%	0.88%
1952	0.63%	-0.62%	0.10%	1.24%	0.92%	-2.13%	3.76%	-0.05%	0.45%	0.10%	0.03%	2.22%	0.55%
1953	1.66%	0.42%	0.42%	0.19%	0.09%	0.09%	1.29%	0.51%	0.04%	0.09%	0.02%	0.47%	0.44%
1954	0.48%	1.70%	1.48%	0.77%	0.27%	0.19%	0.15%	-0.04%	-0.01%	0.01%	0.01%	0.01%	0.42%
1955	0.07%	0.07%	1.04%	0.96%	0.27%	0.09%	-0.04%	0.17%	0.13%	0.04%	0.06%	0.04%	0.24%
1956	0.13%	0.15%	1.39%	-3.84%	2.56%	0.49%	-1.37%	3.11%	0.59%	0.12%	0.01%	0.48%	0.32%
1957	0.90%	0.48%	0.19%	0.16%	0.22%	1.82%	0.05%	0.30%	-0.04%	0.05%	0.06%	-0.02%	0.35%
1958	-1.08%	0.19%	0.93%	-0.13%	8.27%	-1.70%	0.43%	-0.24%	0.77%	-0.36%	-0.76%	0.94%	0.60%
1959	2.57%	-0.13%	-0.48%	-0.95%	0.08%	0.02%	0.00%	-0.07%	-0.07%	-0.29%	-0.18%	0.11%	0.05%
1960	0.61%	1.55%	1.34%	1.33%	1.06%	0.67%	0.24%	2.13%	0.98%	0.41%	-0.03%	-0.14%	0.85%
1961	0.23%	0.02%	0.55%	0.72%	3.73%	1.00%	0.16%	0.02%	0.03%	-0.15%	-0.12%	-1.20%	0.42%
1962	0.25%	0.68%	1.13%	0.71%	0.56%	1.53%	0.97%	0.53%	0.00%	-0.41%	-0.29%	0.01%	0.47%
1963	1.73%	1.60%	1.71%	-1.03%	-1.76%	0.26%	-0.93%	0.55%	0.12%	0.02%	0.04%	-0.48%	0.15%
1964	-0.23%	0.59%	0.21%	4.31%	2.38%	1.86%	0.81%	-1.07%	-0.21%	0.26%	0.00%	-0.14%	0.73%
1965	0.82%	0.39%	0.73%	0.29%	0.41%	-0.31%	0.15%	0.04%	-0.02%	0.10%	0.08%	0.20%	0.24%
1966	0.19%	2.08%	1.86%	0.70%	0.28%	0.20%	0.33%	0.25%	0.00%	-0.03%	0.01%	0.01%	0.49%
1967	0.01%	0.16%	1.91%	0.53%	0.55%	0.81%	0.23%	0.20%	0.26%	0.52%	0.62%	0.91%	0.56%
1968	0.87%	0.35%	0.25%	0.13%	-0.15%	0.82%	0.25%	1.13%	0.16%	-0.37%	0.37%	0.20%	0.33%
1969	0.05%	-0.05%	0.88%	1.30%	2.49%	-0.19%	0.35%	-14.98%	0.16%	0.02%	1.62%	2.52%	-0.49%
1970	1.26%	2.01%	1.18%	-14.66%	0.11%	0.24%	-0.11%	0.32%	0.03%	0.13%	0.08%	-0.03%	-0.79%
1971	-0.02%	0.42%	0.80%	-0.25%	-0.06%	0.94%	0.11%	0.49%	-1.35%	-0.31%	-0.07%	0.42%	0.09%
1972	0.41%	0.20%	1.21%	1.86%	0.91%	0.38%	0.00%	-0.03%	0.00%	0.00%	0.01%	-0.01%	0.41%
1973	0.01%	0.43%	0.61%	1.61%	-0.62%	0.48%	0.35%	0.45%	-0.24%	0.53%	-0.12%	1.76%	0.44%
1974	2.57%	-2.09%	-0.75%	0.13%	0.09%	1.06%	-0.10%	0.26%	0.29%	0.33%	0.16%	1.86%	0.32%
1975	2.81%	0.86%	0.54%	0.34%	0.29%	-2.07%	0.31%	0.56%	0.49%	-3.61%	-1.71%	1.01%	-0.01%
1976	-0.87%	-0.53%	0.13%	0.05%	-0.36%	1.15%	1.41%	0.47%	0.41%	0.01%	-0.35%	0.08%	0.13%
1977	-0.16%	-0.34%	-0.36%	-0.53%	-0.25%	-0.09%	-0.03%	-0.02%	-0.01%	0.06%	0.10%	-0.03%	-0.14%
1978	0.01%	0.09%	0.07%	-1.20%	1.60%	1.18%	0.86%	0.90%	0.71%	-0.93%	-1.10%	0.26%	0.21%
1979	0.49%	-0.45%	0.13%	5.05%	2.85%	0.78%	0.43%	0.18%	-0.06%	-0.01%	0.01%	0.25%	0.80%
1980	0.17%	0.19%	3.63%	3.51%	-5.55%	0.35%	-0.12%	1.84%	2.36%	1.72%	0.64%	0.53%	0.77%
1981	0.41%	0.06%	0.22%	1.28%	0.54%	1.37%	0.92%	2.13%	0.67%	0.10%	0.08%	0.06%	0.65%
1982	0.12%	2.58%	6.18%	-2.19%	-1.97%	0.18%	0.10%	0.21%	1.09%	0.11%	0.00%	1.06%	0.62%
1983	1.40%	-0.16%	0.17%	0.88%	0.10%	0.09%	-4.31%	0.32%	0.28%	3.18%	1.55%	0.86%	0.36%
1984	0.86%	0.46%	0.09%	-0.56%	-0.01%	0.20%	0.00%	0.31%	0.42%	0.11%	-0.02%	0.05%	0.16%
1985	0.13%	0.99%	0.41%	0.17%	0.29%	0.79%	0.49%	0.36%	0.03%	-0.05%	0.10%	0.06%	0.31%
1986	0.09%	0.14%	0.98%	1.01%	4.94%	0.98%	-0.67%	0.64%	3.84%	0.15%	3.76%	3.31%	1.60%
1987	0.86%	0.29%	0.21%	0.12%	1.13%	1.47%	0.03%	-0.03%	0.28%	0.21%	0.18%	0.17%	0.41%
1988	0.09%	0.00%	0.49%	1.85%	0.45%	-0.24%	0.48%	1.69%	0.06%	0.15%	0.40%	0.63%	0.50%
1989	0.01%	0.44%	0.82%	0.77%	0.36%	-0.05%	0.31%	0.04%	0.13%	0.16%	0.12%	0.24%	0.28%
1990	0.52%	0.92%	0.69%	0.15%	-0.04%	0.37%	0.28%	1.04%	-0.22%	-0.15%	0.03%	0.07%	0.30%
1991	-0.06%	-0.37%	0.15%	0.49%	0.35%	0.97%	1.19%	1.04%	2.49%	1.62%	1.30%	1.22%	0.87%
AVG:	0.36%	0.36%	0.67%	0.27%	0.54%	0.55%	0.28%	0.16%	0.37%	0.13%	0.18%	0.36%	0.35%
MIN:	-1.10%	-2.09%	-0.78%	-14.66%	-5.55%	-2.46%	-4.31%	-14.98%	-1.35%	-3.61%	-1.71%	-1.20%	-0.79%
MAX:	2.81%	4.29%	6.18%	5.05%	8.27%	12.30%	3.76%	3.11%	4.70%	3.18%	3.76%	3.31%	1.60%

Table 4.4.5-3 Difference in simulated monthly average chloride concentration (%) at Martinez /Benicia, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.01%	0.01%	0.13%	1.26%	2.30%	-0.81%	0.09%	-1.92%	-3.91%	-0.98%	-0.46%	0.26%	-0.33%
1923	0.50%	0.02%	1.02%	1.57%	0.68%	0.24%	0.89%	-0.29%	0.09%	0.91%	0.00%	0.47%	0.51%
1924	0.48%	-0.16%	-0.07%	-0.52%	-0.59%	0.01%	0.12%	0.05%	-0.03%	0.07%	0.08%	0.03%	-0.04%
1925	-0.33%	-0.31%	-0.44%	-0.54%	-0.25%	0.02%	0.12%	0.97%	0.26%	0.00%	0.01%	0.21%	-0.02%
1926	0.10%	0.03%	0.05%	-0.02%	-0.33%	-0.06%	0.11%	0.35%	0.13%	0.01%	-0.68%	-0.94%	-0.10%
1927	-0.23%	-0.05%	1.48%	1.32%	0.64%	0.09%	0.13%	1.01%	-0.63%	2.66%	1.49%	-0.50%	0.62%
1928	-0.02%	1.61%	1.63%	0.97%	0.56%	0.49%	0.22%	0.06%	0.02%	-0.03%	0.01%	-0.03%	0.46%
1929	0.02%	0.36%	0.05%	-0.22%	0.78%	0.60%	0.11%	0.02%	0.01%	-0.01%	0.24%	0.26%	0.19%
1930	0.03%	0.12%	0.51%	0.14%	0.31%	0.37%	0.06%	0.07%	0.12%	0.15%	0.06%	0.04%	0.17%
1931	0.05%	0.14%	0.08%	0.04%	-0.23%	-0.13%	0.00%	-0.02%	-0.08%	0.00%	0.05%	0.02%	-0.01%
1932	-0.05%	-0.06%	0.25%	0.50%	0.36%	0.22%	0.32%	0.11%	0.14%	-0.01%	0.08%	0.08%	0.16%
1933	0.04%	0.13%	0.26%	0.83%	1.12%	0.57%	0.16%	0.03%	0.01%	0.01%	0.04%	0.01%	0.27%
1934	0.00%	0.01%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.18%	0.03%
1935	0.00%	0.04%	0.03%	0.10%	0.06%	-0.01%	0.32%	0.00%	1.80%	1.83%	0.41%	0.23%	0.40%
1936	0.59%	-0.05%	-0.79%	2.25%	7.22%	4.57%	1.02%	-3.58%	-0.32%	0.04%	-0.09%	0.25%	0.93%
1937	-0.01%	-0.40%	-0.25%	0.14%	-2.95%	4.45%	0.50%	-1.18%	-0.18%	0.02%	-0.05%	0.01%	0.01%
1938	-0.01%	-2.38%	-3.24%	0.22%	-0.01%	-1.53%	-0.14%	0.30%	20.05%	-0.43%	-0.27%	-4.77%	0.65%
1939	-3.32%	-0.06%	0.26%	1.38%	1.15%	0.38%	0.12%	0.11%	-0.02%	-0.02%	0.09%	0.13%	0.02%
1940	-0.13%	0.04%	0.03%	-0.21%	0.33%	-1.12%	1.30%	-1.28%	-0.42%	-0.91%	-0.45%	1.80%	-0.09%
1941	0.25%	-0.30%	-0.46%	3.49%	-0.59%	0.48%	0.15%	-0.19%	0.03%	0.24%	-0.19%	2.12%	0.42%
1942	6.43%	4.22%	3.52%	0.05%	0.12%	0.20%	0.20%	0.35%	-2.65%	-1.77%	-0.21%	1.52%	1.00%
1943	2.06%	1.75%	4.68%	16.24%	0.37%	-2.48%	0.25%	-0.75%	-0.15%	2.32%	1.33%	-0.58%	2.09%
1944	-0.14%	-0.28%	0.01%	-0.08%	-1.17%	-0.39%	0.10%	0.28%	0.34%	0.16%	0.06%	0.12%	-0.08%
1945	0.11%	0.74%	0.63%	0.12%	-0.21%	0.40%	0.32%	-0.10%	0.19%	0.03%	-0.03%	0.14%	0.20%
1946	0.12%	0.98%	2.13%	0.41%	-0.12%	0.08%	0.23%	-0.58%	-0.52%	-0.11%	-0.04%	-0.16%	0.20%
1947	-0.03%	0.25%	0.15%	0.05%	0.90%	0.22%	-0.08%	0.04%	-0.10%	-0.17%	-0.11%	-1.38%	-0.02%
1948	-0.64%	-0.29%	0.82%	0.78%	-0.03%	-0.02%	-0.18%	0.08%	0.09%	0.03%	0.01%	0.13%	0.07%
1949	-0.18%	-0.18%	-0.92%	-1.58%	-1.85%	-1.02%	0.27%	0.08%	-0.02%	0.10%	0.95%	0.99%	-0.28%
1950	0.08%	0.37%	0.88%	1.26%	1.83%	0.64%	0.88%	1.10%	4.67%	1.96%	0.44%	1.46%	1.30%
1951	0.28%	4.07%	4.54%	-0.10%	0.68%	0.14%	-0.26%	-1.47%	1.37%	2.05%	0.79%	0.48%	1.05%
1952	0.83%	-0.63%	-9.62%	3.60%	0.90%	-2.14%	-17.89%	0.65%	-2.34%	-0.45%	-0.08%	-0.66%	-2.32%
1953	0.56%	0.31%	0.21%	0.21%	0.09%	0.09%	1.29%	0.57%	0.13%	0.18%	0.06%	0.55%	0.35%
1954	0.55%	1.98%	1.74%	0.88%	0.29%	0.19%	0.15%	-0.04%	-0.01%	-0.02%	-0.01%	0.00%	0.48%
1955	-0.21%	-0.16%	0.70%	0.34%	0.01%	-0.23%	0.11%	0.33%	0.14%	0.04%	0.07%	0.05%	0.10%
1956	0.03%	0.03%	1.84%	0.36%	0.59%	0.71%	-1.93%	1.00%	-2.94%	-0.01%	-0.26%	1.47%	0.07%
1957	-2.10%	-2.37%	-0.89%	0.07%	-0.29%	1.32%	0.35%	0.38%	-0.02%	0.31%	0.28%	-1.84%	-0.40%
1958	-2.60%	0.17%	0.89%	-0.12%	5.93%	-1.10%	0.12%	0.05%	-3.43%	-0.10%	0.15%	4.84%	0.40%
1959	2.98%	0.70%	0.23%	-0.59%	1.25%	0.27%	0.59%	0.23%	-0.75%	-1.74%	-0.76%	-0.27%	0.18%
1960	-0.10%	-0.11%	-0.08%	-0.10%	0.00%	-0.05%	-0.02%	0.23%	0.16%	-0.02%	-0.01%	0.00%	-0.01%
1961	0.06%	0.03%	0.18%	0.19%	0.25%	0.17%	0.05%	0.00%	-0.07%	-0.06%	-0.04%	-1.15%	-0.03%
1962	-0.23%	0.31%	0.85%	0.40%	0.13%	-0.21%	0.05%	0.06%	0.00%	0.00%	0.00%	0.12%	0.12%
1963	0.99%	1.09%	0.70%	-1.34%	0.79%	4.91%	-3.78%	-0.35%	-0.87%	3.16%	2.07%	0.13%	0.63%
1964	0.01%	0.65%	0.20%	10.91%	5.62%	2.11%	0.06%	-0.48%	-0.13%	0.07%	0.08%	-0.34%	1.56%
1965	0.66%	0.38%	2.08%	0.36%	0.42%	-0.32%	0.12%	0.04%	-1.22%	0.10%	0.88%	0.71%	0.35%
1966	0.59%	0.67%	0.68%	0.50%	0.27%	0.17%	0.32%	0.25%	0.00%	-0.03%	0.00%	0.01%	0.28%
1967	0.02%	0.03%	1.49%	0.91%	0.61%	0.79%	0.20%	0.21%	-0.54%	-0.40%	1.55%	5.28%	0.85%
1968	3.00%	0.58%	0.31%	0.18%	-0.08%	0.03%	0.07%	0.14%	0.01%	-0.04%	0.01%	0.01%	0.35%
1969	-0.12%	-0.07%	0.47%	1.38%	0.27%	0.16%	-0.28%	5.84%	1.22%	-0.27%	0.24%	4.61%	1.12%
1970	3.21%	0.49%	0.52%	0.24%	0.14%	0.27%	0.02%	0.43%	0.04%	0.21%	0.13%	0.04%	0.48%
1971	0.01%	0.40%	0.77%	-0.26%	-0.06%	0.84%	0.23%	0.36%	-0.90%	-0.22%	-0.04%	0.49%	0.14%
1972	0.46%	0.21%	1.31%	1.95%	0.95%	0.38%	0.00%	-0.03%	0.00%	0.00%	0.00%	0.01%	0.44%
1973	-0.25%	-1.03%	-2.21%	-0.67%	-0.51%	0.78%	0.41%	-1.73%	-0.50%	0.61%	-0.13%	0.90%	-0.36%
1974	2.75%	-0.96%	-0.67%	0.14%	0.06%	1.28%	-0.08%	-0.79%	-0.43%	1.61%	1.28%	5.07%	0.77%
1975	5.13%	1.36%	0.02%	-1.04%	-9.02%	-18.59%	-0.31%	0.58%	-1.06%	-0.57%	1.07%	3.24%	-1.60%
1976	0.90%	0.21%	0.35%	0.12%	-1.14%	0.20%	0.79%	0.18%	0.37%	-0.03%	0.81%	0.43%	0.27%
1977	-0.14%	-0.35%	-0.02%	0.07%	-0.01%	0.00%	0.00%	-0.02%	0.05%	0.14%	0.06%	0.03%	-0.02%
1978	0.01%	0.05%	0.01%	-1.28%	1.60%	0.32%	0.13%	1.31%	0.58%	0.18%	-0.13%	0.88%	0.31%
1979	0.57%	0.20%	0.13%	1.16%	0.50%	0.24%	-0.14%	-0.80%	-0.15%	0.07%	0.02%	0.08%	0.16%
1980	-0.01%	-0.09%	1.50%	1.12%	0.01%	1.85%	0.91%	3.46%	3.46%	2.15%	0.74%	0.78%	1.32%
1981	0.69%	0.03%	0.29%	2.67%	0.99%	1.14%	0.56%	0.32%	0.09%	0.00%	0.01%	0.01%	0.57%
1982	-0.01%	-0.03%	0.34%	-2.07%	0.16%	0.15%	0.11%	0.23%	-1.93%	-0.60%	-0.15%	1.16%	-0.22%
1983	3.28%	0.20%	0.10%	0.83%	0.11%	0.09%	-4.32%	0.34%	0.32%	-1.91%	1.09%	2.47%	0.22%
1984	1.33%	-1.73%	0.04%	-0.56%	-0.03%	0.20%	0.00%	0.38%	0.15%	0.41%	0.22%	0.16%	0.05%
1985	0.19%	1.09%	0.44%	0.17%	0.29%	0.71%	0.43%	0.93%	0.03%	-0.06%	0.10%	0.08%	0.37%
1986	0.10%	0.16%	1.00%	1.04%	5.00%	0.98%	-0.68%	-1.25%	3.01%	-0.20%	4.41%	4.31%	1.49%
1987	1.47%	0.27%	0.37%	0.14%	1.56%	1.69%	-0.06%	-0.07%	0.81%	0.58%	1.37%	0.85%	0.75%
1988	0.19%	-0.11%	0.30%	0.51%	0.10%	-0.32%	-0.35%	1.02%	0.38%	-0.06%	0.07%	0.17%	0.16%
1989	0.03%	-0.12%	-0.07%	-0.01%	0.01%	0.15%	0.17%	0.01%	0.02%	0.02%	-0.02%	-0.73%	-0.05%
1990	-0.32%	0.21%	0.31%	0.09%	-0.01%	-0.13%	-0.10%	0.13%	0.03%	-0.06%	-0.14%	-0.14%	-0.01%
1991	0.07%	0.01%	0.28%	0.42%	0.17%	0.40%	-0.31%	-0.40%	1.80%	0.29%	-0.22%	-0.37%	0.18%
AVG:	0.44%	0.21%	0.34%	0.75%	0.41%	0.09%	-0.22%	0.11%	0.23%	0.16%	0.26%	0.51%	0.27%
MIN:	-3.32%	-2.38%	-9.62%	-2.07%	-9.02%	-18.59%	-17.89%	-3.58%	-3.91%	-1.91%	-0.76%	-4.77%	-2.32%
MAX:	6.43%	4.22%	4.68%	16.24%	7.22%	4.91%	1.30%	5.84%	20.05%	3.16%	4.41%	5.28%	2.09%

Table 4.4.5-4 Simulated monthly average chloride concentration (mg/L) at Chipps Island, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	3049	3164	1350	631	55	16	16	10	10	296	1452	2576	1052
1923	3062	2722	222	18	68	267	49	60	420	1019	1978	2823	1059
1924	3250	2891	2518	2130	979	612	971	1859	2464	2102	2743	3921	2203
1925	4009	3430	2118	1444	59	15	23	90	435	1354	2321	3290	1549
1926	3520	3247	2729	1045	38	232	76	216	1002	1831	2436	3347	1643
1927	3668	1074	405	60	11	10	9	13	224	553	1541	2751	860
1928	3332	1577	1112	422	90	9	11	49	611	947	1791	2907	1072
1929	3316	2588	1917	1879	1035	661	958	1324	1567	2271	2864	3577	1996
1930	4036	3394	1484	249	131	25	205	451	1041	1746	2343	3280	1532
1931	3622	2983	2263	1515	1118	1293	1448	1912	2371	2030	2737	3912	2267
1932	3954	3326	616	94	66	217	331	286	403	1226	2243	3183	1329
1933	3692	3261	2163	1096	752	602	574	1094	1606	2293	2743	3347	1935
1934	4113	3395	1867	504	241	301	437	1081	1445	2100	3066	3845	1866
1935	3946	3087	2446	247	206	62	11	13	143	728	1815	3095	1317
1936	3330	2675	2454	206	17	14	17	43	352	929	1812	2928	1231
1937	3319	2627	2389	1898	107	19	18	33	279	884	1897	3135	1384
1938	3655	1168	19	12	17	12	10	9	9	268	1415	1471	672
1939	598	1139	1352	931	863	535	486	561	1222	1916	2464	3325	1283
1940	3366	3040	2902	241	17	11	9	26	350	789	1798	2943	1291
1941	3483	2648	127	11	13	10	10	10	50	420	1394	1670	821
1942	1643	2013	96	13	9	12	11	11	20	395	1573	1759	630
1943	1576	1126	147	12	10	10	12	21	279	623	1567	2781	680
1944	3358	3018	2695	1932	266	104	230	384	707	1467	2557	3233	1663
1945	2982	2354	1356	1112	65	22	109	143	400	978	1972	2944	1203
1946	3402	2078	54	8	11	49	161	203	474	1030	1991	2908	1031
1947	3193	2568	1480	1456	656	205	270	529	944	1582	2311	3071	1522
1948	3025	2771	2511	1371	650	438	55	15	149	720	1807	2654	1347
1949	2999	2674	1908	1508	1202	60	119	268	653	1393	2185	3092	1505
1950	3412	2940	2354	454	22	99	74	83	370	949	1939	2855	1296
1951	3179	178	10	11	10	11	52	39	349	765	1746	2882	769
1952	3359	2498	107	14	9	10	10	10	9	269	1435	918	721
1953	395	1049	95	9	12	58	55	25	66	344	1389	1497	416
1954	2032	1881	1949	282	9	8	9	19	508	854	1737	2646	995
1955	3030	2194	586	259	311	609	427	438	857	1553	2452	3418	1345
1956	3429	2845	78	14	10	9	22	11	52	415	1486	1360	811
1957	1135	1699	2335	1766	153	9	27	68	365	780	1773	2862	1081
1958	1713	1622	470	19	12	12	12	11	10	274	1395	1073	552
1959	526	1205	2112	238	11	22	300	616	761	1085	1969	2680	960
1960	3091	2455	2260	2079	229	105	251	381	1025	1778	2493	3418	1630
1961	3499	2709	1585	1230	122	139	350	610	1130	1702	2120	2788	1499
1962	3238	2522	1495	1523	97	25	178	272	747	1073	1884	2711	1314
1963	345	599	214	358	24	11	10	11	159	557	1580	2584	538
1964	2313	402	857	331	258	539	451	498	898	1535	2234	2918	1103
1965	3215	2396	67	9	10	28	11	16	354	506	1371	2643	886
1966	3252	1079	480	66	25	30	103	259	572	1076	2006	3079	1002
1967	2992	2248	151	17	11	9	12	11	10	163	1090	748	622
1968	422	1074	1458	212	10	9	68	393	729	1087	1884	2717	839
1969	2881	2367	534	15	15	11	10	9	10	270	1383	926	703
1970	305	734	47	12	10	9	54	250	655	486	1293	2490	529
1971	3094	1882	49	9	11	9	20	15	140	328	1297	1467	693
1972	1966	2557	1402	806	195	21	229	646	550	890	1903	3142	1192
1973	3177	1209	123	15	14	10	33	62	286	700	1757	2772	846
1974	3003	147	9	9	8	8	9	13	86	455	1560	1063	531
1975	754	1468	1626	1315	58	10	14	13	40	421	1447	1254	701
1976	718	930	1390	1818	1536	735	654	1564	2639	3146	3463	3893	1874
1977	3956	3627	2595	2233	2028	1777	1603	2010	2470	2120	2769	3852	2587
1978	3989	3292	1919	60	15	12	14	15	65	439	1474	2305	1133
1979	2796	2999	2610	354	20	15	47	90	282	852	1894	3109	1256
1980	3267	2535	956	19	13	11	20	41	338	786	1776	2559	1027
1981	3046	3191	2181	346	40	16	60	389	1194	1864	2403	3109	1487
1982	3053	295	8	14	10	14	9	9	18	387	1553	782	513
1983	62	11	10	16	14	13	11	9	9	11	196	64	35
1984	28	11	10	8	9	10	41	176	529	532	1392	2665	451
1985	3058	415	163	727	683	434	317	411	1026	1736	2416	2796	1182
1986	3011	2706	1250	204	14	11	15	62	295	688	1340	2051	970
1987	2671	2946	2603	2000	577	68	233	645	1162	1740	2653	3611	1742
1988	3044	2563	930	99	226	592	960	1263	1380	2104	3017	3755	1661
1989	3939	3337	2691	1871	1311	65	41	259	971	1723	2277	2857	1778
1990	3069	2265	2100	1212	563	558	592	1125	2115	2503	2948	3774	1902
1991	3752	3586	2756	2403	1983	163	187	635	1619	2556	2982	3569	2183
AVG:	2767	2153	1276	664	278	173	203	346	664	1106	1971	2678	1190
MIN:	28	11	8	8	8	8	9	9	9	11	196	64	35
MAX:	4113	3627	2902	2403	2028	1777	1603	2010	2639	3146	3463	3921	2587

Table 4.4.5-5 Difference in simulated monthly average chloride concentration (%) at Chipps Island, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.04%	0.03%	0.71%	1.65%	2.26%	-0.13%	0.95%	1.30%	1.57%	0.15%	0.04%	0.37%	0.74%
1923	0.52%	0.18%	0.35%	0.64%	2.08%	0.73%	0.95%	0.63%	-0.20%	-0.05%	0.04%	0.61%	0.54%
1924	0.57%	-0.14%	-0.47%	-0.16%	0.48%	0.57%	2.42%	1.93%	-0.46%	1.39%	2.00%	0.24%	0.70%
1925	-0.45%	-0.83%	-1.18%	-1.23%	-0.21%	0.69%	0.89%	0.96%	0.14%	-0.01%	-1.17%	-1.08%	-0.29%
1926	0.76%	-0.20%	-0.22%	0.18%	-0.14%	0.07%	1.87%	2.96%	0.30%	-0.34%	-0.81%	-0.72%	0.31%
1927	0.01%	2.32%	10.47%	11.20%	0.44%	0.26%	0.90%	0.36%	-1.55%	-0.03%	0.20%	0.40%	2.08%
1928	0.36%	1.52%	2.27%	2.05%	1.53%	0.41%	1.19%	0.50%	0.05%	0.24%	0.09%	0.08%	0.86%
1929	0.06%	0.22%	0.02%	-0.08%	2.14%	1.34%	0.42%	0.15%	0.21%	0.01%	1.03%	0.77%	0.52%
1930	-0.08%	0.12%	0.81%	0.31%	2.33%	2.75%	-0.40%	2.32%	0.44%	-0.27%	4.93%	4.05%	1.44%
1931	-0.06%	1.72%	1.57%	-1.41%	-4.40%	-3.12%	0.40%	3.49%	3.78%	1.40%	-0.22%	-0.26%	0.24%
1932	-0.38%	-1.55%	3.22%	1.91%	8.11%	2.50%	1.94%	0.85%	0.39%	0.03%	0.26%	0.30%	1.47%
1933	0.13%	-0.01%	-0.01%	4.59%	6.24%	3.63%	1.43%	0.29%	0.09%	0.13%	0.54%	0.43%	1.46%
1934	-0.12%	-0.28%	-0.06%	-2.41%	-1.85%	-0.31%	-0.12%	0.03%	-0.77%	-0.97%	1.47%	2.00%	-0.28%
1935	0.48%	-0.66%	-0.29%	2.71%	0.01%	1.78%	2.00%	2.43%	10.12%	3.85%	0.97%	0.44%	1.99%
1936	1.96%	0.08%	-1.43%	-0.39%	-2.10%	2.31%	0.49%	1.66%	0.40%	0.62%	1.05%	1.31%	0.50%
1937	0.15%	-0.48%	-0.33%	0.41%	1.60%	0.39%	1.24%	1.59%	0.00%	-0.21%	0.22%	-0.01%	0.38%
1938	0.01%	0.90%	1.49%	1.37%	0.10%	0.14%	0.57%	0.82%	1.37%	0.17%	0.06%	1.39%	0.70%
1939	4.64%	2.55%	1.45%	0.97%	-0.08%	1.06%	1.09%	-0.71%	-0.23%	0.01%	-0.02%	0.39%	0.93%
1940	-0.38%	0.01%	0.40%	0.71%	0.92%	0.29%	0.25%	1.28%	-2.31%	-0.85%	-0.16%	0.24%	0.03%
1941	-0.28%	-1.35%	-1.43%	0.25%	0.13%	-0.02%	0.47%	1.09%	0.65%	0.17%	0.37%	1.63%	0.14%
1942	4.26%	2.89%	2.43%	0.15%	0.22%	0.71%	0.85%	1.33%	2.63%	0.51%	0.06%	1.20%	1.44%
1943	2.37%	4.86%	6.41%	0.58%	0.33%	0.30%	1.09%	1.19%	0.15%	0.37%	0.18%	0.39%	1.52%
1944	0.35%	0.05%	0.09%	-0.06%	0.23%	1.43%	0.84%	0.98%	1.21%	0.46%	0.15%	0.22%	0.50%
1945	0.08%	1.42%	2.17%	1.01%	1.54%	2.63%	1.14%	1.99%	0.40%	0.07%	0.01%	0.39%	1.07%
1946	0.17%	0.69%	1.35%	0.51%	0.37%	0.35%	0.60%	0.24%	0.77%	0.21%	0.08%	0.77%	0.51%
1947	0.01%	0.61%	1.21%	0.55%	1.43%	-1.47%	-0.87%	0.32%	-0.42%	-0.30%	0.15%	-0.71%	0.04%
1948	-1.05%	-0.34%	0.40%	0.34%	0.10%	0.27%	1.13%	2.46%	1.36%	0.39%	0.11%	0.86%	0.50%
1949	0.34%	0.14%	2.15%	0.06%	-0.15%	0.14%	0.35%	0.22%	-0.07%	0.18%	0.36%	0.54%	0.35%
1950	0.80%	0.47%	0.51%	3.81%	6.56%	0.38%	1.13%	23.55%	6.90%	3.20%	1.15%	0.73%	4.10%
1951	-1.94%	-2.70%	0.29%	0.60%	0.39%	1.39%	1.82%	1.87%	1.42%	0.83%	0.34%	0.60%	0.41%
1952	1.03%	0.41%	0.44%	0.24%	0.35%	0.37%	0.78%	0.82%	1.37%	0.22%	0.07%	1.51%	0.63%
1953	3.87%	1.14%	0.93%	0.31%	0.65%	0.42%	2.33%	2.57%	2.09%	0.26%	0.04%	1.36%	1.33%
1954	1.31%	4.83%	3.99%	2.82%	1.23%	0.53%	1.05%	0.78%	0.03%	0.06%	0.04%	0.03%	1.39%
1955	0.22%	0.22%	2.99%	3.27%	1.04%	0.41%	0.01%	0.65%	0.37%	0.11%	0.17%	0.13%	0.80%
1956	0.38%	0.33%	0.92%	0.15%	0.17%	0.60%	0.04%	1.33%	1.73%	0.32%	0.01%	1.03%	0.59%
1957	2.54%	1.35%	0.62%	0.42%	0.75%	0.56%	0.80%	1.61%	-0.10%	0.16%	0.16%	-0.11%	0.73%
1958	2.86%	1.75%	1.79%	1.00%	0.09%	-0.01%	0.45%	0.87%	1.78%	-0.18%	-0.23%	3.33%	1.13%
1959	5.57%	0.31%	-1.05%	-1.03%	0.49%	0.42%	0.05%	-0.19%	-0.19%	-0.94%	-0.48%	-0.91%	0.17%
1960	-0.60%	1.71%	1.69%	1.13%	3.45%	2.56%	0.72%	4.56%	1.40%	0.85%	-0.10%	-0.36%	1.42%
1961	0.67%	0.39%	0.86%	1.56%	3.86%	2.31%	0.54%	0.57%	0.28%	0.00%	-0.21%	-0.21%	0.89%
1962	0.47%	-0.64%	-0.18%	1.25%	0.65%	1.73%	3.63%	2.19%	0.14%	-1.30%	-0.77%	0.11%	0.61%
1963	2.75%	3.53%	4.38%	3.95%	0.64%	0.70%	0.42%	1.42%	0.24%	0.09%	0.09%	-1.92%	1.36%
1964	-0.67%	1.42%	0.44%	12.09%	6.51%	5.16%	2.64%	-3.33%	-0.34%	0.75%	0.02%	-0.41%	2.02%
1965	0.59%	0.65%	0.10%	0.16%	0.70%	-0.89%	0.98%	0.93%	0.01%	0.34%	0.20%	0.64%	0.37%
1966	0.55%	4.93%	5.14%	3.33%	2.31%	1.22%	1.49%	1.01%	0.02%	-0.05%	0.03%	0.04%	1.67%
1967	0.04%	0.44%	1.76%	0.33%	0.38%	0.43%	0.66%	0.89%	1.33%	2.09%	2.00%	2.91%	1.11%
1968	2.80%	0.91%	0.99%	1.19%	0.47%	0.82%	0.50%	3.28%	0.08%	-0.84%	0.01%	0.23%	0.87%
1969	0.07%	-0.06%	1.08%	0.65%	-0.20%	0.45%	0.76%	0.88%	1.38%	0.83%	0.50%	4.84%	0.93%
1970	4.92%	2.86%	3.29%	0.12%	0.24%	0.55%	0.10%	1.21%	0.07%	0.43%	0.20%	0.04%	1.17%
1971	-0.03%	1.00%	2.31%	0.50%	0.44%	0.82%	0.13%	-0.80%	-2.46%	-1.24%	-0.21%	1.21%	0.14%
1972	1.10%	0.83%	4.89%	5.43%	3.76%	2.34%	0.12%	-0.03%	0.05%	-0.04%	0.08%	-0.01%	1.54%
1973	0.04%	1.09%	2.33%	0.47%	0.29%	0.44%	0.96%	1.38%	-0.62%	2.74%	-0.37%	3.62%	1.03%
1974	6.87%	4.82%	0.34%	0.22%	0.55%	-0.04%	0.48%	1.43%	1.38%	1.57%	0.43%	5.18%	1.94%
1975	6.82%	2.23%	1.56%	1.02%	0.74%	1.18%	1.94%	1.91%	2.23%	-2.71%	-1.79%	0.99%	1.34%
1976	-3.20%	-1.34%	0.34%	0.14%	-0.94%	3.44%	4.40%	1.34%	0.93%	0.45%	-0.89%	0.45%	0.43%
1977	-0.52%	-0.85%	-0.97%	-1.42%	-0.69%	-0.27%	-0.06%	-0.06%	-0.04%	0.18%	0.46%	-0.11%	-0.36%
1978	0.04%	0.30%	0.16%	0.08%	0.23%	0.33%	0.91%	1.60%	1.93%	-2.20%	0.60%	0.56%	0.38%
1979	0.93%	-1.28%	-0.21%	10.53%	2.72%	1.00%	2.26%	1.19%	-0.04%	-0.02%	-0.03%	0.92%	1.50%
1980	0.53%	0.60%	5.86%	4.32%	-0.24%	-0.50%	0.78%	3.35%	2.77%	1.47%	0.81%	1.32%	1.76%
1981	1.08%	0.15%	0.57%	2.98%	2.38%	2.97%	4.91%	4.55%	1.51%	0.19%	0.20%	0.14%	1.80%
1982	0.40%	4.51%	0.93%	0.22%	0.28%	0.19%	0.43%	1.05%	1.93%	0.56%	0.02%	1.59%	1.01%
1983	4.27%	1.08%	0.41%	0.16%	0.10%	0.09%	0.50%	0.76%	0.85%	1.77%	3.42%	3.83%	1.44%
1984	2.56%	0.47%	0.14%	0.36%	0.57%	0.70%	0.21%	1.33%	1.25%	0.47%	-0.01%	0.17%	0.68%
1985	0.36%	1.93%	1.76%	0.37%	0.85%	2.17%	1.74%	1.23%	-0.01%	-0.25%	0.06%	0.10%	0.86%
1986	0.19%	0.10%	0.60%	2.87%	0.33%	0.22%	0.64%	2.36%	1.96%	1.05%	3.32%	4.35%	1.50%
1987	2.23%	0.75%	0.50%	0.18%	3.03%	6.30%	-1.54%	-0.05%	0.91%	0.57%	0.65%	0.45%	1.16%
1988	0.27%	-0.05%	1.68%	5.58%	0.71%	0.19%	2.02%	2.70%	-0.84%	0.46%	1.09%	1.71%	1.29%
1989	-0.31%	0.36%	2.29%	2.28%	1.07%	0.88%	1.40%	0.16%	1.02%	0.71%	0.37%	0.69%	0.91%
1990	1.23%	2.71%	1.93%	0.54%	-0.04%	1.49%	0.93%	3.40%	0.70%	-0.45%	0.13%	0.18%	1.06%
1991	-0.21%	-1.02%	-0.27%	0.73%	0.93%	1.97%	3.80%	3.32%	4.63%	3.94%	4.04%	2.13%	2.00%
AVG:	0.96%	0.82%	1.31%	1.45%	1.02%	0.94%	1.03%	1.60%	0.86%	0.34%	0.39%	0.85%	0.96%
MIN:	-3.20%	-2.70%	-1.43%	-2.41%	-4.40%	-3.12%	-1.54%	-3.33%	-2.46%	-2.71%	-1.79%	-1.92%	-0.36%
MAX:	6.87%	4.93%	10.47%	12.09%	8.11%	6.30%	4.91%	23.55%	10.12%	3.94%	4.93%	5.18%	4.10%

Table 4.4.5-6 Difference in simulated monthly average chloride concentration (%) at Chipps Island, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.04%	0.04%	0.61%	1.55%	2.20%	-0.15%	0.88%	1.29%	0.95%	-1.17%	-0.82%	1.07%	0.54%
1923	1.43%	0.02%	0.73%	1.92%	3.49%	1.04%	1.07%	1.25%	-0.04%	-0.12%	0.03%	1.38%	1.02%
1924	1.34%	-0.49%	-0.04%	-0.44%	-1.11%	-0.03%	0.52%	0.14%	-0.08%	0.25%	0.22%	0.06%	0.03%
1925	-0.86%	-0.86%	-1.44%	-1.52%	-1.14%	0.56%	0.83%	4.41%	0.95%	0.02%	0.04%	0.68%	0.14%
1926	0.05%	0.00%	0.12%	-0.08%	1.26%	-0.18%	0.38%	1.60%	0.38%	0.04%	-2.01%	-2.00%	-0.04%
1927	-0.07%	0.14%	7.75%	8.59%	0.79%	0.83%	0.94%	3.24%	-2.88%	5.70%	3.55%	2.10%	2.56%
1928	0.75%	4.39%	4.69%	3.12%	2.62%	0.49%	1.18%	0.81%	0.08%	-0.19%	0.06%	-0.07%	1.49%
1929	0.06%	1.07%	0.10%	-0.57%	1.93%	1.21%	0.42%	0.14%	0.12%	0.06%	0.76%	0.62%	0.49%
1930	0.02%	0.32%	1.37%	1.72%	2.17%	1.84%	0.09%	0.30%	0.26%	0.17%	0.15%	0.14%	0.71%
1931	0.17%	0.64%	0.31%	0.15%	-0.48%	-0.34%	-0.04%	-0.05%	-0.24%	-0.07%	0.09%	0.05%	0.01%
1932	-0.13%	-0.15%	0.60%	0.83%	1.49%	0.68%	1.58%	0.77%	0.37%	0.04%	0.26%	0.24%	0.55%
1933	0.12%	0.33%	0.72%	2.44%	3.70%	2.04%	0.65%	0.14%	0.04%	0.04%	0.12%	0.03%	0.86%
1934	-0.02%	0.03%	0.02%	0.09%	-0.02%	0.03%	0.03%	0.03%	0.02%	0.01%	0.38%	0.51%	0.09%
1935	-0.01%	0.11%	0.06%	0.00%	0.09%	0.18%	1.02%	1.50%	12.15%	4.46%	1.10%	0.38%	1.75%
1936	1.61%	-0.51%	-1.87%	2.11%	-0.79%	3.75%	3.36%	-4.98%	-0.33%	-0.02%	-0.06%	1.24%	0.29%
1937	-0.41%	-1.12%	-0.68%	0.48%	2.01%	-0.12%	0.80%	-4.02%	-0.12%	-0.04%	0.00%	-0.05%	-0.27%
1938	0.02%	-4.75%	-6.65%	1.49%	0.07%	0.14%	0.56%	0.83%	0.92%	1.51%	-0.12%	3.08%	-0.24%
1939	9.55%	2.01%	1.07%	4.18%	3.52%	1.54%	0.50%	0.41%	-0.15%	-0.08%	0.46%	0.44%	1.96%
1940	-0.41%	0.19%	0.06%	-1.00%	0.33%	0.09%	0.75%	-3.64%	3.41%	1.22%	-0.36%	1.74%	0.20%
1941	1.92%	-1.24%	-2.79%	0.27%	0.14%	-0.21%	0.40%	0.94%	-0.04%	-0.16%	-0.62%	4.39%	0.25%
1942	15.24%	11.93%	8.63%	0.42%	0.19%	0.53%	0.80%	1.33%	-9.55%	-4.77%	-0.41%	4.29%	2.39%
1943	5.84%	27.25%	37.14%	2.07%	0.55%	0.30%	1.08%	-1.35%	-0.14%	7.47%	3.07%	1.69%	7.08%
1944	0.39%	-0.46%	0.16%	-0.19%	-3.16%	-0.61%	0.47%	0.91%	1.09%	0.45%	0.16%	0.39%	-0.03%
1945	0.33%	1.55%	1.81%	0.40%	1.17%	2.40%	1.94%	3.60%	0.94%	0.12%	-0.22%	0.35%	1.20%
1946	0.18%	3.01%	5.35%	0.50%	0.00%	0.42%	1.05%	-6.66%	-1.97%	-0.27%	-0.11%	-0.48%	0.08%
1947	0.18%	0.63%	0.42%	0.22%	1.15%	0.22%	-0.16%	0.17%	-0.21%	-0.46%	-0.36%	-0.51%	0.11%
1948	-0.58%	-0.80%	1.77%	1.63%	0.01%	-0.01%	-0.16%	1.21%	0.44%	0.12%	0.03%	0.43%	0.34%
1949	-0.51%	-1.01%	-0.50%	-1.29%	-1.43%	-0.88%	0.87%	0.46%	-0.06%	0.36%	2.80%	2.74%	0.13%
1950	0.20%	0.88%	2.45%	3.52%	6.14%	2.85%	3.77%	23.83%	6.81%	3.08%	1.00%	2.61%	4.76%
1951	0.07%	-2.54%	0.28%	0.10%	0.33%	0.72%	1.23%	-1.89%	2.91%	2.33%	1.17%	1.38%	0.51%
1952	1.54%	0.38%	0.17%	0.25%	0.34%	0.39%	0.48%	0.78%	1.03%	0.18%	-0.02%	3.68%	0.77%
1953	4.28%	0.95%	0.74%	0.33%	0.61%	0.41%	2.31%	2.54%	2.40%	0.57%	0.14%	1.57%	1.40%
1954	1.52%	5.66%	4.68%	3.26%	1.33%	0.53%	1.05%	0.78%	0.03%	-0.04%	-0.01%	0.02%	1.57%
1955	-0.89%	-0.38%	2.08%	1.11%	0.17%	-0.59%	0.25%	1.08%	0.39%	0.12%	0.21%	0.15%	0.31%
1956	0.07%	0.07%	1.88%	0.30%	0.29%	0.66%	0.83%	1.47%	-8.11%	0.09%	-0.68%	3.11%	0.00%
1957	-9.73%	-7.49%	-2.89%	0.00%	1.45%	0.26%	1.37%	2.00%	0.12%	1.61%	0.86%	-3.93%	-1.36%
1958	-0.58%	1.57%	1.63%	0.77%	0.10%	0.19%	0.43%	0.91%	0.73%	2.66%	-0.02%	6.71%	1.26%
1959	8.70%	2.09%	0.65%	-0.13%	0.24%	0.70%	1.29%	0.76%	0.53%	-1.44%	-1.26%	-0.58%	0.96%
1960	-0.24%	-0.28%	-0.22%	-0.27%	-0.17%	-0.49%	0.00%	0.85%	0.44%	-0.08%	0.02%	-0.01%	-0.04%
1961	0.17%	0.06%	0.50%	0.59%	0.78%	0.46%	0.21%	0.46%	-0.10%	-0.11%	-0.03%	-0.08%	0.24%
1962	-0.93%	-1.57%	-0.98%	0.36%	0.35%	-0.26%	0.32%	0.34%	0.04%	0.01%	0.00%	0.12%	-0.18%
1963	1.26%	2.57%	2.96%	0.80%	0.92%	3.97%	0.71%	3.18%	0.48%	1.07%	3.15%	-0.66%	1.70%
1964	-0.09%	1.71%	0.45%	32.22%	17.76%	6.10%	-0.31%	-1.31%	-0.35%	0.21%	0.28%	-0.91%	4.65%
1965	0.14%	0.60%	1.15%	0.27%	0.69%	-0.97%	0.94%	0.95%	-4.18%	3.99%	2.54%	2.19%	0.69%
1966	1.61%	1.79%	1.99%	2.13%	1.82%	0.81%	1.38%	0.97%	0.03%	-0.07%	0.01%	0.05%	1.04%
1967	0.05%	0.10%	0.85%	0.18%	0.49%	0.46%	0.67%	0.90%	1.14%	-0.92%	5.38%	10.53%	1.65%
1968	7.99%	1.69%	1.16%	1.28%	0.48%	0.61%	0.22%	0.86%	0.00%	-0.11%	0.02%	0.04%	1.19%
1969	-0.19%	-0.11%	0.35%	0.52%	0.25%	0.50%	0.68%	0.89%	0.13%	2.14%	0.02%	11.25%	1.37%
1970	12.56%	1.51%	0.50%	0.10%	0.25%	0.55%	0.19%	1.60%	0.09%	0.69%	0.33%	0.10%	1.54%
1971	0.05%	1.00%	2.17%	0.48%	0.44%	0.82%	0.17%	2.07%	-0.64%	-0.86%	-0.16%	1.45%	0.58%
1972	1.25%	0.86%	5.17%	5.72%	3.92%	2.41%	0.14%	-0.03%	0.05%	-0.06%	-0.03%	0.01%	1.62%
1973	-0.69%	-2.66%	-6.98%	-0.23%	0.42%	0.51%	0.97%	-6.67%	-1.00%	2.95%	-0.96%	4.38%	-0.83%
1974	8.37%	7.80%	0.34%	0.21%	0.55%	-0.24%	0.36%	0.16%	-3.47%	3.27%	3.11%	16.35%	3.07%
1975	16.61%	4.64%	2.79%	0.70%	0.26%	2.77%	3.25%	2.09%	-4.44%	-1.33%	3.66%	7.35%	3.20%
1976	2.78%	0.94%	1.01%	0.36%	-2.70%	0.37%	2.28%	0.51%	0.80%	0.26%	1.11%	0.70%	0.70%
1977	-0.49%	-0.96%	-0.03%	0.13%	-0.04%	0.02%	0.05%	-0.07%	-0.01%	0.42%	0.09%	0.07%	-0.07%
1978	0.04%	0.14%	0.04%	-0.04%	0.21%	0.29%	0.81%	1.66%	1.48%	1.04%	-0.01%	1.09%	0.56%
1979	1.23%	0.52%	0.30%	2.39%	0.74%	0.61%	-0.11%	-2.46%	-0.10%	0.18%	0.01%	0.20%	0.29%
1980	-0.01%	-0.28%	1.19%	1.42%	0.54%	2.17%	3.70%	9.10%	6.42%	2.83%	1.06%	2.38%	2.54%
1981	1.92%	-0.19%	0.93%	6.20%	3.83%	2.39%	1.68%	1.12%	0.25%	0.02%	0.03%	0.03%	1.52%
1982	-0.01%	-0.04%	0.30%	0.40%	0.43%	0.18%	0.43%	1.06%	-4.27%	-0.94%	-0.38%	4.98%	0.18%
1983	11.96%	1.47%	0.61%	0.18%	0.10%	0.09%	0.48%	0.86%	0.89%	-0.13%	7.67%	11.16%	2.95%
1984	4.88%	0.48%	0.14%	0.33%	0.55%	0.64%	0.19%	1.63%	0.44%	1.17%	0.60%	0.45%	0.96%
1985	0.53%	2.18%	1.78%	0.37%	0.85%	1.93%	1.53%	1.39%	0.00%	-0.26%	0.11%	0.16%	0.88%
1986	0.28%	0.19%	0.66%	2.93%	0.34%	0.19%	0.76%	-6.57%	-2.24%	-3.50%	5.42%	7.12%	0.46%
1987	3.84%	0.67%	0.79%	0.22%	3.90%	6.51%	-0.79%	-0.14%	2.45%	1.63%	2.11%	1.84%	1.92%
1988	0.41%	-0.24%	0.75%	1.67%	0.32%	0.18%	-0.36%	0.96%	0.26%	-0.32%	0.05%	0.84%	0.38%
1989	-0.21%	-0.33%	-0.18%	-0.04%	0.04%	0.32%	0.95%	0.07%	0.07%	0.08%	-0.05%	-0.64%	0.01%
1990	-0.78%	0.76%	0.88%	0.36%	0.02%	-0.42%	-0.30%	0.45%	0.08%	-0.15%	-0.36%	-0.37%	0.01%
1991	0.25%	0.00%	0.12%	0.62%	0.41%	0.69%	-0.35%	-1.21%	2.67%	2.18%	0.13%	-1.18%	0.36%
AVG:	1.66%	0.98%	1.32%	1.44%	1.01%	0.80%	0.80%	0.75%	0.15%	0.56%	0.64%	1.72%	0.99%
MIN:	-9.73%	-7.49%	-6.98%	-1.52%	-3.16%	-0.97%	-0.79%	-6.67%	-9.55%	-4.77%	-2.01%	-3.93%	-1.36%
MAX:	16.61%	27.25%	37.14%	32.22%	17.76%	6.51%	3.77%	23.83%	12.15%	7.47%	7.67%	16.35%	7.08%

Table 4.4.5-7 Simulated monthly average chloride concentration (mg/L) at Collinsville, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1772	1847	610	224	28	12	11	9	9	79	624	1373	550
1923	1778	1469	97	15	27	72	20	21	124	383	951	1562	543
1924	1927	1638	1348	1071	405	224	388	929	1357	1076	1526	2461	1196
1925	2564	2090	1078	652	26	12	14	22	127	593	1167	1935	857
1926	2141	1921	1522	444	20	70	26	59	402	866	1312	1989	898
1927	2271	472	137	23	9	9	9	9	53	171	670	1494	444
1928	1991	728	454	145	29	8	10	16	210	357	816	1603	530
1929	1975	1403	944	896	433	243	382	585	740	1190	1602	2192	1049
1930	2572	2057	659	92	42	12	55	134	414	807	1206	1935	832
1931	2224	1732	1197	686	482	567	665	972	1287	989	1506	2452	1230
1932	2505	2002	280	41	31	64	98	86	118	523	1182	1842	731
1933	2282	1940	1135	464	282	206	194	454	770	1211	1548	2001	1040
1934	2628	2051	898	191	74	90	134	443	648	1086	1803	2405	1037
1935	2494	1785	1327	105	73	22	10	11	33	251	847	1779	728
1936	1959	1517	1353	91	15	12	12	16	102	360	882	1693	668
1937	2021	1477	1260	933	51	17	15	14	70	323	903	1811	741
1938	2248	514	11	11	11	9	9	8	9	75	605	656	347
1939	217	473	597	374	330	185	162	184	525	892	1274	1939	596
1940	2029	1758	1654	107	15	9	8	11	96	261	828	1669	704
1941	2124	1482	53	10	10	9	9	10	15	124	618	789	438
1942	804	998	38	11	8	10	10	10	10	111	689	815	293
1943	738	464	53	10	9	9	11	13	74	202	688	1517	316
1944	1985	1754	1487	946	109	38	66	115	238	613	1324	1829	875
1945	1707	1208	601	457	28	13	30	37	116	359	945	1634	595
1946	2045	1033	22	8	9	14	40	52	144	384	948	1609	526
1947	1879	1375	668	660	245	63	76	170	357	687	1154	1713	754
1948	1759	1562	1345	590	236	144	22	11	37	240	830	1409	682
1949	1729	1467	932	696	517	25	33	73	219	589	1121	1763	764
1950	2061	1693	1272	186	13	32	23	23	105	345	913	1583	687
1951	1827	75	9	10	9	9	16	15	98	262	785	1602	393
1952	2025	1329	44	12	8	10	9	8	9	74	612	360	375
1953	125	427	40	8	9	15	18	13	16	89	586	663	167
1954	1005	893	941	115	8	8	9	11	161	299	786	1401	470
1955	1717	1100	219	81	91	206	143	137	314	700	1312	2027	671
1956	2061	1599	31	10	8	8	12	10	15	120	669	600	428
1957	483	814	1227	833	62	9	12	20	102	263	815	1590	519
1958	815	760	196	14	9	10	9	9	9	77	616	449	248
1959	181	509	1061	100	10	12	81	204	266	414	931	1461	436
1960	1786	1304	1196	1048	94	39	72	112	411	802	1337	2049	854
1961	2128	1484	726	540	47	43	100	203	466	748	1017	1533	753
1962	1913	1340	668	712	44	14	45	77	265	411	881	1454	652
1963	147	230	72	112	13	10	9	10	38	175	699	1372	241
1964	1188	151	351	122	77	170	147	158	337	658	1099	1605	505
1965	1916	1250	26	8	9	10	9	10	101	150	581	1426	458
1966	1905	481	163	24	13	12	26	69	182	412	971	1750	501
1967	1702	1133	62	16	9	9	11	10	9	42	429	275	309
1968	135	449	664	86	9	9	20	122	256	437	924	1507	385
1969	1662	1277	222	11	11	10	9	8	9	77	608	382	357
1970	101	260	20	9	8	9	16	65	221	151	538	1304	225
1971	1809	912	21	9	8	8	10	11	32	81	537	644	340
1972	959	1372	620	298	65	12	65	224	180	327	900	1829	571
1973	1880	528	44	12	11	9	13	18	72	225	795	1508	426
1974	1698	59	8	8	8	8	8	10	20	128	680	422	255
1975	278	644	733	567	24	9	12	11	12	121	618	523	296
1976	260	347	590	855	710	280	239	741	1469	1776	2047	2409	977
1977	2510	2235	1444	1179	1041	864	751	1040	1335	1042	1536	2421	1450
1978	2555	2017	964	29	13	11	12	12	20	135	658	1208	636
1979	1608	1743	1448	154	17	12	16	23	71	304	902	1780	673
1980	1942	1348	399	11	10	10	12	16	96	276	810	1366	525
1981	1766	1870	1102	138	18	11	22	117	491	845	1216	1789	782
1982	1763	123	8	13	9	12	8	9	10	111	684	312	255
1983	26	10	9	13	10	9	9	8	8	10	45	20	15
1984	13	9	8	8	8	9	14	44	168	158	593	1423	205
1985	1726	177	57	257	250	143	98	124	407	774	1228	1505	562
1986	1711	1527	555	73	10	8	12	20	86	232	588	1058	490
1987	1509	1704	1417	972	231	27	67	220	467	786	1424	2159	915
1988	1737	1410	400	36	66	204	385	550	620	1086	1755	2330	882
1989	2490	1984	1489	910	610	27	15	65	380	769	1133	1606	956
1990	1742	1176	1052	512	208	187	202	482	1105	1359	1670	2316	1001
1991	2333	2205	1589	1316	1027	64	68	222	785	1392	1715	2166	1240
AVG:	1622	1174	642	305	121	68	76	139	279	478	974	1501	615
MIN:	13	9	8	8	8	8	8	8	8	10	45	20	15
MAX:	2628	2235	1654	1316	1041	864	751	1040	1469	1776	2047	2461	1450

Table 4.4.5-8 Difference in simulated monthly average chloride concentration (%) at Collinsville, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.05%	0.07%	0.96%	1.67%	1.94%	0.73%	1.91%	1.42%	1.72%	0.37%	0.06%	0.57%	0.96%
1923	0.73%	0.27%	0.30%	0.50%	2.00%	1.07%	1.34%	1.68%	-0.10%	-0.08%	0.06%	0.95%	0.73%
1924	0.78%	-0.07%	-1.29%	-0.41%	0.73%	0.81%	3.43%	2.57%	-0.94%	2.48%	2.70%	1.22%	1.00%
1925	-0.47%	-1.13%	-1.50%	-1.60%	1.00%	0.80%	1.09%	1.84%	0.42%	0.03%	-1.54%	-1.42%	-0.21%
1926	0.62%	-0.01%	-0.34%	0.32%	0.19%	0.24%	1.67%	3.67%	0.68%	-0.29%	-1.08%	-0.66%	0.42%
1927	-0.18%	2.25%	11.34%	8.32%	0.26%	0.35%	0.96%	1.60%	-1.94%	0.22%	0.31%	0.59%	2.01%
1928	0.51%	1.81%	2.72%	2.50%	1.62%	0.33%	1.33%	1.50%	0.16%	0.69%	0.13%	0.12%	1.12%
1929	0.09%	0.19%	0.04%	-0.09%	2.72%	2.77%	0.65%	0.25%	0.56%	0.22%	1.88%	0.58%	0.82%
1930	-0.11%	0.17%	1.07%	0.55%	2.33%	1.80%	-0.29%	3.40%	0.73%	-0.25%	7.13%	5.51%	1.84%
1931	-0.02%	1.92%	1.53%	-2.18%	-5.40%	-4.71%	-0.20%	2.96%	4.07%	1.60%	-0.12%	-0.19%	-0.06%
1932	-0.20%	-1.55%	3.03%	0.47%	4.10%	2.56%	2.48%	1.74%	0.78%	0.12%	0.39%	0.40%	1.19%
1933	0.15%	-0.02%	-0.02%	4.98%	7.88%	4.83%	2.03%	0.44%	0.15%	0.24%	0.64%	0.58%	1.82%
1934	-0.20%	0.00%	0.04%	-2.43%	-1.76%	-0.13%	0.01%	0.09%	-1.06%	-2.16%	1.01%	2.27%	-0.36%
1935	0.61%	-0.81%	-0.38%	2.92%	-0.44%	1.72%	1.73%	2.83%	13.48%	4.85%	1.12%	1.12%	2.40%
1936	3.05%	0.77%	-2.20%	-1.12%	-0.92%	0.81%	1.78%	2.32%	0.74%	0.26%	1.05%	2.78%	0.78%
1937	-0.04%	-0.65%	-0.43%	0.35%	1.57%	0.49%	1.32%	1.74%	0.26%	-0.39%	0.97%	0.01%	0.43%
1938	0.04%	0.86%	1.54%	1.14%	0.19%	0.20%	0.73%	0.95%	1.60%	0.38%	0.10%	1.77%	0.79%
1939	4.23%	3.02%	2.09%	1.64%	0.38%	4.01%	1.47%	-0.69%	-0.23%	0.04%	-0.02%	0.57%	1.38%
1940	-0.56%	0.04%	0.54%	1.05%	1.02%	0.33%	0.56%	1.79%	-2.26%	-1.08%	-0.21%	0.40%	0.13%
1941	-0.06%	-1.42%	-1.78%	0.27%	0.24%	0.21%	0.60%	1.32%	1.40%	0.38%	0.53%	1.99%	0.31%
1942	5.10%	3.87%	2.50%	0.26%	0.23%	0.67%	0.96%	1.50%	2.39%	0.76%	0.10%	1.61%	1.66%
1943	3.29%	6.38%	6.95%	0.45%	0.44%	0.36%	1.28%	1.68%	0.43%	0.57%	0.26%	0.57%	1.89%
1944	0.48%	0.06%	0.12%	-0.01%	-0.07%	0.88%	1.09%	1.64%	1.61%	0.54%	0.20%	0.45%	0.58%
1945	0.10%	1.64%	2.76%	1.35%	1.39%	1.79%	1.91%	2.41%	0.76%	0.12%	-0.01%	0.67%	1.24%
1946	0.63%	0.94%	1.72%	0.50%	0.81%	0.77%	0.98%	1.45%	1.16%	0.32%	0.12%	1.09%	0.87%
1947	0.08%	0.72%	1.55%	0.37%	1.41%	-1.54%	-0.73%	0.49%	-0.51%	-0.43%	-0.02%	-0.81%	0.05%
1948	-1.10%	-0.36%	0.71%	0.41%	0.17%	0.45%	1.48%	2.31%	1.72%	0.55%	0.16%	1.40%	0.66%
1949	0.48%	0.72%	2.65%	0.47%	0.58%	0.11%	-0.05%	0.44%	-0.02%	0.24%	0.36%	0.75%	0.56%
1950	1.11%	0.55%	0.71%	4.05%	4.32%	0.08%	1.50%	15.75%	7.53%	3.60%	1.47%	1.00%	3.47%
1951	-3.29%	-2.73%	0.31%	0.46%	0.43%	0.44%	1.53%	2.70%	1.85%	1.07%	0.46%	0.95%	0.35%
1952	1.02%	0.43%	0.83%	0.25%	0.39%	0.43%	1.01%	1.01%	1.61%	0.42%	0.16%	1.42%	0.75%
1953	3.31%	1.48%	1.27%	0.28%	0.79%	0.84%	1.69%	2.14%	3.01%	0.61%	0.07%	1.74%	1.44%
1954	1.86%	6.20%	5.14%	3.27%	1.17%	0.53%	1.15%	1.61%	0.14%	0.16%	0.08%	0.06%	1.78%
1955	0.34%	0.33%	3.51%	3.50%	1.48%	0.53%	0.10%	0.99%	0.54%	0.22%	0.07%	0.19%	0.98%
1956	0.47%	0.43%	0.29%	0.14%	0.06%	0.56%	1.22%	1.73%	1.52%	0.51%	0.01%	1.53%	0.71%
1957	3.54%	1.72%	0.99%	0.49%	0.88%	0.66%	1.51%	2.44%	0.07%	0.29%	0.21%	-0.25%	1.05%
1958	3.68%	2.75%	2.10%	0.89%	0.21%	0.01%	0.99%	1.13%	1.88%	-0.19%	-0.29%	4.16%	1.44%
1959	6.75%	0.90%	-0.88%	-0.73%	0.47%	0.95%	0.26%	-0.18%	-0.21%	-1.36%	-0.60%	-1.13%	0.35%
1960	-0.84%	2.07%	2.21%	2.16%	3.24%	2.05%	0.88%	5.82%	2.05%	1.12%	-0.11%	-0.46%	1.68%
1961	0.89%	0.22%	1.21%	1.99%	3.39%	2.22%	0.82%	0.77%	0.55%	0.24%	-0.16%	0.35%	1.04%
1962	1.08%	-0.80%	-0.44%	1.57%	0.86%	0.99%	4.34%	3.21%	0.30%	-1.73%	-0.96%	0.25%	0.72%
1963	2.65%	4.34%	5.48%	3.22%	0.83%	0.49%	0.56%	1.69%	0.75%	0.07%	0.11%	-1.90%	1.52%
1964	-0.92%	1.74%	0.51%	10.74%	7.00%	5.39%	3.46%	-3.85%	-0.27%	0.99%	0.02%	-0.59%	2.02%
1965	0.71%	0.70%	1.89%	0.23%	0.67%	0.62%	1.20%	1.72%	0.17%	0.50%	0.31%	1.35%	0.84%
1966	0.76%	5.61%	5.80%	3.23%	2.82%	1.22%	1.94%	1.51%	0.20%	-0.02%	0.07%	0.07%	1.93%
1967	0.07%	0.60%	1.77%	0.32%	0.66%	0.44%	0.82%	1.13%	1.52%	2.87%	2.72%	3.82%	1.39%
1968	3.46%	1.07%	1.31%	1.83%	0.58%	0.73%	0.99%	4.49%	0.16%	-0.96%	-0.12%	0.20%	1.15%
1969	0.10%	-0.04%	1.56%	0.61%	0.25%	0.57%	0.95%	1.11%	1.65%	0.34%	0.50%	4.51%	1.01%
1970	5.91%	3.80%	2.67%	0.14%	0.29%	0.56%	0.88%	1.79%	0.15%	0.66%	0.26%	0.07%	1.43%
1971	0.03%	1.31%	2.06%	0.52%	0.75%	0.70%	1.20%	1.88%	-0.90%	-1.53%	-0.28%	1.67%	0.62%
1972	1.42%	0.56%	6.19%	6.84%	5.05%	1.96%	0.51%	0.07%	0.19%	0.06%	0.18%	-0.01%	1.92%
1973	0.10%	1.28%	3.37%	0.48%	0.27%	0.51%	1.34%	1.73%	-1.32%	4.42%	-0.51%	5.32%	1.41%
1974	9.49%	5.39%	0.38%	0.20%	0.57%	0.24%	0.70%	1.65%	2.08%	1.71%	0.57%	6.06%	2.42%
1975	7.69%	2.87%	1.97%	1.38%	0.90%	0.74%	1.88%	1.89%	2.55%	-1.93%	-1.44%	1.28%	1.65%
1976	-4.17%	-1.37%	0.45%	0.18%	-1.11%	3.50%	5.47%	1.76%	1.28%	0.36%	-1.28%	0.86%	0.50%
1977	-0.71%	-1.28%	-1.26%	-1.91%	-0.82%	-0.31%	0.20%	-0.10%	-0.05%	-0.13%	0.92%	-0.15%	-0.47%
1978	-0.03%	0.43%	0.26%	-0.57%	0.29%	0.32%	1.14%	1.70%	2.49%	-3.26%	0.97%	0.94%	0.39%
1979	1.04%	-1.70%	0.00%	11.01%	1.46%	0.86%	2.38%	1.99%	0.36%	-0.36%	-0.29%	1.43%	1.51%
1980	0.77%	0.81%	6.61%	2.47%	0.12%	-0.13%	1.07%	2.43%	3.44%	1.77%	0.88%	1.71%	1.83%
1981	1.42%	0.23%	0.67%	2.87%	2.02%	1.18%	4.07%	5.71%	1.84%	0.38%	0.26%	0.19%	1.74%
1982	0.60%	3.48%	0.42%	0.35%	0.32%	0.28%	0.46%	1.26%	2.01%	0.88%	0.02%	1.72%	0.98%
1983	2.36%	0.87%	0.42%	0.22%	0.16%	0.11%	0.71%	1.00%	1.14%	1.80%	4.16%	4.36%	1.44%
1984	2.10%	0.49%	0.20%	0.43%	0.63%	0.66%	1.14%	1.46%	2.03%	0.88%	0.01%	0.25%	0.86%
1985	0.47%	0.84%	1.56%	0.43%	1.00%	3.01%	2.18%	1.70%	-0.39%	-0.41%	0.04%	0.12%	0.88%
1986	0.69%	0.06%	0.47%	4.28%	0.19%	0.24%	1.03%	1.79%	2.29%	1.48%	4.31%	4.82%	1.80%
1987	2.79%	0.96%	0.63%	0.32%	2.71%	4.86%	-0.34%	0.04%	1.27%	0.73%	1.06%	0.62%	1.30%
1988	0.93%	0.12%	2.33%	4.36%	0.55%	0.32%	2.96%	3.26%	-0.94%	0.64%	1.37%	2.27%	1.51%
1989	-0.10%	0.21%	3.08%	2.64%	1.37%	1.09%	1.49%	0.50%	1.46%	1.13%	0.51%	1.01%	1.20%
1990	2.38%	3.68%	2.61%	0.74%	0.01%	1.93%	1.25%	4.36%	0.84%	-0.60%	-0.03%	0.20%	1.45%
1991	-0.33%	-1.37%	-0.55%	0.82%	1.17%	1.85%	4.14%	4.40%	4.72%	4.48%	4.88%	2.26%	2.21%
AVG:	1.14%	0.98%	1.52%	1.42%	1.04%	0.96%	1.35%	1.92%	1.13%	0.46%	0.53%	1.13%	1.13%
MIN:	-4.17%	-2.73%	-2.20%	-2.43%	-5.40%	-4.71%	-0.73%	-3.85%	-2.26%	-3.26%	-1.54%	-1.90%	-0.47%
MAX:	9.49%	6.38%	11.34%	11.01%	7.88%	5.39%	5.47%	15.75%	13.48%	4.85%	7.13%	6.06%	3.47%

Table 4.4.5-9 Difference in simulated monthly average chloride concentration (%) at Collinsville, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.06%	0.08%	0.80%	1.54%	1.87%	0.73%	1.89%	1.41%	1.38%	-1.02%	-1.30%	1.50%	0.74%
1923	1.97%	0.14%	1.07%	1.32%	3.62%	1.60%	1.44%	1.97%	0.14%	-0.31%	-0.23%	2.08%	1.23%
1924	1.78%	-0.44%	-0.30%	-0.32%	-1.01%	-0.03%	0.71%	0.03%	-0.11%	0.35%	0.31%	0.09%	0.09%
1925	-1.08%	-1.20%	-1.49%	-1.98%	0.58%	0.69%	1.09%	4.18%	0.82%	0.10%	0.13%	0.71%	0.21%
1926	0.02%	-0.10%	0.17%	-0.12%	-0.61%	0.23%	0.78%	2.04%	0.61%	0.01%	-2.77%	-2.49%	-0.18%
1927	-0.28%	0.51%	8.17%	7.30%	0.26%	0.76%	1.04%	2.03%	-3.16%	7.42%	4.50%	3.54%	2.67%
1928	1.45%	5.04%	5.63%	3.91%	2.71%	0.33%	1.31%	2.59%	0.29%	-0.25%	0.09%	-0.13%	1.91%
1929	0.11%	1.33%	0.10%	-0.65%	2.50%	2.44%	0.64%	0.23%	0.29%	0.27%	1.47%	0.79%	0.79%
1930	0.02%	0.40%	1.72%	1.95%	2.33%	1.47%	0.35%	0.55%	0.45%	0.07%	0.27%	0.22%	0.82%
1931	0.24%	0.91%	0.42%	0.20%	-0.67%	-0.42%	-0.02%	-0.04%	-0.33%	-0.23%	0.05%	0.07%	0.02%
1932	-0.17%	-0.20%	0.42%	0.62%	0.84%	0.79%	1.96%	1.59%	0.74%	0.12%	0.39%	0.33%	0.62%
1933	0.15%	0.40%	0.95%	2.93%	4.52%	2.73%	1.00%	0.24%	0.09%	0.08%	0.17%	0.04%	1.11%
1934	-0.02%	0.06%	0.04%	0.34%	0.09%	0.17%	0.16%	0.08%	0.06%	0.03%	0.50%	0.72%	0.19%
1935	-0.01%	0.07%	0.12%	0.02%	0.16%	0.52%	1.13%	1.91%	15.76%	5.67%	1.06%	0.90%	2.28%
1936	2.21%	-0.08%	-2.61%	1.47%	0.14%	1.88%	2.15%	-0.60%	-0.35%	-0.87%	-0.21%	1.11%	0.35%
1937	-0.79%	-1.46%	-0.84%	0.42%	1.97%	0.09%	0.82%	-0.30%	-0.05%	-0.74%	0.55%	-0.07%	-0.04%
1938	0.07%	-4.38%	-3.30%	1.24%	0.18%	0.20%	0.74%	0.96%	1.08%	1.71%	-0.17%	4.81%	0.26%
1939	13.12%	3.11%	1.51%	5.01%	4.62%	2.15%	1.01%	0.57%	-0.09%	-0.05%	0.48%	0.58%	2.67%
1940	-0.57%	0.30%	0.00%	-1.09%	0.38%	0.33%	0.84%	0.69%	4.77%	1.61%	-0.14%	2.01%	0.76%
1941	2.23%	-1.20%	-3.12%	0.31%	0.24%	0.12%	0.66%	1.11%	0.32%	0.59%	-0.94%	5.51%	0.48%
1942	19.55%	15.69%	8.58%	0.38%	0.22%	0.46%	0.92%	1.46%	0.45%	-4.88%	-0.31%	5.97%	4.04%
1943	8.04%	36.80%	43.83%	1.11%	0.57%	0.35%	1.27%	0.03%	-0.18%	9.79%	4.92%	2.90%	9.12%
1944	0.93%	-0.68%	0.28%	0.02%	-3.30%	-0.38%	0.75%	1.54%	1.52%	0.53%	0.21%	0.71%	0.18%
1945	0.67%	1.86%	2.29%	0.51%	1.04%	1.77%	2.57%	3.91%	1.81%	0.23%	-0.53%	0.50%	1.39%
1946	0.64%	3.56%	4.73%	0.49%	0.43%	0.48%	1.46%	-6.88%	-2.62%	-0.24%	-0.22%	-0.75%	0.09%
1947	0.28%	0.80%	0.52%	-0.06%	1.10%	0.34%	0.09%	0.35%	-0.04%	-0.78%	-0.64%	-0.17%	0.15%
1948	-0.32%	-0.94%	4.13%	1.69%	0.11%	0.07%	0.56%	1.71%	0.96%	0.22%	0.06%	0.67%	0.74%
1949	-0.71%	-1.80%	-0.77%	-1.37%	-1.21%	-0.19%	1.27%	0.85%	-0.06%	0.48%	3.58%	3.67%	0.31%
1950	0.27%	1.25%	3.33%	4.07%	4.38%	2.77%	3.41%	16.06%	7.89%	3.19%	1.13%	3.55%	4.28%
1951	-0.27%	-2.94%	0.31%	0.27%	0.35%	0.75%	1.62%	-0.19%	4.02%	2.67%	1.45%	1.97%	0.83%
1952	1.69%	0.40%	0.74%	0.25%	0.38%	0.44%	0.65%	1.00%	1.20%	-0.46%	0.28%	4.86%	0.95%
1953	5.92%	1.28%	1.11%	0.30%	0.75%	0.82%	1.66%	2.12%	3.22%	1.01%	0.19%	2.01%	1.70%
1954	2.15%	7.35%	6.04%	3.79%	1.21%	0.54%	1.15%	1.61%	0.14%	0.02%	0.01%	0.04%	2.00%
1955	-0.69%	-0.57%	2.59%	1.38%	0.35%	-0.77%	0.51%	1.45%	0.57%	0.26%	0.13%	0.23%	0.45%
1956	0.09%	0.11%	0.36%	0.20%	0.14%	0.58%	1.43%	1.73%	-4.82%	0.86%	-1.34%	4.07%	0.29%
1957	-10.94%	-9.90%	-4.37%	-0.06%	2.11%	0.53%	1.86%	2.80%	0.42%	1.62%	1.38%	-5.63%	-1.68%
1958	-0.44%	2.38%	2.07%	0.62%	0.25%	0.26%	0.89%	1.16%	1.53%	-0.21%	-0.23%	7.66%	1.33%
1959	11.09%	2.77%	0.86%	0.15%	0.35%	0.76%	1.16%	0.77%	0.77%	-1.59%	-1.41%	-0.70%	1.25%
1960	-0.28%	-0.35%	-0.27%	-0.35%	-0.59%	-0.89%	0.11%	1.22%	0.56%	0.08%	0.09%	0.00%	-0.06%
1961	0.23%	0.08%	0.89%	0.86%	1.11%	0.51%	0.41%	0.61%	-0.01%	0.19%	0.32%	0.53%	0.48%
1962	-0.98%	-2.10%	-1.42%	0.39%	0.37%	0.44%	0.58%	0.93%	0.14%	0.06%	0.01%	0.11%	-0.12%
1963	1.11%	3.24%	3.40%	1.40%	0.63%	0.72%	0.70%	2.01%	1.21%	-0.01%	3.29%	-1.31%	1.37%
1964	-0.22%	2.13%	0.54%	28.27%	20.04%	7.01%	0.76%	-1.33%	-0.42%	0.29%	0.39%	-1.64%	4.65%
1965	0.08%	0.62%	1.97%	0.25%	0.66%	0.57%	1.15%	1.73%	-5.25%	6.87%	3.22%	3.67%	1.29%
1966	2.14%	2.09%	2.38%	2.07%	2.22%	0.85%	1.76%	1.45%	0.21%	-0.05%	0.04%	0.08%	1.27%
1967	0.08%	0.15%	0.77%	0.25%	0.76%	0.45%	0.83%	1.13%	1.31%	-0.93%	7.39%	13.09%	2.11%
1968	9.56%	2.21%	1.68%	1.92%	0.61%	0.65%	0.80%	1.28%	0.09%	-0.16%	0.00%	0.09%	1.56%
1969	-0.17%	-0.07%	0.63%	1.05%	0.42%	0.62%	0.86%	1.13%	0.52%	-0.10%	-0.38%	11.93%	1.37%
1970	15.91%	2.28%	0.48%	0.14%	0.27%	0.57%	0.90%	2.19%	0.15%	0.96%	0.42%	0.12%	2.03%
1971	0.11%	1.22%	1.95%	0.50%	0.74%	0.71%	1.12%	1.97%	0.80%	-1.01%	-0.08%	2.04%	0.84%
1972	1.62%	0.59%	6.56%	7.21%	5.25%	2.01%	0.51%	0.08%	0.18%	0.02%	-0.10%	0.02%	2.00%
1973	-0.94%	-2.97%	-8.18%	0.29%	0.36%	0.58%	1.28%	-0.69%	-1.52%	4.11%	-0.38%	7.58%	-0.04%
1974	12.68%	9.50%	0.38%	0.19%	0.57%	0.18%	0.65%	1.44%	-2.04%	7.94%	4.03%	20.23%	4.65%
1975	20.15%	5.93%	3.53%	1.42%	0.64%	1.52%	3.17%	2.02%	-0.51%	-1.54%	5.07%	9.37%	4.23%
1976	3.71%	1.71%	1.37%	0.48%	-3.27%	-0.54%	2.71%	0.68%	0.88%	-0.01%	1.40%	0.71%	0.82%
1977	-0.74%	-1.39%	0.01%	0.11%	0.04%	0.09%	0.35%	-0.12%	-0.02%	0.25%	0.04%	0.10%	-0.11%
1978	0.05%	0.18%	0.11%	-0.68%	0.25%	0.30%	1.08%	1.65%	2.10%	0.45%	0.04%	1.29%	0.57%
1979	1.50%	0.74%	0.40%	2.44%	0.49%	0.63%	1.11%	-0.57%	0.19%	-0.12%	-0.23%	0.29%	0.57%
1980	-0.01%	-0.46%	1.27%	0.52%	0.14%	1.77%	2.28%	4.99%	7.99%	3.27%	1.15%	3.01%	2.16%
1981	2.50%	0.10%	0.83%	6.61%	2.64%	0.97%	1.50%	1.49%	0.37%	0.05%	0.05%	0.03%	1.43%
1982	-0.01%	-0.02%	0.44%	0.48%	0.35%	0.22%	0.49%	1.28%	0.63%	-0.97%	-1.25%	4.79%	0.54%
1983	8.75%	0.99%	0.49%	0.23%	0.19%	0.12%	0.65%	1.12%	1.20%	1.17%	12.80%	11.92%	3.30%
1984	3.79%	0.47%	0.20%	0.40%	0.60%	0.62%	1.12%	1.78%	0.70%	1.55%	0.62%	0.60%	1.04%
1985	0.68%	1.13%	1.56%	0.43%	1.01%	2.78%	1.93%	1.88%	-0.38%	-0.42%	0.11%	0.20%	0.91%
1986	0.86%	0.15%	0.51%	4.36%	0.14%	0.19%	1.08%	-2.56%	-3.38%	-0.52%	5.99%	8.72%	1.29%
1987	4.92%	0.79%	1.02%	0.57%	3.10%	3.98%	0.08%	-0.13%	3.49%	2.09%	2.70%	2.17%	2.06%
1988	0.49%	-0.32%	0.77%	1.15%	0.43%	0.42%	-0.18%	1.19%	0.10%	-0.57%	-0.06%	1.11%	0.38%
1989	0.04%	-0.48%	-0.23%	-0.04%	0.06%	0.63%	1.42%	0.50%	0.17%	0.14%	-0.05%	-0.66%	0.12%
1990	-0.27%	1.04%	1.25%	0.55%	0.07%	-0.44%	-0.36%	0.75%	0.12%	-0.19%	-0.70%	-0.49%	0.11%
1991	0.35%	0.04%	0.08%	0.65%	0.48%	0.31%	0.28%	-1.29%	2.17%	2.37%	0.65%	-1.43%	0.39%
AVG:	2.09%	1.28%	1.59%	1.46%	1.07%	0.78%	1.06%	1.18%	0.73%	0.75%	0.85%	2.17%	1.25%
MIN:	-10.94%	-9.90%	-8.18%	-1.98%	-3.30%	-0.89%	-0.36%	-6.88%	-5.25%	-4.88%	-2.77%	-5.63%	-1.68%
MAX:	20.15%	36.80%	43.83%	28.27%	20.04%	7.01%	3.41%	16.06%	15.76%	9.79%	12.80%	20.23%	9.12%

Table 4.4.5-10 Simulated monthly average chloride concentration (mg/L) at Jersey Point, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	425	461	163	61	29	16	13	12	12	17	155	424	149
1923	466	435	72	20	16	15	15	16	18	91	290	489	162
1924	504	364	356	334	141	34	46	159	232	155	342	687	279
1925	659	475	253	150	28	18	18	15	19	79	356	598	222
1926	531	423	329	107	20	17	16	17	51	199	279	485	206
1927	568	150	30	18	15	12	11	11	13	28	178	477	126
1928	534	222	136	66	18	10	12	16	32	77	241	537	159
1929	544	336	228	287	171	38	41	70	92	245	393	540	249
1930	658	440	188	36	16	12	13	19	53	217	344	525	210
1931	560	352	204	164	94	68	89	153	213	200	380	695	264
1932	620	417	75	19	22	21	20	20	18	61	195	485	164
1933	600	421	197	80	40	31	24	50	96	221	267	449	206
1934	700	447	226	58	20	20	22	52	78	175	357	613	231
1935	609	419	299	62	17	15	14	16	15	49	258	557	194
1936	560	320	345	82	24	16	14	16	19	75	268	540	190
1937	578	290	334	289	41	26	20	16	16	62	260	556	207
1938	610	172	15	14	27	17	11	9	11	16	147	183	103
1939	29	90	152	74	51	31	23	27	65	281	432	630	157
1940	511	364	366	65	25	15	11	12	17	68	237	508	183
1941	553	342	45	16	20	13	14	14	13	22	151	247	121
1942	174	289	47	19	12	13	15	13	11	20	172	254	87
1943	138	104	37	15	12	13	13	17	17	27	175	482	88
1944	580	397	385	301	65	16	17	24	33	186	486	702	266
1945	452	354	194	109	23	14	18	18	20	96	292	536	177
1946	534	319	27	9	10	12	15	17	21	103	310	542	160
1947	516	348	185	158	83	21	16	22	49	236	444	634	226
1948	456	360	346	207	79	30	15	12	12	63	274	502	196
1949	485	354	238	162	109	18	13	16	29	163	290	525	200
1950	506	354	232	46	12	12	12	13	18	99	310	521	178
1951	587	50	12	15	12	11	14	16	18	58	240	522	130
1952	553	335	37	21	12	13	14	12	11	17	158	115	108
1953	15	81	32	11	10	11	16	16	12	19	150	219	49
1954	266	307	352	144	10	9	11	15	25	77	239	496	163
1955	534	360	97	29	22	27	23	21	42	162	332	588	186
1956	486	410	39	22	12	9	14	13	12	26	175	179	116
1957	80	181	370	312	62	10	12	15	18	58	227	502	154
1958	254	224	81	17	18	18	16	13	11	17	148	134	79
1959	23	96	313	102	14	15	19	29	43	123	320	450	129
1960	493	296	272	292	67	14	15	21	51	251	365	543	223
1961	497	335	205	126	40	13	18	24	50	262	406	515	208
1962	519	338	206	162	37	17	14	17	38	128	300	524	192
1963	152	56	60	35	16	12	14	13	12	26	186	449	86
1964	389	114	83	57	16	24	21	24	44	226	421	574	166
1965	502	346	30	12	10	10	12	13	16	29	147	435	130
1966	567	144	27	18	11	10	13	19	27	116	314	575	154
1967	453	343	64	24	14	11	17	14	12	13	101	73	95
1968	16	101	224	76	12	11	16	25	41	125	308	533	124
1969	451	340	84	21	22	14	12	10	10	15	149	113	103
1970	15	45	18	19	12	11	15	18	30	37	146	442	67
1971	508	262	25	11	9	9	11	15	14	21	135	211	103
1972	258	422	244	110	41	11	13	29	25	76	286	559	173
1973	493	147	26	20	20	13	13	15	16	53	230	493	128
1974	524	54	10	11	9	10	12	13	12	24	176	144	83
1975	43	161	278	207	30	13	17	14	11	25	162	162	93
1976	42	80	209	320	225	65	30	110	290	500	604	738	268
1977	637	508	267	220	177	126	109	157	239	247	386	667	312
1978	639	426	246	37	21	17	18	16	15	21	176	384	168
1979	419	448	321	51	26	17	14	15	15	70	270	566	186
1980	529	351	126	17	20	14	14	16	17	35	211	418	147
1981	444	455	312	55	11	11	15	22	74	311	459	589	230
1982	483	96	9	20	13	18	11	11	11	18	165	81	78
1983	13	12	11	23	20	19	13	10	9	11	14	12	14
1984	12	14	14	9	10	11	13	17	22	32	155	468	65
1985	566	147	16	65	72	25	19	23	58	272	455	550	189
1986	482	365	151	43	21	15	15	17	18	41	152	314	136
1987	404	397	344	313	110	17	15	26	70	243	457	744	262
1988	409	265	89	21	16	22	46	74	75	179	327	554	173
1989	601	454	341	224	99	17	11	14	46	243	406	479	245
1990	539	281	317	241	64	31	26	56	166	223	384	705	253
1991	566	504	314	250	186	35	16	28	104	323	356	531	268
AVG:	430	288	171	97	41	20	19	27	45	115	273	461	166
MIN:	12	12	9	9	9	9	11	9	9	11	14	12	14
MAX:	700	508	385	334	225	126	109	159	290	500	604	744	312

Table 4.4.5-11 Difference in simulated monthly average chloride concentration (%) at Jersey Point, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.10%	-0.10%	0.64%	1.73%	0.75%	0.46%	0.95%	0.94%	1.14%	1.46%	0.36%	0.49%	0.74%
1923	0.83%	-0.24%	-0.41%	0.27%	0.58%	1.14%	1.07%	1.51%	1.78%	0.86%	0.36%	0.67%	0.70%
1924	1.02%	-0.57%	0.40%	-0.27%	-0.07%	1.20%	3.62%	3.71%	-0.10%	1.86%	2.22%	-1.71%	0.94%
1925	-1.27%	-2.11%	-2.83%	-2.67%	-1.12%	0.36%	0.52%	1.70%	1.66%	-0.05%	-2.08%	-2.17%	-0.84%
1926	1.76%	-0.03%	-0.36%	1.02%	0.17%	0.31%	1.49%	2.56%	-0.43%	0.23%	-0.58%	-1.74%	0.37%
1927	0.15%	2.98%	11.09%	8.16%	0.00%	-0.29%	0.32%	0.85%	0.05%	1.11%	0.66%	0.44%	2.13%
1928	0.43%	1.97%	3.57%	2.84%	1.72%	0.42%	0.93%	1.35%	1.11%	0.35%	0.23%	0.19%	1.26%
1929	0.03%	0.44%	0.23%	-0.16%	0.83%	1.23%	1.94%	1.25%	0.20%	-1.32%	1.27%	6.35%	1.02%
1930	1.38%	0.45%	1.22%	0.55%	0.91%	1.01%	1.21%	3.10%	-2.42%	-4.91%	5.75%	6.70%	1.25%
1931	-1.96%	1.86%	2.68%	-2.55%	-5.64%	-6.29%	-2.15%	1.62%	3.50%	3.21%	1.20%	-0.16%	-0.39%
1932	0.08%	-1.66%	0.68%	1.25%	2.56%	2.69%	3.75%	4.01%	2.26%	0.48%	0.72%	0.65%	1.46%
1933	0.42%	0.08%	0.04%	8.69%	11.43%	4.54%	2.50%	0.90%	0.55%	-0.22%	0.99%	0.18%	2.51%
1934	-0.86%	-0.21%	-0.62%	-4.04%	-1.10%	0.94%	2.02%	0.97%	-0.35%	10.85%	9.38%	1.22%	1.51%
1935	0.19%	-2.34%	-0.78%	1.76%	0.89%	1.18%	1.80%	2.68%	4.16%	-0.74%	0.60%	-1.51%	0.66%
1936	1.56%	-3.90%	-3.07%	0.32%	-3.65%	-0.96%	1.29%	2.02%	1.96%	1.49%	1.80%	1.45%	0.02%
1937	1.56%	-0.74%	-0.52%	0.93%	0.85%	0.47%	0.97%	1.03%	1.69%	8.13%	-1.71%	-0.59%	1.01%
1938	-0.04%	0.93%	3.08%	1.48%	0.06%	0.11%	0.34%	0.46%	0.84%	1.52%	0.41%	2.09%	0.94%
1939	4.96%	2.71%	2.27%	2.31%	1.23%	1.09%	2.16%	1.63%	1.02%	0.34%	0.10%	0.15%	1.66%
1940	-0.60%	1.26%	-0.07%	-0.71%	0.45%	-1.43%	-0.49%	1.42%	0.65%	-0.93%	-0.08%	0.56%	0.00%
1941	-0.23%	-2.36%	-2.34%	0.23%	0.14%	-0.41%	0.18%	0.72%	1.94%	1.51%	0.84%	2.49%	0.23%
1942	7.00%	5.18%	2.80%	0.01%	0.26%	0.49%	0.57%	0.93%	1.72%	1.45%	0.35%	2.11%	1.91%
1943	4.55%	8.44%	8.16%	0.37%	0.24%	0.18%	0.78%	1.03%	1.70%	1.58%	0.54%	0.37%	2.33%
1944	0.52%	-0.03%	0.05%	-0.18%	-0.21%	0.84%	1.43%	1.89%	2.30%	0.98%	0.34%	0.01%	0.66%
1945	-0.07%	1.97%	3.29%	1.96%	1.84%	1.08%	1.28%	1.75%	2.00%	0.57%	0.27%	0.61%	1.38%
1946	0.56%	0.92%	1.39%	0.47%	0.72%	0.84%	1.34%	2.21%	2.36%	0.74%	0.31%	1.15%	1.08%
1947	-0.68%	0.20%	2.04%	-0.38%	-0.28%	0.89%	0.76%	2.05%	0.74%	-0.84%	-0.37%	-0.18%	0.33%
1948	-1.06%	-0.14%	-0.36%	0.05%	0.32%	0.61%	1.19%	1.54%	2.29%	1.01%	0.31%	0.58%	0.53%
1949	-0.08%	-3.32%	3.03%	0.61%	0.46%	0.67%	1.20%	2.23%	1.65%	-0.31%	1.56%	1.12%	0.74%
1950	1.77%	2.03%	1.68%	3.70%	1.91%	0.96%	1.52%	3.74%	5.85%	4.23%	2.07%	1.11%	2.55%
1951	-0.70%	-2.56%	0.22%	0.64%	0.17%	-0.17%	0.54%	1.47%	2.49%	3.71%	0.92%	0.63%	0.61%
1952	0.68%	0.37%	0.59%	0.19%	0.29%	0.25%	0.53%	0.50%	0.95%	1.17%	-0.53%	0.82%	0.48%
1953	3.27%	1.72%	1.10%	0.33%	0.70%	0.94%	1.08%	1.45%	2.43%	1.43%	0.32%	2.36%	1.43%
1954	1.74%	6.76%	6.91%	3.89%	1.14%	0.48%	0.81%	1.17%	1.15%	0.46%	0.20%	0.11%	2.07%
1955	0.13%	0.11%	2.20%	3.44%	1.71%	0.92%	1.12%	2.01%	1.48%	-0.13%	-0.12%	-0.02%	1.07%
1956	0.78%	0.73%	1.16%	0.19%	0.14%	0.51%	0.99%	1.16%	2.02%	1.49%	0.43%	1.65%	0.94%
1957	4.82%	2.52%	-0.42%	0.20%	0.68%	0.43%	0.88%	1.78%	1.85%	0.92%	0.51%	0.08%	1.19%
1958	3.56%	4.11%	2.08%	0.57%	0.21%	0.23%	0.15%	0.50%	1.25%	1.19%	0.09%	3.96%	1.49%
1959	7.75%	1.11%	-0.68%	-0.75%	0.32%	1.03%	1.60%	1.22%	0.60%	-0.21%	-0.70%	-0.94%	0.86%
1960	-1.43%	0.50%	1.39%	1.62%	2.46%	1.17%	1.38%	3.46%	-0.68%	1.23%	-0.62%	-0.97%	0.79%
1961	1.58%	0.21%	0.87%	2.90%	4.72%	1.73%	1.51%	1.68%	1.40%	0.09%	-0.03%	0.14%	1.40%
1962	0.56%	-2.01%	-0.82%	2.43%	0.76%	0.55%	2.07%	3.31%	1.41%	-0.75%	-1.24%	-0.28%	0.50%
1963	1.29%	4.12%	3.19%	1.79%	-3.19%	-0.38%	0.12%	1.13%	2.24%	2.66%	-0.16%	-0.61%	1.02%
1964	-0.58%	2.23%	0.73%	7.22%	7.50%	4.10%	3.20%	-0.62%	1.35%	1.67%	0.15%	-0.41%	2.21%
1965	-0.45%	-0.72%	-2.05%	0.03%	0.54%	0.80%	0.74%	1.26%	1.85%	2.32%	0.60%	0.70%	0.47%
1966	0.69%	4.41%	7.07%	2.56%	0.74%	0.88%	1.34%	1.89%	1.16%	0.23%	0.07%	0.04%	1.76%
1967	0.10%	0.92%	2.03%	0.27%	0.59%	0.43%	0.38%	0.49%	0.85%	2.16%	3.90%	4.77%	1.41%
1968	4.02%	1.45%	1.33%	1.38%	0.47%	0.57%	0.98%	3.15%	0.59%	0.08%	-0.50%	0.10%	1.14%
1969	-0.27%	-0.45%	0.70%	-1.47%	-0.49%	0.27%	0.42%	0.49%	1.05%	0.97%	0.61%	2.71%	0.38%
1970	4.38%	4.21%	2.69%	0.12%	0.18%	0.44%	1.07%	1.83%	1.32%	0.77%	0.55%	0.25%	1.48%
1971	-0.24%	1.40%	2.02%	0.43%	0.66%	0.68%	1.15%	1.25%	1.70%	0.60%	-0.09%	1.74%	0.94%
1972	2.05%	1.49%	5.88%	8.90%	5.00%	1.52%	1.29%	1.08%	1.47%	0.67%	-0.21%	-0.10%	2.42%
1973	0.04%	1.40%	2.40%	0.37%	0.34%	0.39%	1.12%	1.72%	3.89%	-12.51%	-2.44%	2.10%	-0.10%
1974	8.32%	5.26%	0.27%	0.24%	0.47%	-0.57%	0.18%	1.18%	2.10%	2.67%	1.01%	5.40%	2.21%
1975	10.54%	3.41%	2.42%	1.91%	0.99%	2.17%	1.68%	1.35%	2.20%	0.32%	-0.74%	1.88%	2.34%
1976	-1.89%	-1.89%	0.60%	0.31%	-1.46%	-0.46%	4.51%	2.48%	-0.96%	1.07%	-0.61%	1.01%	0.23%
1977	-1.60%	-2.50%	-2.14%	-2.96%	-2.28%	-1.46%	-1.41%	-0.55%	0.13%	-0.36%	-3.16%	-1.27%	-1.63%
1978	-0.22%	0.63%	0.36%	0.18%	0.15%	0.24%	0.49%	1.05%	1.78%	14.40%	3.20%	1.31%	1.96%
1979	1.48%	-4.86%	-1.11%	8.45%	0.45%	0.51%	1.23%	1.70%	1.37%	-0.36%	-0.30%	0.16%	0.73%
1980	0.13%	-0.18%	4.92%	1.58%	-1.29%	-1.31%	0.58%	1.43%	2.87%	3.09%	1.30%	3.00%	1.34%
1981	2.38%	-0.29%	1.24%	3.00%	1.39%	0.82%	1.28%	3.19%	3.74%	0.18%	0.01%	0.23%	1.43%
1982	-0.19%	2.08%	-0.35%	0.07%	0.24%	0.15%	0.24%	0.63%	1.68%	1.90%	0.35%	1.73%	0.71%
1983	1.41%	0.62%	0.35%	0.08%	0.08%	0.06%	0.27%	0.39%	0.38%	1.35%	2.98%	2.82%	0.90%
1984	1.07%	0.25%	0.11%	0.24%	0.41%	0.49%	1.05%	1.83%	2.97%	2.17%	0.27%	0.96%	0.98%
1985	0.64%	2.17%	2.10%	0.67%	0.89%	1.88%	1.81%	1.98%	0.71%	-0.21%	-0.29%	0.18%	1.04%
1986	0.14%	0.83%	1.89%	-26.74%	-0.19%	0.18%	0.64%	1.38%	2.38%	1.20%	3.86%	4.70%	-0.81%
1987	3.57%	1.17%	1.09%	0.43%	3.12%	2.91%	1.13%	1.09%	1.88%	0.91%	0.17%	0.44%	1.49%
1988	-0.53%	-0.65%	0.71%	3.04%	1.46%	0.28%	3.37%	-0.79%	-0.63%	1.83%	4.18%	4.40%	1.39%
1989	-0.48%	0.43%	2.87%	3.03%	4.03%	1.54%	1.25%	1.92%	0.99%	-1.67%	-1.30%	0.63%	1.10%
1990	0.01%	2.45%	1.45%	-0.15%	-0.97%	-0.67%	1.16%	6.92%	1.60%	-1.28%	-0.50%	0.47%	0.88%
1991	0.28%	-2.77%	-1.65%	0.10%	0.05%	0.12%	1.46%	2.70%	4.42%	-3.20%	7.61%	8.64%	1.48%
AVG:	1.16%	0.77%	1.32%	0.83%	0.71%	0.56%	1.14%	1.64%	1.50%	0.98%	0.68%	1.12%	1.03%
MIN:	-1.96%	-4.86%	-3.07%	-26.74%	-5.64%	-6.29%	-2.15%	-0.79%	-2.42%	-12.51%	-3.16%	-2.17%	-1.63%
MAX:	10.54%	8.44%	11.09%	8.90%	11.43%	4.54%	4.51%	6.92%	5.85%	14.40%	9.38%	8.64%	2.55%

Table 4.4.5-12 Difference in simulated monthly average chloride concentration (%) at Jersey Point, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.09%	-0.13%	0.41%	1.53%	0.71%	0.47%	0.96%	0.92%	-0.27%	0.50%	1.22%	2.47%	0.74%
1923	3.07%	-0.86%	-1.26%	-0.14%	0.17%	1.24%	1.09%	1.55%	0.48%	1.49%	0.48%	1.47%	0.73%
1924	2.43%	-1.75%	1.53%	-0.09%	-2.39%	0.17%	1.01%	0.57%	0.10%	0.68%	0.36%	-0.16%	0.21%
1925	-2.16%	-2.03%	-2.77%	-3.33%	-1.49%	0.26%	0.52%	2.06%	3.98%	0.83%	0.70%	1.13%	-0.19%
1926	-0.37%	-0.08%	0.33%	-0.25%	0.68%	0.39%	1.14%	1.94%	0.23%	0.69%	-3.07%	-3.56%	-0.16%
1927	0.57%	1.27%	7.16%	6.70%	1.29%	1.00%	0.69%	1.66%	0.15%	9.92%	8.28%	4.91%	3.63%
1928	2.66%	5.65%	7.72%	4.57%	2.31%	0.41%	0.91%	1.71%	0.79%	1.73%	-0.87%	-0.28%	2.27%
1929	0.05%	2.48%	0.62%	-1.18%	0.52%	1.79%	1.49%	1.06%	0.49%	-0.95%	0.75%	1.53%	0.72%
1930	-0.09%	0.60%	2.35%	2.04%	1.17%	0.95%	1.35%	2.08%	0.45%	0.52%	0.13%	-0.02%	0.96%
1931	0.38%	0.56%	0.24%	0.33%	-0.84%	-0.43%	0.23%	-0.23%	-0.23%	1.37%	1.35%	0.31%	0.25%
1932	-0.26%	-0.30%	0.35%	0.74%	0.78%	1.05%	3.45%	3.88%	2.25%	0.50%	0.70%	0.56%	1.14%
1933	0.36%	0.98%	1.82%	4.93%	5.79%	3.42%	1.91%	1.03%	0.68%	0.15%	0.38%	0.23%	1.81%
1934	0.12%	0.14%	0.10%	-0.10%	0.54%	0.84%	1.24%	0.79%	0.69%	0.30%	1.74%	1.02%	0.62%
1935	-0.30%	0.22%	0.30%	-0.16%	0.65%	0.65%	0.88%	1.42%	4.29%	-0.17%	0.62%	-1.02%	0.62%
1936	2.75%	-3.65%	-3.86%	1.84%	0.81%	2.47%	2.16%	1.45%	-0.01%	6.51%	2.57%	0.51%	1.13%
1937	1.51%	-1.98%	-1.28%	1.09%	1.24%	-0.29%	0.35%	-0.37%	0.15%	14.20%	2.12%	0.86%	1.47%
1938	0.31%	-8.09%	-2.37%	1.71%	0.01%	0.10%	0.29%	0.47%	-0.58%	1.69%	3.01%	8.85%	0.45%
1939	18.03%	3.77%	1.85%	7.17%	8.23%	2.70%	1.52%	1.84%	0.71%	-0.07%	0.39%	0.55%	3.89%
1940	-0.86%	1.70%	0.00%	-1.61%	0.20%	0.26%	0.72%	0.91%	4.06%	4.04%	1.09%	2.35%	1.07%
1941	3.63%	-3.87%	-6.32%	0.31%	0.18%	-0.64%	-0.01%	0.38%	-0.86%	1.59%	0.50%	8.71%	0.30%
1942	28.83%	21.65%	11.58%	0.43%	0.19%	0.37%	0.55%	0.97%	0.19%	10.80%	4.38%	9.19%	7.43%
1943	13.01%	47.60%	55.29%	1.67%	0.54%	0.19%	0.78%	-2.05%	-1.67%	7.67%	6.07%	3.50%	11.05%
1944	2.00%	-1.71%	0.77%	-0.20%	-3.31%	0.08%	1.22%	1.85%	2.27%	0.96%	0.34%	-0.42%	0.32%
1945	-0.13%	1.65%	2.49%	0.93%	1.77%	1.18%	1.33%	2.24%	0.23%	1.15%	2.62%	1.97%	1.45%
1946	0.88%	3.75%	5.14%	0.47%	-0.16%	-0.02%	1.39%	-0.25%	-0.17%	0.74%	0.77%	0.63%	1.10%
1947	-0.66%	0.44%	0.79%	-0.62%	-0.33%	1.07%	1.16%	2.04%	-2.05%	-1.46%	-0.93%	-0.29%	-0.07%
1948	-1.03%	-2.15%	-8.20%	-3.83%	-0.67%	-0.13%	0.81%	1.43%	2.08%	0.60%	0.15%	0.26%	-0.89%
1949	-1.66%	-1.07%	-1.02%	-1.72%	-1.79%	-0.80%	1.20%	2.24%	2.50%	0.03%	7.32%	5.79%	0.92%
1950	-0.44%	2.59%	5.96%	4.95%	1.88%	1.75%	2.22%	4.28%	4.06%	5.55%	2.96%	3.14%	3.24%
1951	-0.60%	-4.54%	0.19%	-0.12%	0.24%	0.63%	1.31%	0.64%	3.30%	7.26%	2.28%	1.96%	1.05%
1952	1.72%	0.07%	-0.28%	0.19%	0.26%	0.25%	0.26%	0.46%	-0.54%	0.49%	-3.30%	3.12%	0.22%
1953	7.42%	1.57%	0.91%	0.36%	0.62%	0.90%	1.05%	1.49%	2.54%	1.68%	0.56%	2.74%	1.82%
1954	2.07%	8.02%	8.11%	4.52%	1.25%	0.48%	0.81%	1.17%	1.14%	0.50%	0.11%	0.08%	2.35%
1955	-1.53%	-0.90%	1.32%	1.24%	0.22%	-1.17%	0.30%	2.06%	1.46%	-0.46%	-0.11%	0.09%	0.21%
1956	0.13%	0.21%	2.36%	0.36%	0.25%	0.50%	1.06%	1.15%	-0.08%	-14.84%	-1.34%	6.63%	-0.30%
1957	-9.79%	-14.01%	-2.50%	1.87%	1.21%	0.12%	0.50%	1.76%	0.77%	0.77%	-1.01%	-2.85%	-1.93%
1958	-1.04%	3.72%	1.83%	0.55%	0.33%	0.18%	0.11%	0.52%	-0.20%	0.18%	2.14%	10.10%	1.53%
1959	16.83%	2.90%	1.04%	-2.05%	0.31%	0.56%	1.16%	1.57%	1.27%	-0.29%	-1.50%	-0.88%	1.74%
1960	-0.43%	-0.57%	-0.51%	-0.61%	-0.68%	0.12%	1.01%	2.06%	0.42%	0.41%	0.17%	0.01%	0.12%
1961	0.51%	0.17%	0.59%	1.48%	1.04%	0.80%	1.23%	1.57%	0.58%	0.50%	0.70%	0.53%	0.81%
1962	-0.68%	-3.40%	-2.10%	0.27%	-0.16%	0.24%	1.11%	2.02%	1.02%	0.16%	0.06%	0.72%	-0.06%
1963	1.42%	3.60%	3.34%	1.49%	1.38%	0.69%	0.56%	2.31%	3.63%	11.34%	5.11%	2.68%	3.13%
1964	0.77%	2.62%	0.78%	20.02%	21.21%	5.98%	2.41%	0.57%	1.85%	0.70%	0.48%	-0.60%	4.73%
1965	-0.99%	-0.22%	0.76%	0.25%	0.53%	0.76%	0.72%	1.28%	-0.84%	3.81%	5.42%	3.35%	1.24%
1966	2.77%	2.40%	2.62%	1.71%	0.72%	0.86%	1.35%	1.90%	1.16%	0.20%	0.04%	0.04%	1.32%
1967	0.06%	0.05%	0.59%	0.26%	0.92%	0.47%	0.38%	0.49%	0.15%	1.11%	12.21%	19.28%	3.00%
1968	10.21%	2.82%	1.58%	1.55%	0.47%	0.48%	0.97%	1.85%	1.08%	0.07%	0.14%	-0.05%	1.76%
1969	-0.68%	-0.87%	-0.11%	0.68%	0.23%	0.32%	0.35%	0.48%	-0.40%	0.64%	2.27%	13.44%	1.36%
1970	14.69%	0.70%	0.06%	0.07%	0.24%	0.43%	1.05%	1.90%	1.44%	1.05%	0.83%	0.39%	1.90%
1971	-0.16%	1.33%	1.84%	0.42%	0.65%	0.69%	1.15%	1.26%	1.97%	1.16%	0.71%	2.48%	1.12%
1972	2.32%	1.57%	6.15%	9.40%	5.27%	1.56%	1.35%	1.11%	1.47%	0.67%	0.61%	0.21%	2.64%
1973	-1.31%	-4.18%	-4.57%	0.22%	0.64%	0.43%	1.03%	1.05%	2.70%	-11.44%	-1.04%	3.84%	-1.05%
1974	10.66%	8.13%	0.27%	0.24%	0.48%	-1.14%	0.00%	0.51%	0.75%	11.07%	7.94%	21.03%	5.00%
1975	30.53%	6.88%	4.18%	2.43%	0.95%	5.77%	3.48%	1.51%	1.23%	0.50%	8.50%	13.70%	6.64%
1976	8.45%	1.63%	1.83%	0.72%	-4.66%	-4.71%	2.39%	1.10%	-0.19%	2.37%	2.24%	0.87%	1.00%
1977	-1.36%	-2.39%	-1.21%	-0.16%	-0.91%	-0.88%	-1.25%	-0.61%	0.18%	-0.48%	0.55%	0.37%	-0.68%
1978	0.14%	0.42%	0.20%	0.05%	0.14%	0.27%	0.43%	1.00%	1.72%	2.10%	0.26%	1.32%	0.67%
1979	1.94%	-0.13%	0.22%	1.91%	0.17%	0.42%	1.06%	1.32%	1.24%	-0.11%	-0.34%	0.14%	0.65%
1980	-0.14%	0.48%	1.60%	0.62%	1.96%	4.03%	2.13%	2.71%	5.60%	7.38%	3.60%	4.31%	2.86%
1981	3.71%	-0.97%	1.72%	6.11%	2.23%	0.81%	1.11%	1.79%	1.19%	0.14%	0.14%	0.11%	1.51%
1982	-0.03%	-0.36%	0.36%	0.74%	0.57%	0.12%	0.24%	0.66%	0.77%	1.09%	0.25%	5.59%	0.83%
1983	2.52%	0.69%	0.70%	0.09%	0.08%	0.05%	0.28%	0.43%	0.40%	0.40%	6.15%	7.84%	1.64%
1984	1.43%	0.23%	0.10%	0.24%	0.41%	0.44%	1.04%	1.91%	1.87%	2.45%	0.91%	1.49%	1.04%
1985	0.94%	2.31%	2.15%	0.67%	0.89%	1.80%	1.73%	2.05%	0.75%	-0.24%	-0.21%	0.30%	1.09%
1986	0.13%	1.06%	1.32%	-26.51%	-0.20%	0.16%	0.77%	0.10%	-0.50%	-1.17%	8.40%	9.14%	-0.61%
1987	6.73%	0.63%	2.14%	0.33%	3.51%	3.79%	1.14%	1.15%	4.08%	2.88%	-0.43%	1.24%	2.27%
1988	0.34%	-0.72%	0.86%	1.92%	0.85%	-0.19%	0.78%	-2.94%	-1.04%	3.77%	2.30%	2.30%	0.69%
1989	-0.11%	-0.75%	-0.26%	0.06%	0.26%	0.63%	1.24%	1.82%	1.21%	0.38%	-0.04%	-0.35%	0.34%
1990	-1.04%	1.73%	0.57%	-0.47%	-0.85%	-1.63%	-0.01%	1.53%	0.68%	-0.19%	-1.46%	-0.89%	-0.17%
1991	0.59%	-0.16%	0.05%	0.71%	0.56%	0.96%	1.19%	-0.16%	1.14%	1.22%	0.90%	0.06%	0.59%
AVG:	2.60%	1.27%	1.72%	0.89%	0.89%	0.68%	1.02%	1.21%	1.03%	1.58%	1.59%	2.72%	1.43%
MIN:	-9.79%	-14.01%	-8.20%	-26.51%	-4.66%	-4.71%	-1.25%	-2.94%	-2.05%	-14.84%	-3.30%	-3.56%	-1.93%
MAX:	30.53%	47.60%	55.29%	20.02%	21.21%	5.98%	3.48%	4.28%	5.60%	14.20%	12.21%	21.03%	11.05%

Table 4.4.5-13 Simulated monthly average chloride concentration (mg/L) at Prisoners Point, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	46	56	38	23	45	29	28	29	24	13	16	41	32
1923	53	52	49	33	28	17	37	36	17	14	28	52	35
1924	59	49	46	52	38	38	47	40	44	36	35	85	47
1925	100	77	47	29	32	47	40	34	17	16	32	67	45
1926	70	55	53	29	24	19	30	36	21	23	33	51	37
1927	74	32	12	14	35	18	27	25	13	12	18	48	27
1928	66	34	22	19	12	20	27	39	21	15	23	58	30
1929	68	47	36	41	44	27	43	49	33	28	44	61	43
1930	87	73	36	22	19	14	20	25	17	23	37	57	36
1931	72	55	39	29	31	32	40	43	42	31	37	89	45
1932	96	72	50	29	36	30	36	34	18	17	26	49	41
1933	76	63	46	29	30	21	34	41	33	29	42	55	41
1934	90	80	41	21	23	33	34	36	31	26	44	75	44
1935	87	63	49	38	25	18	34	36	16	12	25	61	39
1936	75	50	52	32	37	22	26	30	17	14	29	64	37
1937	73	47	43	53	27	36	29	27	15	13	25	59	37
1938	76	31	31	25	25	14	12	10	13	14	17	22	24
1939	23	14	23	20	20	28	42	38	23	28	47	71	31
1940	71	48	53	47	54	35	26	28	16	13	24	53	39
1941	74	52	25	32	30	23	25	25	22	14	18	29	31
1942	24	30	36	35	24	32	36	32	18	12	18	27	27
1943	23	17	17	22	18	16	26	35	18	13	18	48	23
1944	66	54	51	49	39	20	44	47	20	20	52	84	45
1945	63	41	37	21	28	30	36	39	18	14	29	56	34
1946	67	40	27	12	22	19	34	37	17	15	31	59	32
1947	62	46	30	25	23	14	20	36	21	25	50	75	36
1948	66	44	50	34	24	19	29	25	13	12	28	56	33
1949	59	45	38	31	26	18	28	28	16	19	33	53	33
1950	66	48	43	28	13	11	21	27	14	14	32	57	31
1951	68	25	23	21	18	20	31	37	17	13	23	56	29
1952	69	47	24	44	21	25	24	18	19	13	17	18	28
1953	20	15	27	23	21	13	41	32	13	12	16	25	21
1954	25	35	50	41	10	10	26	38	20	14	24	54	29
1955	62	45	24	20	22	18	33	30	16	19	35	64	32
1956	73	55	33	23	13	13	27	27	19	12	20	24	28
1957	17	19	45	52	25	16	26	34	17	13	22	53	28
1958	37	25	26	22	44	39	21	19	20	13	18	20	25
1959	17	13	36	31	36	31	38	31	15	16	33	54	29
1960	55	41	36	47	30	13	35	37	20	26	43	61	37
1961	68	47	33	30	18	12	16	21	20	28	48	59	33
1962	66	46	32	30	50	23	28	36	18	17	32	59	36
1963	37	12	18	20	20	13	37	30	16	12	18	45	23
1964	45	27	14	19	15	14	33	27	16	24	48	67	29
1965	68	45	27	19	14	15	28	29	17	12	16	42	28
1966	63	30	18	17	19	11	35	32	15	15	32	65	29
1967	59	42	28	47	20	25	25	19	17	20	15	14	28
1968	14	15	32	29	23	14	37	32	16	18	36	66	28
1969	63	47	25	28	19	15	13	9	9	14	18	19	23
1970	22	13	19	24	19	24	32	38	19	12	17	45	24
1971	60	39	23	13	12	11	24	39	16	11	16	24	24
1972	25	46	43	22	17	9	19	25	16	13	29	64	27
1973	67	28	15	39	45	27	27	33	16	12	23	51	32
1974	61	21	14	22	13	26	25	29	15	11	18	20	23
1975	12	17	40	37	28	31	32	30	17	11	17	20	24
1976	15	12	27	49	54	27	39	39	40	57	70	88	43
1977	91	75	60	38	44	44	46	50	43	32	39	86	54
1978	105	85	48	56	38	32	24	22	22	15	20	44	42
1979	48	56	56	41	36	28	28	31	15	13	27	61	37
1980	69	44	28	24	20	19	26	32	26	16	20	41	30
1981	47	52	47	23	14	15	40	36	19	32	53	68	37
1982	63	26	11	42	18	28	10	15	23	15	17	19	24
1983	23	29	11	19	16	15	13	11	8	14	11	19	16
1984	20	20	14	8	16	23	31	38	21	12	17	46	22
1985	69	37	11	13	21	21	46	37	18	28	51	63	35
1986	62	54	31	21	29	14	20	28	25	14	18	35	29
1987	44	48	49	47	40	21	22	31	19	25	49	86	40
1988	68	36	28	16	13	20	30	32	27	26	43	68	34
1989	86	67	56	39	32	15	12	14	15	25	45	57	39
1990	62	42	39	46	31	19	27	34	34	39	42	80	41
1991	85	68	75	50	51	27	32	32	26	36	46	59	49
AVG:	58	42	35	30	27	22	30	31	20	19	30	52	33
MIN:	12	12	11	8	10	9	10	9	8	11	11	14	16
MAX:	105	85	75	56	54	47	47	50	44	57	70	89	54

Table 4.4.5-14 Difference in simulated monthly average chloride concentration (%) at Prisoners Point, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.60%	0.40%	0.53%	0.91%	0.14%	0.05%	0.13%	0.22%	-0.05%	1.85%	2.30%	1.25%	0.69%
1923	1.39%	0.22%	0.18%	0.03%	0.16%	0.73%	0.29%	0.43%	1.87%	2.70%	1.68%	1.30%	0.91%
1924	1.67%	0.45%	-0.18%	0.99%	-0.09%	0.38%	0.72%	2.75%	2.14%	2.05%	4.84%	-0.95%	1.23%
1925	-1.40%	-3.03%	-3.01%	-2.68%	-0.67%	-0.24%	-0.13%	0.38%	1.98%	2.82%	-1.01%	-2.74%	-0.81%
1926	0.55%	1.63%	-0.58%	1.20%	0.38%	2.55%	1.39%	0.90%	2.87%	1.56%	0.50%	-0.46%	1.04%
1927	0.23%	1.81%	2.59%	1.99%	-1.36%	-1.10%	-0.20%	-0.55%	0.90%	2.41%	2.31%	1.29%	0.86%
1928	1.14%	1.84%	3.01%	2.11%	1.18%	0.26%	0.19%	0.22%	1.59%	2.53%	1.48%	0.77%	1.36%
1929	0.42%	0.69%	0.88%	0.15%	0.71%	5.11%	2.66%	1.08%	6.51%	3.53%	1.80%	15.81%	3.28%
1930	8.98%	1.14%	0.82%	0.48%	0.86%	0.64%	0.52%	1.22%	4.42%	-1.12%	4.76%	10.03%	2.73%
1931	1.66%	-1.71%	3.20%	-1.47%	-1.50%	-0.95%	-0.59%	1.08%	2.91%	2.35%	2.22%	0.85%	0.67%
1932	0.75%	0.16%	0.15%	0.44%	1.18%	1.17%	2.51%	1.62%	2.36%	2.94%	2.45%	1.56%	1.44%
1933	0.22%	0.13%	0.45%	0.34%	1.42%	1.72%	0.78%	0.81%	1.58%	2.29%	2.56%	2.25%	1.21%
1934	-0.50%	-1.29%	-0.31%	-0.52%	0.13%	2.69%	2.15%	1.27%	-2.24%	-1.76%	4.55%	1.91%	0.51%
1935	0.85%	-1.29%	-1.15%	0.71%	0.57%	-0.46%	1.00%	0.96%	2.86%	3.48%	0.53%	-1.24%	0.57%
1936	0.97%	2.59%	-4.54%	-1.44%	-1.08%	-0.82%	1.67%	1.01%	1.82%	2.84%	2.92%	2.56%	0.71%
1937	1.50%	-0.01%	-0.13%	0.53%	0.60%	1.61%	0.59%	0.07%	1.75%	3.03%	1.23%	-1.17%	0.80%
1938	0.29%	0.87%	2.74%	0.55%	-0.09%	-0.08%	0.06%	0.02%	0.03%	1.73%	2.29%	2.26%	0.89%
1939	0.88%	1.97%	2.09%	2.08%	1.24%	1.46%	1.77%	1.17%	1.69%	1.66%	0.84%	0.63%	1.46%
1940	-0.22%	-0.62%	1.23%	-0.19%	-0.05%	-2.50%	-0.55%	-0.08%	1.37%	2.00%	1.28%	1.37%	0.25%
1941	1.54%	-0.35%	-0.87%	0.19%	-0.01%	-0.45%	0.02%	0.14%	1.50%	2.65%	2.35%	2.94%	0.80%
1942	4.54%	5.63%	0.99%	0.04%	0.09%	0.07%	0.11%	0.20%	0.82%	2.41%	2.06%	2.43%	1.62%
1943	2.77%	4.01%	3.54%	0.17%	-0.01%	0.05%	0.04%	0.10%	1.44%	2.61%	2.28%	1.21%	1.52%
1944	1.30%	0.74%	0.40%	0.41%	0.11%	0.93%	0.37%	0.42%	2.00%	2.47%	0.84%	0.28%	0.86%
1945	0.00%	1.85%	2.96%	2.11%	0.73%	0.73%	-0.09%	0.30%	1.55%	2.35%	1.69%	1.58%	1.31%
1946	1.18%	1.09%	0.54%	0.32%	0.22%	0.52%	0.26%	0.57%	2.06%	2.43%	1.38%	2.09%	1.06%
1947	1.73%	-0.09%	2.02%	0.65%	-0.06%	0.36%	0.51%	1.34%	2.07%	0.84%	0.30%	0.03%	0.81%
1948	-0.16%	0.33%	0.73%	0.08%	0.68%	0.77%	0.44%	0.53%	1.94%	2.52%	1.33%	0.85%	0.84%
1949	0.29%	-2.69%	-0.17%	1.68%	0.88%	0.51%	0.36%	1.55%	2.37%	1.70%	1.68%	2.44%	0.88%
1950	2.69%	3.17%	3.18%	2.36%	1.25%	1.23%	0.69%	2.25%	2.99%	3.41%	3.06%	2.01%	2.36%
1951	-0.74%	-1.55%	0.10%	-0.13%	-2.29%	-3.10%	-0.30%	0.27%	1.91%	2.92%	2.30%	1.22%	0.05%
1952	0.82%	0.66%	0.30%	0.07%	0.10%	0.06%	0.12%	0.08%	0.13%	1.94%	1.82%	1.43%	0.63%
1953	0.70%	1.40%	0.55%	0.31%	0.58%	0.90%	0.21%	0.54%	1.80%	2.78%	2.17%	2.62%	1.21%
1954	2.86%	5.36%	8.42%	4.43%	0.75%	0.39%	0.23%	0.21%	1.53%	2.36%	1.44%	0.62%	2.38%
1955	0.45%	0.51%	1.10%	1.12%	0.68%	0.87%	0.70%	1.19%	2.60%	2.04%	1.18%	0.79%	1.10%
1956	1.09%	1.53%	0.46%	0.02%	0.22%	0.38%	0.31%	0.30%	1.58%	2.44%	2.03%	2.02%	1.03%
1957	2.79%	3.18%	0.52%	0.04%	0.89%	-1.94%	-0.14%	0.49%	1.96%	2.65%	1.95%	0.97%	1.11%
1958	3.03%	4.69%	1.93%	0.27%	0.00%	0.13%	-0.05%	0.14%	0.24%	2.08%	2.02%	3.12%	1.47%
1959	1.56%	1.91%	0.25%	-0.27%	0.14%	0.68%	0.37%	0.96%	2.16%	1.58%	0.35%	-0.56%	0.76%
1960	-1.28%	0.11%	1.57%	1.06%	0.89%	0.71%	0.35%	1.11%	7.78%	2.42%	0.75%	-0.47%	1.25%
1961	1.42%	1.68%	0.22%	1.94%	1.73%	1.16%	1.28%	3.34%	4.79%	1.09%	0.78%	0.81%	1.69%
1962	2.31%	0.35%	-2.10%	2.57%	0.14%	0.56%	0.94%	2.29%	2.89%	1.39%	-0.35%	-0.14%	0.90%
1963	0.69%	1.32%	1.74%	0.45%	-2.52%	-1.37%	-0.22%	0.26%	1.67%	2.62%	2.10%	0.06%	0.57%
1964	-0.03%	2.17%	1.51%	3.06%	2.61%	2.05%	1.18%	0.74%	1.95%	2.87%	0.92%	-0.20%	1.57%
1965	0.36%	-0.24%	-1.28%	-0.11%	0.24%	0.50%	-0.07%	0.18%	1.70%	2.67%	2.39%	1.77%	0.68%
1966	1.03%	2.01%	1.59%	0.75%	0.38%	0.76%	0.27%	0.89%	2.20%	2.04%	0.96%	0.43%	1.11%
1967	0.54%	1.22%	1.62%	0.22%	0.55%	0.13%	0.06%	0.06%	0.10%	0.86%	3.56%	3.69%	1.05%
1968	1.53%	1.70%	1.57%	1.31%	0.33%	0.38%	0.19%	1.23%	2.60%	1.56%	0.78%	0.45%	1.14%
1969	0.17%	-0.34%	0.35%	-1.34%	-0.61%	0.05%	0.02%	-0.08%	0.04%	1.66%	2.18%	2.90%	0.42%
1970	0.70%	1.68%	0.42%	0.05%	0.08%	0.11%	0.14%	0.48%	1.78%	2.27%	2.12%	1.05%	0.91%
1971	0.59%	1.33%	0.74%	0.33%	0.39%	0.47%	0.26%	0.30%	1.70%	2.37%	1.97%	2.19%	1.05%
1972	2.86%	2.07%	4.65%	7.21%	3.99%	0.99%	0.65%	1.26%	2.06%	2.45%	0.82%	0.00%	2.42%
1973	0.38%	1.21%	1.39%	0.41%	0.12%	0.14%	0.19%	0.30%	-0.78%	3.14%	-2.73%	2.87%	0.55%
1974	8.53%	5.18%	0.04%	0.07%	0.24%	-0.87%	0.04%	0.23%	1.45%	2.61%	2.47%	4.00%	2.00%
1975	3.51%	3.14%	2.57%	2.35%	0.35%	2.09%	0.43%	0.46%	0.99%	2.51%	2.01%	2.36%	1.90%
1976	1.11%	0.38%	0.82%	0.61%	-0.30%	0.63%	1.39%	1.64%	3.42%	1.38%	0.10%	1.39%	1.05%
1977	0.95%	-3.67%	-2.03%	-3.32%	-2.90%	-1.04%	0.04%	0.31%	1.18%	0.79%	-0.82%	-1.65%	-1.01%
1978	0.01%	0.71%	0.65%	0.18%	0.06%	0.07%	0.02%	0.07%	0.52%	-5.51%	3.66%	2.58%	0.25%
1979	2.32%	-2.51%	-4.13%	0.56%	0.09%	0.05%	0.15%	0.04%	0.82%	2.14%	1.03%	1.20%	0.15%
1980	0.99%	0.39%	2.40%	0.12%	0.78%	-1.60%	-0.24%	-0.23%	1.23%	2.55%	2.67%	3.07%	1.01%
1981	3.05%	0.34%	0.48%	2.14%	0.76%	0.42%	0.27%	1.21%	2.86%	1.74%	0.83%	0.61%	1.23%
1982	0.48%	1.46%	-1.16%	-0.14%	0.08%	0.03%	0.04%	0.03%	0.31%	2.17%	2.47%	1.74%	0.63%
1983	0.12%	0.12%	0.12%	-0.04%	-0.05%	-0.05%	0.03%	0.04%	0.00%	0.11%	2.07%	0.85%	0.28%
1984	0.21%	0.03%	0.03%	-0.06%	0.10%	0.21%	0.18%	0.38%	1.69%	2.69%	2.07%	1.15%	0.72%
1985	1.17%	1.95%	1.28%	1.04%	0.96%	1.12%	0.46%	0.79%	2.10%	1.05%	0.52%	0.50%	1.08%
1986	0.48%	1.03%	1.62%	-10.52%	-0.22%	0.13%	0.02%	0.35%	1.14%	2.74%	3.55%	4.78%	0.42%
1987	4.04%	2.06%	1.01%	1.15%	0.30%	0.18%	0.52%	1.44%	2.76%	2.56%	1.33%	1.09%	1.54%
1988	1.31%	1.73%	1.02%	1.06%	1.03%	3.66%	3.34%	19.14%	6.16%	0.77%	2.60%	4.18%	3.83%
1989	1.11%	-0.36%	3.73%	3.23%	1.05%	0.03%	1.04%	1.82%	3.77%	0.41%	-0.97%	0.80%	1.30%
1990	0.55%	0.60%	0.34%	-1.07%	-1.36%	-0.22%	1.27%	2.11%	3.38%	0.91%	1.02%	0.79%	0.69%
1991	-0.46%	-3.07%	-4.54%	-2.84%	-1.35%	-0.25%	0.12%	0.57%	7.13%	3.97%	3.99%	8.73%	1.00%
AVG:	1.27%	0.90%	0.76%	0.46%	0.24%	0.38%	0.48%	0.98%	2.01%	1.97%	1.69%	1.70%	1.07%
MIN:	-1.40%	-3.67%	-4.54%	-10.52%	-2.90%	-3.10%	-0.59%	-0.55%	-2.24%	-5.51%	-2.73%	-2.74%	-1.01%
MAX:	8.98%	5.63%	8.42%	7.21%	3.99%	5.11%	3.34%	19.14%	7.78%	3.97%	4.84%	15.81%	3.83%

Table 4.4.5-15 Difference in simulated monthly average chloride concentration (%) at Prisoners Point, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.61%	0.37%	0.36%	0.81%	0.13%	0.07%	0.13%	0.21%	-0.24%	2.13%	3.84%	5.98%	1.20%
1923	5.44%	0.21%	-0.32%	-0.76%	-0.11%	0.73%	0.29%	0.46%	1.50%	2.93%	2.87%	3.00%	1.35%
1924	3.43%	0.75%	0.22%	2.35%	-1.79%	0.04%	0.44%	1.32%	1.33%	1.88%	2.20%	1.05%	1.10%
1925	-1.81%	-3.85%	-2.58%	-3.09%	-0.83%	-0.30%	-0.12%	0.69%	2.82%	4.01%	2.80%	2.98%	0.06%
1926	1.42%	-0.17%	1.38%	0.45%	-0.32%	0.87%	0.67%	0.64%	2.68%	2.14%	-0.59%	-3.35%	0.49%
1927	-0.07%	2.08%	1.52%	1.65%	3.26%	1.44%	0.15%	1.19%	1.50%	3.62%	8.38%	9.25%	2.83%
1928	5.72%	4.40%	6.40%	3.31%	1.56%	0.27%	0.18%	-0.17%	0.07%	2.50%	1.37%	-0.06%	2.13%
1929	0.35%	2.40%	2.68%	-0.89%	0.11%	2.67%	1.33%	0.85%	4.64%	2.97%	1.52%	2.43%	1.75%
1930	0.64%	1.00%	1.78%	1.25%	0.75%	0.75%	0.68%	1.24%	2.94%	1.92%	1.23%	0.37%	1.21%
1931	0.97%	2.46%	2.08%	0.92%	0.67%	0.80%	0.81%	1.54%	1.42%	1.43%	2.47%	1.14%	1.39%
1932	0.47%	-0.01%	0.29%	0.19%	0.16%	0.44%	2.40%	1.60%	2.18%	2.89%	2.49%	1.52%	1.22%
1933	0.38%	0.98%	2.13%	1.57%	1.26%	1.60%	0.90%	0.87%	1.65%	2.09%	2.02%	1.72%	1.43%
1934	0.85%	0.51%	0.55%	0.74%	0.53%	0.68%	0.76%	1.02%	1.76%	2.23%	2.00%	2.20%	1.15%
1935	0.34%	-0.15%	1.16%	0.23%	0.43%	1.63%	0.43%	0.49%	3.09%	3.97%	1.07%	-0.33%	1.03%
1936	2.42%	3.04%	-4.03%	0.51%	1.29%	2.79%	1.98%	0.35%	0.01%	3.75%	5.76%	5.59%	1.95%
1937	2.30%	-0.99%	-1.05%	0.23%	0.65%	1.53%	0.51%	-1.37%	0.24%	4.03%	6.42%	2.63%	1.26%
1938	1.33%	-1.85%	3.37%	0.63%	-0.07%	-0.03%	0.02%	0.03%	0.07%	2.19%	4.41%	8.40%	1.54%
1939	2.39%	2.89%	2.17%	2.05%	2.95%	1.03%	0.88%	0.97%	1.14%	1.03%	0.88%	1.03%	1.62%
1940	-0.60%	-0.50%	1.09%	-0.36%	0.06%	0.18%	0.35%	-0.80%	1.36%	4.31%	3.78%	5.25%	1.18%
1941	5.01%	-0.02%	-2.39%	0.13%	0.00%	-0.62%	-0.07%	0.02%	-4.62%	1.05%	3.53%	9.10%	0.93%
1942	17.84%	23.32%	7.49%	0.17%	0.03%	0.07%	0.14%	-0.31%	0.30%	-1.28%	5.80%	10.48%	5.34%
1943	8.88%	18.12%	22.27%	0.19%	0.01%	0.04%	0.08%	-1.90%	-0.90%	4.25%	6.55%	6.46%	5.34%
1944	4.47%	0.38%	-0.18%	1.56%	-0.99%	0.32%	0.26%	0.37%	1.96%	2.45%	1.20%	0.32%	1.01%
1945	0.01%	1.31%	2.04%	0.99%	0.12%	0.72%	0.11%	0.68%	0.71%	2.33%	4.96%	5.58%	1.63%
1946	2.62%	3.33%	1.61%	0.31%	-2.61%	-0.18%	0.28%	-0.61%	-0.17%	2.90%	2.87%	2.54%	1.07%
1947	1.69%	0.67%	1.06%	0.34%	0.06%	0.65%	0.74%	1.70%	4.22%	-0.04%	-0.38%	-0.28%	0.87%
1948	0.60%	-1.18%	-1.99%	-7.42%	-1.21%	0.41%	0.10%	0.43%	1.83%	2.39%	1.18%	0.67%	-0.35%
1949	-1.35%	-3.14%	-1.41%	-2.24%	-1.45%	-0.55%	0.24%	1.58%	1.97%	2.00%	5.62%	8.87%	0.84%
1950	2.94%	1.68%	6.46%	3.13%	1.22%	1.58%	1.88%	3.35%	2.89%	4.05%	5.91%	6.38%	3.46%
1951	0.88%	-2.06%	0.04%	0.17%	0.08%	0.49%	0.26%	-0.98%	1.38%	4.08%	3.87%	3.17%	0.95%
1952	2.38%	0.57%	0.34%	0.06%	0.10%	0.04%	0.00%	0.06%	-1.47%	1.64%	1.40%	2.40%	0.63%
1953	1.25%	1.40%	1.28%	0.26%	0.41%	0.89%	0.07%	0.56%	1.87%	2.75%	2.37%	3.03%	1.35%
1954	3.26%	6.45%	9.86%	5.14%	0.80%	0.39%	0.23%	0.20%	1.53%	2.35%	1.39%	0.58%	2.68%
1955	-1.45%	-1.79%	0.30%	0.44%	-0.58%	-0.49%	-0.15%	0.94%	2.55%	1.87%	1.11%	0.92%	0.31%
1956	0.55%	0.57%	1.05%	0.23%	0.23%	0.49%	0.33%	0.31%	-2.45%	6.06%	0.83%	6.31%	1.21%
1957	1.77%	-9.22%	-4.58%	2.42%	3.06%	-5.20%	-0.46%	0.60%	3.67%	2.97%	0.97%	-3.33%	-0.61%
1958	-1.76%	4.55%	1.93%	0.27%	0.00%	0.11%	-0.05%	0.19%	-0.37%	1.69%	4.14%	7.76%	1.54%
1959	2.87%	2.39%	1.57%	0.36%	0.28%	0.72%	0.36%	0.90%	2.28%	1.67%	-0.27%	-0.43%	1.06%
1960	-0.19%	-0.28%	-0.56%	-0.59%	-0.50%	0.40%	0.27%	0.81%	3.38%	1.68%	1.12%	0.71%	0.52%
1961	0.89%	0.80%	0.76%	1.14%	0.90%	0.93%	1.18%	3.22%	3.71%	1.35%	1.60%	1.57%	1.51%
1962	0.12%	-3.24%	-3.68%	-0.78%	-0.27%	-0.34%	-0.01%	0.66%	2.12%	1.85%	0.94%	0.60%	-0.17%
1963	1.60%	1.92%	2.62%	0.78%	0.89%	1.12%	0.30%	1.88%	3.40%	1.64%	6.52%	5.43%	2.34%
1964	2.46%	2.51%	1.49%	7.06%	6.82%	2.80%	1.38%	1.10%	1.90%	2.08%	1.12%	-0.16%	2.55%
1965	-0.47%	0.11%	0.18%	0.19%	0.25%	0.41%	-0.08%	0.27%	0.09%	2.91%	5.77%	6.00%	1.30%
1966	4.09%	2.01%	0.83%	0.62%	0.40%	0.76%	0.29%	0.98%	2.23%	2.03%	0.93%	0.43%	1.30%
1967	0.42%	0.37%	0.46%	0.36%	1.37%	0.15%	0.05%	0.07%	-0.38%	0.61%	6.59%	10.78%	1.74%
1968	2.43%	2.44%	1.73%	1.26%	0.33%	0.43%	0.21%	0.90%	2.29%	1.70%	1.04%	0.20%	1.25%
1969	-0.32%	-0.86%	-0.15%	0.36%	0.09%	0.05%	0.01%	-0.06%	-0.04%	2.09%	4.09%	9.29%	1.21%
1970	1.57%	1.64%	0.01%	0.02%	0.06%	0.09%	0.16%	0.51%	1.84%	2.38%	2.33%	1.31%	0.99%
1971	0.68%	1.28%	0.67%	0.31%	0.39%	0.47%	0.29%	0.30%	1.80%	2.48%	2.30%	2.92%	1.16%
1972	3.22%	2.10%	4.81%	7.53%	4.24%	1.01%	0.62%	1.45%	2.09%	2.45%	1.66%	1.01%	2.68%
1973	-0.74%	-1.93%	-1.70%	0.66%	0.39%	0.04%	0.14%	-0.48%	-1.94%	3.50%	-0.95%	6.33%	0.28%
1974	12.49%	7.50%	-0.01%	0.08%	0.25%	-1.42%	-0.02%	-0.36%	0.12%	2.72%	7.69%	14.32%	3.61%
1975	9.27%	5.72%	4.33%	3.33%	0.44%	4.75%	0.87%	0.49%	-0.66%	2.11%	7.23%	11.98%	4.16%
1976	3.74%	1.54%	2.19%	1.15%	-1.01%	-2.40%	0.43%	1.22%	2.28%	2.34%	3.68%	1.85%	1.42%
1977	-1.50%	-3.13%	-2.37%	-1.30%	-1.48%	-0.24%	0.42%	0.39%	1.19%	0.93%	1.31%	0.95%	-0.40%
1978	0.54%	0.64%	0.59%	0.16%	0.02%	0.13%	-0.02%	0.10%	0.47%	2.46%	1.86%	2.10%	0.75%
1979	2.59%	0.92%	0.06%	0.10%	0.02%	0.08%	0.10%	-0.17%	0.73%	2.21%	1.00%	0.46%	0.67%
1980	0.31%	0.23%	1.52%	0.17%	1.76%	1.64%	0.61%	0.95%	2.28%	3.65%	5.02%	5.81%	2.00%
1981	4.43%	-0.04%	-0.16%	3.48%	1.02%	0.42%	0.20%	0.77%	2.22%	1.15%	0.79%	0.66%	1.25%
1982	0.28%	-0.10%	0.31%	0.37%	0.30%	0.01%	0.03%	0.05%	-0.33%	2.34%	3.27%	3.57%	0.84%
1983	0.25%	0.21%	0.37%	-0.15%	-0.03%	-0.01%	0.02%	0.04%	0.00%	-0.46%	2.46%	1.22%	0.33%
1984	0.41%	0.04%	0.01%	-0.01%	0.04%	0.18%	0.18%	0.10%	1.43%	2.68%	2.68%	1.99%	0.81%
1985	1.72%	2.07%	1.28%	1.04%	0.96%	1.04%	0.44%	0.80%	2.08%	0.99%	0.56%	0.62%	1.13%
1986	0.52%	0.90%	1.61%	-10.51%	-0.21%	0.15%	0.16%	-1.05%	-0.75%	2.84%	6.66%	11.83%	1.01%
1987	8.28%	2.51%	0.70%	1.86%	-1.29%	-0.37%	0.17%	0.29%	2.93%	4.02%	1.39%	0.59%	1.76%
1988	0.66%	-0.15%	0.19%	0.69%	0.81%	7.12%	4.85%	8.85%	5.48%	0.96%	1.03%	0.65%	2.59%
1989	0.53%	-0.30%	-0.07%	0.37%	0.62%	0.62%	1.01%	1.84%	2.99%	1.80%	0.69%	0.20%	0.86%
1990	-0.94%	-0.69%	-0.02%	-1.51%	-1.27%	-0.66%	-0.15%	1.08%	1.96%	1.39%	0.35%	-0.89%	-0.11%
1991	0.57%	1.00%	-0.19%	0.50%	0.81%	0.66%	0.62%	0.46%	6.33%	3.44%	2.22%	-0.03%	1.37%
AVG:	1.98%	1.27%	1.20%	0.53%	0.39%	0.53%	0.46%	0.67%	1.44%	2.34%	2.76%	3.22%	1.40%
MIN:	-1.81%	-9.22%	-4.58%	-10.51%	-2.61%	-5.20%	-0.46%	-1.90%	-4.62%	-1.28%	-0.95%	-3.35%	-0.61%
MAX:	17.84%	23.32%	22.27%	7.53%	6.82%	7.12%	4.85%	8.85%	6.33%	6.06%	8.38%	14.32%	5.34%

Table 4.4.5-16 Simulated monthly average chloride concentration (mg/L) at Rock Slough Entrance at Old River, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	152	179	98	36	47	30	27	36	29	19	43	135	69
1923	168	158	83	35	28	21	37	38	25	31	87	169	73
1924	194	164	128	138	83	49	49	75	122	104	108	263	123
1925	315	243	128	66	45	46	48	38	26	33	104	209	108
1926	237	185	152	70	33	25	34	40	37	65	105	168	96
1927	240	96	20	19	37	23	27	27	20	20	49	155	61
1928	211	106	53	40	18	22	27	44	32	33	70	182	70
1929	219	149	95	102	98	42	43	61	65	82	144	202	108
1930	291	267	95	40	24	20	22	30	31	66	119	182	99
1931	243	184	110	69	61	49	63	82	111	90	117	270	121
1932	312	230	95	34	37	33	36	42	28	32	74	155	92
1933	246	206	127	55	38	32	34	48	65	83	138	170	103
1934	292	296	107	45	28	34	38	48	60	69	146	241	117
1935	296	196	132	64	28	24	37	45	25	23	76	188	94
1936	223	149	127	70	53	30	30	40	27	29	81	180	87
1937	230	160	115	128	58	51	51	40	22	26	77	186	95
1938	243	99	38	28	63	36	16	10	27	20	43	69	58
1939	29	27	58	42	31	35	40	45	40	87	150	220	67
1940	233	159	153	82	55	39	27	28	23	27	70	169	89
1941	220	157	52	35	45	31	39	45	27	21	44	85	67
1942	64	87	68	47	28	29	41	37	23	18	49	90	48
1943	53	41	29	32	25	30	31	45	27	22	49	155	45
1944	211	181	144	128	66	26	33	50	31	55	160	258	112
1945	203	124	97	44	35	30	35	41	26	33	89	181	78
1946	209	130	43	14	18	22	31	38	26	34	96	187	71
1947	202	143	79	60	49	23	24	37	35	73	156	228	92
1948	210	137	141	89	50	30	33	30	19	24	85	175	85
1949	187	146	101	73	54	29	26	33	25	50	101	170	83
1950	225	161	120	53	18	16	23	32	22	34	97	182	82
1951	217	66	28	26	22	21	29	41	26	25	70	177	62
1952	220	147	46	44	23	27	34	30	26	18	45	52	59
1953	20	27	44	24	19	18	35	38	19	18	43	80	32
1954	79	110	129	94	15	14	25	39	30	31	70	169	67
1955	196	142	60	27	27	25	36	38	27	50	111	202	78
1956	234	154	107	65	22	14	30	35	25	19	50	71	69
1957	33	50	126	134	54	20	26	37	25	25	66	167	64
1958	116	63	67	29	51	47	43	35	25	19	43	56	50
1959	21	26	98	73	35	34	37	39	27	42	101	168	59
1960	177	139	97	119	61	19	27	42	35	77	134	195	94
1961	233	145	88	63	32	17	22	28	36	82	148	182	90
1962	212	145	84	72	59	29	26	36	29	44	95	185	85
1963	98	21	36	26	27	19	39	35	24	20	52	147	45
1964	148	65	28	38	18	21	32	36	28	69	149	206	70
1965	216	138	50	23	15	17	29	31	24	20	42	138	62
1966	203	91	24	20	20	14	26	38	24	38	99	199	66
1967	194	123	63	48	26	24	40	26	28	23	33	36	55
1968	17	28	79	59	27	20	38	44	28	42	98	187	56
1969	186	129	62	42	70	35	16	11	13	20	44	52	57
1970	23	20	29	59	30	24	30	39	29	23	43	143	41
1971	191	119	36	15	13	15	23	41	24	17	39	76	51
1972	77	139	116	49	31	13	21	33	28	28	88	195	68
1973	213	79	25	43	48	28	26	34	23	23	67	165	65
1974	194	59	18	22	15	27	34	34	21	18	50	62	46
1975	22	42	105	90	43	32	41	37	22	17	47	63	47
1976	27	25	70	121	122	52	41	60	114	176	225	276	109
1977	286	239	177	94	108	84	82	88	116	98	123	266	147
1978	311	242	121	74	46	37	27	27	29	23	50	128	93
1979	147	173	155	62	57	34	28	32	22	27	81	189	84
1980	219	136	72	32	48	28	29	40	31	25	58	138	71
1981	151	176	133	50	17	20	32	41	36	98	165	210	94
1982	201	68	16	42	28	41	17	17	24	21	46	48	47
1983	26	30	36	36	30	35	18	11	9	22	16	20	24
1984	24	30	22	11	16	23	29	38	31	21	44	150	37
1985	210	96	16	22	42	29	40	46	33	85	160	199	81
1986	183	150	78	33	60	56	40	39	31	24	47	100	70
1987	139	160	142	119	85	30	27	35	36	74	153	265	105
1988	227	109	71	23	17	23	43	53	56	69	144	219	88
1989	286	215	154	99	69	27	18	21	27	74	142	175	109
1990	198	134	102	115	57	29	32	46	79	120	133	251	108
1991	287	224	241	126	127	49	32	40	52	111	156	194	137
AVG:	180	129	86	59	43	30	33	39	35	45	90	163	78
MIN:	17	20	16	11	13	13	16	10	9	17	16	20	24
MAX:	315	296	241	138	127	84	82	88	122	176	225	276	147

Table 4.4.5-17 Difference in simulated monthly average chloride concentration (%) at Rock Slough Entrance at Old River, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.21%	0.15%	0.31%	1.11%	0.34%	0.13%	0.25%	0.15%	0.25%	1.03%	0.94%	0.70%	0.46%
1923	1.10%	0.30%	-0.38%	-0.03%	0.15%	0.56%	0.32%	0.41%	1.12%	1.46%	0.77%	0.78%	0.55%
1924	1.29%	0.28%	-0.28%	0.65%	-0.36%	0.52%	0.77%	2.88%	1.70%	0.64%	3.96%	1.06%	1.09%
1925	-0.63%	-2.78%	-2.76%	-2.97%	-0.99%	0.13%	-0.02%	0.42%	1.40%	0.99%	-1.71%	-2.65%	-0.97%
1926	0.19%	1.82%	-1.29%	1.17%	0.36%	1.75%	1.32%	0.79%	1.83%	-0.11%	-0.43%	-1.06%	0.53%
1927	-0.33%	1.68%	4.32%	4.02%	-0.84%	-1.02%	-0.02%	-0.04%	0.39%	1.27%	1.19%	0.62%	0.94%
1928	0.88%	1.47%	3.38%	2.59%	1.28%	0.25%	0.21%	0.18%	0.83%	1.05%	0.52%	0.34%	1.08%
1929	0.30%	0.41%	0.61%	-0.13%	0.57%	3.70%	3.17%	1.50%	4.28%	0.73%	0.77%	6.63%	1.88%
1930	4.12%	-0.29%	0.98%	0.50%	0.58%	0.55%	0.41%	0.98%	2.80%	-3.43%	4.32%	9.73%	1.77%
1931	1.41%	-2.25%	4.07%	-2.18%	-2.63%	-3.25%	-2.03%	0.14%	3.02%	2.36%	1.35%	0.45%	0.04%
1932	0.24%	-0.26%	-0.38%	0.70%	1.89%	1.55%	1.31%	2.71%	1.97%	1.55%	1.11%	0.91%	1.11%
1933	0.49%	0.22%	0.14%	1.54%	5.33%	2.06%	1.90%	0.78%	0.70%	0.69%	1.30%	0.74%	1.33%
1934	-0.43%	-1.60%	-0.34%	-1.77%	-0.09%	1.05%	1.99%	1.01%	-0.47%	-0.48%	3.40%	1.87%	0.35%
1935	0.79%	-1.31%	-1.66%	0.75%	0.60%	-0.43%	1.41%	2.13%	2.54%	2.09%	0.01%	-1.07%	0.49%
1936	0.89%	3.79%	-4.86%	-1.00%	-8.64%	-3.05%	0.14%	0.85%	1.02%	2.37%	2.06%	1.81%	-0.39%
1937	1.07%	-0.49%	-0.47%	0.38%	-1.11%	-0.42%	0.05%	-0.90%	0.93%	4.25%	-0.30%	-1.26%	0.14%
1938	0.03%	0.57%	5.21%	2.11%	0.24%	0.02%	-0.01%	0.00%	-0.01%	0.90%	0.81%	1.65%	0.96%
1939	2.24%	2.44%	2.07%	2.15%	1.24%	0.97%	1.25%	1.26%	0.72%	0.66%	0.34%	-0.03%	1.28%
1940	-0.44%	-1.01%	1.35%	-0.19%	0.16%	-1.27%	-1.43%	0.32%	0.45%	0.27%	0.18%	0.88%	-0.06%
1941	0.99%	-0.67%	-1.82%	0.16%	0.01%	-1.42%	-0.58%	-0.04%	1.08%	1.67%	1.20%	2.48%	0.26%
1942	5.45%	6.09%	1.66%	-0.24%	0.08%	0.12%	0.12%	0.16%	0.62%	1.52%	0.82%	1.88%	1.52%
1943	4.03%	6.06%	5.47%	0.24%	0.03%	0.02%	0.10%	0.10%	0.78%	1.53%	0.97%	0.78%	1.68%
1944	0.71%	0.48%	0.05%	0.26%	-0.13%	0.81%	0.54%	0.50%	1.43%	1.52%	0.54%	-0.01%	0.56%
1945	-0.20%	1.52%	3.11%	2.25%	1.02%	0.62%	0.43%	0.41%	1.16%	1.17%	0.85%	0.87%	1.10%
1946	1.04%	0.86%	0.99%	0.29%	0.36%	0.42%	0.39%	0.61%	1.86%	0.99%	0.61%	1.28%	0.81%
1947	0.84%	-0.52%	2.11%	0.31%	-0.42%	0.36%	0.13%	0.66%	1.10%	-0.27%	-0.28%	-0.04%	0.33%
1948	-0.70%	-0.02%	0.28%	-0.05%	0.43%	0.50%	0.43%	0.45%	1.28%	1.51%	0.58%	0.40%	0.43%
1949	0.40%	-0.81%	1.43%	1.54%	0.33%	0.53%	0.30%	1.11%	1.39%	0.22%	1.05%	1.80%	0.77%
1950	1.87%	2.48%	2.34%	2.23%	1.15%	0.82%	0.79%	1.64%	2.57%	3.53%	2.53%	1.44%	1.95%
1951	-0.72%	-3.01%	0.09%	1.72%	-0.44%	-1.84%	-0.84%	0.27%	0.96%	2.52%	1.45%	0.67%	0.07%
1952	0.77%	0.58%	0.06%	0.08%	0.10%	0.05%	-0.02%	0.01%	0.15%	1.20%	0.19%	0.62%	0.31%
1953	1.19%	1.40%	0.70%	0.28%	0.35%	0.62%	0.28%	0.43%	1.24%	1.70%	0.81%	2.16%	0.93%
1954	2.31%	5.33%	8.27%	4.34%	1.02%	0.27%	0.22%	0.24%	0.80%	1.10%	0.50%	0.24%	2.05%
1955	0.28%	0.31%	1.04%	1.77%	0.88%	0.59%	0.65%	0.92%	1.61%	0.54%	0.28%	0.34%	0.77%
1956	0.62%	1.16%	0.35%	0.01%	0.06%	0.38%	0.24%	0.26%	0.78%	1.67%	0.93%	1.46%	0.66%
1957	3.69%	3.35%	0.65%	-0.30%	1.00%	-0.80%	-0.34%	0.45%	1.22%	1.46%	0.96%	0.37%	0.98%
1958	2.33%	5.05%	2.04%	0.28%	0.11%	0.06%	0.08%	-0.08%	0.18%	1.24%	0.68%	2.72%	1.22%
1959	3.61%	1.69%	-0.28%	-0.60%	0.15%	0.98%	1.01%	0.77%	1.16%	0.36%	-0.51%	-1.02%	0.61%
1960	-1.51%	0.44%	1.92%	0.90%	1.47%	0.76%	0.56%	0.92%	5.88%	1.58%	0.11%	-1.02%	1.00%
1961	0.59%	1.44%	-0.31%	2.50%	2.05%	0.97%	0.78%	1.18%	2.74%	0.39%	0.31%	0.26%	1.07%
1962	1.99%	0.31%	-2.61%	2.63%	0.51%	0.38%	0.81%	0.69%	2.00%	0.05%	-1.13%	-0.43%	0.43%
1963	0.63%	2.41%	2.51%	0.83%	-1.76%	-1.36%	-0.17%	0.14%	1.05%	2.30%	0.61%	-0.43%	0.56%
1964	-0.60%	2.03%	1.18%	3.47%	4.28%	1.94%	1.60%	0.54%	0.50%	2.16%	0.41%	-0.33%	1.43%
1965	-0.33%	-0.42%	-1.39%	-0.14%	0.25%	-0.37%	0.04%	0.26%	0.96%	1.82%	1.09%	0.68%	0.21%
1966	0.79%	2.02%	2.98%	1.16%	0.40%	0.61%	0.48%	0.65%	0.86%	0.80%	0.30%	0.12%	0.93%
1967	0.15%	0.78%	1.54%	0.19%	0.44%	0.18%	0.03%	0.00%	0.08%	0.73%	3.38%	4.19%	0.98%
1968	1.85%	1.64%	1.40%	1.45%	0.45%	0.27%	0.08%	1.05%	1.99%	0.41%	-0.01%	0.08%	0.89%
1969	0.02%	-0.38%	0.04%	-0.55%	-0.27%	0.01%	-0.10%	-0.71%	0.26%	1.00%	1.02%	2.36%	0.22%
1970	1.58%	2.14%	1.11%	-0.04%	0.01%	0.10%	0.23%	0.44%	1.08%	1.46%	1.04%	0.48%	0.80%
1971	0.10%	0.92%	1.43%	0.27%	0.33%	0.35%	0.35%	0.23%	1.01%	1.40%	0.54%	1.52%	0.70%
1972	2.62%	1.80%	4.40%	8.86%	4.92%	1.10%	0.57%	0.77%	1.22%	1.28%	0.02%	-0.12%	2.29%
1973	0.16%	0.95%	1.70%	0.26%	0.27%	0.14%	0.31%	0.44%	-1.70%	-2.68%	-4.07%	1.75%	-0.21%
1974	8.08%	7.41%	0.04%	0.07%	0.22%	-1.19%	-0.53%	0.20%	0.98%	1.81%	1.49%	3.89%	1.87%
1975	6.68%	3.71%	2.45%	2.33%	0.84%	2.89%	2.14%	0.37%	1.00%	1.51%	0.11%	1.59%	2.14%
1976	0.66%	-1.35%	0.63%	0.45%	-0.37%	-0.26%	1.86%	1.83%	2.00%	0.88%	-0.27%	0.43%	0.54%
1977	0.61%	-3.65%	-1.48%	-3.15%	-2.37%	-1.24%	-0.89%	-0.74%	0.25%	0.23%	-1.86%	-1.72%	-1.33%
1978	-0.41%	0.34%	0.54%	0.14%	-0.02%	0.03%	0.08%	-0.04%	0.33%	-5.39%	3.78%	1.90%	0.11%
1979	2.06%	-2.32%	-4.79%	2.73%	0.15%	0.10%	0.31%	0.47%	0.70%	0.64%	0.09%	0.72%	0.07%
1980	1.00%	0.15%	2.52%	1.10%	-0.11%	-1.72%	-0.39%	0.28%	0.95%	2.03%	1.68%	2.32%	0.82%
1981	2.88%	0.53%	0.24%	2.45%	0.84%	0.39%	0.32%	1.10%	2.83%	0.79%	0.31%	0.36%	1.09%
1982	0.41%	1.24%	-0.06%	-0.20%	0.07%	0.02%	0.57%	-0.01%	0.53%	0.96%	1.04%	1.31%	0.49%
1983	0.46%	0.17%	0.95%	0.04%	-0.03%	-0.01%	-0.27%	-0.02%	-0.03%	0.15%	1.42%	1.08%	0.33%
1984	0.11%	0.07%	0.03%	0.11%	0.06%	0.16%	0.25%	0.40%	1.27%	1.99%	0.80%	0.68%	0.49%
1985	0.86%	1.87%	1.43%	0.93%	0.79%	1.12%	1.00%	0.64%	1.24%	-0.07%	-0.17%	0.22%	0.82%
1986	0.22%	0.77%	1.41%	-12.45%	-0.76%	0.07%	0.06%	0.23%	0.92%	1.91%	3.00%	4.65%	0.00%
1987	4.03%	1.84%	0.77%	1.08%	0.24%	0.49%	0.35%	0.56%	1.84%	1.63%	0.40%	0.60%	1.15%
1988	0.96%	0.60%	0.49%	1.26%	0.99%	1.38%	2.12%	5.81%	2.15%	0.50%	1.06%	4.82%	1.85%
1989	1.38%	-0.98%	3.58%	3.17%	2.04%	0.47%	0.58%	1.07%	2.62%	-1.16%	-1.47%	0.59%	0.99%
1990	0.42%	1.19%	1.40%	-0.33%	-1.21%	-0.31%	0.29%	2.10%	3.40%	-0.94%	-0.11%	0.53%	0.54%
1991	-0.07%	-2.35%	-3.74%	-2.14%	-0.33%	-0.12%	0.03%	0.80%	3.81%	1.73%	3.58%	8.28%	0.79%
AVG:	1.15%	0.85%	0.87%	0.62%	0.26%	0.20%	0.41%	0.66%	1.31%	0.93%	0.76%	1.17%	0.77%
MIN:	-1.51%	-3.65%	-4.86%	-12.45%	-8.64%	-3.25%	-2.03%	-0.90%	-1.70%	-5.39%	-4.07%	-2.65%	-1.33%
MAX:	8.08%	7.41%	8.27%	8.86%	5.33%	3.70%	3.17%	5.81%	5.88%	4.25%	4.32%	9.73%	2.29%

Table 4.4.5-18 Difference in simulated monthly average chloride concentration (%) at Rock Slough Entrance at Old River, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.18%	0.16%	0.19%	0.94%	0.32%	0.13%	0.22%	0.20%	0.03%	1.44%	1.68%	3.56%	0.75%
1923	4.41%	0.39%	-1.33%	-0.87%	-0.28%	0.55%	0.34%	0.38%	0.93%	1.83%	1.41%	1.64%	0.78%
1924	2.99%	0.43%	-0.41%	2.02%	-2.28%	-0.42%	0.28%	0.75%	0.37%	0.75%	0.93%	0.23%	0.47%
1925	-1.35%	-3.52%	-2.23%	-3.60%	-1.23%	0.04%	-0.05%	0.49%	1.82%	2.01%	1.31%	1.67%	-0.39%
1926	0.82%	-0.75%	1.05%	-0.12%	-0.06%	0.39%	0.59%	0.75%	1.56%	0.74%	-1.75%	-4.15%	-0.08%
1927	-0.74%	1.61%	2.09%	3.27%	2.44%	1.26%	0.12%	0.43%	0.85%	3.37%	9.04%	6.35%	2.51%
1928	4.54%	4.24%	7.70%	4.29%	1.72%	0.28%	0.19%	0.72%	0.20%	1.36%	-0.01%	-0.38%	2.07%
1929	0.19%	1.79%	2.46%	-1.30%	0.03%	2.11%	1.73%	0.99%	2.99%	0.50%	0.45%	1.72%	1.14%
1930	0.48%	-0.56%	1.78%	1.54%	0.63%	0.57%	0.52%	0.88%	1.59%	0.80%	0.46%	0.30%	0.75%
1931	0.50%	1.99%	1.38%	0.52%	0.18%	0.02%	0.39%	0.37%	0.08%	0.69%	1.52%	0.63%	0.69%
1932	0.17%	-0.33%	0.05%	0.34%	0.49%	0.48%	1.13%	2.61%	1.89%	1.52%	1.04%	0.81%	0.85%
1933	0.53%	0.80%	1.77%	2.11%	3.04%	1.73%	1.09%	0.77%	0.81%	0.65%	0.63%	0.65%	1.21%
1934	0.43%	0.18%	0.30%	0.29%	0.43%	0.41%	0.63%	0.70%	0.80%	0.76%	0.87%	1.50%	0.61%
1935	-0.11%	-0.43%	0.76%	0.01%	0.36%	0.71%	0.55%	0.65%	2.59%	2.64%	0.32%	-0.67%	0.62%
1936	1.66%	3.70%	-4.97%	-0.02%	-6.85%	0.00%	0.43%	0.66%	0.00%	4.17%	4.19%	3.27%	0.52%
1937	1.37%	-1.73%	-1.38%	0.20%	-0.92%	-2.46%	-1.62%	-2.35%	-0.24%	7.21%	4.63%	1.17%	0.32%
1938	0.70%	-2.28%	2.41%	2.38%	0.36%	0.03%	0.04%	0.00%	0.02%	1.22%	3.05%	7.61%	1.30%
1939	7.82%	4.08%	1.94%	3.29%	5.46%	1.60%	0.55%	1.01%	0.36%	0.17%	0.37%	0.54%	2.27%
1940	-0.54%	-0.75%	1.17%	-0.86%	0.03%	0.11%	0.22%	0.26%	0.95%	4.14%	2.24%	3.13%	0.84%
1941	4.04%	0.40%	-4.28%	0.15%	-0.16%	-2.11%	-0.87%	-0.17%	-3.47%	0.23%	1.69%	7.36%	0.23%
1942	23.67%	26.06%	11.58%	0.69%	0.05%	0.09%	0.11%	0.16%	0.06%	-1.91%	5.03%	8.86%	6.21%
1943	12.97%	29.11%	37.32%	3.89%	1.27%	-0.08%	0.12%	-0.86%	-1.78%	3.84%	6.33%	4.41%	8.04%
1944	3.26%	0.01%	-0.46%	1.47%	-1.91%	-0.03%	0.31%	0.49%	1.41%	1.49%	0.59%	-0.05%	0.55%
1945	-0.05%	1.13%	2.37%	1.04%	0.76%	0.64%	0.41%	0.66%	0.87%	1.26%	3.70%	3.22%	1.33%
1946	1.96%	2.86%	3.61%	0.26%	-0.80%	-0.72%	0.45%	0.14%	-0.45%	1.44%	1.40%	1.05%	0.93%
1947	0.33%	0.25%	0.91%	-0.03%	-0.37%	0.55%	0.49%	0.65%	2.55%	-1.24%	-0.85%	-0.58%	0.22%
1948	-0.14%	-1.31%	-1.68%	-6.66%	-1.22%	0.01%	0.15%	0.34%	1.14%	1.25%	0.41%	0.19%	-0.63%
1949	-1.05%	-2.94%	-0.91%	-2.27%	-1.49%	-0.77%	0.23%	1.10%	0.99%	0.57%	5.30%	7.86%	0.55%
1950	2.15%	0.30%	6.34%	3.75%	1.15%	1.16%	1.30%	2.01%	2.53%	4.47%	4.27%	4.18%	2.80%
1951	0.84%	-3.74%	0.07%	-0.82%	-0.14%	0.38%	0.47%	0.10%	0.97%	4.74%	3.01%	2.18%	0.67%
1952	2.16%	0.86%	-0.56%	0.08%	0.10%	0.05%	-0.02%	0.01%	-0.31%	0.86%	-1.73%	1.05%	0.21%
1953	2.84%	1.39%	1.03%	0.39%	0.25%	0.57%	0.28%	0.46%	1.30%	1.81%	1.09%	2.55%	1.16%
1954	2.69%	6.38%	9.74%	5.06%	1.12%	0.27%	0.22%	0.24%	0.81%	1.08%	0.43%	0.20%	2.35%
1955	-1.17%	-1.69%	0.55%	0.72%	-0.06%	-0.50%	-0.28%	0.64%	1.56%	0.30%	0.25%	0.46%	0.06%
1956	0.28%	0.27%	0.32%	0.06%	0.16%	0.24%	0.31%	0.29%	-1.64%	4.14%	-1.55%	5.36%	0.69%
1957	-0.55%	-14.55%	-5.18%	1.79%	3.14%	-2.80%	-1.24%	0.41%	3.27%	1.51%	-0.44%	-2.75%	-1.45%
1958	-3.07%	4.82%	1.89%	0.27%	0.10%	0.03%	0.04%	-0.08%	0.25%	0.86%	2.40%	7.29%	1.23%
1959	7.69%	2.85%	1.31%	0.30%	0.26%	0.23%	0.32%	0.73%	1.42%	0.46%	-1.20%	-0.88%	1.12%
1960	-0.44%	-0.42%	-0.66%	-0.57%	-0.63%	0.22%	0.31%	0.58%	2.42%	0.66%	0.52%	0.14%	0.18%
1961	0.37%	0.53%	0.33%	1.19%	0.80%	0.58%	0.74%	1.33%	2.02%	0.68%	1.01%	0.89%	0.87%
1962	-0.13%	-3.05%	-3.59%	-0.31%	-0.23%	-0.22%	0.05%	0.48%	1.28%	0.67%	0.26%	0.36%	-0.37%
1963	1.13%	2.43%	2.98%	0.91%	0.85%	0.78%	0.20%	0.60%	2.19%	1.55%	6.14%	3.72%	1.96%
1964	1.46%	2.49%	1.21%	9.00%	12.15%	3.38%	1.76%	0.73%	0.79%	1.18%	0.57%	-0.26%	2.87%
1965	-1.21%	-0.06%	-0.08%	0.22%	0.25%	-0.43%	0.01%	0.27%	-0.27%	1.91%	5.81%	4.17%	0.88%
1966	3.56%	2.16%	0.77%	0.81%	0.39%	0.61%	0.34%	0.69%	0.92%	0.79%	0.26%	0.12%	0.95%
1967	0.16%	0.14%	0.26%	0.20%	1.04%	0.22%	0.04%	0.00%	-0.24%	0.43%	8.54%	14.89%	2.14%
1968	4.37%	2.72%	1.64%	1.48%	0.42%	0.25%	0.12%	0.67%	1.53%	0.62%	0.41%	-0.04%	1.18%
1969	-0.37%	-0.98%	-0.33%	0.24%	0.05%	0.00%	0.03%	-0.02%	-0.06%	0.92%	2.67%	9.25%	0.95%
1970	5.37%	1.29%	-0.20%	-0.04%	0.04%	0.09%	0.17%	0.46%	1.12%	1.58%	1.31%	0.67%	0.99%
1971	0.21%	0.91%	1.29%	0.26%	0.33%	0.35%	0.34%	0.23%	1.10%	1.54%	1.08%	2.29%	0.83%
1972	2.99%	1.86%	4.59%	9.30%	5.20%	1.14%	0.48%	0.79%	1.27%	1.28%	0.90%	0.45%	2.52%
1973	-0.72%	-2.76%	-3.05%	0.21%	0.52%	0.08%	0.21%	0.24%	-2.40%	-2.04%	-2.44%	3.90%	-0.69%
1974	11.42%	10.63%	0.07%	0.08%	0.23%	-2.02%	-0.91%	-0.04%	0.10%	2.78%	8.46%	15.67%	3.87%
1975	20.77%	7.58%	4.37%	3.27%	0.92%	7.96%	5.64%	0.74%	-0.38%	1.00%	7.41%	13.08%	6.03%
1976	7.16%	1.35%	2.13%	1.03%	-1.41%	-4.14%	0.29%	0.89%	1.29%	1.71%	2.83%	1.58%	1.23%
1977	-1.28%	-2.92%	-2.32%	-0.46%	-0.68%	-0.35%	-0.40%	-0.67%	0.23%	0.39%	0.27%	0.56%	-0.64%
1978	0.26%	0.25%	0.45%	0.06%	0.06%	0.11%	0.08%	0.02%	0.43%	1.57%	0.78%	1.39%	0.45%
1979	2.40%	0.82%	-0.21%	0.50%	-0.03%	0.07%	0.31%	0.25%	0.55%	0.81%	0.01%	0.13%	0.47%
1980	0.13%	-0.02%	1.33%	0.42%	0.68%	2.84%	0.96%	0.92%	2.08%	3.73%	4.08%	3.92%	1.75%
1981	4.35%	0.33%	-0.29%	4.17%	1.30%	0.40%	0.22%	0.71%	1.23%	0.42%	0.47%	0.27%	1.13%
1982	0.07%	-0.16%	0.15%	0.20%	0.36%	-0.01%	0.03%	0.00%	0.08%	1.47%	1.31%	3.23%	0.56%
1983	0.88%	0.26%	4.26%	0.31%	0.02%	-0.02%	-0.05%	0.01%	-0.01%	-0.25%	1.65%	1.95%	0.75%
1984	0.56%	0.08%	0.03%	0.10%	0.05%	0.12%	0.27%	0.42%	1.09%	1.89%	1.61%	1.27%	0.62%
1985	1.32%	2.01%	1.44%	0.93%	0.79%	1.06%	1.00%	0.64%	1.26%	0.05%	-0.02%	0.33%	0.90%
1986	0.25%	0.72%	1.39%	-12.46%	-0.74%	0.06%	0.18%	-0.38%	-1.00%	1.37%	6.17%	10.83%	0.53%
1987	8.05%	2.41%	0.36%	1.96%	-1.51%	0.20%	0.27%	0.64%	2.61%	3.44%	0.35%	1.00%	1.65%
1988	1.10%	-0.55%	-0.22%	0.78%	0.66%	2.15%	2.38%	3.09%	2.39%	0.24%	-0.53%	1.96%	1.12%
1989	0.64%	-0.68%	-0.32%	0.07%	0.32%	0.46%	0.59%	1.06%	1.60%	0.79%	0.17%	-0.22%	0.37%
1990	-1.17%	-0.41%	0.55%	-0.85%	-1.15%	-0.76%	-0.35%	0.60%	1.09%	0.12%	-0.67%	-1.09%	-0.34%
1991	0.11%	0.78%	-0.60%	0.30%	0.60%	0.53%	0.35%	0.63%	1.85%	1.84%	1.80%	-0.62%	0.63%
AVG:	2.24%	1.30%	1.38%	0.68%	0.40%	0.29%	0.37%	0.49%	0.82%	1.40%	1.80%	2.53%	1.14%
MIN:	-3.07%	-14.55%	-5.18%	-12.46%	-6.85%	-4.14%	-1.62%	-2.35%	-3.47%	-2.04%	-2.44%	-4.15%	-1.45%
MAX:	23.67%	29.11%	37.32%	9.30%	12.15%	7.96%	5.64%	3.09%	3.27%	7.21%	9.04%	15.67%	8.04%

Table 4.4.5-19 Simulated monthly average chloride concentration (mg/L) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	111	134	86	42	57	36	34	42	34	23	35	95	61
1923	124	120	82	43	34	27	47	51	33	29	63	122	65
1924	142	127	98	106	73	71	94	83	107	103	83	180	105
1925	229	188	109	59	56	77	67	52	34	34	75	148	94
1926	177	143	122	65	43	37	48	63	48	53	80	119	83
1927	176	86	24	24	50	32	35	37	26	23	38	108	55
1928	154	88	45	38	21	29	35	56	41	31	51	129	60
1929	160	119	79	78	82	51	75	91	81	67	106	144	94
1930	209	210	84	43	34	27	32	49	38	51	87	129	83
1931	179	147	96	61	58	63	81	90	101	77	85	187	102
1932	229	182	98	45	46	40	47	57	39	36	62	112	83
1933	177	153	109	59	50	42	60	78	79	71	106	128	93
1934	208	232	94	45	37	55	67	79	78	64	103	172	103
1935	213	158	109	67	37	33	46	43	31	24	56	133	79
1936	168	119	99	66	66	36	35	50	33	29	60	130	74
1937	170	129	91	104	54	58	41	39	27	26	57	131	77
1938	176	83	45	34	54	22	12	7	17	24	36	56	47
1939	33	25	48	41	35	44	58	61	49	66	109	157	61
1940	176	124	118	84	74	47	34	39	30	26	52	120	77
1941	161	125	54	49	50	33	35	41	34	26	36	64	59
1942	55	65	66	58	34	37	48	46	32	24	39	68	48
1943	49	39	32	35	27	24	33	43	34	27	40	109	41
1944	153	140	111	102	70	37	50	66	40	43	112	183	92
1945	156	98	82	41	41	37	43	52	34	30	65	129	67
1946	155	101	45	19	25	30	42	50	33	31	69	133	61
1947	150	114	68	50	46	28	34	68	45	54	111	163	78
1948	160	106	109	71	44	36	46	44	25	23	61	124	71
1949	138	113	82	63	51	37	40	48	32	40	76	120	70
1950	168	128	101	59	27	21	34	50	28	29	69	130	70
1951	157	66	34	32	25	25	38	52	33	25	51	126	55
1952	161	118	50	57	29	31	28	22	26	22	36	45	52
1953	26	27	48	32	25	24	51	51	25	21	34	60	35
1954	58	81	94	79	19	20	34	59	39	30	51	119	57
1955	143	109	54	35	36	36	53	56	34	41	82	143	69
1956	177	121	79	50	22	18	37	45	33	22	39	57	58
1957	35	39	90	103	52	27	36	50	32	25	49	119	55
1958	92	48	61	40	71	57	34	25	29	23	36	47	47
1959	27	23	69	63	46	49	55	54	32	35	72	125	54
1960	131	112	75	94	63	26	59	70	45	59	100	139	81
1961	175	118	74	57	35	19	29	42	47	61	107	132	75
1962	155	116	69	60	71	38	36	55	36	36	68	131	72
1963	83	22	32	33	38	26	51	46	32	25	40	103	44
1964	109	58	27	37	25	29	59	54	34	51	107	147	62
1965	160	110	52	28	18	22	36	41	32	24	33	97	54
1966	146	81	29	26	27	20	49	55	31	32	71	142	59
1967	147	97	63	65	35	31	35	20	24	28	29	35	51
1968	23	26	59	55	38	26	54	59	33	35	71	135	51
1969	141	103	59	50	33	25	11	7	12	23	37	46	46
1970	29	21	34	53	32	28	40	52	36	25	34	100	40
1971	141	99	45	22	19	22	33	60	32	20	32	58	48
1972	56	100	93	43	30	15	27	47	36	27	63	139	56
1973	161	72	30	62	62	34	33	44	30	24	50	117	60
1974	143	58	26	31	20	30	38	42	28	21	39	51	44
1975	26	34	78	72	45	38	40	46	30	21	37	51	43
1976	31	23	51	89	100	56	71	76	93	130	165	199	90
1977	206	174	144	82	88	89	97	99	104	81	88	186	120
1978	228	192	106	89	58	44	21	23	31	26	40	94	79
1979	109	128	125	65	63	38	34	41	28	26	59	134	71
1980	165	106	65	37	42	28	31	44	40	30	45	99	61
1981	110	126	105	51	25	28	53	58	40	70	118	151	78
1982	152	65	24	54	30	45	9	15	27	27	38	48	45
1983	29	37	21	22	18	19	11	8	7	20	18	28	20
1984	27	23	12	9	18	28	39	52	42	26	35	105	35
1985	154	87	22	22	39	39	73	68	39	62	114	142	72
1986	137	121	71	38	65	23	24	39	38	28	38	74	58
1987	103	120	110	92	78	42	42	57	42	55	110	188	86
1988	178	92	69	31	23	34	58	67	68	62	106	158	79
1989	209	169	124	83	64	34	25	30	32	56	103	129	88
1990	145	107	76	89	56	38	54	68	78	105	101	178	91
1991	212	167	162	113	106	58	56	66	60	84	118	142	112
AVG:	135	103	73	56	45	36	44	51	41	40	67	118	67
MIN:	23	21	12	9	18	15	9	7	7	20	18	28	20
MAX:	229	232	162	113	106	89	97	99	107	130	165	199	120

Table 4.4.5-20 Difference in simulated monthly average chloride concentration (%) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.26%	0.21%	0.28%	0.69%	0.21%	0.06%	0.09%	0.08%	0.15%	0.81%	1.04%	0.84%	0.39%
1923	1.05%	0.40%	-0.24%	0.01%	0.01%	0.37%	0.19%	0.20%	0.71%	1.32%	0.88%	0.86%	0.48%
1924	1.31%	0.54%	-0.32%	0.84%	-0.23%	0.18%	0.16%	1.35%	1.79%	0.58%	3.89%	1.20%	0.94%
1925	0.08%	-2.33%	-2.63%	-2.65%	-0.77%	-0.10%	-0.07%	0.15%	1.05%	1.14%	-1.38%	-2.57%	-0.84%
1926	-0.59%	1.91%	-1.02%	0.81%	0.26%	2.33%	1.41%	0.59%	1.73%	0.55%	-0.25%	-1.00%	0.56%
1927	-0.24%	1.31%	2.46%	2.48%	-0.62%	-1.01%	-0.05%	-0.16%	0.03%	0.99%	1.30%	0.77%	0.61%
1928	0.78%	1.29%	2.74%	2.09%	0.98%	0.20%	0.10%	0.03%	0.53%	1.17%	0.68%	0.41%	0.92%
1929	0.34%	0.39%	0.64%	-0.04%	0.48%	5.78%	2.27%	0.90%	5.42%	2.64%	0.59%	5.72%	2.10%
1930	5.50%	0.28%	0.73%	0.44%	0.50%	0.37%	0.10%	0.55%	3.97%	-2.11%	3.64%	9.66%	1.97%
1931	2.47%	-2.57%	2.78%	-1.38%	-1.86%	-1.11%	-1.05%	-0.01%	2.05%	1.98%	1.43%	0.43%	0.26%
1932	0.07%	0.00%	-0.13%	0.46%	1.05%	1.17%	-1.67%	1.30%	1.86%	1.60%	1.01%	0.98%	0.64%
1933	0.52%	0.22%	0.16%	0.46%	1.53%	1.25%	0.51%	0.22%	0.41%	0.89%	2.42%	1.22%	0.82%
1934	-0.26%	-1.36%	-0.49%	-0.63%	0.15%	2.65%	2.02%	0.71%	-1.73%	-6.26%	2.63%	0.44%	-0.18%
1935	1.20%	-0.74%	-1.44%	0.46%	0.50%	-0.27%	0.62%	-1.28%	1.62%	3.10%	0.23%	-0.59%	0.28%
1936	0.63%	3.80%	-3.56%	-1.11%	-9.23%	-3.55%	0.68%	0.62%	0.75%	1.31%	2.01%	1.87%	-0.48%
1937	1.26%	-0.33%	-0.34%	0.21%	-1.18%	-0.13%	0.73%	0.03%	0.54%	1.10%	0.93%	-1.25%	0.13%
1938	0.02%	0.51%	3.65%	1.90%	-0.29%	-0.08%	-0.03%	0.00%	0.02%	0.62%	1.03%	1.53%	0.74%
1939	1.43%	1.71%	1.77%	1.71%	0.87%	0.94%	1.43%	0.88%	0.46%	0.79%	0.41%	0.10%	1.04%
1940	-0.22%	-1.12%	1.02%	0.01%	-0.04%	-1.12%	-0.95%	0.12%	0.53%	0.53%	0.38%	0.87%	0.00%
1941	1.19%	-0.15%	-1.17%	0.09%	0.02%	-1.17%	-0.32%	-0.05%	0.82%	1.39%	1.20%	2.22%	0.34%
1942	4.23%	5.57%	1.61%	-0.26%	0.05%	0.05%	0.06%	0.06%	0.35%	0.99%	0.94%	1.68%	1.28%
1943	2.59%	4.18%	3.66%	0.20%	0.02%	0.03%	0.02%	0.02%	0.50%	1.19%	1.11%	0.77%	1.19%
1944	0.83%	0.52%	0.04%	0.32%	-0.08%	0.64%	0.36%	0.20%	0.99%	1.51%	0.63%	0.08%	0.50%
1945	-0.15%	1.18%	2.70%	1.88%	0.74%	0.46%	0.20%	0.18%	0.76%	1.15%	0.88%	1.09%	0.92%
1946	1.00%	0.81%	0.78%	0.22%	0.37%	0.27%	0.19%	0.33%	0.96%	1.25%	0.71%	1.39%	0.69%
1947	1.13%	-0.54%	1.83%	0.84%	-0.21%	-0.20%	-0.23%	-0.11%	0.66%	-0.01%	-0.20%	-0.02%	0.25%
1948	-0.57%	-0.04%	0.45%	0.02%	0.42%	0.42%	0.29%	0.23%	1.15%	1.46%	0.70%	0.61%	0.43%
1949	0.54%	-0.75%	1.66%	1.54%	0.41%	0.37%	0.15%	0.70%	0.92%	0.67%	0.98%	1.82%	0.75%
1950	1.75%	2.40%	2.24%	1.83%	0.90%	0.66%	0.46%	1.76%	1.91%	2.92%	2.51%	1.51%	1.74%
1951	-0.58%	-2.32%	0.05%	1.88%	-0.53%	-2.25%	-0.79%	0.04%	0.88%	1.73%	1.50%	0.80%	0.03%
1952	0.69%	0.57%	0.17%	0.06%	0.06%	0.05%	-0.02%	0.00%	0.06%	1.03%	0.72%	0.60%	0.33%
1953	0.72%	1.00%	0.53%	0.19%	0.33%	0.46%	0.10%	0.24%	0.82%	1.55%	1.02%	1.97%	0.74%
1954	2.43%	4.56%	8.17%	4.36%	0.98%	0.21%	0.12%	0.05%	0.50%	1.13%	0.65%	0.31%	1.96%
1955	0.26%	0.41%	0.79%	1.08%	0.55%	0.40%	0.56%	0.57%	1.17%	0.78%	0.38%	0.45%	0.62%
1956	0.62%	1.16%	0.38%	0.05%	-0.18%	0.29%	0.17%	0.16%	0.53%	1.31%	1.06%	1.29%	0.57%
1957	2.43%	3.15%	0.91%	-0.37%	0.79%	-0.72%	-0.52%	0.21%	0.84%	1.34%	1.08%	0.49%	0.80%
1958	2.02%	4.84%	1.98%	0.26%	0.09%	0.08%	0.08%	0.11%	0.12%	0.91%	0.86%	2.19%	1.13%
1959	2.10%	1.45%	-0.08%	-0.44%	0.13%	1.32%	0.80%	0.41%	0.96%	0.45%	-0.32%	-0.91%	0.49%
1960	-1.45%	0.36%	2.03%	0.89%	1.22%	0.48%	0.16%	0.65%	6.60%	2.38%	0.41%	-0.90%	1.07%
1961	0.46%	1.47%	0.01%	1.99%	1.52%	0.78%	0.52%	0.60%	2.58%	0.73%	0.30%	0.31%	0.94%
1962	1.97%	0.85%	-2.51%	2.21%	0.27%	-0.18%	0.69%	1.13%	1.81%	0.31%	-0.92%	-0.32%	0.44%
1963	0.60%	1.38%	2.08%	0.41%	-1.45%	-1.26%	-0.20%	0.07%	0.75%	1.10%	0.85%	-0.36%	0.33%
1964	-0.60%	1.69%	1.09%	2.48%	2.63%	1.44%	0.72%	0.25%	-0.08%	2.10%	0.60%	-0.30%	1.00%
1965	-0.19%	-0.21%	-1.09%	-0.14%	0.15%	-0.15%	-0.03%	0.09%	0.61%	1.31%	1.19%	0.86%	0.20%
1966	0.93%	1.51%	1.78%	0.71%	0.26%	0.45%	0.12%	0.36%	0.95%	0.92%	0.44%	0.18%	0.72%
1967	0.18%	0.72%	1.25%	0.15%	0.36%	0.14%	0.03%	0.01%	0.02%	0.42%	2.57%	3.22%	0.76%
1968	1.14%	1.34%	1.29%	1.28%	0.41%	0.23%	0.01%	0.69%	1.57%	0.52%	0.17%	0.13%	0.73%
1969	0.10%	-0.28%	-0.02%	-0.26%	-0.02%	0.07%	-0.02%	0.00%	0.02%	0.80%	1.07%	1.96%	0.28%
1970	0.95%	1.34%	0.67%	0.00%	-0.08%	0.05%	0.06%	0.18%	0.65%	1.45%	1.14%	0.57%	0.58%
1971	0.17%	0.77%	0.93%	0.19%	0.17%	0.20%	0.14%	0.04%	0.74%	1.20%	0.73%	1.42%	0.56%
1972	2.50%	1.63%	3.77%	7.45%	4.24%	1.02%	0.31%	0.39%	0.85%	1.21%	0.28%	-0.04%	1.97%
1973	0.16%	0.78%	1.19%	0.21%	0.22%	0.20%	0.15%	0.19%	-2.01%	2.65%	-3.13%	2.13%	0.23%
1974	7.67%	6.54%	0.16%	0.06%	0.13%	-1.35%	-0.52%	0.08%	0.63%	1.37%	1.47%	3.24%	1.62%
1975	3.92%	3.08%	2.32%	2.21%	0.68%	2.41%	1.24%	0.22%	0.73%	1.24%	0.44%	1.41%	1.66%
1976	0.63%	-0.78%	0.61%	0.50%	-0.12%	0.31%	1.13%	0.93%	2.22%	1.10%	-0.09%	0.15%	0.55%
1977	0.98%	-3.26%	-1.40%	-2.66%	-2.37%	-1.02%	-0.53%	-0.40%	0.21%	0.40%	-1.31%	-1.82%	-1.10%
1978	-0.47%	0.15%	0.51%	0.12%	0.05%	0.05%	0.19%	-0.01%	0.18%	-6.29%	1.94%	1.86%	-0.14%
1979	1.98%	-1.35%	-4.94%	1.05%	0.01%	0.06%	0.03%	0.16%	0.20%	0.72%	0.15%	0.72%	-0.10%
1980	1.06%	0.24%	1.92%	0.68%	-0.01%	-0.99%	-0.27%	-0.06%	0.61%	1.32%	1.59%	2.19%	0.69%
1981	2.71%	0.96%	0.13%	1.87%	0.54%	0.26%	0.11%	0.70%	1.84%	0.93%	0.38%	0.40%	0.90%
1982	0.41%	1.05%	-0.23%	-0.19%	0.06%	0.01%	0.13%	0.00%	0.18%	0.97%	1.12%	0.99%	0.37%
1983	0.31%	0.12%	-0.40%	-0.01%	-0.02%	-0.04%	-0.52%	0.00%	0.00%	0.07%	1.07%	0.65%	0.10%
1984	0.07%	0.11%	0.03%	0.09%	0.00%	0.09%	0.11%	0.06%	0.85%	1.37%	0.92%	0.72%	0.37%
1985	0.87%	1.56%	0.98%	0.78%	0.65%	0.80%	0.10%	0.31%	0.91%	0.28%	0.07%	0.25%	0.63%
1986	0.32%	0.68%	1.16%	-8.03%	-0.50%	-0.08%	-0.20%	-0.03%	0.60%	1.58%	2.53%	4.37%	0.20%
1987	3.82%	1.98%	0.69%	1.15%	-0.28%	-0.39%	0.01%	0.57%	1.56%	1.62%	0.59%	0.63%	1.00%
1988	0.94%	0.96%	0.68%	0.85%	0.71%	2.50%	2.01%	9.34%	5.60%	-1.35%	-0.34%	4.06%	2.16%
1989	1.53%	-0.76%	3.15%	3.11%	1.42%	0.09%	0.39%	0.65%	2.52%	-0.15%	-1.22%	0.42%	0.93%
1990	0.81%	1.25%	1.52%	-0.43%	-1.22%	-0.41%	0.08%	0.61%	2.54%	-0.23%	0.08%	0.52%	0.43%
1991	-0.05%	-1.93%	2.36%	-1.90%	-0.76%	-0.19%	-0.04%	0.06%	2.24%	3.52%	3.26%	5.82%	1.03%
AVG:	1.05%	0.80%	0.78%	0.53%	0.09%	0.21%	0.20%	0.42%	1.08%	0.87%	0.82%	1.08%	0.66%
MIN:	-1.45%	-3.26%	-4.94%	-8.03%	-9.23%	-3.55%	-1.67%	-1.28%	-2.01%	-6.29%	-3.13%	-2.57%	-1.10%
MAX:	7.67%	6.54%	8.17%	7.45%	4.24%	5.78%	2.27%	9.34%	6.60%	3.52%	3.89%	9.66%	2.16%

Table 4.4.5-21 Difference in simulated monthly average chloride concentration (%) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.23%	0.20%	0.18%	0.58%	0.19%	0.07%	0.09%	0.09%	-0.03%	0.90%	1.91%	3.76%	0.68%
1923	4.38%	0.80%	-0.94%	-0.77%	-0.39%	0.33%	0.21%	0.20%	0.55%	1.42%	1.55%	1.74%	0.76%
1924	2.99%	0.96%	-0.55%	2.40%	-1.80%	-0.39%	-0.05%	0.35%	0.41%	0.72%	1.13%	0.24%	0.53%
1925	-0.80%	-3.19%	-2.19%	-3.09%	-0.94%	-0.12%	-0.07%	0.35%	1.22%	1.94%	1.50%	1.84%	-0.30%
1926	1.20%	-0.77%	0.96%	-0.16%	-0.31%	0.34%	0.48%	0.31%	1.54%	1.06%	-1.08%	-3.85%	-0.02%
1927	-0.88%	1.27%	1.10%	1.96%	1.27%	1.01%	0.04%	0.35%	0.54%	2.11%	7.73%	6.76%	1.94%
1928	4.74%	3.68%	6.29%	3.51%	1.19%	0.22%	0.08%	-0.01%	-0.10%	1.30%	0.31%	-0.34%	1.74%
1929	0.19%	1.51%	2.68%	-1.01%	-0.08%	2.57%	0.95%	0.43%	3.47%	1.83%	0.42%	1.82%	1.23%
1930	0.56%	-0.55%	1.32%	1.24%	0.48%	0.43%	0.23%	0.37%	1.56%	0.99%	0.69%	0.26%	0.63%
1931	0.52%	1.67%	1.79%	0.62%	0.36%	0.40%	0.35%	0.67%	0.42%	0.39%	1.68%	0.75%	0.80%
1932	0.31%	-0.20%	0.08%	0.21%	0.17%	0.34%	-1.75%	1.24%	1.73%	1.52%	1.06%	0.90%	0.47%
1933	0.54%	0.65%	1.49%	1.24%	1.32%	1.09%	0.45%	0.24%	0.45%	0.78%	1.07%	0.80%	0.84%
1934	0.50%	0.20%	0.31%	0.40%	0.38%	0.51%	0.34%	0.27%	0.45%	0.76%	0.99%	1.49%	0.55%
1935	0.23%	-0.50%	0.72%	0.08%	0.39%	0.69%	0.39%	-0.63%	1.86%	3.64%	0.58%	-0.15%	0.61%
1936	1.30%	3.89%	-3.67%	-0.15%	-7.93%	-0.96%	1.01%	0.45%	-0.06%	1.97%	4.08%	3.56%	0.29%
1937	1.70%	-1.33%	-1.18%	-0.05%	-1.07%	-1.63%	0.08%	-0.33%	-0.80%	1.91%	4.79%	1.39%	0.29%
1938	0.84%	-0.92%	2.72%	2.12%	-0.44%	-0.07%	0.04%	0.00%	-0.08%	1.03%	2.81%	6.28%	1.20%
1939	4.95%	2.97%	1.78%	1.79%	2.92%	1.04%	0.61%	0.64%	0.00%	0.34%	0.42%	0.64%	1.51%
1940	-0.32%	-0.93%	1.01%	-0.55%	-0.01%	0.08%	0.12%	-0.13%	0.47%	3.34%	2.30%	3.16%	0.71%
1941	4.00%	1.57%	-2.58%	0.08%	0.01%	-1.58%	-0.50%	-0.11%	-3.53%	-0.42%	1.85%	6.54%	0.44%
1942	17.85%	23.54%	10.58%	0.68%	0.11%	0.05%	0.06%	0.06%	-0.19%	-5.00%	3.79%	7.79%	4.94%
1943	9.65%	18.95%	24.54%	2.98%	1.43%	0.04%	0.08%	3.60%	-1.12%	2.72%	5.67%	4.70%	6.10%
1944	3.49%	0.42%	-0.72%	1.70%	-1.29%	0.02%	0.14%	0.18%	0.97%	1.49%	0.68%	0.10%	0.60%
1945	0.01%	0.87%	2.08%	0.80%	0.53%	0.40%	0.19%	0.32%	0.51%	1.09%	3.15%	3.60%	1.13%
1946	2.04%	2.47%	2.74%	0.29%	-1.61%	-0.64%	0.21%	-0.21%	-0.64%	1.43%	1.50%	1.16%	0.73%
1947	0.63%	0.33%	0.85%	0.36%	-0.19%	-0.24%	0.16%	0.02%	2.98%	-0.67%	-0.73%	-0.51%	0.25%
1948	0.05%	-0.78%	-0.33%	-5.42%	-1.42%	-0.06%	0.00%	0.13%	0.72%	1.25%	0.55%	0.34%	-0.41%
1949	-0.76%	-3.32%	-1.04%	-2.16%	-1.46%	-0.72%	0.05%	0.70%	0.20%	0.88%	4.29%	7.74%	0.37%
1950	2.57%	0.09%	5.29%	2.97%	0.94%	0.95%	1.17%	2.11%	1.98%	3.54%	4.31%	4.46%	2.53%
1951	1.43%	-2.75%	0.04%	-1.13%	-0.30%	0.12%	0.26%	-0.08%	0.78%	3.43%	2.95%	2.22%	0.58%
1952	2.10%	1.12%	-0.20%	0.06%	0.06%	0.05%	-0.03%	0.02%	-0.16%	1.10%	0.15%	0.91%	0.43%
1953	1.68%	1.01%	0.94%	0.29%	0.21%	0.41%	0.10%	0.27%	0.89%	1.68%	1.20%	2.32%	0.92%
1954	2.81%	5.46%	9.62%	5.08%	1.08%	0.22%	0.12%	0.05%	0.50%	1.07%	0.59%	0.27%	2.24%
1955	-1.02%	-1.83%	0.27%	0.43%	-0.26%	-0.66%	-0.33%	0.23%	1.11%	0.61%	0.30%	0.56%	-0.05%
1956	0.36%	0.29%	0.38%	0.03%	0.29%	0.15%	0.16%	0.17%	-1.82%	9.07%	-0.14%	4.50%	1.12%
1957	0.77%	-11.73%	-5.67%	1.46%	2.68%	-2.11%	-1.53%	0.16%	2.95%	2.02%	0.52%	-3.01%	-1.12%
1958	-3.10%	4.47%	1.84%	0.22%	0.09%	0.09%	0.09%	0.08%	-0.02%	0.63%	2.34%	5.99%	1.06%
1959	4.52%	2.24%	1.36%	0.40%	0.42%	0.23%	0.17%	0.33%	1.27%	0.58%	-0.93%	-0.77%	0.82%
1960	-0.39%	-0.35%	-0.62%	-0.52%	-0.52%	0.05%	-0.01%	0.24%	2.45%	1.01%	0.64%	0.23%	0.19%
1961	0.40%	0.58%	0.52%	0.98%	0.72%	0.55%	0.49%	0.60%	2.07%	0.83%	1.05%	0.95%	0.81%
1962	0.20%	-2.79%	-3.63%	-0.75%	-0.25%	-0.81%	-0.14%	0.28%	1.01%	0.84%	0.38%	0.38%	-0.44%
1963	1.05%	1.65%	2.60%	0.62%	0.64%	0.67%	0.10%	0.38%	1.63%	-0.22%	5.00%	3.82%	1.50%
1964	1.59%	2.14%	1.13%	6.11%	7.72%	2.59%	0.84%	0.49%	-0.17%	1.22%	0.69%	-0.27%	2.01%
1965	-1.05%	0.03%	-0.08%	0.16%	0.15%	-0.20%	-0.07%	0.10%	-0.69%	1.31%	4.93%	4.40%	0.75%
1966	3.66%	1.87%	1.03%	0.50%	0.25%	0.46%	0.12%	0.38%	0.98%	0.91%	0.40%	0.17%	0.90%
1967	0.18%	0.15%	0.24%	0.19%	0.91%	0.19%	0.03%	0.00%	-0.10%	0.21%	5.84%	10.93%	1.56%
1968	2.61%	2.14%	1.56%	1.27%	0.34%	0.15%	0.00%	0.33%	1.17%	0.81%	0.53%	0.05%	0.91%
1969	-0.27%	-0.85%	-0.35%	0.14%	0.05%	0.04%	0.02%	0.01%	-0.06%	0.74%	2.41%	7.22%	0.76%
1970	3.28%	1.23%	0.01%	-0.02%	-0.07%	0.04%	0.04%	0.19%	0.67%	1.56%	1.35%	0.77%	0.75%
1971	0.29%	0.77%	0.85%	0.19%	0.18%	0.20%	0.15%	0.05%	0.80%	1.26%	1.12%	2.11%	0.66%
1972	2.87%	1.69%	3.93%	7.78%	4.49%	1.05%	0.29%	0.43%	0.89%	1.20%	0.97%	0.58%	2.18%
1973	-0.54%	-2.10%	-1.95%	0.17%	0.42%	0.04%	0.08%	-0.07%	-2.39%	3.13%	-1.71%	4.38%	-0.04%
1974	11.08%	9.14%	0.22%	0.08%	0.14%	-2.37%	-0.84%	-0.12%	-0.11%	1.05%	7.01%	12.96%	3.19%
1975	12.27%	6.22%	4.10%	3.17%	0.78%	5.93%	3.28%	0.49%	-0.32%	0.64%	5.85%	11.27%	4.47%
1976	4.66%	1.11%	2.07%	1.09%	-0.58%	-2.60%	-0.18%	0.34%	1.38%	1.61%	2.85%	1.79%	1.13%
1977	-0.78%	-2.48%	-2.36%	-0.66%	-0.86%	-0.16%	-0.03%	-0.24%	0.20%	0.64%	0.40%	0.66%	-0.47%
1978	0.30%	0.26%	0.44%	0.08%	0.03%	0.08%	0.11%	-0.01%	0.22%	1.18%	0.96%	1.28%	0.41%
1979	2.26%	0.99%	-0.23%	0.12%	-0.08%	0.03%	0.09%	0.00%	-0.01%	0.86%	0.16%	0.18%	0.36%
1980	0.16%	-0.05%	1.09%	0.27%	0.11%	1.97%	0.39%	0.14%	1.56%	2.44%	3.63%	3.86%	1.30%
1981	4.11%	0.97%	-0.44%	3.09%	0.83%	0.27%	0.07%	0.30%	0.96%	0.56%	0.40%	0.34%	0.95%
1982	0.15%	-0.10%	0.09%	0.14%	0.29%	-0.03%	-0.03%	-0.01%	-0.03%	1.03%	1.51%	2.35%	0.45%
1983	0.64%	0.20%	-1.83%	-0.07%	0.01%	0.02%	-0.08%	0.00%	0.00%	-0.05%	1.16%	1.23%	0.10%
1984	0.36%	0.12%	0.02%	0.08%	0.00%	0.06%	0.11%	0.07%	0.61%	1.38%	1.59%	1.33%	0.48%
1985	1.36%	1.69%	1.00%	0.79%	0.65%	0.75%	0.07%	0.31%	0.88%	0.24%	0.07%	0.36%	0.68%
1986	0.37%	0.63%	1.16%	-8.05%	-0.52%	-0.07%	-0.09%	-0.09%	-0.62%	1.56%	5.05%	10.26%	0.80%
1987	7.76%	2.81%	-0.06%	2.26%	-1.89%	-1.22%	-0.11%	-0.02%	1.45%	3.32%	0.76%	0.83%	1.32%
1988	1.17%	-0.29%	-0.39%	0.22%	0.48%	6.61%	3.15%	4.65%	4.53%	-0.83%	-2.15%	1.35%	1.54%
1989	0.68%	-0.48%	-0.27%	0.07%	0.30%	0.43%	0.42%	0.65%	1.36%	0.97%	0.31%	-0.16%	0.36%
1990	-0.86%	-0.67%	0.52%	-0.92%	-1.18%	-0.96%	-0.54%	0.03%	0.74%	0.30%	-0.34%	-1.04%	-0.41%
1991	-0.23%	0.90%	1.29%	0.33%	0.50%	0.40%	0.12%	0.16%	1.51%	2.64%	2.09%	-0.71%	0.75%
AVG:	1.88%	1.13%	1.08%	0.55%	0.16%	0.24%	0.17%	0.33%	0.62%	1.27%	1.73%	2.34%	0.96%
MIN:	-3.10%	-11.73%	-5.67%	-8.05%	-7.93%	-2.60%	-1.75%	-0.63%	-3.53%	-5.00%	-2.15%	-3.85%	-1.12%
MAX:	17.85%	23.54%	24.54%	7.78%	7.72%	6.61%	3.28%	4.65%	4.53%	9.07%	7.73%	12.96%	6.10%

Table 4.4.5-22 Simulated monthly average chloride concentration (mg/L) at Tracy Pumping Plant, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	107	123	86	62	61	38	37	34	24	46	60	106	65
1923	94	113	70	35	35	61	49	50	61	55	76	123	68
1924	122	116	93	97	88	109	109	97	110	113	96	158	109
1925	181	149	106	75	81	93	64	58	61	59	81	134	95
1926	147	130	113	84	81	71	69	73	80	81	103	125	96
1927	152	94	46	49	66	55	43	47	53	47	59	111	68
1928	137	91	57	53	49	42	41	55	63	52	66	124	69
1929	138	116	87	83	92	97	97	91	96	83	109	136	102
1930	175	177	94	72	69	64	70	78	67	74	102	130	98
1931	153	137	108	76	87	117	109	103	108	94	98	164	113
1932	187	156	82	48	37	46	42	51	62	61	70	104	79
1933	135	118	98	79	80	87	80	76	89	92	109	125	97
1934	165	177	97	64	81	98	95	95	97	92	107	157	110
1935	180	139	102	63	48	58	41	39	51	57	66	122	81
1936	137	116	96	78	52	43	33	42	56	65	71	123	76
1937	134	119	90	88	25	43	25	24	50	57	69	122	70
1938	125	92	40	29	29	12	10	6	10	42	56	75	44
1939	32	56	73	66	65	68	61	66	72	75	102	148	74
1940	150	125	117	78	76	40	37	45	57	53	69	120	81
1941	135	119	70	57	28	28	28	29	42	51	62	90	61
1942	61	78	56	42	30	48	43	41	46	48	62	89	54
1943	53	63	47	23	20	17	32	35	60	52	63	112	48
1944	118	125	106	101	88	67	63	61	72	64	103	161	94
1945	142	106	92	68	50	42	40	51	64	57	78	128	77
1946	118	99	44	30	38	53	47	54	62	56	79	129	67
1947	128	107	74	61	65	63	73	85	76	67	110	156	89
1948	148	112	107	84	71	79	64	59	56	49	73	122	85
1949	126	110	90	81	84	71	62	63	59	59	82	120	84
1950	144	121	106	78	54	54	59	66	56	52	77	125	83
1951	142	68	27	21	19	38	42	45	57	49	66	120	58
1952	132	112	66	64	33	30	24	15	18	41	56	71	55
1953	31	50	64	33	38	59	55	54	54	47	58	86	52
1954	78	90	93	86	57	57	50	55	65	54	67	120	73
1955	127	110	73	66	69	86	86	78	61	63	90	140	87
1956	163	121	37	24	13	31	40	48	44	45	60	80	59
1957	45	55	84	95	74	52	48	53	57	50	65	119	67
1958	99	68	79	78	98	51	20	17	25	44	56	73	59
1959	36	46	75	73	56	67	64	65	58	54	78	127	67
1960	124	109	89	100	86	64	90	88	76	69	102	141	95
1961	156	119	81	77	67	62	74	71	71	74	106	135	91
1962	146	118	80	75	75	49	46	59	60	56	76	126	80
1963	97	54	55	61	58	55	52	44	53	47	58	105	61
1964	105	75	47	59	62	75	91	75	62	63	102	142	80
1965	145	109	52	21	21	38	35	41	53	48	57	104	60
1966	123	78	31	32	38	46	66	71	60	54	78	135	68
1967	132	105	70	88	57	43	25	16	14	29	50	62	58
1968	36	50	68	70	55	57	61	67	60	55	78	130	65
1969	131	108	78	35	19	14	10	6	6	41	58	72	48
1970	29	58	55	25	22	35	42	50	60	51	59	108	49
1971	121	104	68	49	49	52	51	58	61	48	57	86	67
1972	77	99	92	61	60	56	69	70	58	49	72	131	74
1973	145	95	66	99	57	36	35	44	59	51	67	117	73
1974	124	82	57	40	34	42	33	36	49	47	60	78	57
1975	52	58	81	79	51	40	35	41	45	46	60	78	56
1976	50	49	63	85	101	96	96	87	99	113	126	171	95
1977	130	113	107	91	117	135	124	106	107	87	98	164	115
1978	192	163	106	90	44	41	19	19	22	46	61	96	75
1979	77	113	112	57	37	32	35	41	55	51	72	127	68
1980	134	102	76	24	21	20	27	34	43	45	59	94	57
1981	73	106	98	71	61	59	59	63	63	77	107	141	82
1982	138	91	60	55	18	33	7	12	27	47	60	67	51
1983	21	33	9	20	14	16	10	8	6	12	44	46	20
1984	19	12	11	6	18	41	48	53	69	54	61	113	42
1985	131	96	49	50	68	81	84	68	63	71	103	135	83
1986	128	124	87	67	37	12	19	31	42	61	62	93	63
1987	85	104	101	90	95	89	76	78	66	72	107	171	95
1988	159	101	87	64	54	110	98	90	93	89	109	153	101
1989	178	149	116	87	94	70	61	58	61	71	103	135	99
1990	136	108	80	91	86	84	93	92	94	112	107	159	103
1991	176	145	135	110	121	81	71	74	78	92	111	129	110
AVG:	118	102	77	64	57	57	54	55	59	60	78	119	75
MIN:	19	12	9	6	13	12	7	6	6	12	44	46	20
MAX:	192	177	135	110	121	135	124	106	110	113	126	171	115

Table 4.4.5-23 Difference in simulated monthly average chloride concentration (%) at Tracy Pumping Plant, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.17%	0.17%	0.15%	0.23%	0.07%	0.02%	0.01%	-0.01%	0.03%	0.27%	0.39%	0.45%	0.16%
1923	0.60%	0.27%	-0.11%	-0.06%	-0.06%	0.05%	0.03%	0.03%	0.20%	0.45%	0.46%	0.55%	0.20%
1924	0.90%	0.46%	0.19%	0.53%	-0.09%	0.03%	0.03%	0.50%	1.03%	0.35%	2.62%	-0.95%	0.47%
1925	0.47%	-0.45%	-1.67%	-1.48%	-0.27%	-0.05%	-0.03%	0.02%	0.81%	0.81%	-0.66%	-1.69%	-0.35%
1926	-0.49%	1.62%	-0.67%	0.33%	0.10%	1.65%	0.42%	0.11%	1.32%	-0.04%	0.04%	-0.22%	0.35%
1927	-0.28%	0.65%	0.74%	0.70%	-0.55%	-0.26%	-0.01%	-0.04%	0.01%	0.29%	0.56%	0.49%	0.19%
1928	0.58%	0.70%	1.18%	0.81%	0.26%	0.05%	0.02%	0.00%	0.19%	0.49%	0.37%	0.29%	0.41%
1929	0.23%	0.23%	0.36%	0.00%	0.26%	5.09%	0.71%	0.21%	4.14%	2.55%	0.50%	4.16%	1.54%
1930	4.72%	0.98%	0.40%	0.16%	0.25%	0.09%	-0.31%	0.13%	0.65%	0.95%	1.46%	6.14%	1.30%
1931	2.81%	-1.92%	0.85%	-0.53%	0.07%	-0.14%	-0.35%	-0.09%	1.12%	0.94%	0.68%	0.39%	0.32%
1932	0.95%	-0.93%	-0.01%	0.16%	0.58%	0.31%	-0.33%	0.08%	0.96%	0.94%	0.69%	0.68%	0.34%
1933	0.77%	0.14%	0.05%	0.02%	0.05%	0.22%	0.07%	0.03%	0.17%	0.34%	0.88%	1.07%	0.32%
1934	-0.01%	-0.09%	-0.37%	0.63%	-0.11%	1.98%	0.80%	0.25%	0.05%	-3.25%	2.95%	0.15%	0.25%
1935	0.83%	-0.19%	-0.89%	0.18%	0.12%	-0.56%	-0.33%	-0.15%	1.26%	3.70%	0.32%	-1.21%	0.26%
1936	-0.14%	3.45%	-1.96%	-0.61%	-5.24%	-1.03%	2.31%	0.37%	0.27%	-1.51%	0.96%	1.21%	-0.16%
1937	0.48%	-0.15%	-0.16%	0.12%	0.02%	1.80%	0.43%	0.39%	0.16%	-6.85%	0.54%	-0.77%	-0.33%
1938	0.05%	0.27%	-0.33%	0.25%	-0.03%	-0.02%	-0.13%	0.00%	0.00%	0.20%	0.43%	0.59%	0.11%
1939	0.41%	-0.01%	0.42%	0.41%	0.18%	0.56%	0.30%	0.19%	0.08%	0.31%	0.26%	0.08%	0.27%
1940	-0.08%	-0.91%	0.79%	0.03%	0.00%	-0.33%	-0.23%	0.02%	0.15%	0.20%	0.20%	0.51%	0.03%
1941	0.73%	0.07%	-0.42%	0.03%	0.00%	-0.11%	-0.07%	0.01%	0.31%	0.47%	0.45%	0.89%	0.20%
1942	1.60%	2.62%	0.06%	-0.04%	0.02%	0.01%	0.01%	0.01%	0.09%	0.36%	0.37%	0.70%	0.48%
1943	1.13%	1.45%	1.20%	0.06%	0.00%	0.00%	0.00%	0.00%	0.11%	0.40%	0.43%	0.47%	0.44%
1944	0.48%	0.47%	0.09%	0.18%	-0.02%	0.19%	0.05%	0.02%	0.45%	0.68%	0.41%	0.10%	0.26%
1945	-0.08%	0.57%	1.38%	0.67%	0.22%	0.13%	0.02%	0.02%	0.20%	0.38%	0.45%	0.64%	0.38%
1946	0.71%	0.46%	0.33%	-0.02%	0.08%	-0.05%	0.03%	0.06%	0.28%	0.45%	0.39%	0.94%	0.30%
1947	0.81%	-0.30%	0.93%	0.31%	-0.05%	0.14%	-0.08%	-0.10%	0.11%	0.05%	-0.08%	-0.04%	0.14%
1948	-0.33%	-0.04%	0.39%	0.04%	0.18%	0.14%	0.07%	0.05%	0.21%	0.44%	0.38%	0.48%	0.17%
1949	0.41%	-1.58%	0.98%	0.77%	0.14%	0.10%	0.06%	0.22%	0.19%	0.28%	0.06%	1.08%	0.23%
1950	1.27%	1.60%	1.25%	0.73%	0.25%	0.21%	0.19%	0.19%	0.71%	1.01%	1.39%	1.04%	0.82%
1951	-0.43%	-1.13%	0.02%	1.14%	-4.01%	-1.03%	-0.17%	0.00%	0.23%	0.68%	0.71%	0.52%	-0.29%
1952	0.53%	0.35%	0.06%	0.02%	0.02%	0.01%	0.00%	0.00%	0.01%	0.30%	0.27%	0.23%	0.15%
1953	0.20%	0.30%	0.18%	0.10%	0.15%	-0.08%	0.02%	0.05%	0.19%	0.40%	0.41%	0.81%	0.23%
1954	1.01%	2.33%	4.91%	2.46%	0.21%	0.05%	0.03%	0.01%	0.17%	0.44%	0.33%	0.21%	1.01%
1955	0.15%	0.26%	0.34%	0.32%	0.17%	0.10%	0.08%	0.20%	0.41%	0.78%	0.37%	0.49%	0.30%
1956	0.34%	0.60%	0.02%	0.02%	-0.19%	0.05%	0.03%	0.03%	0.14%	0.44%	0.47%	0.51%	0.20%
1957	0.81%	1.24%	0.48%	-0.25%	0.65%	-0.30%	-0.16%	0.04%	0.26%	0.48%	0.51%	0.33%	0.34%
1958	1.00%	1.97%	0.86%	0.08%	0.01%	0.01%	-0.02%	0.04%	0.03%	0.33%	0.37%	0.85%	0.46%
1959	0.63%	0.40%	0.00%	-0.24%	0.03%	0.37%	0.21%	0.13%	0.34%	0.37%	-0.14%	-0.84%	0.11%
1960	-0.79%	0.45%	1.25%	-0.16%	0.46%	0.09%	0.04%	-0.45%	-1.88%	1.19%	0.14%	-0.65%	-0.03%
1961	-0.02%	1.03%	-0.15%	0.97%	0.51%	2.57%	0.09%	0.06%	1.22%	0.39%	0.19%	0.28%	0.60%
1962	1.52%	0.81%	-1.28%	1.04%	-0.52%	0.00%	0.07%	0.02%	0.72%	0.32%	-0.46%	0.04%	0.19%
1963	0.30%	0.33%	0.79%	0.12%	-0.48%	-0.19%	-0.04%	0.03%	0.23%	0.51%	0.39%	-0.18%	0.15%
1964	-0.37%	0.78%	0.40%	0.84%	0.65%	0.61%	0.14%	-0.01%	-0.20%	1.10%	0.48%	-0.06%	0.36%
1965	-0.21%	-0.14%	-0.48%	-0.05%	0.03%	0.33%	0.00%	0.01%	0.19%	0.51%	0.45%	0.55%	0.10%
1966	0.29%	0.67%	0.72%	0.25%	0.07%	0.12%	0.02%	0.08%	0.32%	0.39%	0.28%	0.14%	0.28%
1967	0.14%	0.41%	0.57%	0.04%	0.13%	0.03%	0.01%	0.01%	0.00%	0.12%	0.85%	0.93%	0.27%
1968	0.34%	0.41%	0.62%	0.75%	0.09%	0.06%	0.01%	0.21%	0.67%	0.26%	0.15%	0.08%	0.30%
1969	0.09%	-0.14%	-0.03%	-0.05%	-0.08%	0.24%	0.01%	0.00%	0.07%	0.22%	0.44%	0.65%	0.12%
1970	0.25%	0.22%	0.08%	-0.01%	-0.04%	0.00%	0.01%	0.03%	0.22%	0.42%	0.43%	0.33%	0.16%
1971	0.09%	0.40%	0.33%	0.05%	0.04%	0.05%	0.02%	0.01%	0.23%	0.37%	0.28%	0.57%	0.20%
1972	1.04%	1.16%	2.12%	2.98%	1.33%	0.20%	0.10%	0.10%	0.37%	0.51%	0.20%	0.03%	0.84%
1973	0.11%	0.35%	0.33%	0.06%	0.08%	0.05%	0.03%	0.02%	0.89%	0.31%	-1.12%	1.39%	0.21%
1974	4.87%	2.95%	0.06%	0.00%	0.07%	-0.81%	-0.10%	0.00%	0.18%	0.41%	0.58%	1.19%	0.78%
1975	0.96%	1.04%	1.24%	0.98%	0.24%	0.62%	0.16%	0.04%	0.20%	0.37%	0.20%	0.55%	0.55%
1976	0.21%	-0.18%	0.28%	0.31%	0.07%	1.03%	0.21%	0.27%	1.69%	0.90%	0.46%	-0.02%	0.44%
1977	-0.19%	-1.29%	-0.61%	-1.43%	-0.51%	-0.27%	-0.13%	-0.11%	0.10%	0.17%	-1.73%	-1.14%	-0.60%
1978	-0.31%	0.09%	0.32%	0.04%	-0.04%	0.02%	0.04%	0.00%	-0.02%	-1.22%	0.43%	0.98%	0.03%
1979	1.20%	-0.68%	-3.83%	0.35%	0.00%	0.00%	0.04%	0.03%	0.05%	0.27%	0.09%	0.21%	-0.19%
1980	0.90%	0.32%	0.93%	0.21%	0.00%	-0.14%	-0.04%	-0.01%	0.18%	0.46%	0.73%	1.18%	0.39%
1981	1.70%	0.50%	0.03%	0.55%	0.10%	0.01%	0.01%	0.20%	0.60%	0.58%	0.28%	0.27%	0.40%
1982	0.25%	0.46%	-0.05%	-0.05%	-0.07%	0.04%	0.29%	0.00%	0.03%	0.23%	0.44%	0.35%	0.16%
1983	0.08%	0.04%	-0.35%	-0.01%	0.00%	0.01%	-0.10%	-0.03%	0.00%	0.02%	0.29%	0.17%	0.01%
1984	0.05%	-0.01%	-0.07%	-0.03%	0.02%	0.02%	0.03%	0.03%	0.28%	0.47%	0.34%	0.35%	0.12%
1985	0.58%	0.80%	0.27%	0.20%	0.20%	0.11%	0.05%	0.10%	0.15%	0.20%	0.09%	0.17%	0.24%
1986	0.19%	0.28%	0.56%	-2.39%	-0.13%	-0.03%	-0.01%	0.00%	0.17%	0.72%	0.90%	1.96%	0.18%
1987	2.11%	1.58%	0.50%	0.69%	-0.93%	-0.23%	-0.15%	0.04%	0.41%	0.59%	0.22%	0.40%	0.44%
1988	0.78%	1.31%	0.42%	0.28%	0.21%	0.00%	1.10%	2.86%	2.32%	-1.07%	-0.78%	2.25%	0.81%
1989	1.44%	-0.64%	1.76%	1.97%	-1.78%	-0.07%	0.18%	0.16%	2.55%	1.73%	-0.23%	0.10%	0.60%
1990	0.05%	0.97%	0.94%	-0.27%	-0.61%	-0.31%	0.04%	0.15%	1.23%	0.06%	0.54%	0.32%	0.26%
1991	0.48%	-1.27%	-9.08%	-0.93%	-0.32%	-0.09%	-0.01%	0.00%	0.22%	4.42%	1.55%	4.71%	-0.03%
AVG:	0.60%	0.41%	0.15%	0.22%	-0.11%	0.19%	0.08%	0.10%	0.43%	0.37%	0.40%	0.56%	0.29%
MIN:	-0.79%	-1.92%	-9.08%	-2.39%	-5.24%	-1.03%	-0.35%	-0.45%	-1.88%	-6.85%	-1.73%	-1.69%	-0.60%
MAX:	4.87%	3.45%	4.91%	2.98%	1.33%	5.09%	2.31%	2.86%	4.14%	4.42%	2.95%	6.14%	1.54%

Table 4.4.5-24 Difference in simulated monthly average chloride concentration (%) at Tracy Pumping Plant, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.15%	0.15%	0.09%	0.19%	0.06%	0.02%	0.01%	0.01%	0.01%	0.19%	0.71%	2.05%	0.30%
1923	2.58%	0.54%	-0.42%	0.02%	-0.15%	0.05%	0.04%	0.02%	0.15%	0.62%	0.78%	1.18%	0.45%
1924	2.00%	0.89%	-0.42%	1.60%	-0.79%	-0.10%	-0.02%	0.12%	0.23%	0.36%	0.66%	0.25%	0.40%
1925	-0.09%	-0.98%	-1.42%	-1.66%	-0.33%	-0.05%	-0.03%	0.06%	0.21%	1.71%	0.92%	1.08%	-0.05%
1926	1.13%	-0.57%	0.56%	0.07%	0.11%	0.15%	0.13%	0.05%	1.24%	-0.20%	-0.18%	-2.18%	0.03%
1927	-0.54%	0.64%	0.32%	0.56%	1.64%	0.26%	0.01%	0.07%	0.17%	0.61%	2.95%	4.15%	0.90%
1928	3.40%	2.02%	2.74%	1.37%	0.37%	0.06%	0.02%	0.00%	-0.10%	0.61%	0.22%	-0.20%	0.88%
1929	0.07%	0.88%	1.53%	-0.50%	-0.04%	2.06%	0.28%	0.09%	2.71%	1.88%	0.35%	1.05%	0.86%
1930	0.56%	-0.01%	0.69%	0.44%	0.19%	0.11%	-0.11%	0.07%	0.39%	0.01%	0.63%	0.16%	0.26%
1931	0.41%	1.50%	0.89%	0.37%	0.53%	0.09%	0.12%	0.24%	0.28%	0.09%	0.44%	0.53%	0.46%
1932	0.26%	-0.05%	0.03%	0.08%	0.11%	0.12%	-0.34%	0.07%	0.91%	0.85%	0.73%	0.63%	0.28%
1933	0.93%	0.33%	0.38%	0.29%	0.13%	0.12%	0.05%	0.04%	0.19%	0.22%	0.45%	0.62%	0.31%
1934	0.42%	0.10%	0.21%	0.27%	0.08%	0.23%	0.13%	0.08%	0.19%	0.26%	0.40%	0.88%	0.27%
1935	0.32%	-0.30%	0.45%	0.05%	0.10%	0.32%	0.03%	-0.06%	1.28%	4.08%	0.51%	-0.80%	0.50%
1936	0.91%	3.74%	-1.80%	-0.14%	-5.01%	-0.35%	2.48%	0.39%	0.02%	-2.32%	2.16%	2.23%	0.19%
1937	0.95%	-0.71%	-0.65%	-0.06%	0.05%	1.75%	0.57%	0.46%	-0.14%	-10.26%	2.72%	1.01%	-0.36%
1938	0.98%	1.89%	0.83%	0.34%	-0.18%	-0.01%	-0.11%	0.00%	0.13%	0.16%	1.07%	2.38%	0.62%
1939	1.41%	1.45%	0.46%	0.49%	0.51%	0.29%	0.13%	0.14%	-0.18%	0.25%	0.26%	0.44%	0.47%
1940	-0.11%	-0.83%	0.47%	-0.21%	-0.01%	0.02%	0.02%	-0.02%	0.06%	1.03%	1.06%	1.78%	0.27%
1941	2.73%	1.19%	-0.89%	0.02%	0.00%	-0.14%	-0.10%	-0.01%	-1.41%	-0.42%	0.71%	2.61%	0.36%
1942	6.75%	11.12%	4.48%	0.21%	0.08%	0.01%	0.02%	0.01%	-0.06%	-2.08%	1.21%	3.25%	2.08%
1943	3.90%	6.13%	8.01%	0.95%	0.38%	-0.08%	0.01%	0.09%	-0.17%	0.77%	2.08%	2.72%	2.07%
1944	2.19%	0.67%	-0.45%	0.91%	-0.40%	0.00%	0.01%	0.01%	0.44%	0.67%	0.45%	0.12%	0.39%
1945	-0.02%	0.42%	1.07%	0.35%	0.15%	0.13%	0.01%	0.04%	0.13%	0.35%	1.48%	2.15%	0.52%
1946	1.45%	1.39%	1.15%	0.10%	-0.36%	-0.11%	0.03%	-0.03%	-0.25%	0.51%	0.79%	0.78%	0.46%
1947	0.44%	0.21%	0.44%	0.12%	-0.05%	0.15%	0.02%	-0.16%	1.86%	-0.19%	-0.43%	-0.31%	0.18%
1948	0.18%	-0.05%	3.32%	-2.55%	-0.70%	-0.07%	-0.03%	0.02%	0.15%	0.38%	0.30%	0.32%	0.11%
1949	-0.40%	-2.11%	-0.70%	-1.19%	-1.00%	-0.32%	0.03%	0.22%	0.25%	0.34%	1.79%	4.78%	0.14%
1950	2.65%	-0.10%	2.85%	1.19%	0.27%	0.70%	0.53%	0.23%	0.77%	1.20%	2.38%	2.96%	1.30%
1951	1.20%	-1.30%	0.02%	0.03%	-0.30%	0.15%	0.05%	0.02%	0.40%	1.21%	1.36%	1.42%	0.35%
1952	1.50%	0.60%	-0.05%	0.02%	0.05%	0.02%	-0.02%	0.00%	-0.02%	0.38%	0.13%	0.35%	0.25%
1953	0.47%	0.31%	0.53%	0.12%	0.10%	-0.09%	0.02%	0.05%	0.21%	0.42%	0.48%	0.96%	0.30%
1954	1.17%	2.79%	5.78%	2.87%	0.23%	0.05%	0.03%	0.01%	0.17%	0.43%	0.30%	0.18%	1.17%
1955	-0.62%	-1.17%	0.07%	0.13%	0.14%	-0.38%	-0.12%	0.08%	0.38%	0.58%	0.38%	0.56%	0.00%
1956	0.21%	0.04%	-0.11%	-0.04%	-0.09%	0.07%	0.02%	0.03%	-0.78%	1.92%	0.30%	1.78%	0.28%
1957	0.45%	-4.68%	-3.25%	0.79%	1.84%	-0.63%	-0.43%	0.02%	0.79%	0.76%	0.26%	-1.88%	-0.50%
1958	-1.76%	1.79%	0.80%	0.05%	0.02%	0.01%	-0.09%	-0.02%	0.03%	0.27%	0.89%	2.21%	0.35%
1959	1.36%	0.63%	0.74%	0.86%	0.16%	0.07%	0.04%	0.08%	0.38%	0.41%	-0.48%	-0.43%	0.32%
1960	-0.19%	-0.23%	-0.38%	-0.22%	-0.21%	0.01%	0.00%	0.05%	0.38%	0.66%	0.43%	0.19%	0.04%
1961	0.27%	0.40%	0.24%	0.55%	0.25%	0.31%	0.10%	0.11%	0.97%	0.54%	0.75%	0.70%	0.43%
1962	0.00%	-1.81%	-1.93%	-0.37%	-0.11%	-0.14%	-0.03%	0.01%	0.39%	0.41%	0.25%	0.29%	-0.25%
1963	0.56%	0.43%	0.99%	0.19%	0.27%	0.19%	0.02%	0.07%	0.51%	0.30%	1.90%	2.25%	0.64%
1964	0.99%	1.01%	0.41%	1.57%	1.63%	0.93%	0.14%	0.20%	0.14%	0.77%	0.52%	0.00%	0.69%
1965	-0.80%	-0.03%	-0.04%	0.06%	0.04%	0.31%	-0.01%	0.01%	-0.24%	0.30%	1.73%	2.57%	0.33%
1966	2.12%	0.93%	0.32%	0.18%	0.07%	0.13%	0.02%	0.09%	0.33%	0.38%	0.26%	0.14%	0.41%
1967	0.13%	0.14%	0.11%	0.04%	0.34%	0.04%	-0.01%	0.00%	-0.01%	0.05%	1.83%	3.07%	0.48%
1968	0.77%	0.65%	0.76%	0.82%	0.07%	-0.01%	0.00%	0.09%	0.43%	0.40%	0.34%	0.05%	0.36%
1969	-0.13%	-0.44%	-0.18%	0.02%	-0.09%	0.17%	-0.06%	0.00%	0.03%	0.18%	0.93%	2.39%	0.23%
1970	0.89%	1.14%	-0.07%	-0.02%	-0.08%	0.00%	0.01%	0.03%	0.24%	0.45%	0.51%	0.44%	0.30%
1971	0.16%	0.40%	0.30%	0.05%	0.04%	0.04%	0.02%	0.01%	0.25%	0.40%	0.40%	0.84%	0.24%
1972	1.20%	1.20%	2.21%	3.11%	1.41%	0.21%	0.10%	0.11%	0.38%	0.51%	0.65%	0.42%	0.96%
1973	-0.28%	-0.92%	-0.47%	0.04%	0.15%	0.07%	0.01%	0.00%	0.82%	0.44%	-0.52%	2.83%	0.18%
1974	6.88%	4.15%	0.08%	0.00%	0.07%	-1.30%	-0.18%	0.01%	-0.13%	0.34%	2.57%	4.76%	1.44%
1975	3.05%	2.09%	2.19%	1.41%	0.28%	1.39%	0.38%	0.08%	-0.23%	0.16%	1.99%	4.17%	1.41%
1976	1.44%	0.32%	0.94%	0.68%	0.24%	-0.56%	-0.04%	0.09%	0.75%	1.19%	1.61%	1.40%	0.67%
1977	-0.04%	-0.93%	-1.07%	-0.28%	0.41%	0.25%	0.02%	-0.06%	0.11%	0.43%	0.14%	0.44%	-0.05%
1978	0.25%	0.15%	0.28%	0.03%	0.01%	-0.04%	0.12%	0.00%	0.00%	0.43%	0.43%	0.67%	0.19%
1979	1.36%	0.78%	-0.17%	0.03%	-0.01%	-0.01%	0.03%	0.00%	0.02%	0.30%	0.13%	0.07%	0.21%
1980	0.18%	-0.06%	0.52%	0.08%	-0.01%	0.29%	0.01%	-0.02%	0.51%	0.84%	1.61%	2.34%	0.52%
1981	2.59%	0.52%	-0.38%	0.90%	0.16%	0.03%	0.01%	0.09%	0.38%	0.36%	0.29%	0.24%	0.43%
1982	0.10%	-0.04%	0.02%	0.04%	-0.01%	0.01%	0.04%	0.01%	0.00%	0.24%	0.61%	0.79%	0.15%
1983	0.17%	0.07%	-0.22%	-0.02%	-0.02%	0.02%	-0.12%	-0.04%	0.00%	0.00%	0.32%	0.32%	0.04%
1984	0.11%	0.00%	-0.08%	-0.03%	0.02%	0.01%	0.03%	0.03%	0.26%	0.43%	0.56%	0.77%	0.17%
1985	0.90%	0.88%	0.28%	0.21%	0.20%	0.07%	0.05%	0.10%	0.12%	0.17%	0.09%	0.24%	0.28%
1986	0.22%	0.26%	0.56%	-2.38%	-0.10%	-0.15%	0.05%	0.01%	-0.27%	2.20%	1.76%	4.71%	0.57%
1987	4.37%	2.59%	-0.03%	1.33%	-2.26%	-0.40%	-0.19%	0.05%	0.46%	1.28%	0.25%	0.43%	0.66%
1988	0.85%	-0.05%	-0.39%	0.03%	0.14%	-0.92%	1.20%	2.14%	2.40%	-0.15%	-1.89%	0.37%	0.31%
1989	0.53%	-0.25%	-0.17%	0.09%	0.37%	0.26%	0.15%	0.20%	1.00%	0.63%	0.31%	0.01%	0.26%
1990	-0.74%	-0.49%	0.28%	-0.56%	-0.63%	-0.55%	-0.10%	0.00%	0.33%	0.23%	0.14%	-0.64%	-0.23%
1991	0.09%	0.72%	-7.34%	0.21%	0.16%	0.16%	0.02%	0.03%	-0.04%	1.95%	2.21%	-0.46%	-0.19%
AVG:	0.97%	0.60%	0.38%	0.23%	0.01%	0.08%	0.07%	0.09%	0.30%	0.36%	0.78%	1.12%	0.42%
MIN:	-1.76%	-4.68%	-7.34%	-2.55%	-5.01%	-1.30%	-0.43%	-0.16%	-1.41%	-10.26%	-1.89%	-2.18%	-0.50%
MAX:	6.88%	11.12%	8.01%	3.11%	1.84%	2.06%	2.48%	2.14%	2.71%	4.08%	2.95%	4.78%	2.08%

Table 4.4.5-25 Simulated monthly average chloride concentration (mg/L) at Clifton Court Forebay, FDM results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	103	126	86	46	61	38	35	39	30	25	35	86	59
1923	113	111	82	42	35	36	49	52	41	31	59	109	63
1924	131	119	92	100	75	89	106	90	106	110	81	158	105
1925	208	178	108	61	64	83	69	56	42	38	69	133	93
1926	162	135	116	68	51	44	56	71	57	55	78	108	83
1927	161	85	27	27	58	39	39	42	32	26	37	96	56
1928	142	85	45	39	25	34	38	55	48	33	48	114	59
1929	146	116	79	73	81	67	89	91	88	68	98	130	94
1930	192	188	82	49	43	31	47	63	44	49	80	115	82
1931	163	142	98	62	64	81	98	99	106	79	79	165	103
1932	207	175	101	51	46	43	44	56	46	45	63	102	82
1933	159	142	107	68	60	58	71	79	86	74	106	121	94
1934	187	197	94	48	54	72	85	90	91	70	100	155	104
1935	193	151	106	69	43	40	46	41	35	28	53	119	77
1936	153	115	95	66	60	40	36	46	40	33	57	117	72
1937	155	124	87	98	42	51	33	32	32	29	54	117	71
1938	158	80	44	34	33	13	11	6	13	28	37	56	43
1939	34	26	51	47	44	54	61	65	57	63	99	141	62
1940	162	118	112	86	79	47	36	42	37	28	50	108	75
1941	149	120	58	53	43	32	32	35	39	29	37	62	57
1942	56	61	66	53	34	41	47	45	38	27	40	65	48
1943	50	41	36	32	24	19	33	38	41	33	40	98	40
1944	138	132	106	96	77	44	56	65	48	44	103	165	90
1945	147	93	80	43	45	40	42	53	40	33	62	115	66
1946	142	94	47	22	28	37	45	53	41	32	65	119	61
1947	138	109	67	50	49	33	51	75	53	52	102	145	77
1948	150	103	103	66	48	46	54	51	30	25	57	112	70
1949	128	108	81	64	56	44	54	58	39	40	72	108	71
1950	155	123	101	66	32	26	41	58	34	30	64	116	70
1951	141	68	35	28	23	31	40	49	40	27	48	112	54
1952	147	114	56	63	32	32	25	17	23	26	37	46	51
1953	28	29	54	34	29	34	53	54	30	24	34	57	38
1954	55	75	86	76	23	25	40	56	46	31	49	108	56
1955	129	101	53	40	43	44	68	69	41	41	77	129	70
1956	165	116	60	32	19	22	38	48	39	25	39	57	55
1957	38	38	82	95	56	36	41	53	39	27	46	106	55
1958	87	45	63	49	81	58	26	20	29	26	37	48	47
1959	30	24	63	62	51	58	62	62	37	35	67	113	55
1960	120	108	74	89	67	31	67	81	53	56	94	125	80
1961	163	116	72	60	37	24	42	56	56	59	99	118	75
1962	141	112	66	59	75	43	40	57	43	37	63	118	71
1963	81	24	32	37	44	31	53	47	40	28	40	93	46
1964	100	58	28	38	31	36	77	66	41	49	98	131	63
1965	148	104	55	27	19	26	37	42	39	27	34	87	54
1966	132	80	32	28	31	25	59	61	37	32	65	126	59
1967	137	92	65	77	41	36	30	17	19	29	30	38	51
1968	27	27	56	56	44	35	51	64	38	36	67	121	52
1969	132	99	60	47	25	19	10	6	7	28	38	48	43
1970	30	25	43	27	27	32	41	51	43	28	35	91	40
1971	129	96	50	26	26	28	38	58	36	22	32	55	50
1972	53	91	88	42	32	17	44	59	42	28	59	125	57
1973	151	72	36	76	64	36	34	46	35	26	47	105	61
1974	130	59	32	35	23	35	37	39	33	24	39	50	45
1975	32	34	73	68	48	40	35	45	36	24	38	50	44
1976	36	24	47	80	97	63	85	84	94	118	146	179	88
1977	183	157	131	83	95	104	112	106	106	79	82	165	117
1978	214	185	105	97	56	45	23	20	28	31	40	88	78
1979	98	120	119	65	52	37	35	43	34	28	55	119	67
1980	152	101	65	34	31	26	30	39	43	35	44	91	57
1981	98	115	99	56	35	37	57	63	47	67	109	135	76
1982	142	67	29	58	27	40	8	13	29	31	38	52	45
1983	27	38	13	17	13	16	10	8	6	17	21	35	18
1984	24	15	10	7	18	34	43	54	50	29	36	95	35
1985	139	86	25	23	43	48	83	71	46	59	104	128	71
1986	127	118	71	42	53	17	22	36	42	32	39	70	56
1987	95	110	105	85	82	55	58	68	48	52	100	167	85
1988	166	93	74	34	30	57	74	76	79	67	103	146	83
1989	195	159	120	81	70	38	31	38	38	53	94	118	86
1990	131	105	70	82	60	45	75	80	87	110	97	158	92
1991	194	156	136	112	109	65	65	73	68	82	113	130	109
AVG:	125	98	71	56	47	41	49	53	46	42	64	107	67
MIN:	24	15	10	7	13	13	8	6	6	17	21	35	18
MAX:	214	197	136	112	109	104	112	106	106	118	146	179	117

Table 4.4.5-26 Difference in simulated monthly average chloride concentration (%) at Clifton Court Forebay, FDM results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.25%	0.24%	0.26%	0.55%	0.15%	0.04%	0.05%	0.05%	0.09%	0.68%	0.99%	0.68%	0.34%
1923	0.92%	0.46%	-0.20%	0.00%	0.00%	0.25%	0.13%	0.12%	0.49%	1.14%	0.87%	0.94%	0.43%
1924	1.18%	0.51%	-0.84%	0.77%	-0.17%	0.08%	0.07%	0.92%	1.40%	0.59%	3.81%	1.98%	0.86%
1925	0.31%	-2.03%	-2.49%	-2.56%	-0.65%	-0.08%	-0.06%	0.09%	0.90%	1.03%	-1.09%	-2.53%	-0.76%
1926	-0.59%	2.00%	-0.88%	0.81%	0.43%	2.04%	1.13%	0.27%	1.76%	0.59%	-0.15%	-0.79%	0.55%
1927	-0.35%	1.11%	1.93%	1.99%	-0.78%	-0.76%	-0.04%	-0.11%	-0.32%	0.92%	1.24%	0.74%	0.46%
1928	0.90%	1.20%	2.40%	1.83%	0.80%	0.15%	0.07%	0.01%	0.40%	1.14%	0.70%	0.44%	0.84%
1929	0.35%	0.34%	0.62%	0.00%	0.53%	5.85%	1.66%	0.45%	5.94%	3.31%	0.75%	5.60%	2.12%
1930	5.89%	0.83%	0.72%	0.38%	0.51%	0.30%	0.01%	0.25%	3.47%	-0.38%	3.28%	9.31%	2.05%
1931	2.89%	-2.45%	2.14%	-1.45%	-0.72%	-0.62%	-0.61%	-0.07%	1.73%	1.70%	1.24%	0.56%	0.36%
1932	1.18%	-0.38%	-0.09%	0.34%	1.51%	0.82%	-1.48%	0.57%	1.34%	1.70%	1.07%	1.01%	0.63%
1933	0.65%	0.20%	0.14%	-0.64%	0.75%	0.62%	0.28%	0.10%	0.23%	1.10%	1.11%	1.15%	0.47%
1934	-0.13%	-0.52%	-0.39%	-0.08%	0.20%	3.18%	1.95%	0.41%	-4.19%	-8.55%	0.82%	0.61%	-0.56%
1935	1.20%	-0.43%	-1.28%	0.34%	0.38%	-0.82%	0.00%	-0.27%	2.41%	7.20%	0.35%	0.15%	0.77%
1936	0.38%	5.38%	-3.00%	-1.09%	-1.76%	-2.73%	1.19%	0.48%	0.55%	-0.33%	1.88%	2.06%	0.25%
1937	1.30%	-0.21%	-0.25%	0.18%	1.68%	1.18%	0.74%	0.35%	0.37%	-0.15%	0.33%	-1.17%	0.36%
1938	0.02%	0.48%	0.57%	1.24%	0.13%	-0.03%	-0.07%	-0.02%	0.02%	0.45%	0.93%	1.34%	0.42%
1939	1.05%	1.32%	1.36%	1.23%	0.59%	0.86%	0.69%	0.68%	0.34%	0.82%	0.42%	0.24%	0.80%
1940	-0.09%	-1.21%	1.04%	0.06%	-0.02%	-0.78%	-0.68%	0.07%	0.29%	0.54%	0.41%	0.87%	0.04%
1941	1.11%	0.01%	-0.88%	0.09%	0.05%	-0.54%	-0.25%	-0.03%	0.60%	1.27%	1.08%	2.04%	0.38%
1942	3.34%	5.09%	1.33%	-0.18%	0.04%	0.03%	0.04%	0.04%	0.25%	0.87%	0.88%	1.54%	1.11%
1943	2.30%	3.35%	2.80%	0.16%	0.02%	0.01%	0.02%	0.01%	0.34%	0.89%	1.02%	0.74%	0.97%
1944	0.85%	0.54%	0.12%	0.36%	-0.04%	0.82%	0.24%	0.12%	0.80%	1.40%	0.63%	0.08%	0.49%
1945	-0.13%	1.06%	2.46%	1.65%	0.53%	0.29%	0.13%	0.11%	0.57%	1.02%	0.91%	0.93%	0.79%
1946	1.07%	0.78%	0.63%	0.16%	0.14%	0.25%	0.12%	0.21%	0.71%	1.13%	0.71%	1.25%	0.59%
1947	1.12%	-0.40%	1.64%	0.90%	-0.10%	-0.76%	-0.24%	-0.43%	0.39%	0.06%	-0.16%	0.11%	0.18%
1948	-0.56%	-0.05%	0.54%	0.09%	0.36%	0.29%	0.21%	0.16%	0.76%	1.30%	0.70%	0.34%	0.35%
1949	0.58%	-0.58%	1.55%	1.54%	0.41%	0.30%	0.09%	0.48%	0.47%	0.58%	0.68%	1.88%	0.66%
1950	1.65%	2.26%	1.97%	1.49%	0.72%	0.59%	0.33%	0.95%	1.54%	2.55%	2.43%	1.54%	1.50%
1951	-0.92%	-1.88%	0.01%	-0.75%	-1.97%	-2.22%	-0.75%	0.00%	0.73%	1.53%	1.45%	0.78%	-0.33%
1952	0.70%	0.58%	0.16%	0.04%	0.04%	0.04%	-0.02%	0.00%	0.04%	0.76%	0.67%	0.52%	0.29%
1953	0.53%	0.81%	0.41%	0.19%	0.26%	0.34%	0.04%	0.16%	0.64%	1.43%	1.02%	1.86%	0.64%
1954	2.12%	4.21%	7.93%	4.21%	0.75%	0.15%	0.08%	0.02%	0.37%	1.05%	0.67%	0.34%	1.82%
1955	0.37%	0.39%	0.72%	0.86%	0.43%	0.31%	0.20%	0.40%	0.88%	1.00%	0.44%	0.46%	0.54%
1956	0.53%	1.10%	0.17%	0.02%	-0.29%	0.13%	0.12%	0.10%	0.34%	1.10%	0.99%	1.17%	0.46%
1957	1.82%	2.83%	1.00%	-0.35%	0.89%	-0.85%	-0.54%	0.14%	0.63%	1.21%	1.03%	0.51%	0.69%
1958	1.88%	4.43%	1.78%	0.23%	0.07%	0.06%	0.03%	0.04%	0.08%	0.77%	0.82%	1.92%	1.01%
1959	1.54%	1.39%	-0.01%	-0.36%	0.08%	0.51%	0.39%	0.25%	0.77%	0.52%	-0.25%	-0.87%	0.33%
1960	-1.34%	0.11%	1.90%	1.43%	1.11%	0.42%	0.27%	0.04%	10.03%	2.83%	0.54%	-0.76%	1.38%
1961	0.21%	1.56%	-0.23%	1.63%	1.31%	0.92%	0.35%	2.78%	3.76%	0.84%	0.32%	0.48%	1.16%
1962	1.57%	1.21%	-2.49%	1.84%	0.04%	0.14%	0.46%	-0.29%	1.37%	0.38%	-0.81%	-0.49%	0.24%
1963	0.55%	1.09%	1.90%	0.30%	-1.18%	-1.08%	-0.13%	0.05%	0.50%	0.79%	0.84%	0.12%	0.31%
1964	-0.56%	1.52%	1.03%	2.12%	2.11%	0.90%	0.37%	0.04%	-0.19%	1.97%	0.63%	-0.17%	0.81%
1965	-0.23%	0.03%	-0.92%	-0.11%	0.12%	-0.13%	-0.09%	0.06%	0.43%	1.03%	1.12%	0.97%	0.19%
1966	0.92%	1.27%	1.35%	0.55%	0.20%	0.33%	0.07%	0.26%	0.72%	0.89%	0.45%	0.20%	0.60%
1967	0.22%	0.75%	1.09%	0.11%	0.30%	0.10%	0.02%	0.01%	0.02%	0.29%	2.18%	2.57%	0.64%
1968	0.81%	1.16%	1.20%	1.21%	0.34%	0.12%	0.00%	0.50%	1.21%	0.55%	0.22%	0.16%	0.62%
1969	0.18%	-0.23%	-0.02%	-0.16%	0.01%	0.12%	-0.05%	0.00%	0.04%	0.68%	0.98%	1.62%	0.26%
1970	0.70%	1.02%	0.30%	0.04%	-0.05%	0.02%	0.04%	0.07%	0.47%	1.17%	1.09%	0.58%	0.45%
1971	0.25%	0.68%	0.74%	0.15%	0.09%	0.14%	0.10%	0.01%	0.68%	1.02%	0.72%	1.36%	0.49%
1972	2.42%	1.42%	3.47%	6.76%	3.84%	0.85%	0.13%	0.23%	0.68%	1.13%	0.27%	-0.06%	1.76%
1973	0.20%	0.70%	0.94%	0.15%	0.17%	0.17%	0.11%	0.11%	-3.95%	2.12%	-2.49%	1.76%	0.00%
1974	7.78%	5.73%	0.13%	0.05%	0.09%	-0.86%	-0.34%	0.03%	0.47%	1.13%	1.35%	2.90%	1.54%
1975	2.79%	2.70%	2.17%	2.04%	0.53%	1.72%	0.32%	0.14%	0.50%	1.03%	0.47%	1.33%	1.31%
1976	0.51%	-0.57%	0.58%	0.51%	0.08%	0.64%	0.72%	0.62%	2.82%	1.11%	0.27%	-0.03%	0.61%
1977	1.02%	-2.80%	-1.16%	-2.43%	-1.72%	-0.71%	-0.36%	-0.27%	0.15%	0.50%	-1.06%	-1.81%	-0.89%
1978	-0.37%	0.05%	0.46%	0.09%	0.03%	0.02%	0.11%	0.01%	0.12%	-11.89%	1.17%	1.75%	-0.70%
1979	1.86%	-0.84%	-4.94%	0.66%	0.01%	0.02%	0.08%	0.10%	-0.12%	0.67%	0.28%	1.01%	-0.10%
1980	0.94%	0.44%	1.69%	0.47%	-0.05%	-0.28%	-0.20%	-0.06%	0.36%	1.01%	1.48%	2.02%	0.65%
1981	2.50%	1.02%	0.04%	1.40%	0.37%	0.16%	0.03%	0.37%	1.32%	0.94%	0.40%	0.41%	0.75%
1982	0.44%	0.96%	-0.14%	-0.13%	0.04%	0.01%	0.20%	0.00%	0.10%	0.81%	1.04%	0.81%	0.35%
1983	0.22%	0.09%	-0.43%	-0.01%	0.01%	0.01%	-0.15%	-0.01%	0.00%	0.05%	0.91%	0.43%	0.09%
1984	0.07%	0.09%	0.03%	0.06%	0.01%	0.05%	0.06%	0.11%	0.58%	1.25%	0.87%	0.73%	0.33%
1985	0.85%	1.39%	0.79%	0.68%	0.52%	0.49%	0.11%	0.19%	0.59%	0.31%	0.10%	0.26%	0.52%
1986	0.33%	0.44%	1.04%	-6.50%	-0.33%	-0.07%	-0.13%	-0.04%	0.35%	1.58%	2.20%	3.91%	0.23%
1987	3.51%	1.94%	0.60%	1.14%	-0.67%	-0.38%	-0.08%	0.19%	1.29%	1.57%	0.77%	0.64%	0.88%
1988	1.12%	1.40%	0.74%	0.76%	0.53%	2.95%	1.61%	10.75%	4.05%	-1.59%	-0.28%	3.97%	2.17%
1989	1.83%	-0.77%	2.53%	2.93%	0.10%	-0.09%	0.22%	0.43%	2.60%	0.01%	-1.32%	0.53%	0.75%
1990	1.21%	1.02%	1.63%	-0.45%	-1.04%	-0.45%	0.06%	0.44%	1.54%	0.01%	0.34%	0.83%	0.43%
1991	-0.26%	-1.69%	3.54%	-1.68%	-0.70%	-0.20%	-0.04%	0.03%	7.30%	4.21%	1.81%	4.48%	1.40%
AVG:	0.99%	0.80%	0.65%	0.43%	0.17%	0.22%	0.13%	0.34%	0.97%	0.75%	0.74%	1.04%	0.60%
MIN:	-1.34%	-2.80%	-4.94%	-6.50%	-1.97%	-2.73%	-1.48%	-0.43%	-4.19%	-11.89%	-2.49%	-2.53%	-0.89%
MAX:	7.78%	5.73%	7.93%	6.76%	3.84%	5.85%	1.95%	10.75%	10.03%	7.20%	3.81%	9.31%	2.17%

Table 4.4.5-27 Difference in simulated monthly average chloride concentration (%) at Clifton Court Forebay, FDM results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.23%	0.23%	0.17%	0.46%	0.14%	0.04%	0.06%	0.05%	-0.02%	1.15%	1.83%	3.26%	0.63%
1923	4.05%	0.94%	-0.76%	0.13%	-0.37%	0.20%	0.14%	0.12%	0.36%	1.19%	1.52%	1.89%	0.78%
1924	2.77%	1.00%	-0.64%	2.43%	-1.46%	-0.24%	-0.04%	0.22%	0.31%	0.64%	1.14%	0.39%	0.54%
1925	-0.56%	-2.89%	-2.09%	-2.89%	-0.78%	-0.08%	-0.07%	0.17%	0.87%	1.86%	1.53%	1.96%	-0.25%
1926	1.39%	-0.70%	0.82%	0.09%	-0.44%	0.41%	0.36%	0.14%	1.58%	0.45%	-0.75%	-3.49%	-0.01%
1927	-0.90%	1.11%	0.84%	1.56%	1.93%	0.79%	0.04%	0.20%	-0.27%	1.70%	6.92%	6.64%	1.71%
1928	4.72%	3.39%	5.51%	3.06%	1.13%	0.18%	0.05%	-0.01%	-0.14%	0.81%	0.35%	-0.30%	1.56%
1929	0.18%	1.30%	2.49%	-0.86%	0.00%	2.54%	0.66%	0.20%	3.68%	2.27%	0.49%	1.85%	1.23%
1930	0.70%	-0.30%	1.13%	1.02%	0.44%	0.36%	0.10%	0.19%	1.26%	0.88%	0.73%	0.36%	0.57%
1931	0.54%	2.23%	1.72%	0.64%	0.68%	0.39%	0.24%	0.52%	0.41%	0.29%	1.43%	0.80%	0.82%
1932	0.31%	-0.16%	0.06%	0.15%	0.36%	0.25%	-1.49%	0.54%	1.25%	1.59%	1.00%	0.92%	0.40%
1933	0.71%	0.54%	1.21%	0.67%	0.80%	0.61%	0.19%	0.12%	0.25%	0.76%	0.70%	0.78%	0.61%
1934	0.52%	0.21%	0.30%	0.48%	0.23%	0.56%	0.31%	0.14%	0.27%	0.65%	0.56%	1.37%	0.47%
1935	0.29%	-0.41%	0.64%	0.09%	0.28%	0.77%	0.16%	-0.21%	2.93%	8.37%	0.71%	0.49%	1.18%
1936	1.22%	5.24%	-2.88%	-0.16%	-1.03%	-0.98%	1.46%	0.51%	-0.05%	-0.88%	3.83%	3.85%	0.84%
1937	2.10%	-1.02%	-1.00%	-0.10%	1.76%	1.56%	0.45%	0.39%	-0.33%	0.25%	4.09%	1.48%	0.80%
1938	0.91%	0.08%	0.01%	1.40%	0.18%	-0.02%	0.04%	-0.02%	-0.02%	1.04%	2.48%	5.40%	0.96%
1939	3.68%	2.57%	1.40%	0.75%	1.68%	0.72%	0.30%	0.47%	-0.13%	0.30%	0.43%	0.71%	1.07%
1940	-0.20%	-1.07%	0.90%	-0.40%	-0.01%	0.06%	0.09%	-0.07%	0.48%	2.88%	2.18%	3.22%	0.67%
1941	3.80%	1.70%	-1.91%	0.09%	0.02%	-0.75%	-0.39%	-0.07%	-2.67%	-0.04%	1.72%	5.97%	0.62%
1942	13.95%	21.48%	8.29%	0.57%	0.14%	0.06%	0.05%	0.04%	-0.15%	-3.80%	3.08%	7.12%	4.24%
1943	7.86%	14.85%	18.69%	1.16%	0.84%	-0.06%	0.06%	2.19%	-0.68%	2.52%	4.85%	4.36%	4.72%
1944	3.45%	0.61%	-0.60%	1.82%	-0.91%	-0.01%	0.07%	0.10%	0.74%	1.38%	0.68%	0.03%	0.61%
1945	0.24%	0.82%	1.90%	0.67%	0.39%	0.29%	0.12%	0.19%	0.37%	0.95%	3.21%	3.42%	1.05%
1946	2.14%	2.30%	2.19%	0.21%	0.15%	-0.34%	0.13%	-0.14%	-0.61%	1.30%	1.45%	1.33%	0.84%
1947	0.64%	0.30%	0.77%	0.49%	-0.10%	0.09%	0.05%	-0.71%	3.17%	-0.43%	-0.67%	-0.57%	0.25%
1948	0.17%	-0.47%	-0.08%	-4.79%	-1.44%	-0.12%	-0.02%	0.08%	0.58%	1.12%	0.56%	0.26%	-0.35%
1949	-0.64%	-3.41%	-1.12%	-2.03%	-1.30%	-0.64%	0.03%	0.48%	-0.51%	0.68%	3.32%	7.64%	0.21%
1950	2.92%	0.01%	4.40%	2.41%	0.74%	1.27%	1.01%	1.17%	1.63%	3.06%	4.18%	4.68%	2.29%
1951	1.64%	-2.25%	0.01%	0.31%	-0.13%	0.37%	0.20%	0.02%	0.86%	2.77%	2.79%	2.17%	0.73%
1952	2.05%	1.07%	-0.09%	0.05%	0.04%	0.04%	-0.04%	0.01%	-0.07%	0.79%	0.07%	0.72%	0.39%
1953	1.22%	0.82%	0.79%	0.24%	0.16%	0.31%	0.04%	0.18%	0.70%	1.52%	1.19%	2.18%	0.78%
1954	2.50%	5.04%	9.33%	4.91%	0.83%	0.15%	0.08%	0.02%	0.36%	1.00%	0.61%	0.29%	2.09%
1955	-0.83%	-1.75%	0.20%	0.34%	-0.24%	-0.59%	-0.18%	0.16%	0.83%	0.95%	0.39%	0.56%	-0.01%
1956	0.39%	0.27%	0.15%	-0.03%	0.26%	0.12%	0.10%	0.10%	-1.34%	7.06%	0.38%	3.98%	0.95%
1957	0.84%	-10.10%	-5.85%	1.22%	3.21%	-1.98%	-1.53%	0.09%	3.11%	1.93%	0.30%	-2.67%	-0.95%
1958	-2.92%	4.09%	1.65%	0.19%	0.05%	0.06%	0.06%	0.02%	0.01%	0.55%	2.09%	5.21%	0.92%
1959	3.30%	2.04%	1.32%	0.89%	0.36%	0.15%	0.08%	0.18%	0.95%	0.65%	-0.82%	-0.71%	0.70%
1960	-0.36%	-0.31%	-0.57%	-0.51%	-0.45%	0.02%	-0.01%	0.12%	2.31%	1.08%	0.67%	0.29%	0.19%
1961	0.35%	0.58%	0.37%	0.84%	0.65%	0.48%	0.30%	2.56%	2.11%	0.86%	1.04%	1.14%	0.94%
1962	0.02%	-2.55%	-3.69%	-0.71%	-0.21%	-0.31%	-0.12%	-0.06%	0.77%	0.85%	0.42%	0.39%	-0.43%
1963	0.99%	1.41%	2.39%	0.51%	0.51%	0.55%	0.07%	0.25%	1.22%	-2.49%	4.27%	4.22%	1.16%
1964	1.61%	1.93%	1.04%	5.12%	5.76%	1.93%	0.43%	0.34%	-0.27%	1.15%	0.70%	-0.07%	1.64%
1965	-1.06%	0.06%	-0.07%	0.11%	0.11%	-0.17%	-0.12%	0.06%	-0.80%	1.09%	4.38%	4.26%	0.65%
1966	3.63%	1.66%	0.58%	0.39%	0.19%	0.36%	0.07%	0.27%	0.75%	0.88%	0.43%	0.20%	0.78%
1967	0.20%	0.26%	0.22%	0.14%	0.78%	0.13%	0.03%	0.01%	-0.06%	0.13%	4.80%	8.59%	1.27%
1968	1.81%	1.81%	1.47%	1.21%	0.30%	0.10%	0.01%	0.21%	0.93%	0.79%	0.55%	0.09%	0.77%
1969	-0.23%	-0.77%	-0.33%	0.09%	0.04%	0.05%	-0.05%	0.00%	0.00%	0.62%	2.13%	6.01%	0.63%
1970	2.43%	2.32%	-0.08%	0.02%	-0.07%	0.02%	0.03%	0.08%	0.46%	1.24%	1.27%	0.77%	0.71%
1971	0.37%	0.68%	0.68%	0.15%	0.10%	0.14%	0.10%	0.02%	0.75%	1.06%	1.04%	1.99%	0.59%
1972	2.79%	1.46%	3.61%	7.06%	4.05%	0.88%	0.13%	0.25%	0.72%	1.13%	1.03%	0.56%	1.97%
1973	-0.40%	-1.81%	-1.42%	0.10%	0.31%	0.06%	0.05%	-0.03%	-4.41%	2.47%	-1.18%	4.09%	-0.18%
1974	11.34%	8.12%	0.19%	0.09%	0.10%	-1.46%	-0.55%	-0.02%	-0.16%	0.97%	6.08%	11.54%	3.02%
1975	8.73%	5.39%	3.84%	2.95%	0.62%	5.94%	0.45%	0.33%	-0.47%	0.48%	5.02%	10.14%	3.62%
1976	3.49%	0.95%	1.95%	1.10%	-0.32%	-1.93%	-0.05%	0.20%	1.60%	1.71%	2.75%	1.84%	1.11%
1977	-0.62%	-2.19%	-1.96%	-0.78%	-0.45%	0.12%	0.02%	-0.15%	0.16%	0.80%	0.36%	0.66%	-0.34%
1978	0.32%	0.23%	0.42%	0.07%	0.03%	0.04%	0.44%	0.02%	0.13%	1.01%	0.94%	1.20%	0.41%
1979	2.10%	1.02%	-0.20%	0.18%	-0.05%	0.01%	0.06%	0.00%	-0.21%	0.77%	0.24%	0.28%	0.35%
1980	0.21%	-0.16%	0.95%	0.20%	0.09%	0.78%	0.19%	-0.04%	1.01%	1.46%	3.27%	3.53%	0.96%
1981	3.82%	1.15%	-0.62%	2.27%	0.58%	0.17%	0.02%	0.16%	0.74%	0.58%	0.41%	0.37%	0.80%
1982	0.14%	-0.08%	0.06%	0.10%	0.22%	-0.01%	0.02%	0.00%	-0.02%	1.45%	1.44%	1.86%	0.43%
1983	0.49%	0.15%	-1.96%	-0.01%	-0.03%	0.02%	-0.09%	-0.01%	0.00%	-0.07%	1.00%	0.82%	0.03%
1984	0.27%	0.09%	0.03%	0.04%	0.01%	0.04%	0.06%	0.11%	0.42%	1.16%	1.43%	1.28%	0.41%
1985	1.33%	1.52%	0.80%	0.68%	0.52%	0.45%	0.10%	0.20%	0.56%	0.27%	0.11%	0.37%	0.58%
1986	0.39%	0.37%	1.04%	-6.54%	-0.34%	-0.08%	0.04%	0.00%	-0.47%	3.03%	4.36%	9.06%	0.91%
1987	7.23%	2.97%	-0.26%	2.32%	-2.45%	-1.13%	-0.17%	-0.04%	1.56%	3.11%	1.07%	0.90%	1.26%
1988	1.24%	-0.09%	-0.47%	0.13%	0.32%	8.82%	2.66%	4.92%	4.27%	-2.01%	-2.59%	1.42%	1.55%
1989	0.74%	-0.36%	-0.24%	0.07%	0.33%	0.41%	0.29%	0.47%	1.19%	0.99%	0.31%	-0.13%	0.34%
1990	-0.75%	-0.84%	0.51%	-0.92%	-1.03%	-0.93%	-0.34%	-0.01%	0.41%	0.26%	-0.01%	-0.98%	-0.38%
1991	0.25%	0.84%	1.44%	0.28%	0.37%	0.33%	0.06%	0.09%	6.95%	2.91%	2.04%	-0.51%	1.26%
AVG:	1.69%	1.08%	0.85%	0.49%	0.27%	0.32%	0.10%	0.26%	0.60%	1.14%	1.58%	2.20%	0.88%
MIN:	-2.92%	-10.10%	-5.85%	-6.54%	-2.45%	-1.98%	-1.53%	-0.71%	-4.41%	-3.80%	-2.59%	-3.49%	-0.95%
MAX:	13.95%	21.48%	18.69%	7.06%	5.76%	8.82%	2.66%	4.92%	6.95%	8.37%	6.92%	11.54%	4.72%

Table 4.4.5-28 Simulated running annual average bromate concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			5.53	5.45
1923	5.30	5.34	5.72	6.00
1924	6.83	7.48	8.20	8.85
1925	8.38	7.78	7.28	6.94
1926	6.79	6.79	6.80	5.92
1927	5.68	5.49	4.98	5.09
1928	5.10	5.25	5.51	5.88
1929	6.62	6.93	7.51	8.13
1930	7.42	7.01	6.78	6.42
1931	6.88	7.67	8.05	8.36
1932	8.00	7.33	6.51	6.36
1933	6.46	6.65	7.19	7.53
1934	7.45	7.45	7.65	7.44
1935	7.48	7.29	6.62	6.21
1936	6.39	6.34	6.36	6.38
1937	6.74	6.82	6.80	6.28
1938	5.80	5.48	4.86	3.81
1939	3.72	4.10	5.41	7.12
1940	7.44	7.20	6.44	5.99
1941	5.69	5.85	5.38	4.61
1942	4.58	4.53	4.56	4.12
1943	4.03	4.04	4.31	5.94
1944	6.53	6.59	7.54	7.13
1945	6.65	6.59	5.96	5.77
1946	5.48	5.45	5.50	5.69
1947	6.08	6.09	6.63	6.88
1948	7.05	6.97	6.29	6.09
1949	6.04	6.05	6.23	6.48
1950	6.14	6.10	6.05	5.25
1951	5.17	5.26	5.09	5.51
1952	5.64	5.61	4.98	3.67
1953	3.49	3.50	3.60	4.61
1954	4.88	4.90	5.43	5.70
1955	5.53	5.56	5.94	6.31
1956	6.40	6.34	5.44	4.32
1957	4.79	4.78	5.25	5.43
1958	5.11	5.19	4.62	4.15
1959	4.21	4.21	5.03	6.15
1960	6.38	6.38	6.76	6.93
1961	6.55	6.45	6.48	6.40
1962	6.64	6.66	6.30	5.15
1963	4.72	4.75	4.30	4.66
1964	4.68	4.68	5.51	6.15
1965	6.03	5.96	5.05	4.70
1966	4.70	4.72	5.27	5.56
1967	5.78	5.82	4.80	3.73
1968	3.77	3.85	4.84	5.90
1969	6.11	5.73	4.85	3.55
1970	3.39	3.71	4.08	5.24
1971	4.88	4.82	4.51	4.50
1972	4.76	4.74	5.46	5.32
1973	5.46	5.47	5.25	5.06
1974	4.77	4.80	4.29	3.92
1975	4.40	4.46	4.45	4.24
1976	4.80	5.32	7.41	9.62
1977	9.60	9.91	9.23	9.11
1978	8.55	7.64	6.53	5.89
1979	5.87	5.86	6.24	6.03
1980	5.81	5.90	5.61	5.77
1981	5.65	5.70	6.70	5.95
1982	6.07	5.80	4.36	3.59
1983	3.54	3.42	3.13	3.05
1984	2.77	3.11	3.80	4.80
1985	5.03	5.14	6.07	6.49
1986	6.76	6.72	5.63	5.75
1987	6.11	6.05	7.28	7.12
1988	6.33	6.59	6.39	7.28
1989	7.90	7.47	7.34	6.58
1990	6.60	7.04	7.44	8.53
1991	8.95	8.81	8.67	

Table 4.4.5-29 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			0.25%	0.32%
1923	0.29%	0.32%	0.35%	0.37%
1924	0.36%	0.54%	0.72%	0.10%
1925	-0.06%	-0.27%	-0.99%	-0.37%
1926	-0.13%	-0.06%	0.17%	0.24%
1927	0.16%	0.04%	0.36%	0.58%
1928	0.69%	0.70%	0.63%	0.35%
1929	0.35%	0.64%	1.19%	1.48%
1930	1.53%	1.39%	1.71%	1.44%
1931	1.00%	0.91%	0.23%	0.04%
1932	0.40%	0.48%	0.43%	0.56%
1933	0.70%	0.62%	0.61%	0.24%
1934	-0.02%	-0.05%	0.18%	0.32%
1935	0.38%	0.47%	-0.01%	0.20%
1936	-0.31%	-0.42%	-0.01%	-0.02%
1937	0.39%	0.33%	-0.04%	0.10%
1938	0.21%	0.24%	0.49%	0.62%
1939	0.75%	0.84%	0.57%	0.24%
1940	0.08%	-0.02%	0.01%	0.02%
1941	0.04%	0.06%	0.19%	1.16%
1942	1.21%	1.24%	1.17%	1.01%
1943	1.05%	1.05%	0.94%	0.31%
1944	0.31%	0.35%	0.28%	0.43%
1945	0.55%	0.54%	0.65%	0.60%
1946	0.51%	0.54%	0.56%	0.48%
1947	0.44%	0.42%	0.16%	-0.04%
1948	-0.02%	-0.03%	0.12%	0.24%
1949	0.33%	0.35%	0.48%	0.99%
1950	1.06%	1.11%	1.28%	0.48%
1951	0.34%	0.22%	-0.03%	0.38%
1952	0.38%	0.38%	0.25%	0.23%
1953	0.27%	0.34%	0.54%	1.83%
1954	2.06%	2.04%	1.73%	0.53%
1955	0.32%	0.37%	0.35%	0.43%
1956	0.36%	0.31%	0.43%	0.64%
1957	0.58%	0.58%	0.50%	0.73%
1958	0.78%	0.74%	0.89%	0.39%
1959	0.37%	0.48%	0.07%	-0.03%
1960	0.11%	0.24%	0.32%	0.46%
1961	0.52%	0.44%	0.53%	0.47%
1962	0.43%	0.40%	0.24%	0.36%
1963	0.12%	0.03%	0.24%	0.10%
1964	0.44%	0.51%	0.51%	0.27%
1965	0.05%	0.00%	0.03%	0.55%
1966	0.61%	0.63%	0.48%	0.32%
1967	0.29%	0.24%	0.51%	0.65%
1968	0.74%	0.86%	0.42%	0.17%
1969	0.05%	-0.04%	0.10%	0.36%
1970	0.43%	0.48%	0.38%	0.32%
1971	0.36%	0.35%	0.39%	1.06%
1972	1.59%	1.63%	1.30%	0.76%
1973	0.23%	0.15%	0.03%	1.32%
1974	1.34%	1.37%	2.03%	1.04%
1975	1.30%	1.41%	1.19%	0.67%
1976	0.27%	0.46%	0.34%	-0.08%
1977	-0.35%	-0.56%	-0.92%	-0.57%
1978	-0.29%	-0.26%	0.21%	-0.30%
1979	-0.17%	-0.14%	-0.22%	0.53%
1980	0.39%	0.37%	0.63%	0.68%
1981	0.84%	0.94%	0.63%	0.48%
1982	0.35%	0.25%	0.32%	0.28%
1983	0.29%	0.25%	0.16%	0.09%
1984	0.11%	0.21%	0.30%	0.53%
1985	0.59%	0.62%	0.41%	0.31%
1986	-0.11%	-0.16%	0.29%	0.72%
1987	1.16%	1.22%	0.80%	0.49%
1988	0.51%	0.78%	1.26%	1.29%
1989	1.38%	1.22%	0.57%	0.48%
1990	0.11%	0.25%	0.33%	-0.42%
1991	-0.48%	-0.55%	0.38%	

Table 4.4.5-30 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			0.52%	0.91%
1923	0.86%	0.89%	0.74%	0.65%
1924	0.61%	0.58%	0.43%	-0.41%
1925	-0.60%	-0.66%	-0.55%	0.26%
1926	0.45%	0.48%	-0.25%	-0.36%
1927	-0.21%	-0.28%	1.47%	2.71%
1928	2.73%	2.65%	1.45%	0.56%
1929	0.33%	0.49%	0.67%	0.44%
1930	0.56%	0.44%	0.32%	0.59%
1931	0.51%	0.43%	0.52%	0.22%
1932	0.24%	0.36%	0.34%	0.64%
1933	0.81%	0.72%	0.65%	0.47%
1934	0.32%	0.31%	0.42%	0.34%
1935	0.33%	0.35%	0.11%	0.25%
1936	-0.05%	-0.11%	0.53%	0.31%
1937	0.44%	0.27%	0.15%	0.27%
1938	0.50%	0.69%	0.74%	1.51%
1939	1.91%	1.83%	0.95%	0.37%
1940	0.08%	0.05%	0.44%	0.85%
1941	0.88%	0.71%	0.74%	4.53%
1942	4.67%	4.89%	5.13%	4.55%
1943	4.80%	4.67%	4.42%	1.13%
1944	0.93%	1.05%	0.43%	0.37%
1945	0.44%	0.43%	0.96%	1.35%
1946	1.31%	1.27%	0.88%	0.35%
1947	0.35%	0.45%	0.00%	-0.34%
1948	-0.71%	-0.78%	-0.59%	-0.77%
1949	-0.53%	-0.50%	0.55%	1.64%
1950	2.11%	2.20%	1.91%	1.23%
1951	1.01%	0.89%	0.50%	0.89%
1952	0.89%	0.85%	0.37%	0.19%
1953	0.23%	0.32%	0.67%	2.15%
1954	2.42%	2.40%	2.01%	0.20%
1955	-0.16%	-0.14%	-0.12%	0.21%
1956	0.21%	0.14%	0.39%	-1.02%
1957	-0.65%	-0.55%	-1.12%	0.13%
1958	-0.12%	-0.18%	0.67%	1.05%
1959	1.06%	1.15%	0.30%	-0.17%
1960	-0.26%	-0.23%	0.00%	0.20%
1961	0.36%	0.37%	0.49%	-0.07%
1962	-0.18%	-0.23%	-0.38%	0.36%
1963	0.50%	0.53%	1.31%	1.30%
1964	1.93%	1.95%	1.09%	0.56%
1965	0.02%	-0.07%	0.51%	1.45%
1966	1.49%	1.54%	0.78%	0.19%
1967	0.19%	0.13%	0.95%	1.52%
1968	1.57%	1.65%	0.52%	0.06%
1969	-0.01%	-0.08%	0.44%	1.05%
1970	1.08%	1.07%	0.46%	0.36%
1971	0.40%	0.40%	0.49%	1.19%
1972	1.75%	1.79%	1.50%	0.45%
1973	-0.09%	-0.20%	-0.12%	2.25%
1974	2.29%	2.30%	3.78%	3.04%
1975	3.37%	3.63%	3.38%	2.61%
1976	1.51%	1.29%	0.80%	-0.07%
1977	-0.01%	-0.12%	-0.53%	0.06%
1978	0.13%	0.20%	0.28%	0.48%
1979	0.50%	0.51%	0.34%	0.16%
1980	0.26%	0.34%	0.95%	1.25%
1981	1.37%	1.31%	0.68%	0.37%
1982	0.19%	0.13%	0.30%	0.62%
1983	0.62%	0.63%	0.42%	0.16%
1984	0.16%	0.24%	0.44%	0.71%
1985	0.76%	0.79%	0.50%	0.34%
1986	-0.08%	-0.19%	0.76%	1.54%
1987	1.90%	2.05%	1.20%	0.51%
1988	0.58%	0.74%	0.62%	0.46%
1989	0.40%	0.23%	0.10%	0.01%
1990	-0.14%	-0.13%	-0.30%	-0.15%
1991	0.01%	0.03%	0.32%	

Table 4.4.5-31 Simulated running annual average total trihalomethanes concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			66.4	65.9
1923	65.3	65.4	68.6	71.0
1924	75.4	80.1	87.7	96.1
1925	93.4	89.0	83.9	78.7
1926	78.0	78.0	77.3	71.3
1927	70.2	69.2	65.3	65.0
1928	65.0	65.9	68.1	70.8
1929	74.5	76.5	81.7	89.3
1930	85.7	83.2	80.7	75.8
1931	77.9	83.3	88.2	92.8
1932	91.1	86.4	77.6	74.4
1933	74.9	76.1	80.8	86.0
1934	85.6	85.5	88.6	85.5
1935	85.6	84.5	77.9	72.8
1936	73.7	73.4	73.4	73.7
1937	75.8	76.2	76.2	73.0
1938	70.4	68.8	63.1	54.0
1939	53.5	55.5	67.6	81.1
1940	82.6	81.3	74.0	70.7
1941	69.3	70.2	66.0	58.5
1942	58.4	58.1	58.3	55.9
1943	55.6	55.6	58.2	70.8
1944	73.9	74.2	84.0	80.5
1945	77.9	77.6	70.5	69.7
1946	68.6	68.4	68.9	69.9
1947	71.5	71.6	77.1	78.8
1948	79.7	79.2	72.6	70.8
1949	70.5	70.6	71.7	74.3
1950	72.8	72.6	72.5	67.0
1951	66.7	67.2	65.7	68.6
1952	69.2	69.0	63.4	53.1
1953	52.4	52.5	53.3	59.3
1954	60.6	60.7	65.4	68.8
1955	67.9	68.0	71.5	74.7
1956	75.1	74.8	66.6	57.0
1957	59.5	59.4	63.7	65.1
1958	63.3	63.7	58.7	55.7
1959	55.9	55.9	62.7	71.0
1960	72.3	72.4	76.0	78.2
1961	76.2	75.7	75.9	74.9
1962	76.0	76.1	72.9	64.1
1963	62.2	62.3	58.5	61.1
1964	61.2	61.2	68.8	74.1
1965	73.7	73.3	65.0	62.5
1966	62.5	62.6	67.6	69.1
1967	70.0	70.1	61.4	53.3
1968	53.5	53.9	62.3	70.2
1969	71.2	69.3	61.7	52.6
1970	51.7	53.4	56.6	65.0
1971	63.6	63.3	60.5	59.1
1972	60.1	59.9	66.5	67.5
1973	68.1	68.1	66.0	64.5
1974	63.3	63.5	59.0	54.8
1975	57.0	57.3	57.3	56.1
1976	59.4	63.1	85.0	104.3
1977	104.1	106.3	98.1	97.8
1978	94.5	88.2	77.1	68.4
1979	68.3	68.2	71.9	71.3
1980	70.3	70.8	67.9	68.1
1981	67.6	67.8	77.3	73.2
1982	73.7	72.3	59.2	52.7
1983	52.5	51.9	50.2	49.8
1984	48.8	50.4	55.7	63.7
1985	64.6	65.2	73.6	75.6
1986	76.9	76.6	66.5	66.9
1987	68.8	68.5	81.0	81.1
1988	77.2	78.7	76.0	84.4
1989	87.4	84.9	83.1	74.9
1990	75.1	77.8	82.5	93.9
1991	96.4	95.4	93.4	

Table 4.4.5-32 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			0.15%	0.23%
1923	0.22%	0.23%	0.28%	0.31%
1924	0.32%	0.48%	0.70%	0.05%
1925	-0.03%	-0.19%	-0.96%	-0.33%
1926	-0.23%	-0.19%	0.08%	0.01%
1927	-0.03%	-0.09%	0.15%	0.36%
1928	0.40%	0.41%	0.37%	0.21%
1929	0.23%	0.42%	1.15%	1.63%
1930	1.66%	1.56%	1.89%	1.42%
1931	1.22%	1.21%	0.35%	0.20%
1932	0.36%	0.35%	0.26%	0.37%
1933	0.43%	0.39%	0.43%	-0.01%
1934	-0.11%	-0.13%	0.18%	0.46%
1935	0.48%	0.53%	-0.05%	0.13%
1936	-0.08%	-0.14%	0.26%	0.22%
1937	0.39%	0.36%	-0.03%	-0.03%
1938	0.00%	0.00%	0.21%	0.24%
1939	0.28%	0.34%	0.26%	0.09%
1940	0.03%	-0.02%	0.02%	0.12%
1941	0.13%	0.14%	0.19%	0.64%
1942	0.65%	0.66%	0.63%	0.44%
1943	0.44%	0.45%	0.42%	0.25%
1944	0.26%	0.28%	0.23%	0.27%
1945	0.31%	0.30%	0.39%	0.42%
1946	0.38%	0.39%	0.43%	0.36%
1947	0.35%	0.34%	0.10%	-0.08%
1948	-0.07%	-0.07%	0.04%	0.16%
1949	0.19%	0.20%	0.36%	0.83%
1950	0.85%	0.87%	0.97%	0.28%
1951	0.23%	0.18%	-0.02%	0.30%
1952	0.30%	0.30%	0.19%	0.08%
1953	0.09%	0.12%	0.22%	1.06%
1954	1.20%	1.19%	1.05%	0.29%
1955	0.18%	0.20%	0.21%	0.31%
1956	0.29%	0.26%	0.30%	0.30%
1957	0.28%	0.28%	0.26%	0.43%
1958	0.45%	0.43%	0.48%	0.17%
1959	0.16%	0.21%	-0.05%	-0.13%
1960	-0.06%	0.01%	0.07%	0.27%
1961	0.28%	0.23%	0.35%	0.38%
1962	0.37%	0.36%	0.20%	0.10%
1963	0.00%	-0.04%	0.08%	0.01%
1964	0.11%	0.14%	0.19%	0.08%
1965	0.01%	-0.01%	0.01%	0.33%
1966	0.34%	0.35%	0.28%	0.17%
1967	0.17%	0.14%	0.25%	0.26%
1968	0.29%	0.34%	0.18%	0.07%
1969	0.03%	-0.02%	0.06%	0.14%
1970	0.16%	0.19%	0.17%	0.18%
1971	0.19%	0.19%	0.20%	0.59%
1972	0.79%	0.80%	0.65%	0.29%
1973	0.10%	0.07%	0.08%	1.19%
1974	1.19%	1.20%	1.47%	0.46%
1975	0.60%	0.65%	0.53%	0.29%
1976	0.14%	0.30%	0.29%	-0.09%
1977	-0.25%	-0.41%	-0.86%	-0.54%
1978	-0.37%	-0.36%	0.14%	-0.17%
1979	-0.12%	-0.11%	-0.18%	0.37%
1980	0.31%	0.30%	0.47%	0.56%
1981	0.61%	0.67%	0.47%	0.30%
1982	0.25%	0.20%	0.17%	0.11%
1983	0.11%	0.10%	0.05%	0.03%
1984	0.03%	0.07%	0.15%	0.34%
1985	0.36%	0.38%	0.26%	0.18%
1986	0.03%	0.01%	0.34%	0.71%
1987	0.89%	0.92%	0.68%	0.42%
1988	0.41%	0.56%	1.13%	1.20%
1989	1.27%	1.16%	0.42%	0.26%
1990	0.07%	0.19%	0.28%	-0.44%
1991	-0.48%	-0.54%	0.53%	

Table 4.4.5-33 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			0.39%	0.78%
1923	0.76%	0.77%	0.68%	0.61%
1924	0.60%	0.60%	0.46%	-0.49%
1925	-0.59%	-0.65%	-0.53%	0.34%
1926	0.43%	0.44%	-0.29%	-0.47%
1927	-0.42%	-0.46%	0.90%	1.91%
1928	1.92%	1.90%	0.99%	0.29%
1929	0.21%	0.32%	0.56%	0.38%
1930	0.43%	0.35%	0.19%	0.43%
1931	0.41%	0.38%	0.49%	0.22%
1932	0.23%	0.29%	0.21%	0.46%
1933	0.53%	0.49%	0.48%	0.34%
1934	0.28%	0.27%	0.43%	0.31%
1935	0.31%	0.32%	-0.01%	0.24%
1936	0.11%	0.09%	0.68%	0.46%
1937	0.51%	0.42%	0.24%	0.29%
1938	0.39%	0.47%	0.43%	0.66%
1939	0.78%	0.79%	0.44%	0.18%
1940	0.06%	0.05%	0.35%	0.93%
1941	0.94%	0.86%	0.81%	2.54%
1942	2.59%	2.67%	2.84%	1.96%
1943	2.02%	1.97%	1.98%	0.96%
1944	0.90%	0.96%	0.44%	0.25%
1945	0.26%	0.26%	0.74%	1.07%
1946	1.05%	1.02%	0.68%	0.29%
1947	0.29%	0.34%	-0.07%	-0.32%
1948	-0.50%	-0.54%	-0.33%	-0.49%
1949	-0.36%	-0.35%	0.68%	1.57%
1950	1.76%	1.79%	1.46%	0.95%
1951	0.87%	0.82%	0.45%	0.76%
1952	0.76%	0.74%	0.37%	0.06%
1953	0.06%	0.10%	0.28%	1.26%
1954	1.41%	1.40%	1.22%	0.00%
1955	-0.17%	-0.16%	-0.12%	0.17%
1956	0.17%	0.14%	0.26%	-0.44%
1957	-0.27%	-0.23%	-0.70%	-0.14%
1958	-0.28%	-0.30%	0.28%	0.48%
1959	0.49%	0.52%	0.04%	-0.19%
1960	-0.23%	-0.22%	0.00%	0.17%
1961	0.24%	0.25%	0.37%	-0.02%
1962	-0.07%	-0.09%	-0.24%	0.20%
1963	0.24%	0.25%	0.75%	0.81%
1964	1.01%	1.02%	0.48%	0.12%
1965	-0.06%	-0.10%	0.31%	1.08%
1966	1.09%	1.11%	0.61%	0.11%
1967	0.11%	0.08%	0.46%	0.61%
1968	0.64%	0.68%	0.22%	-0.01%
1969	-0.04%	-0.07%	0.20%	0.45%
1970	0.45%	0.47%	0.21%	0.22%
1971	0.23%	0.22%	0.25%	0.67%
1972	0.87%	0.89%	0.80%	0.14%
1973	-0.05%	-0.10%	0.08%	1.98%
1974	1.98%	1.99%	2.59%	1.40%
1975	1.62%	1.74%	1.61%	1.23%
1976	0.81%	0.77%	0.90%	0.09%
1977	0.13%	0.04%	-0.54%	0.12%
1978	0.17%	0.21%	0.23%	0.39%
1979	0.40%	0.40%	0.28%	0.09%
1980	0.13%	0.17%	0.62%	0.94%
1981	0.98%	0.95%	0.52%	0.21%
1982	0.14%	0.11%	0.14%	0.23%
1983	0.23%	0.23%	0.12%	0.05%
1984	0.05%	0.08%	0.24%	0.48%
1985	0.50%	0.52%	0.35%	0.21%
1986	0.06%	0.01%	0.71%	1.41%
1987	1.54%	1.62%	1.06%	0.49%
1988	0.50%	0.59%	0.52%	0.39%
1989	0.37%	0.26%	0.08%	-0.07%
1990	-0.14%	-0.12%	-0.33%	-0.15%
1991	-0.06%	-0.06%	0.27%	

Table 4.4.5-34 Simulated monthly average electrical conductivity (µS/cm) at Martinez/Benicia, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				18624	8486	7170	8218	4426	4748	11765	19635	23949	11891
1923	24765	23951	10391	7323	10322	14758	10897	11650	16156	19971	23226	24557	16497
1924	24898	23697	23654	22683	19494	18280	20198	23035	23686	22492	24387	25691	22683
1925	25447	24554	22178	21332	5154	5604	8540	12158	16676	21103	23756	25236	17645
1926	24803	24383	23575	18958	8090	12552	11597	14671	19768	22620	23774	25208	19167
1927	25158	18046	16880	11121	1264	2921	4413	6861	12742	17062	21971	24439	13573
1928	25026	20668	20663	16658	13221	2087	4368	9479	16798	19525	22787	24675	16330
1929	24813	23315	22496	22801	19580	18612	20099	21272	22093	23762	24210	25406	22372
1930	25503	24049	20399	14718	13830	9989	13848	16766	20441	22656	23663	25154	19251
1931	25047	23821	22702	21608	20390	21247	21540	23114	23631	22440	24427	25679	22971
1932	25195	24249	15724	12616	11952	14842	16416	16353	17236	20942	23311	25228	18672
1933	25272	24260	22245	20154	18946	18498	18264	20789	22006	23817	23848	25189	21941
1934	25740	23927	21918	16749	15703	16300	17461	20639	21505	23496	24789	25772	21167
1935	25200	23938	23273	12237	13566	11641	4590	6150	11649	17914	22733	25159	16504
1936	24700	23468	23799	10332	2535	5005	7984	10957	16136	19986	23235	25204	16112
1937	25157	23255	23622	22446	7759	3964	6223	9542	14671	19356	23005	25217	17018
1938	25295	18489	3940	5000	1001	276	1933	2797	3831	10698	18995	20890	9429
1939	17631	20839	21164	19951	19879	18098	17940	18167	21173	22912	23909	25252	20576
1940	24551	24079	23987	10632	3469	1185	1911	6944	13477	18444	22659	24721	14672
1941	25111	23243	8137	1541	747	1395	2176	3758	8668	15190	21384	22222	11131
1942	22458	23420	5337	1649	684	4318	4697	4808	8029	14596	21111	21936	11087
1943	21913	20499	13065	2558	2287	1735	4590	8098	13985	17614	22114	24457	12743
1944	25038	23963	23921	22278	13950	12776	14989	16882	19018	21867	24248	25034	20330
1945	23979	23404	20581	20597	7559	8162	12011	13870	16954	20036	23186	24752	17924
1946	25009	22054	4677	3507	6604	10465	13960	15088	17622	20259	23223	24682	15596
1947	24721	23256	21226	21717	18037	15243	16001	17870	20142	22406	23778	24904	20775
1948	24180	24025	23379	20577	18168	17490	11280	8656	12592	18094	22669	24351	18788
1949	24564	23528	22326	21709	20861	7710	11075	14673	18609	21859	23443	25061	19618
1950	24762	23916	22967	15686	9427	11764	12310	12991	16528	19937	23196	24635	18177
1951	24758	7559	1486	1872	2365	5461	9901	11047	15807	18644	22537	24677	12176
1952	25100	23009	7892	1812	1763	2523	2246	2087	3859	10957	19142	18499	9907
1953	16806	20619	7989	1545	4710	9918	11655	10296	11953	15735	21236	21252	12809
1954	23175	22232	23208	12938	4553	4000	4726	7776	15141	18699	22613	24200	15272
1955	24594	22589	17319	15828	16267	18683	17441	17709	19729	22196	23995	25401	20146
1956	24443	23877	3153	283	1488	5589	8512	6139	9960	15741	21683	20839	11809
1957	20878	22722	23894	22109	11507	5537	8406	11588	16142	18958	22563	24609	17409
1958	20980	22338	15805	8073	624	904	1765	2986	5349	12171	19954	19565	10876
1959	17881	21157	23359	11778	4263	7232	13538	17662	19182	20534	23148	24229	16997
1960	24768	22778	23365	22865	12550	12369	14931	16891	20436	22670	23978	25326	20244
1961	24626	23520	21325	20947	11650	13021	16007	18364	20756	22659	23231	24605	20059
1962	24654	23028	21423	21845	7576	8318	13065	15658	19360	20646	23153	24396	18593
1963	12660	16802	13756	16773	4525	5600	2276	4280	10632	16547	22105	24196	12513
1964	23158	15307	19325	15246	15807	17919	17436	17979	19968	22307	23597	24688	19395
1965	24658	23158	4056	798	4005	8770	5569	7426	14074	16963	21763	24306	12962
1966	24961	18451	17495	11555	9973	10367	12842	15587	18243	20555	23291	24995	17360
1967	24030	23077	9503	4549	3746	3119	3072	3031	3765	10117	18089	18115	10351
1968	17310	20942	22035	13176	3936	5043	10170	16033	18958	20906	23335	24668	16376
1969	24285	23397	16269	1787	530	2459	3286	2364	4396	11527	19572	18879	10729
1970	16261	19253	5808	309	1085	5710	9420	14211	18494	17583	21518	23957	12801
1971	24840	21682	5412	3907	6521	5709	8280	8162	12507	15616	21146	21187	12914
1972	23089	23920	20599	19383	14184	9844	13858	18001	17959	20139	23008	25183	19097
1973	24611	19645	12900	2649	1306	2694	7547	10944	15363	18589	22483	24372	13592
1974	24519	6684	2551	852	3315	1660	1751	5857	10641	16211	21704	19321	9589
1975	19079	21931	22152	21417	5526	1574	4862	6910	10121	15819	21249	20344	14249
1976	18713	20170	21821	22963	21488	18743	18724	22192	24187	24815	25005	25504	22027
1977	25252	24664	22744	23210	22322	22237	21610	23169	23582	22504	24426	25671	23449
1978	25273	24233	21865	4589	3002	2704	3578	6515	10900	16507	21877	23842	13740
1979	24611	24510	23544	14400	5363	5808	9810	12562	15744	19493	22958	25138	16995
1980	24657	23408	18770	2346	584	2652	7236	10102	15513	18801	22637	23949	14221
1981	24664	24468	22489	14837	10819	8555	10860	15854	20477	22824	23812	24920	18715
1982	24192	12154	2376	1649	1314	1645	735	2792	7441	13845	20945	17896	8915
1983	11531	6570	2120	966	342	151	1918	3665	2006	5003	11272	11283	4736
1984	10463	2759	435	1812	4884	5699	9480	13673	17593	17750	21700	24241	10874
1985	24638	13665	13389	18310	18451	17644	16614	17213	20380	22622	23943	24253	19260
1986	24276	23742	20180	14377	747	311	5877	10429	15206	18843	21770	23612	14947
1987	24576	24351	23551	22685	16983	12017	14540	18043	20724	22707	24314	25583	20840
1988	23541	23718	18340	13021	14775	18128	20356	21404	21519	23439	24536	25616	20700
1989	25181	24277	23527	22046	20885	8000	9436	14167	19653	22556	23586	24575	19824
1990	24588	22520	23252	20207	17882	18283	18343	21083	23497	23535	24575	25578	21945
1991	24844	24915	23053	23508	22184	11865	13423	17775	22309	24311	24312	25368	21489
AVG:	23233	21364	16982	13043	9268	8894	10352	12458	15773	19070	22549	23764	16365
MIN:	10463	2759	435	283	342	151	735	2087	2006	5003	11272	11283	4736
MAX:	25740	24915	23987	23508	22322	22237	21610	23169	24187	24815	25005	25772	23449

Table 4.4.5-35 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.21%	0.35%	0.34%	0.18%	0.37%	0.36%	0.12%	0.04%	0.08%	0.23%
1923	0.10%	-0.03%	0.40%	0.51%	0.36%	0.17%	0.13%	0.24%	0.08%	0.02%	0.00%	0.14%	0.18%
1924	0.08%	-0.10%	-0.09%	-0.11%	0.10%	0.07%	0.46%	0.31%	-0.27%	0.44%	0.27%	0.10%	0.10%
1925	-0.19%	-0.14%	-0.22%	-0.17%	0.70%	0.36%	0.16%	0.14%	0.04%	0.01%	-0.28%	-0.18%	0.02%
1926	0.25%	-0.15%	0.07%	-0.05%	0.01%	0.02%	0.51%	0.57%	0.18%	0.03%	-0.15%	-0.08%	0.10%
1927	0.08%	0.67%	1.95%	1.07%	0.47%	0.11%	-0.35%	-0.40%	-0.51%	-0.03%	0.03%	0.10%	0.27%
1928	0.05%	0.37%	0.36%	0.28%	0.18%	0.22%	0.19%	0.05%	0.02%	0.04%	0.02%	0.02%	0.15%
1929	0.00%	0.04%	-0.01%	-0.01%	0.54%	0.29%	0.08%	0.00%	0.00%	0.00%	0.27%	0.15%	0.11%
1930	-0.08%	0.06%	0.14%	-0.05%	0.36%	0.56%	0.10%	0.44%	-0.01%	-0.04%	1.07%	0.59%	0.26%
1931	-0.42%	0.44%	-0.25%	-0.48%	-0.95%	-0.68%	-0.23%	-0.03%	0.00%	-0.13%	-0.07%	-0.02%	-0.23%
1932	0.04%	-0.11%	1.64%	1.01%	1.95%	0.85%	0.27%	0.19%	0.08%	0.02%	0.07%	0.04%	0.50%
1933	0.01%	0.00%	0.00%	0.99%	0.85%	0.50%	0.17%	0.03%	0.00%	0.00%	0.06%	0.03%	0.22%
1934	-0.11%	0.09%	-0.08%	-0.54%	-0.35%	-0.11%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.09%
1935	-0.17%	-0.25%	0.02%	0.89%	0.46%	0.72%	1.61%	0.21%	1.15%	0.52%	0.18%	0.03%	0.45%
1936	0.45%	-0.35%	-0.26%	0.23%	2.19%	3.43%	1.35%	0.49%	0.07%	-0.01%	-0.01%	0.12%	0.64%
1937	-0.15%	-0.16%	-0.07%	0.11%	1.03%	0.86%	0.37%	0.27%	0.06%	0.00%	0.00%	0.00%	0.19%
1938	0.00%	0.26%	-0.09%	0.05%	0.24%	0.19%	0.09%	0.13%	0.22%	0.08%	0.04%	0.31%	0.13%
1939	0.75%	0.34%	0.27%	0.22%	0.10%	0.38%	0.19%	-0.10%	-0.03%	0.00%	0.00%	0.09%	0.18%
1940	-0.17%	0.10%	0.02%	0.58%	1.52%	-0.81%	-0.30%	0.18%	-0.23%	-0.12%	-0.04%	0.07%	0.07%
1941	0.04%	-0.18%	0.17%	0.67%	0.24%	0.41%	0.16%	0.15%	0.05%	0.02%	0.06%	0.32%	0.18%
1942	0.77%	0.41%	0.58%	0.30%	0.07%	0.12%	0.15%	0.31%	0.35%	0.14%	0.04%	0.30%	0.29%
1943	0.44%	0.95%	0.69%	0.25%	0.15%	0.14%	0.19%	0.13%	0.05%	0.06%	0.03%	0.09%	0.26%
1944	0.04%	-0.03%	0.03%	-0.04%	0.20%	0.45%	0.27%	0.22%	0.20%	0.08%	0.02%	0.03%	0.12%
1945	-0.01%	0.28%	0.24%	0.11%	0.96%	0.74%	0.29%	0.25%	0.09%	0.03%	0.00%	0.09%	0.26%
1946	0.05%	0.14%	0.38%	0.22%	0.00%	0.03%	0.08%	0.35%	0.16%	0.05%	0.01%	0.20%	0.14%
1947	-0.12%	0.21%	0.13%	0.04%	0.31%	-0.39%	-0.23%	-0.02%	-0.09%	-0.05%	0.05%	-0.09%	-0.02%
1948	-0.02%	0.03%	0.13%	0.04%	0.01%	0.03%	0.20%	0.38%	0.31%	0.12%	0.03%	0.21%	0.12%
1949	-0.01%	0.16%	0.11%	-0.01%	0.17%	-0.60%	-0.26%	-0.08%	-0.01%	0.00%	0.09%	0.10%	-0.03%
1950	0.17%	0.03%	0.10%	0.98%	1.18%	0.46%	0.25%	3.03%	1.25%	0.36%	0.04%	0.06%	0.66%
1951	-0.59%	1.21%	0.94%	-0.78%	-0.09%	0.91%	0.44%	0.33%	0.27%	0.17%	0.06%	0.09%	0.25%
1952	0.04%	-0.10%	0.71%	0.49%	0.07%	0.12%	1.06%	0.43%	0.15%	0.08%	0.04%	0.32%	0.28%
1953	0.46%	0.19%	0.26%	0.12%	0.05%	0.05%	0.20%	0.27%	0.39%	0.17%	0.05%	0.32%	0.21%
1954	0.21%	1.08%	0.56%	0.28%	0.19%	0.18%	0.19%	0.03%	0.00%	0.00%	0.00%	0.00%	0.23%
1955	0.05%	0.02%	0.69%	0.55%	0.21%	0.07%	-0.04%	0.11%	0.05%	0.02%	0.03%	0.02%	0.15%
1956	0.09%	0.03%	0.57%	0.42%	-0.07%	0.10%	0.11%	0.34%	0.35%	0.14%	0.04%	0.31%	0.20%
1957	0.45%	0.20%	0.06%	0.08%	0.04%	0.64%	0.26%	0.29%	0.08%	0.06%	0.02%	-0.03%	0.18%
1958	0.82%	0.47%	0.33%	0.21%	0.45%	0.16%	0.00%	0.15%	0.23%	0.10%	0.04%	0.87%	0.32%
1959	0.75%	0.28%	0.07%	0.09%	0.16%	0.02%	0.00%	-0.04%	-0.04%	-0.17%	-0.08%	-0.17%	0.07%
1960	-0.08%	0.34%	0.20%	0.27%	0.65%	0.56%	0.21%	0.72%	0.24%	0.06%	-0.13%	-0.07%	0.25%
1961	0.23%	-0.11%	0.28%	0.17%	1.31%	0.65%	0.20%	0.08%	0.06%	0.02%	-0.05%	0.09%	0.24%
1962	0.39%	-0.32%	0.08%	0.09%	-0.25%	0.22%	0.56%	0.27%	0.07%	-0.24%	-0.13%	0.05%	0.07%
1963	1.20%	0.98%	0.70%	0.54%	-1.18%	-0.48%	0.04%	0.42%	0.14%	0.07%	0.01%	-0.36%	0.17%
1964	0.05%	0.39%	0.18%	2.93%	1.54%	0.86%	0.29%	-0.67%	-0.02%	0.06%	-0.01%	-0.09%	0.46%
1965	0.08%	-0.06%	0.57%	0.38%	0.07%	0.01%	0.41%	0.10%	0.02%	0.06%	0.03%	0.14%	0.15%
1966	0.08%	1.31%	0.91%	0.46%	0.25%	0.17%	0.22%	0.16%	0.01%	-0.01%	-0.01%	0.01%	0.30%
1967	0.00%	0.11%	0.77%	0.57%	0.57%	0.29%	0.17%	0.20%	0.24%	0.34%	0.41%	0.50%	0.35%
1968	0.46%	0.18%	0.20%	0.03%	0.10%	0.61%	0.22%	0.59%	-0.03%	-0.08%	-0.04%	-0.01%	0.18%
1969	-0.04%	-0.02%	0.49%	0.56%	0.11%	0.10%	0.15%	0.26%	0.30%	0.11%	0.05%	0.66%	0.23%
1970	0.67%	0.52%	0.52%	0.26%	0.05%	0.12%	0.03%	0.19%	0.00%	0.09%	0.04%	0.01%	0.21%
1971	0.00%	0.28%	0.44%	0.23%	0.00%	0.78%	0.21%	0.47%	0.36%	0.08%	0.00%	0.29%	0.26%
1972	0.18%	0.06%	1.13%	0.78%	0.43%	0.28%	0.04%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.24%
1973	0.01%	0.28%	0.36%	0.71%	0.32%	0.37%	0.18%	0.18%	0.04%	0.01%	0.00%	0.76%	0.27%
1974	1.17%	-2.94%	-1.49%	0.61%	0.18%	0.44%	0.23%	0.12%	0.18%	0.22%	0.09%	1.19%	0.00%
1975	0.91%	0.33%	0.23%	0.08%	0.14%	-0.94%	-0.15%	0.38%	0.37%	0.15%	0.31%	0.47%	0.19%
1976	-0.76%	-0.17%	0.02%	0.03%	-0.27%	0.82%	0.71%	0.27%	0.02%	-0.02%	-0.29%	0.29%	0.06%
1977	-0.36%	-0.02%	-0.25%	-0.20%	-0.07%	-0.01%	0.00%	0.00%	0.00%	0.03%	0.02%	0.01%	-0.07%
1978	0.03%	0.06%	0.00%	0.09%	0.20%	0.27%	0.66%	0.39%	0.31%	0.11%	0.03%	0.24%	0.20%
1979	0.13%	-0.53%	0.41%	2.86%	1.61%	0.77%	0.42%	0.19%	0.02%	0.00%	0.00%	0.23%	0.51%
1980	0.00%	0.16%	1.28%	1.44%	-1.57%	0.02%	0.28%	0.26%	0.28%	0.12%	0.03%	0.23%	0.21%
1981	0.12%	-0.07%	0.16%	0.65%	0.46%	0.87%	1.01%	0.92%	0.23%	0.03%	0.02%	0.01%	0.37%
1982	0.08%	1.55%	-0.31%	0.12%	0.43%	0.09%	0.11%	0.16%	0.22%	0.12%	0.04%	0.42%	0.25%
1983	0.73%	0.51%	0.16%	0.08%	0.11%	0.09%	0.10%	0.11%	0.15%	0.24%	0.34%	0.45%	0.26%
1984	0.52%	0.37%	0.17%	0.08%	0.13%	0.20%	0.05%	0.20%	0.25%	0.05%	0.00%	0.04%	0.17%
1985	0.07%	0.71%	0.52%	0.18%	0.20%	0.39%	0.26%	0.22%	0.00%	-0.02%	0.02%	0.01%	0.21%
1986	0.05%	0.03%	0.19%	0.60%	0.71%	0.25%	-0.12%	0.12%	0.21%	0.09%	0.26%	0.20%	0.22%
1987	0.08%	-0.06%	0.06%	-0.06%	0.84%	1.17%	0.26%	0.07%	0.18%	0.09%	0.12%	0.05%	0.23%
1988	0.01%	0.00%	0.44%	0.87%	0.37%	0.10%	0.52%	0.12%	0.00%	-0.02%	0.37%	0.21%	0.25%
1989	-0.22%	0.09%	0.38%	0.27%	0.09%	-0.08%	0.12%	0.03%	0.15%	0.07%	0.06%	0.14%	0.09%
1990	0.27%	0.49%	0.23%	-0.03%	-0.05%	0.25%	0.13%	0.72%	0.00%	-0.06%	0.02%	0.03%	0.17%
1991	-0.08%	-0.29%	0.09%	0.09%	0.16%	0.46%	0.71%	0.63%	0.26%	0.01%	0.67%	0.37%	0.26%
AVG:	0.15%	0.15%	0.28%	0.35%	0.31%	0.30%	0.24%	0.25%	0.13%	0.06%	0.06%	0.16%	0.20%
MIN:	-0.76%	-2.94%	-1.49%	-0.78%	-1.57%	-0.94%	-0.35%	-0.67%	-0.51%	-0.24%	-0.29%	-0.36%	-0.23%
MAX:	1.20%	1.55%	1.95%	2.93%	2.19%	3.43%	1.61%	3.03%	1.25%	0.52%	1.07%	1.19%	0.66%

Table 4.4.5-36 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.19%	0.33%	0.31%	0.17%	0.35%	-1.71%	-0.71%	-0.29%	0.33%	-0.11%
1923	0.26%	-0.14%	1.21%	1.54%	0.74%	0.27%	0.15%	0.28%	0.09%	0.02%	0.00%	0.34%	0.40%
1924	0.19%	-0.27%	0.11%	-0.20%	0.01%	0.04%	0.10%	0.01%	-0.02%	0.05%	0.03%	0.01%	0.00%
1925	-0.28%	-0.06%	-0.26%	-0.21%	0.00%	0.04%	0.09%	0.61%	0.20%	0.05%	0.01%	0.17%	0.03%
1926	-0.09%	0.05%	-0.03%	-0.01%	0.80%	0.28%	0.16%	0.22%	0.07%	0.02%	-0.51%	-0.28%	0.06%
1927	0.18%	0.00%	1.37%	0.77%	0.37%	0.12%	0.10%	0.70%	-0.19%	1.02%	0.50%	0.55%	0.46%
1928	0.23%	1.07%	0.68%	0.38%	0.32%	0.28%	0.18%	0.05%	0.02%	-0.01%	0.00%	-0.02%	0.27%
1929	0.03%	0.26%	-0.10%	-0.08%	0.51%	0.28%	0.08%	0.00%	-0.01%	0.00%	0.18%	0.10%	0.11%
1930	-0.05%	0.12%	0.26%	0.26%	0.40%	0.33%	0.10%	0.07%	0.03%	0.01%	0.01%	0.01%	0.13%
1931	0.03%	0.10%	0.06%	0.02%	-0.15%	-0.04%	0.00%	-0.03%	-0.02%	0.04%	0.02%	0.01%	0.00%
1932	-0.05%	-0.01%	0.20%	0.25%	0.37%	0.19%	0.07%	0.16%	0.08%	0.02%	0.06%	0.03%	0.11%
1933	0.01%	0.11%	0.12%	0.50%	0.54%	0.27%	0.08%	0.01%	0.00%	0.00%	0.02%	0.01%	0.14%
1934	0.00%	0.02%	-0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.07%	0.02%
1935	-0.07%	0.05%	-0.03%	0.09%	0.06%	0.01%	0.17%	0.04%	1.39%	0.66%	0.22%	0.03%	0.22%
1936	0.38%	-0.46%	-0.31%	2.35%	7.31%	4.73%	2.02%	-0.48%	-0.32%	-0.14%	-0.02%	0.21%	1.27%
1937	-0.22%	-0.25%	-0.10%	0.16%	1.07%	1.50%	0.61%	-0.59%	-0.21%	-0.07%	0.00%	0.00%	0.16%
1938	0.00%	-1.48%	-1.10%	0.11%	0.25%	0.15%	0.09%	0.15%	-1.46%	-0.60%	-0.27%	1.12%	-0.25%
1939	2.92%	1.31%	0.56%	0.88%	0.44%	0.16%	0.04%	0.07%	-0.02%	-0.02%	0.05%	0.05%	0.54%
1940	-0.17%	0.15%	-0.10%	-0.06%	0.27%	0.57%	0.36%	-0.56%	0.30%	0.18%	0.08%	0.32%	0.11%
1941	0.17%	-0.54%	0.30%	0.84%	0.17%	0.60%	0.20%	-0.26%	-0.06%	-0.02%	-0.13%	1.07%	0.20%
1942	2.85%	1.46%	0.17%	-0.07%	0.18%	0.14%	0.15%	0.32%	-1.93%	-0.88%	-0.33%	1.11%	0.26%
1943	0.91%	5.64%	3.45%	-0.22%	-0.15%	0.22%	0.20%	-0.40%	-0.19%	1.19%	0.61%	0.79%	1.00%
1944	0.19%	-0.20%	0.21%	-0.20%	-0.74%	-0.29%	0.01%	0.16%	0.20%	0.08%	0.02%	0.07%	-0.04%
1945	0.02%	0.30%	0.15%	0.01%	1.09%	0.75%	0.40%	0.52%	0.22%	0.06%	0.00%	0.10%	0.30%
1946	0.06%	0.67%	0.67%	0.17%	-0.04%	0.02%	0.14%	-1.38%	-0.68%	-0.22%	-0.03%	-0.09%	-0.06%
1947	0.06%	0.13%	0.03%	0.00%	0.27%	-0.05%	-0.06%	-0.01%	-0.07%	-0.04%	-0.06%	0.06%	0.02%
1948	0.14%	-0.08%	0.39%	0.02%	-0.05%	-0.05%	-0.13%	0.03%	0.05%	0.03%	0.01%	0.09%	0.04%
1949	-0.21%	-0.19%	-0.25%	-0.11%	-0.05%	0.53%	0.33%	0.12%	0.02%	0.00%	0.69%	0.42%	0.11%
1950	-0.20%	0.37%	0.35%	0.59%	1.13%	0.66%	0.68%	3.11%	1.25%	0.35%	0.03%	0.45%	0.73%
1951	-0.47%	0.60%	0.62%	0.32%	0.20%	0.10%	0.11%	-0.90%	0.22%	0.24%	0.12%	0.19%	0.11%
1952	0.09%	-0.18%	1.06%	0.66%	0.02%	0.10%	-0.43%	0.04%	-1.22%	-0.50%	-0.23%	1.06%	0.04%
1953	0.88%	0.31%	0.13%	0.09%	0.07%	0.05%	0.20%	0.31%	0.46%	0.23%	0.08%	0.37%	0.27%
1954	0.25%	1.26%	0.66%	0.31%	0.19%	0.18%	0.19%	0.03%	0.00%	-0.01%	-0.01%	0.00%	0.25%
1955	-0.17%	-0.01%	0.47%	0.20%	0.05%	-0.15%	0.10%	0.19%	0.08%	0.02%	0.04%	0.02%	0.07%
1956	0.01%	0.02%	1.20%	0.69%	-0.27%	0.08%	0.11%	0.35%	-1.32%	-0.59%	-0.22%	0.97%	0.09%
1957	-2.23%	-1.28%	-0.45%	0.27%	-0.22%	1.26%	0.56%	0.41%	0.10%	0.28%	0.13%	-0.84%	-0.17%
1958	0.74%	0.54%	0.38%	0.22%	0.76%	0.18%	-0.13%	0.15%	-1.58%	-0.71%	-0.30%	1.53%	0.15%
1959	1.15%	0.39%	0.08%	-0.41%	-0.14%	0.02%	0.01%	-0.06%	0.03%	-0.15%	-0.08%	-0.02%	0.07%
1960	0.00%	-0.05%	-0.03%	-0.05%	0.03%	-0.01%	-0.01%	0.13%	0.06%	0.02%	0.00%	0.00%	0.01%
1961	0.05%	-0.02%	0.13%	0.07%	0.17%	0.11%	0.04%	0.07%	0.01%	0.00%	-0.01%	0.10%	0.06%
1962	-0.01%	-0.32%	-0.11%	-0.02%	-0.01%	-0.15%	-0.01%	0.01%	0.01%	0.00%	0.00%	0.01%	-0.05%
1963	0.65%	0.57%	0.40%	0.27%	1.11%	0.19%	0.29%	2.22%	0.72%	0.29%	0.04%	-0.36%	0.53%
1964	0.03%	0.35%	0.16%	7.34%	3.87%	1.45%	-0.07%	-0.29%	-0.07%	0.00%	0.05%	-0.21%	1.05%
1965	0.06%	-0.05%	1.45%	0.75%	-0.03%	-0.01%	0.35%	0.08%	-0.64%	0.84%	0.46%	0.51%	0.31%
1966	0.21%	0.25%	0.31%	0.29%	0.24%	0.16%	0.22%	0.15%	0.01%	-0.01%	-0.01%	0.01%	0.15%
1967	0.00%	0.01%	0.58%	0.87%	0.68%	0.26%	0.14%	0.21%	-0.49%	-0.30%	0.89%	1.62%	0.37%
1968	0.95%	0.30%	0.20%	0.06%	0.12%	0.19%	0.06%	0.13%	-0.01%	-0.02%	-0.01%	0.00%	0.16%
1969	-0.08%	0.00%	0.20%	0.87%	0.35%	-0.08%	0.09%	0.20%	-1.67%	-0.67%	-0.29%	2.51%	0.12%
1970	1.69%	0.44%	0.26%	0.22%	0.07%	0.12%	0.03%	0.23%	0.00%	0.14%	0.07%	0.02%	0.27%
1971	0.00%	0.26%	0.42%	0.22%	0.00%	0.83%	0.22%	0.52%	0.41%	0.13%	0.02%	0.34%	0.28%
1972	0.20%	0.07%	1.20%	0.82%	0.44%	0.28%	0.04%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.25%
1973	-0.21%	-0.55%	-1.56%	0.13%	0.58%	0.62%	0.26%	-0.66%	-0.22%	-0.05%	0.00%	1.07%	-0.05%
1974	1.68%	-2.34%	-1.36%	0.58%	0.18%	0.64%	0.27%	-0.42%	-0.64%	0.78%	0.43%	3.64%	0.29%
1975	2.14%	0.70%	0.28%	0.08%	0.14%	-2.70%	-0.66%	0.38%	-0.59%	-0.28%	0.70%	1.27%	0.12%
1976	0.03%	0.15%	0.10%	0.04%	-0.80%	0.41%	0.36%	0.14%	0.03%	0.00%	0.21%	-0.08%	0.05%
1977	-0.21%	-0.23%	0.12%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.01%	0.06%	0.03%	0.01%	-0.02%
1978	0.00%	0.04%	-0.02%	0.05%	0.17%	0.14%	0.40%	0.33%	0.23%	0.09%	0.02%	0.24%	0.14%
1979	0.13%	-0.01%	0.07%	0.75%	0.53%	0.24%	0.00%	-0.40%	-0.11%	-0.02%	0.01%	0.05%	0.10%
1980	-0.04%	-0.05%	0.25%	0.35%	2.39%	0.95%	0.49%	1.18%	1.09%	0.44%	0.11%	0.40%	0.63%
1981	0.21%	-0.19%	0.24%	1.46%	0.87%	0.79%	0.46%	0.27%	0.06%	0.01%	0.01%	0.00%	0.35%
1982	-0.01%	-0.03%	0.29%	1.12%	0.30%	-0.08%	0.07%	0.18%	-1.08%	-0.53%	-0.22%	1.29%	0.11%
1983	1.99%	0.94%	-0.07%	-0.03%	0.16%	0.08%	0.09%	0.13%	0.18%	-0.97%	0.69%	1.60%	0.40%
1984	1.02%	0.36%	0.10%	0.09%	0.13%	0.20%	0.05%	0.25%	0.08%	0.23%	0.11%	0.10%	0.23%
1985	0.09%	0.76%	0.55%	0.19%	0.20%	0.34%	0.24%	0.24%	-0.01%	-0.03%	0.02%	0.02%	0.22%
1986	0.05%	0.03%	0.19%	0.62%	0.83%	0.33%	-0.13%	-0.75%	-0.72%	-0.31%	0.61%	0.67%	0.12%
1987	0.29%	-0.24%	0.24%	-0.21%	1.31%	1.02%	0.17%	0.02%	0.47%	0.24%	0.27%	0.12%	0.31%
1988	-0.13%	-0.09%	0.22%	0.27%	0.10%	0.02%	0.08%	0.02%	0.00%	-0.01%	0.12%	0.07%	0.06%
1989	-0.10%	-0.09%	-0.02%	0.01%	0.01%	0.15%	0.16%	0.04%	0.02%	0.00%	-0.02%	-0.07%	0.01%
1990	0.05%	0.25%	0.13%	0.01%	-0.01%	-0.09%	-0.05%	0.11%	0.00%	-0.03%	-0.11%	-0.06%	0.02%
1991	0.11%	-0.04%	0.06%	0.04%	0.03%	0.21%	-0.07%	-0.20%	-0.09%	-0.02%	-0.06%	-0.03%	0.00%
AVG:	0.27%	0.16%	0.25%	0.39%	0.43%	0.29%	0.15%	0.12%	-0.13%	0.00%	0.07%	0.36%	0.20%
MIN:	-2.23%	-2.34%	-1.56%	-0.41%	-0.80%	-2.70%	-0.66%	-1.38%	-1.93%	-0.97%	-0.51%	-0.84%	-0.25%
MAX:	2.92%	5.64%	3.45%	7.34%	7.31%	4.73%	2.02%	3.11%	1.39%	1.19%	0.89%	3.64%	1.27%

Table 4.4.5-37 Simulated monthly average electrical conductivity (µS/cm) at Chipps Island, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				4689	804	383	520	190	213	2484	7377	10980	3071
1923	13153	12627	1712	403	1328	3398	1226	1483	3955	6620	9778	11938	5635
1924	13529	12556	11927	10978	6842	5424	7428	10874	11496	9527	11403	14067	10504
1925	14806	13810	10537	8890	792	351	728	1898	4136	7755	10662	12835	7267
1926	13058	12272	11242	6412	605	2673	1613	3020	6865	9485	10840	12882	7581
1927	13515	5561	3682	1095	181	185	174	432	2423	4378	8364	11798	4316
1928	13724	8873	7757	4044	1607	202	288	1067	4719	6308	9000	12065	5805
1929	13499	11989	10497	10717	7082	5656	7353	8771	8944	10711	11764	13240	10018
1930	14846	13230	8131	2881	2267	858	2921	4723	6963	9311	10597	12769	7458
1931	14190	12717	10909	9316	7795	8593	9158	10821	11253	9413	11361	14043	10797
1932	14499	13346	4376	1659	1512	3206	4159	3849	4089	7508	10483	12804	6791
1933	14368	13362	10504	7589	6106	5590	5448	8031	9115	10740	11449	12812	9593
1934	15085	13283	9847	4408	3307	3948	4818	7910	8492	10260	12596	14018	8998
1935	14551	12860	11754	2336	2529	1486	203	383	1943	5246	9351	12630	6273
1936	13475	12013	12117	1710	199	328	598	1371	3928	6681	9771	12741	6244
1937	13315	10995	10485	10391	984	213	412	1031	3044	6144	9637	12776	6619
1938	14345	6500	274	274	186	166	161	159	183	2246	7004	7508	3251
1939	4290	7176	8226	6977	6980	5415	5065	5376	7745	9668	10794	12773	7540
1940	12767	11721	11497	1827	200	165	159	664	3055	5282	9035	12202	5715
1941	13186	10993	907	169	169	163	164	183	1068	3762	8024	8925	3976
1942	9042	10409	932	172	160	292	192	215	621	3394	8100	8737	3522
1943	9080	7938	2056	192	169	170	273	608	2897	4729	8413	11882	4034
1944	13664	12879	12385	10562	2644	1779	3273	4449	5602	8213	11173	12542	8264
1945	12403	11571	8113	7835	997	695	2008	2497	4054	6482	9822	12154	6553
1946	13779	10382	728	175	447	1339	2714	3112	4490	6685	9779	12023	5471
1947	13288	11798	8985	9193	5699	2929	3693	5265	6702	8769	10513	12190	8252
1948	12731	12523	11879	8222	5286	4699	1327	529	2053	5308	9229	11457	7104
1949	12915	12164	10334	9436	8301	799	1936	3489	5343	8303	10415	12481	7993
1950	12965	11466	10191	3825	656	1723	1714	1923	3902	6455	9744	11991	6380
1951	12469	1395	160	167	164	322	1145	1079	3600	5504	8859	12047	3909
1952	13089	10661	992	176	162	164	165	163	188	2337	7085	5389	3381
1953	3541	7134	928	159	346	1199	1286	773	1427	3415	7845	7988	3003
1954	10426	10335	10843	2267	191	178	198	563	3996	5685	8840	11410	5411
1955	12104	9817	4154	3375	3908	5942	4844	4819	6302	8724	11103	13192	7357
1956	12711	11344	865	170	163	247	719	251	1218	3938	8344	7689	3972
1957	7146	9501	11243	9265	1441	210	732	1445	3662	5579	9004	12019	5937
1958	8746	9551	4136	434	168	168	170	170	253	2607	7464	6245	3343
1959	4837	8448	11706	2043	194	632	3274	5396	5656	6740	9662	11543	5844
1960	13170	11289	11318	11287	2442	1752	3316	4434	6969	9308	11002	13147	8286
1961	13674	12118	9150	8323	1740	2196	4114	5656	7322	9099	9833	11701	7910
1962	12246	10479	7872	9128	948	750	2689	3649	5896	7056	9532	11657	6825
1963	2669	4953	2764	3974	494	335	165	238	1850	4330	8502	11466	3478
1964	10288	3179	5957	3695	3437	5418	4839	5066	6533	8697	10321	11873	6609
1965	13292	11627	632	159	256	806	224	490	3297	4284	8049	11718	4570
1966	12779	6004	4033	1274	831	997	2076	3599	5026	6876	9866	12459	5485
1967	12555	11147	1502	210	180	167	185	178	179	1794	6185	5033	3276
1968	3890	7404	9005	2198	204	260	1537	4476	5722	7088	9898	11981	5305
1969	11970	10802	3841	258	177	170	170	159	221	2494	7283	5732	3606
1970	3205	5868	576	166	163	227	1135	2817	5243	4333	7806	11271	3567
1971	13307	9976	754	180	379	227	636	466	2032	3344	7596	8083	3915
1972	9544	11353	7288	6216	2491	718	2975	5861	4819	6318	9703	12759	6670
1973	12786	6605	1576	198	172	167	775	1285	3167	5277	8899	11751	4388
1974	12132	1125	161	157	198	159	163	384	1457	3892	8325	6217	2864
1975	5873	9450	10086	8232	732	162	317	355	1052	3791	8016	6982	4587
1976	5622	7263	9367	10802	9255	5984	5820	9659	11999	12431	12778	13579	9546
1977	13737	12861	10360	10903	10474	9879	9282	10941	11295	9399	11446	14077	11221
1978	14606	13381	10026	597	184	174	201	406	1459	4152	8476	10903	5380
1979	12093	12463	11215	3233	254	321	1231	1967	3294	6058	9627	12619	6198
1980	13443	11818	6490	330	172	171	572	1027	3465	5625	9088	11200	5283
1981	12258	12163	9477	3049	972	530	1348	4247	7364	9361	10536	12266	6964
1982	12006	2028	172	175	164	176	162	169	570	3210	7972	5044	2654
1983	1081	278	163	178	164	163	164	159	153	289	2037	1151	498
1984	957	191	157	159	205	247	997	2395	4580	4419	7985	11586	2823
1985	12221	2760	1973	6129	6077	4800	4044	4529	6956	9196	10717	11444	6737
1986	12530	12382	7968	2282	204	168	380	1399	3367	5479	8109	10517	5399
1987	12860	13288	12142	10735	4698	1345	3047	5705	7352	9195	11381	13405	8763
1988	12274	11905	6278	1726	3023	5747	7673	8778	8350	10203	12277	13706	8495
1989	14506	13339	12156	10084	8353	859	1037	3217	6591	9149	10324	11852	8455
1990	13061	10836	11070	8052	5049	5452	5620	8365	10926	10971	11837	13677	9576
1991	14008	13942	11917	11648	10544	1900	2444	5729	9266	11703	11954	13198	9854
AVG:	11446	9847	6731	4288	2246	1776	2166	3097	4620	6503	9458	11183	6091
MIN:	957	191	157	157	160	159	159	159	153	289	2037	1151	498
MAX:	15085	13942	12385	11648	10544	9879	9282	10941	11999	12431	12778	14077	11221

Table 4.4.5-38 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.65%	0.98%	0.98%	0.85%	1.52%	1.73%	0.27%	0.09%	0.29%	0.82%
1923	0.33%	0.04%	0.63%	1.28%	0.96%	0.41%	0.65%	1.03%	0.25%	0.09%	0.04%	0.42%	0.51%
1924	0.30%	-0.18%	-0.37%	-0.26%	0.21%	0.20%	1.31%	1.03%	-0.51%	1.01%	1.15%	0.35%	0.35%
1925	-0.34%	-0.52%	-0.63%	-0.59%	0.08%	0.54%	0.86%	0.59%	0.19%	0.05%	-0.75%	-0.60%	-0.09%
1926	0.53%	-0.06%	-0.13%	0.07%	0.01%	0.21%	1.66%	1.78%	0.45%	0.08%	-0.37%	-0.22%	0.33%
1927	0.21%	1.96%	6.78%	5.21%	0.50%	0.51%	0.84%	-0.15%	-1.29%	0.14%	0.22%	0.29%	1.27%
1928	0.22%	0.95%	1.11%	1.00%	0.68%	0.42%	1.10%	0.44%	0.08%	0.19%	0.08%	0.08%	0.53%
1929	0.05%	0.11%	0.03%	-0.02%	1.72%	1.09%	0.13%	0.07%	0.08%	0.07%	0.77%	0.38%	0.37%
1930	-0.14%	0.13%	0.55%	0.01%	1.30%	1.99%	0.02%	1.43%	0.05%	-0.07%	3.15%	2.36%	0.90%
1931	-0.69%	0.49%	0.06%	-1.67%	-2.75%	-2.13%	-0.78%	-0.05%	0.06%	-0.36%	-0.23%	-0.07%	-0.68%
1932	0.07%	-0.22%	3.82%	2.96%	6.49%	1.92%	0.68%	0.79%	0.41%	0.04%	0.19%	0.16%	1.44%
1933	0.07%	0.03%	-0.01%	2.78%	3.15%	1.53%	0.55%	0.12%	0.08%	0.11%	0.20%	0.16%	0.73%
1934	-0.20%	0.06%	-0.03%	-1.61%	-0.97%	-0.15%	0.00%	0.04%	-0.15%	-0.30%	-0.06%	0.14%	-0.27%
1935	-0.29%	-0.68%	-0.09%	2.05%	0.77%	2.02%	2.34%	0.56%	4.29%	1.81%	0.41%	0.36%	1.13%
1936	1.24%	-0.21%	-1.12%	0.08%	-0.56%	7.25%	3.10%	1.05%	0.17%	-0.06%	-0.01%	0.36%	0.94%
1937	-0.32%	-0.63%	-0.20%	0.26%	1.73%	0.67%	1.09%	1.11%	0.18%	-0.19%	0.19%	0.08%	0.33%
1938	0.00%	0.76%	1.18%	0.77%	0.29%	0.19%	0.75%	0.98%	1.65%	0.25%	0.06%	0.89%	0.65%
1939	2.63%	0.87%	0.70%	0.80%	0.33%	1.19%	0.65%	-0.31%	-0.05%	0.07%	0.02%	0.25%	0.60%
1940	-0.26%	0.08%	0.29%	0.91%	0.94%	0.36%	0.59%	0.97%	-0.77%	-0.38%	-0.06%	0.19%	0.24%
1941	0.22%	-0.38%	-0.47%	0.33%	0.24%	0.23%	0.71%	1.36%	0.28%	0.11%	0.22%	0.95%	0.31%
1942	2.33%	1.51%	1.21%	0.38%	0.21%	0.68%	1.14%	1.61%	1.44%	0.30%	0.07%	0.79%	0.97%
1943	1.34%	2.87%	3.25%	0.61%	0.43%	0.35%	1.21%	0.95%	0.18%	0.26%	0.12%	0.24%	0.99%
1944	0.19%	-0.03%	0.03%	-0.03%	0.45%	1.46%	0.76%	0.71%	0.80%	0.31%	0.09%	0.13%	0.40%
1945	0.02%	0.74%	0.93%	0.35%	1.23%	1.71%	0.63%	0.91%	0.35%	0.11%	0.02%	0.27%	0.61%
1946	0.26%	0.40%	0.84%	0.57%	0.20%	0.19%	0.31%	1.27%	0.54%	0.15%	0.05%	0.58%	0.45%
1947	-0.04%	0.37%	0.62%	0.13%	0.89%	-1.38%	-0.60%	0.23%	-0.18%	-0.12%	0.16%	-0.21%	-0.01%
1948	-0.14%	0.13%	0.40%	0.24%	0.04%	0.14%	0.77%	1.79%	0.96%	0.33%	0.10%	0.66%	0.45%
1949	0.20%	0.42%	0.48%	0.00%	0.47%	0.11%	-0.05%	0.08%	0.05%	0.13%	0.24%	0.32%	0.20%
1950	0.47%	0.20%	0.29%	2.95%	3.87%	0.82%	0.74%	11.16%	2.94%	0.41%	0.17%	0.23%	2.02%
1951	-1.59%	-1.48%	0.41%	0.50%	0.46%	2.55%	1.26%	1.22%	0.87%	0.61%	0.21%	0.28%	0.44%
1952	0.22%	-0.19%	0.39%	0.38%	0.36%	0.46%	0.86%	0.98%	1.60%	0.23%	0.18%	0.96%	0.53%
1953	1.60%	0.46%	0.65%	0.34%	0.48%	0.36%	0.88%	1.22%	1.43%	0.47%	0.10%	0.96%	0.75%
1954	0.64%	2.82%	2.01%	1.19%	0.80%	0.57%	1.16%	0.56%	0.08%	0.06%	0.03%	0.02%	0.83%
1955	0.16%	0.17%	2.05%	1.71%	0.52%	0.22%	-0.01%	0.42%	0.28%	0.10%	0.17%	0.12%	0.49%
1956	0.26%	0.20%	0.34%	0.21%	0.33%	0.64%	0.57%	1.77%	1.20%	0.37%	0.10%	0.85%	0.57%
1957	1.43%	0.66%	0.23%	0.26%	0.47%	1.13%	0.61%	1.30%	0.24%	0.20%	0.11%	-0.08%	0.55%
1958	2.12%	1.47%	1.06%	0.89%	0.21%	0.30%	0.59%	1.17%	1.61%	0.28%	0.09%	2.54%	1.03%
1959	2.60%	0.64%	0.16%	0.29%	0.60%	0.17%	0.06%	-0.05%	-0.02%	-0.46%	-0.23%	-0.45%	0.28%
1960	-0.31%	0.92%	0.73%	0.73%	2.06%	1.72%	0.53%	2.43%	0.86%	0.08%	-0.27%	-0.24%	0.77%
1961	0.53%	0.04%	0.60%	0.68%	2.75%	1.13%	0.31%	0.50%	0.29%	0.14%	-0.10%	0.29%	0.60%
1962	1.43%	-0.24%	-0.11%	0.42%	0.02%	1.19%	1.90%	0.86%	0.15%	-0.70%	-0.37%	0.19%	0.39%
1963	2.53%	2.19%	2.35%	1.50%	0.82%	0.47%	0.70%	1.84%	0.35%	0.14%	0.07%	-1.02%	0.99%
1964	-0.21%	1.38%	0.34%	8.14%	3.82%	1.94%	1.09%	-2.16%	-0.18%	0.40%	-0.07%	-0.25%	1.19%
1965	0.19%	0.01%	0.00%	0.27%	0.58%	0.17%	1.37%	0.60%	0.13%	0.33%	0.14%	0.43%	0.35%
1966	0.36%	3.40%	2.81%	1.52%	0.77%	0.57%	0.79%	0.56%	0.09%	0.01%	0.01%	0.04%	0.91%
1967	0.04%	0.29%	1.54%	0.72%	0.67%	0.52%	0.96%	1.18%	1.58%	1.21%	1.15%	1.75%	0.97%
1968	1.56%	0.45%	0.55%	0.50%	0.45%	1.49%	0.42%	1.84%	0.10%	-0.35%	-0.02%	0.01%	0.58%
1969	-0.06%	-0.05%	1.29%	1.13%	0.02%	0.46%	0.96%	1.07%	1.65%	0.23%	0.10%	1.88%	0.72%
1970	2.46%	1.42%	1.78%	0.16%	0.18%	0.66%	0.32%	0.80%	0.05%	0.28%	0.14%	0.03%	0.69%
1971	0.03%	0.71%	1.49%	0.61%	0.20%	1.67%	0.28%	1.81%	1.06%	0.20%	-0.03%	0.76%	0.73%
1972	0.59%	0.12%	3.14%	2.62%	1.46%	1.03%	0.00%	0.01%	0.10%	0.07%	0.06%	0.03%	0.77%
1973	0.06%	0.84%	1.46%	0.59%	0.34%	0.53%	0.60%	0.86%	0.12%	0.68%	0.10%	2.20%	0.70%
1974	3.97%	2.01%	0.41%	0.22%	0.59%	0.24%	0.68%	1.16%	0.77%	0.71%	0.25%	3.34%	1.20%
1975	2.85%	0.77%	0.63%	0.38%	0.31%	0.57%	1.09%	1.91%	1.43%	0.40%	0.89%	1.60%	1.07%
1976	-2.31%	-0.65%	0.32%	0.07%	-0.62%	2.21%	2.16%	0.57%	0.26%	-0.04%	-0.75%	0.42%	0.14%
1977	-0.44%	-0.54%	-0.50%	-0.69%	-0.20%	0.02%	0.02%	0.02%	0.03%	0.18%	0.28%	0.17%	-0.14%
1978	0.13%	0.20%	0.10%	0.19%	0.54%	0.46%	1.31%	1.57%	1.02%	0.19%	0.18%	0.74%	0.55%
1979	0.53%	-1.22%	0.45%	8.45%	3.60%	1.74%	1.11%	0.70%	0.15%	0.06%	0.02%	0.66%	1.36%
1980	0.33%	0.41%	3.78%	3.97%	0.07%	0.20%	0.90%	1.22%	0.94%	0.44%	0.09%	0.60%	1.08%
1981	0.50%	-0.05%	0.35%	2.13%	1.51%	2.68%	3.00%	2.36%	0.59%	0.01%	0.10%	0.08%	1.11%
1982	0.28%	3.37%	1.08%	0.29%	0.30%	0.33%	0.44%	1.24%	1.40%	0.41%	0.13%	1.32%	0.88%
1983	2.64%	1.43%	0.43%	0.24%	0.16%	0.12%	0.64%	0.88%	1.02%	1.63%	1.21%	1.71%	1.01%
1984	1.72%	0.82%	0.21%	0.38%	0.66%	0.79%	0.18%	0.82%	0.85%	0.20%	0.00%	0.12%	0.56%
1985	0.24%	1.73%	1.30%	0.34%	0.55%	1.29%	0.87%	0.72%	0.04%	-0.07%	0.09%	0.07%	0.60%
1986	0.16%	0.10%	0.56%	4.84%	-0.55%	0.15%	0.66%	0.89%	0.74%	0.32%	0.78%	0.70%	0.78%
1987	0.28%	-0.07%	0.12%	-0.03%	2.48%	4.37%	0.24%	0.25%	0.72%	0.34%	0.40%	0.28%	0.78%
1988	0.14%	0.06%	1.26%	2.93%	0.78%	0.15%	1.74%	1.10%	-0.11%	0.02%	0.74%	0.70%	0.79%
1989	-0.46%	-0.08%	1.15%	0.96%	0.30%	0.24%	0.77%	0.17%	0.48%	0.42%	0.27%	0.45%	0.39%
1990	1.06%	1.66%	0.85%	0.04%	-0.13%	0.82%	0.47%	2.03%	0.61%	-0.32%	0.18%	0.14%	0.62%
1991	-0.14%	-0.68%	-0.06%	0.36%	0.46%	1.41%	2.15%	1.88%	0.96%	0.60%	1.71%	1.34%	0.83%
AVG:	0.53%	0.50%	0.84%	1.01%	0.76%	0.88%	0.81%	1.05%	0.57%	0.21%	0.21%	0.51%	0.66%
MIN:	-2.31%	-1.48%	-1.12%	-1.67%	-2.75%	-2.13%	-0.78%	-2.16%	-1.29%	-0.70%	-0.75%	-1.02%	-0.68%
MAX:	3.97%	3.40%	6.78%	8.45%	6.49%	7.25%	3.10%	11.16%	4.29%	1.81%	3.15%	3.34%	2.02%

Table 4.4.5-39 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.62%	0.97%	0.94%	0.85%	1.52%	-0.61%	-0.82%	-0.32%	0.89%	0.45%
1923	0.89%	-0.16%	1.59%	3.14%	1.47%	0.55%	0.70%	1.23%	0.31%	0.04%	-0.02%	0.96%	0.89%
1924	0.75%	-0.54%	-0.04%	-0.23%	-0.25%	0.13%	0.27%	0.08%	-0.05%	0.24%	0.17%	0.06%	0.05%
1925	-0.54%	-0.41%	-0.63%	-0.77%	-0.34%	0.35%	0.75%	2.38%	0.57%	0.04%	0.05%	0.41%	0.15%
1926	0.00%	-0.02%	0.04%	-0.06%	1.45%	0.21%	0.41%	0.92%	0.29%	0.05%	-1.28%	-1.01%	0.08%
1927	0.31%	0.40%	4.94%	4.18%	0.49%	0.61%	1.11%	2.81%	-1.05%	3.16%	1.49%	1.32%	1.65%
1928	0.93%	2.83%	2.24%	1.25%	1.14%	0.58%	1.04%	0.54%	0.05%	-0.01%	0.03%	-0.02%	0.88%
1929	0.07%	0.64%	-0.03%	-0.33%	1.66%	1.04%	0.15%	0.04%	0.01%	0.05%	0.54%	0.45%	0.36%
1930	-0.02%	0.26%	0.88%	1.00%	1.34%	1.33%	0.16%	0.28%	0.18%	0.04%	0.07%	0.07%	0.47%
1931	0.05%	0.28%	0.24%	0.08%	-0.37%	-0.14%	0.07%	-0.01%	-0.03%	0.15%	0.06%	0.00%	0.03%
1932	-0.09%	-0.06%	0.60%	0.96%	1.31%	0.52%	0.42%	0.69%	0.39%	0.08%	0.20%	0.16%	0.43%
1933	0.05%	0.26%	0.43%	1.51%	1.94%	0.87%	0.25%	0.07%	0.07%	0.07%	0.10%	0.07%	0.47%
1934	0.02%	0.06%	0.03%	0.06%	0.06%	0.08%	0.06%	0.04%	0.04%	0.05%	0.32%	0.31%	0.09%
1935	-0.10%	0.06%	0.01%	0.11%	0.18%	0.17%	1.08%	0.85%	5.33%	2.14%	0.45%	0.32%	0.88%
1936	0.93%	-0.57%	-1.26%	3.29%	0.39%	8.14%	4.94%	-2.73%	-0.55%	-0.28%	-0.20%	0.42%	1.04%
1937	-0.49%	-0.95%	-0.30%	0.37%	1.99%	0.74%	1.20%	-2.21%	-0.11%	-0.36%	-0.07%	-0.06%	-0.02%
1938	0.00%	-3.50%	-4.31%	0.85%	0.29%	0.19%	0.76%	0.98%	0.19%	-0.65%	-0.33%	3.00%	-0.21%
1939	10.14%	3.35%	1.37%	2.78%	1.59%	0.47%	0.16%	0.31%	0.02%	0.00%	0.19%	0.18%	1.71%
1940	-0.31%	0.22%	-0.06%	-0.49%	0.48%	0.29%	0.76%	-1.75%	1.56%	0.79%	0.06%	0.79%	0.19%
1941	0.67%	-1.14%	-1.86%	0.31%	0.24%	0.18%	0.67%	1.12%	0.30%	-0.13%	-0.48%	2.85%	0.23%
1942	8.75%	5.42%	3.06%	0.49%	0.22%	0.71%	1.14%	1.61%	-5.78%	-1.75%	-0.43%	2.73%	1.35%
1943	2.99%	16.53%	19.76%	1.04%	0.51%	0.36%	1.22%	-0.84%	-0.24%	4.10%	1.92%	1.20%	4.05%
1944	0.73%	-0.40%	0.31%	-0.12%	-2.31%	-0.43%	0.24%	0.62%	0.80%	0.32%	0.09%	0.23%	0.01%
1945	0.19%	0.81%	0.71%	0.02%	1.06%	1.53%	1.05%	1.76%	0.83%	0.08%	-0.19%	0.10%	0.66%
1946	0.24%	1.72%	3.20%	0.60%	0.09%	0.19%	0.58%	-4.23%	-1.73%	-0.30%	-0.14%	-0.34%	-0.01%
1947	0.17%	0.48%	0.18%	0.03%	0.73%	-0.23%	-0.14%	0.21%	-0.19%	-0.13%	-0.14%	0.15%	0.09%
1948	0.50%	-0.04%	1.21%	0.40%	-0.35%	-0.06%	-0.12%	0.87%	0.34%	0.11%	0.05%	0.32%	0.27%
1949	-0.38%	-0.72%	-0.68%	-0.43%	-0.14%	0.74%	0.63%	0.34%	0.13%	0.14%	1.71%	1.51%	0.24%
1950	-0.30%	0.62%	1.38%	2.02%	3.45%	1.47%	2.15%	11.17%	3.07%	0.33%	0.00%	1.20%	2.21%
1951	-0.71%	-1.86%	0.38%	0.33%	0.38%	0.55%	0.71%	-2.43%	1.55%	1.11%	0.21%	0.51%	0.06%
1952	0.43%	-0.35%	0.36%	0.39%	0.36%	0.46%	0.73%	0.96%	0.42%	-0.53%	-0.02%	2.93%	0.51%
1953	3.06%	0.64%	0.56%	0.33%	0.42%	0.33%	0.88%	1.35%	1.60%	0.67%	0.17%	1.09%	0.93%
1954	0.76%	3.28%	2.34%	1.33%	0.82%	0.56%	1.16%	0.56%	0.08%	0.02%	0.03%	0.03%	0.91%
1955	-0.34%	-0.14%	1.54%	0.60%	0.08%	-0.39%	0.26%	0.73%	0.31%	0.15%	0.21%	0.15%	0.26%
1956	0.06%	0.07%	0.61%	0.24%	0.33%	0.68%	0.59%	1.82%	-4.56%	-0.83%	-0.36%	2.45%	0.09%
1957	-6.17%	-4.59%	-1.23%	0.44%	0.61%	1.66%	0.92%	1.50%	0.33%	0.90%	0.55%	-2.33%	-0.62%
1958	0.89%	1.82%	1.12%	0.91%	0.22%	0.30%	0.59%	1.17%	-1.87%	-0.88%	-0.38%	4.31%	0.68%
1959	4.01%	0.82%	0.22%	-0.53%	0.25%	0.28%	0.07%	-0.12%	0.17%	-0.37%	-0.22%	0.00%	0.38%
1960	0.03%	-0.09%	-0.08%	-0.12%	0.00%	0.06%	0.06%	0.55%	0.26%	0.11%	0.04%	0.03%	0.07%
1961	0.16%	0.03%	0.34%	0.31%	0.48%	0.33%	0.12%	0.44%	0.16%	0.05%	0.02%	0.32%	0.23%
1962	0.09%	-0.80%	-0.53%	0.00%	0.13%	-0.29%	0.12%	0.25%	0.14%	0.06%	0.03%	0.04%	-0.06%
1963	1.28%	1.27%	1.33%	0.73%	1.15%	0.02%	0.72%	4.42%	0.93%	0.14%	0.10%	-1.13%	0.91%
1964	-0.28%	1.28%	0.30%	21.18%	10.34%	2.67%	-0.06%	-0.85%	-0.10%	0.07%	0.15%	-0.55%	2.85%
1965	-0.01%	0.06%	0.59%	0.31%	0.52%	0.13%	1.30%	0.59%	-2.13%	2.53%	1.35%	1.23%	0.54%
1966	0.92%	0.89%	1.01%	1.08%	0.78%	0.56%	0.80%	0.55%	0.10%	0.02%	0.03%	0.06%	0.57%
1967	0.06%	0.06%	0.93%	0.84%	0.69%	0.52%	0.95%	1.16%	1.17%	-0.45%	2.86%	5.64%	1.20%
1968	3.11%	0.65%	0.60%	0.58%	0.48%	0.71%	0.10%	0.41%	0.05%	-0.04%	0.03%	0.02%	0.56%
1969	-0.15%	-0.04%	0.62%	0.64%	0.26%	0.44%	0.89%	1.04%	-1.58%	-0.81%	-0.36%	6.88%	0.65%
1970	6.52%	0.64%	0.32%	0.17%	0.20%	0.66%	0.29%	0.93%	0.03%	0.41%	0.19%	0.02%	0.86%
1971	0.03%	0.67%	1.41%	0.60%	0.20%	1.71%	0.27%	1.98%	1.22%	0.34%	0.03%	0.87%	0.78%
1972	0.63%	0.12%	3.34%	2.76%	1.47%	1.03%	0.02%	0.01%	0.10%	0.05%	-0.01%	-0.01%	0.79%
1973	-0.46%	-1.55%	-4.52%	-0.55%	0.36%	0.59%	0.64%	-2.21%	-0.17%	0.66%	0.01%	3.04%	-0.35%
1974	5.70%	4.43%	0.42%	0.22%	0.59%	0.19%	0.62%	-0.33%	-1.79%	3.14%	1.31%	10.05%	2.05%
1975	7.00%	1.40%	0.84%	0.42%	0.35%	0.96%	1.19%	2.01%	-1.98%	-0.56%	2.19%	4.16%	1.50%
1976	0.27%	0.23%	0.50%	0.12%	-1.97%	0.58%	1.34%	0.23%	0.19%	-0.09%	0.49%	0.08%	0.17%
1977	-0.61%	-0.69%	0.11%	0.15%	-0.02%	0.05%	0.02%	-0.01%	0.04%	0.30%	0.14%	0.08%	-0.04%
1978	0.06%	0.11%	0.03%	0.10%	0.52%	0.42%	1.12%	1.53%	0.86%	0.30%	0.10%	0.73%	0.49%
1979	0.55%	0.07%	0.18%	1.97%	1.34%	0.79%	0.02%	-1.13%	0.00%	0.13%	0.04%	0.17%	0.34%
1980	0.00%	-0.17%	0.71%	1.03%	0.38%	1.04%	2.25%	4.16%	3.01%	1.20%	0.23%	1.07%	1.24%
1981	0.87%	-0.27%	0.40%	4.75%	2.71%	2.29%	1.16%	0.49%	0.14%	0.06%	0.07%	0.06%	1.06%
1982	0.02%	0.04%	0.34%	0.38%	0.35%	0.33%	0.43%	1.25%	-3.90%	-0.71%	-0.25%	3.56%	0.15%
1983	7.20%	2.24%	0.43%	0.22%	0.15%	0.11%	0.61%	0.88%	1.02%	-1.31%	3.62%	6.05%	1.77%
1984	2.63%	0.85%	0.20%	0.40%	0.67%	0.79%	0.21%	1.05%	0.31%	0.80%	0.34%	0.22%	0.70%
1985	0.22%	1.79%	1.41%	0.36%	0.57%	1.15%	0.85%	0.81%	0.01%	-0.12%	0.08%	0.07%	0.60%
1986	0.12%	0.09%	0.57%	4.94%	-0.53%	0.13%	0.66%	-2.99%	-1.84%	-0.60%	1.74%	2.12%	0.37%
1987	0.92%	-0.42%	0.32%	-0.11%	3.42%	4.10%	0.06%	0.11%	1.49%	0.85%	0.88%	0.61%	1.02%
1988	-0.24%	-0.29%	0.61%	1.03%	0.25%	0.07%	0.29%	0.23%	-0.10%	-0.09%	0.12%	0.15%	0.17%
1989	-0.21%	-0.27%	-0.07%	0.04%	0.06%	0.40%	0.64%	0.18%	0.11%	0.03%	-0.06%	-0.20%	0.05%
1990	0.18%	0.80%	0.52%	0.13%	0.02%	-0.22%	-0.12%	0.37%	0.08%	-0.14%	-0.26%	-0.19%	0.10%
1991	0.25%	0.06%	0.02%	0.15%	0.09%	0.62%	-0.25%	-0.52%	-0.07%	0.10%	-0.08%	-0.10%	0.02%
AVG:	0.94%	0.56%	0.76%	1.02%	0.70%	0.70%	0.65%	0.60%	0.00%	0.20%	0.28%	1.04%	0.62%
MIN:	-6.17%	-4.59%	-4.52%	-0.77%	-2.31%	-0.43%	-0.25%	-4.23%	-5.78%	-1.75%	-1.28%	-2.33%	-0.62%
MAX:	10.14%	16.53%	19.76%	21.18%	10.34%	8.14%	4.94%	11.17%	5.33%	4.10%	3.62%	10.05%	4.05%

Table 4.4.5-40 Simulated monthly average electrical conductivity (µS/cm) at Collinsville, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				2215	418	194	214	163	163	1139	4428	7353	1810
1923	9431	8892	952	207	505	1538	495	532	1883	3622	6185	8223	3539
1924	9837	8928	8262	7383	3801	2809	4327	7290	7985	6119	7742	10466	7079
1925	11205	10209	6995	5523	493	195	280	729	1966	4608	6948	9130	4857
1926	9481	8706	7710	3541	307	1221	646	1308	3963	5989	7249	9234	4946
1927	9908	3093	1630	428	163	162	157	196	1033	2095	5006	8086	2663
1928	10034	5526	4539	1966	561	168	175	395	2466	3419	5471	8311	3586
1929	9794	8347	6938	7101	4014	2969	4267	5418	5594	7092	8111	9613	6605
1930	11232	9640	4849	1260	857	323	1296	2343	3960	5767	6955	9119	4800
1931	10531	9110	7353	5857	4588	5272	5738	7222	7730	5949	7684	10437	7289
1932	10884	9750	2363	608	544	1411	1963	1732	1875	4403	6965	9085	4299
1933	10699	9751	6994	4430	3271	2870	2794	4840	5773	7139	7893	9165	6302
1934	11475	9715	6319	2176	1407	1812	2364	4736	5234	6717	8981	10398	5944
1935	10930	9207	8151	1224	1068	558	171	197	784	2725	5823	8900	4145
1936	9737	8409	8453	939	192	192	239	497	1868	3693	6160	9004	4115
1937	9679	7522	6736	6831	582	197	222	387	1332	3312	6073	9050	4327
1938	10669	3700	202	176	174	161	160	158	161	1047	4165	4375	2096
1939	2062	4119	4997	3924	3896	2775	2526	2727	4593	6039	7082	9027	4481
1940	9188	8165	7832	1056	189	162	158	270	1414	2657	5551	8498	3762
1941	9576	7481	520	167	165	162	162	166	416	1792	4790	5461	2572
1942	5647	6801	611	170	157	179	168	167	240	1577	4896	5336	2162
1943	5649	4654	882	171	166	167	179	248	1286	2329	5031	8160	2410
1944	9929	9254	8719	6993	1234	640	1437	2139	2899	4798	7383	8718	5345
1945	8719	7850	4751	4675	574	273	799	1001	1875	3477	6223	8411	4052
1946	10100	6791	459	157	204	484	1129	1310	2150	3623	6155	8265	3402
1947	9568	8140	5589	5788	3010	1190	1652	2688	3725	5211	6763	8382	5142
1948	9054	8863	8240	4925	2654	2270	540	209	805	2709	5697	7692	4472
1949	9187	8521	6773	5998	4955	444	815	1583	2740	4907	6827	8744	5124
1950	9383	7807	6696	1912	256	640	620	704	1798	3454	6112	8262	3970
1951	8759	896	159	165	162	178	420	379	1660	2811	5372	8312	2439
1952	9464	7144	586	173	160	162	164	161	162	1077	4220	2861	2194
1953	1549	4099	538	157	190	434	454	277	485	1497	4629	4704	1585
1954	6796	6720	7191	1141	168	158	159	229	2035	2967	5349	7658	3381
1955	8412	6315	1939	1464	1778	3172	2392	2341	3421	5305	7454	9491	4457
1956	9161	7736	584	163	162	164	271	169	454	1858	5049	4515	2524
1957	4075	6033	7632	5858	686	165	274	513	1662	2843	5530	8300	3631
1958	5382	6029	2121	218	160	166	167	164	167	1198	4466	3431	1972
1959	2355	5193	8087	1059	176	261	1565	2815	2917	3632	6027	7861	3496
1960	9436	7698	7711	7679	1260	637	1469	2116	3965	5717	7363	9493	5379
1961	10017	8461	5719	5044	817	863	1946	2960	4240	5460	6140	7960	4969
1962	8444	7003	4500	5745	556	290	1167	1643	3133	3876	5906	7886	4179
1963	1466	2551	1277	1861	311	181	161	169	777	2114	5118	7744	1978
1964	6695	1555	3185	1809	1500	2792	2394	2502	3603	5158	6591	8095	3823
1965	9613	7932	410	158	170	293	168	212	1577	2043	4749	8039	2947
1966	9109	3436	1814	494	295	339	801	1605	2505	3755	6236	8713	3258
1967	8844	7429	853	187	167	163	180	172	163	777	3519	2603	2088
1968	1743	4286	5594	1010	173	167	610	2263	3001	3905	6249	8193	3100
1969	8358	7236	1901	197	170	167	166	158	166	1165	4342	3099	2260
1970	1361	3124	353	157	161	164	428	1205	2676	2025	4536	7563	1980
1971	9594	6450	467	159	185	161	244	202	802	1440	4425	4790	2410
1972	6018	7722	4091	3324	1037	261	1331	3172	2389	3338	6104	9061	3987
1973	9182	3659	631	180	171	162	309	462	1365	2629	5431	8022	2684
1974	8442	728	159	155	160	157	162	196	548	1808	5010	3429	1746
1975	3074	6000	6507	4995	455	161	190	188	376	1764	4774	3943	2702
1976	2897	4127	5868	7187	5774	3193	3078	6222	8440	8691	9074	9909	6205
1977	10183	9311	6941	7310	6916	6367	5842	7373	7753	5910	7794	10486	7682
1978	11004	9791	6503	389	176	171	186	208	554	1997	5108	7219	3609
1979	8468	8852	7704	1637	202	193	464	747	1415	3200	6067	8879	3986
1980	9727	8140	3622	232	167	166	241	373	1592	2938	5596	7520	3359
1981	8640	8434	5902	1446	338	212	489	2096	4311	5713	6796	8518	4408
1982	8396	1057	162	174	162	174	158	160	236	1510	4809	2674	1639
1983	400	172	161	174	161	157	162	158	153	172	854	424	262
1984	333	164	155	158	164	166	365	957	2232	2067	4690	7869	1610
1985	8507	1475	734	3418	3285	2347	1861	2158	3947	5592	6972	7691	3999
1986	8809	8742	4757	922	169	162	205	532	1535	2794	4767	6876	3356
1987	9141	9651	8504	7110	2370	487	1321	3046	4245	5630	7652	9640	5733
1988	8654	8274	3519	620	1287	3088	4504	5387	5101	6663	8673	10083	5488
1989	10879	9711	8538	6572	5053	463	378	1439	3746	5587	6624	8163	5596
1990	9268	7283	7427	4812	2522	2786	2926	5111	7432	7429	8152	9981	6261
1991	10390	10337	8375	8066	7009	918	1016	3110	5947	8027	8352	9534	6757
AVG:	8067	6665	4310	2594	1248	919	1093	1667	2580	3736	6013	7659	3863
MIN:	333	164	155	155	157	157	157	158	153	172	854	424	262
MAX:	11475	10337	8719	8066	7009	6367	5842	7373	8440	8691	9074	10486	7682

Table 4.4.5-41 Difference in simulated monthly average electrical conductivity (%) at Collinsville, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.93%	1.08%	0.95%	1.54%	1.57%	1.97%	0.52%	0.15%	0.39%	1.01%
1923	0.46%	0.10%	0.44%	1.01%	1.27%	0.59%	1.07%	1.86%	0.44%	0.15%	0.05%	0.61%	0.67%
1924	0.43%	-0.24%	-0.56%	-0.35%	0.32%	0.36%	1.92%	1.44%	-0.67%	1.34%	1.72%	0.61%	0.53%
1925	-0.45%	-0.71%	-0.82%	-0.81%	-0.01%	0.83%	1.44%	1.15%	0.39%	0.14%	-0.96%	-0.79%	-0.05%
1926	0.71%	-0.02%	-0.22%	0.21%	0.20%	0.35%	1.94%	2.41%	0.60%	0.13%	-0.50%	-0.26%	0.46%
1927	0.29%	2.50%	9.19%	6.91%	0.42%	0.51%	1.15%	1.35%	-1.43%	0.34%	0.35%	0.45%	1.84%
1928	0.34%	1.27%	1.54%	1.40%	1.05%	0.39%	1.58%	1.20%	0.17%	0.35%	0.16%	0.13%	0.80%
1929	0.08%	0.15%	0.05%	-0.02%	2.22%	1.59%	0.14%	0.12%	0.26%	0.17%	1.09%	0.40%	0.52%
1930	-0.12%	0.18%	0.79%	0.18%	1.91%	2.26%	0.00%	2.10%	0.24%	0.13%	4.45%	3.38%	1.29%
1931	-0.90%	0.61%	0.15%	-2.38%	-3.69%	-2.96%	-1.05%	-0.02%	0.11%	-0.50%	-0.29%	-0.06%	-0.92%
1932	0.12%	-0.28%	4.15%	3.55%	7.92%	2.40%	1.05%	1.32%	0.73%	0.11%	0.28%	0.24%	1.80%
1933	0.11%	0.06%	-0.01%	3.80%	4.44%	2.13%	0.83%	0.18%	0.13%	0.22%	0.31%	0.26%	1.04%
1934	-0.26%	0.09%	0.01%	-2.04%	-1.06%	-0.04%	0.07%	0.08%	-0.20%	-0.74%	-0.14%	0.35%	-0.32%
1935	-0.36%	-0.90%	-0.10%	2.02%	0.93%	2.20%	1.69%	1.94%	6.15%	2.68%	0.58%	0.78%	1.47%
1936	1.79%	-0.09%	-1.63%	-0.01%	-0.51%	2.45%	2.82%	1.69%	0.30%	-0.15%	-0.01%	0.54%	0.60%
1937	-0.47%	-0.86%	-0.26%	0.36%	1.50%	0.47%	1.36%	1.83%	0.40%	-0.60%	0.57%	0.16%	0.37%
1938	0.01%	1.01%	1.11%	0.90%	0.27%	0.20%	0.80%	1.03%	1.75%	0.47%	0.10%	1.23%	0.74%
1939	3.65%	1.13%	0.98%	1.15%	0.49%	1.72%	0.99%	-0.34%	-0.01%	0.13%	0.03%	0.41%	0.86%
1940	-0.35%	0.06%	0.55%	0.68%	0.71%	0.29%	0.63%	1.79%	-0.94%	-0.42%	-0.06%	0.31%	0.27%
1941	0.34%	-0.51%	-0.63%	0.33%	0.24%	0.26%	0.74%	1.42%	0.92%	0.31%	0.33%	1.34%	0.42%
1942	3.27%	2.14%	1.39%	0.38%	0.21%	0.82%	1.19%	1.75%	2.30%	0.51%	0.10%	1.09%	1.26%
1943	1.87%	4.04%	4.60%	0.52%	0.43%	0.36%	1.46%	1.92%	0.43%	0.48%	0.20%	0.38%	1.39%
1944	0.27%	-0.05%	0.06%	0.01%	0.50%	1.96%	1.10%	1.10%	1.17%	0.48%	0.16%	0.20%	0.58%
1945	0.05%	1.02%	1.32%	0.50%	1.11%	1.73%	1.00%	1.50%	0.67%	0.22%	0.04%	0.40%	0.80%
1946	0.39%	0.54%	0.94%	0.56%	0.66%	0.44%	0.63%	1.95%	0.85%	0.26%	0.08%	0.92%	0.68%
1947	0.01%	0.50%	0.88%	0.22%	1.18%	-1.57%	-0.65%	0.44%	-0.18%	-0.10%	0.21%	-0.35%	0.05%
1948	-0.18%	0.19%	0.60%	0.36%	0.10%	0.23%	1.11%	2.50%	1.57%	0.51%	0.16%	0.99%	0.68%
1949	0.30%	0.66%	0.68%	0.01%	0.64%	0.63%	0.27%	0.34%	0.19%	0.27%	0.28%	0.48%	0.40%
1950	0.69%	0.27%	0.44%	3.56%	3.30%	1.07%	1.28%	14.90%	3.74%	0.51%	0.24%	0.35%	2.53%
1951	-2.35%	-2.13%	0.36%	0.51%	0.46%	1.41%	1.56%	2.11%	1.34%	0.81%	0.31%	0.42%	0.40%
1952	0.33%	-0.23%	0.23%	0.36%	0.37%	0.46%	0.88%	1.01%	1.76%	0.46%	0.32%	1.27%	0.60%
1953	2.31%	0.63%	0.73%	0.32%	0.75%	0.58%	1.55%	2.18%	2.24%	0.75%	0.14%	1.28%	1.12%
1954	0.91%	3.85%	2.77%	1.53%	0.78%	0.54%	1.30%	1.66%	0.22%	0.20%	0.09%	0.07%	1.16%
1955	0.29%	0.27%	2.46%	2.29%	0.73%	0.33%	0.06%	0.75%	0.48%	0.20%	0.32%	0.20%	0.70%
1956	0.34%	0.31%	0.40%	0.20%	0.34%	0.68%	1.30%	2.02%	1.84%	0.60%	0.14%	1.16%	0.78%
1957	2.02%	0.90%	0.36%	0.37%	0.74%	0.69%	1.22%	2.07%	0.47%	0.39%	0.16%	-0.16%	0.77%
1958	2.78%	2.00%	1.46%	0.99%	0.19%	0.31%	0.64%	1.21%	2.03%	0.54%	0.15%	3.37%	1.31%
1959	3.67%	0.83%	0.22%	0.37%	0.60%	0.63%	0.18%	0.01%	0.04%	-0.64%	-0.30%	-0.66%	0.41%
1960	-0.40%	1.32%	1.03%	1.03%	2.21%	2.13%	0.77%	3.55%	1.43%	0.11%	-0.31%	-0.30%	1.05%
1961	0.71%	0.09%	0.83%	0.95%	2.53%	1.31%	0.47%	0.75%	0.49%	0.25%	-0.09%	0.44%	0.73%
1962	2.22%	-0.21%	-0.31%	0.63%	0.26%	1.45%	2.72%	1.37%	0.30%	-0.95%	-0.46%	0.34%	0.61%
1963	2.46%	2.93%	3.06%	2.11%	1.06%	0.60%	0.71%	1.83%	0.69%	0.27%	0.15%	-1.52%	1.20%
1964	-0.31%	1.70%	0.45%	9.30%	4.84%	2.68%	1.61%	-2.93%	-0.15%	0.61%	-0.07%	-0.34%	1.45%
1965	0.30%	0.08%	0.09%	0.27%	0.61%	0.50%	1.38%	1.67%	0.30%	0.54%	0.23%	0.65%	0.55%
1966	0.53%	4.14%	3.84%	1.99%	1.07%	0.87%	1.26%	1.01%	0.23%	0.06%	0.07%	0.08%	1.26%
1967	0.08%	0.41%	1.52%	0.55%	0.53%	0.50%	0.99%	1.21%	1.68%	1.79%	1.64%	2.49%	1.12%
1968	2.27%	0.64%	0.79%	0.88%	0.54%	0.94%	0.71%	2.71%	0.20%	-0.50%	0.00%	0.03%	0.77%
1969	-0.04%	-0.06%	1.48%	0.84%	0.09%	0.48%	0.98%	1.11%	1.86%	0.47%	0.17%	2.43%	0.82%
1970	3.60%	1.99%	1.85%	0.15%	0.20%	0.65%	0.81%	1.33%	0.13%	0.50%	0.22%	0.05%	0.96%
1971	0.07%	0.93%	1.62%	0.56%	0.67%	0.80%	0.96%	2.42%	1.63%	0.43%	-0.01%	1.05%	0.93%
1972	0.82%	0.14%	4.01%	3.62%	2.10%	1.22%	0.08%	0.08%	0.31%	0.17%	0.13%	0.05%	1.06%
1973	0.09%	1.01%	1.80%	0.48%	0.33%	0.47%	1.18%	1.69%	0.16%	2.04%	0.19%	3.37%	1.07%
1974	5.81%	3.16%	0.47%	0.22%	0.59%	0.25%	0.72%	1.88%	1.46%	1.11%	0.38%	4.25%	1.69%
1975	3.98%	1.00%	0.86%	0.55%	0.40%	0.53%	1.80%	2.28%	2.14%	0.57%	1.31%	2.22%	1.47%
1976	-2.94%	-0.80%	0.49%	0.09%	-0.82%	3.04%	3.13%	0.75%	0.45%	-0.12%	-1.04%	0.59%	0.24%
1977	-0.49%	-0.78%	-0.57%	-0.93%	-0.23%	0.06%	0.03%	0.04%	0.08%	0.29%	0.64%	0.24%	-0.13%
1978	0.19%	0.30%	0.16%	0.28%	0.53%	0.43%	1.17%	1.99%	1.46%	-0.50%	0.35%	1.05%	0.62%
1979	0.76%	-1.52%	0.50%	9.51%	1.77%	1.12%	1.63%	1.27%	0.37%	0.15%	0.04%	1.00%	1.38%
1980	0.52%	0.58%	4.99%	3.22%	0.10%	0.19%	1.46%	2.14%	1.43%	0.63%	0.17%	0.84%	1.36%
1981	0.69%	0.01%	0.38%	2.63%	1.86%	2.02%	3.88%	3.29%	0.80%	0.02%	0.14%	0.10%	1.32%
1982	0.46%	2.84%	0.63%	0.30%	0.30%	0.34%	0.47%	1.32%	2.22%	0.63%	0.21%	1.62%	0.95%
1983	3.21%	1.13%	0.43%	0.27%	0.18%	0.14%	0.68%	0.94%	1.10%	2.13%	1.88%	2.41%	1.21%
1984	2.22%	0.66%	0.21%	0.40%	0.64%	0.77%	0.69%	1.46%	1.31%	0.38%	0.05%	0.20%	0.75%
1985	0.35%	1.77%	1.63%	0.40%	0.75%	1.86%	1.31%	1.12%	0.10%	-0.09%	0.13%	0.13%	0.79%
1986	0.23%	0.14%	0.77%	8.53%	0.16%	0.19%	1.34%	1.64%	1.22%	0.54%	1.10%	1.00%	1.40%
1987	0.40%	-0.08%	0.16%	-0.03%	2.73%	5.31%	0.23%	0.42%	1.09%	0.48%	0.69%	0.44%	0.99%
1988	0.28%	0.09%	1.58%	3.64%	0.95%	0.21%	2.49%	1.82%	-0.24%	0.06%	0.95%	0.97%	1.07%
1989	-0.62%	-0.14%	1.64%	1.34%	0.41%	0.54%	1.35%	0.40%	0.80%	0.80%	0.44%	0.68%	0.64%
1990	1.65%	2.32%	1.20%	0.13%	-0.13%	1.24%	0.67%	2.97%	0.88%	-0.43%	0.35%	0.21%	0.92%
1991	-0.19%	-0.97%	-0.11%	0.51%	0.66%	1.58%	3.03%	2.74%	1.47%	1.22%	2.24%	1.68%	1.16%
AVG:	0.74%	0.64%	1.04%	1.22%	0.87%	0.90%	1.11%	1.57%	0.86%	0.36%	0.33%	0.72%	0.86%
MIN:	-2.94%	-2.13%	-1.63%	-2.38%	-3.69%	-2.96%	-1.05%	-2.93%	-1.43%	-0.95%	-1.04%	-1.52%	-0.92%
MAX:	5.81%	4.14%	9.19%	9.51%	7.92%	5.31%	3.88%	14.90%	6.15%	2.68%	4.45%	4.25%	2.53%

Table 4.4.5-42 Difference in simulated monthly average electrical conductivity (%) at Collinsville, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.88%	1.05%	0.93%	1.56%	1.57%	1.73%	-0.65%	-0.47%	1.19%	0.87%
1923	1.26%	-0.15%	0.85%	1.56%	1.68%	0.72%	1.10%	2.04%	0.58%	-0.03%	-0.06%	1.40%	0.91%
1924	1.06%	-0.70%	-0.10%	-0.22%	-0.34%	0.26%	0.39%	0.13%	-0.05%	0.34%	0.29%	0.11%	0.10%
1925	-0.70%	-0.53%	-0.80%	-1.04%	-0.34%	0.77%	1.39%	3.45%	0.80%	0.11%	0.01%	0.58%	0.31%
1926	0.05%	-0.03%	0.08%	-0.08%	1.06%	0.22%	0.66%	1.32%	0.41%	0.08%	-1.75%	-1.39%	0.05%
1927	0.41%	0.71%	6.64%	5.68%	0.45%	0.62%	1.18%	2.81%	-1.31%	4.49%	1.90%	1.78%	2.11%
1928	1.32%	3.73%	3.08%	1.78%	1.57%	0.46%	1.55%	1.42%	0.12%	-0.02%	0.10%	-0.03%	1.26%
1929	0.12%	0.87%	0.08%	-0.42%	2.13%	1.46%	0.21%	0.10%	0.15%	0.12%	0.76%	0.64%	0.52%
1930	0.02%	0.35%	1.25%	1.43%	1.92%	1.71%	0.30%	0.48%	0.33%	0.08%	0.15%	0.15%	0.68%
1931	0.08%	0.41%	0.33%	0.11%	-0.48%	-0.15%	0.11%	0.03%	-0.02%	0.19%	0.08%	0.04%	0.06%
1932	-0.09%	-0.05%	0.74%	1.24%	1.71%	0.75%	0.75%	1.17%	0.72%	0.17%	0.32%	0.24%	0.64%
1933	0.07%	0.37%	0.61%	2.07%	2.71%	1.21%	0.42%	0.14%	0.14%	0.16%	0.14%	0.13%	0.68%
1934	0.05%	0.10%	0.08%	0.13%	0.23%	0.20%	0.13%	0.08%	0.09%	0.10%	0.46%	0.49%	0.18%
1935	-0.08%	0.11%	0.06%	0.10%	0.30%	0.44%	1.21%	1.87%	7.47%	3.09%	0.55%	0.65%	1.31%
1936	1.26%	-0.62%	-1.81%	2.25%	0.15%	3.08%	4.19%	-2.71%	-0.38%	-0.65%	-0.40%	0.55%	0.41%
1937	-0.71%	-1.28%	-0.41%	0.51%	1.79%	0.29%	1.11%	-1.60%	0.23%	-1.08%	0.00%	-0.13%	-0.11%
1938	0.03%	-3.99%	-2.79%	0.93%	0.27%	0.20%	0.81%	1.03%	1.48%	-0.56%	-0.46%	4.03%	0.08%
1939	14.06%	4.32%	1.84%	3.85%	2.26%	0.70%	0.33%	0.56%	0.06%	0.05%	0.28%	0.29%	2.38%
1940	-0.45%	0.24%	0.01%	-0.64%	0.45%	0.30%	0.78%	-0.39%	2.40%	1.17%	-0.02%	1.13%	0.41%
1941	0.94%	-1.44%	-2.44%	0.31%	0.24%	0.23%	0.71%	1.39%	0.93%	0.03%	-0.75%	3.78%	0.33%
1942	12.39%	7.66%	3.61%	0.47%	0.21%	0.84%	1.19%	1.75%	-2.50%	-2.52%	-0.58%	3.69%	2.19%
1943	4.18%	23.68%	29.47%	0.85%	0.51%	0.37%	1.46%	0.50%	-0.08%	5.82%	2.64%	1.64%	5.92%
1944	1.03%	-0.49%	0.40%	-0.03%	-2.74%	-0.28%	0.50%	1.00%	1.16%	0.50%	0.16%	0.35%	0.13%
1945	0.32%	1.13%	1.04%	0.05%	0.86%	1.58%	1.53%	2.59%	1.43%	0.05%	-0.49%	0.09%	0.85%
1946	0.38%	2.32%	3.49%	0.56%	0.50%	0.45%	1.01%	-5.21%	-2.17%	-0.35%	-0.26%	-0.55%	0.01%
1947	0.31%	0.66%	0.27%	0.05%	0.93%	-0.13%	-0.08%	0.40%	-0.05%	-0.14%	-0.19%	0.26%	0.19%
1948	0.80%	-0.05%	2.08%	0.52%	-0.45%	-0.06%	0.21%	1.98%	0.75%	0.22%	0.10%	0.48%	0.55%
1949	-0.47%	-1.10%	-0.89%	-0.60%	-0.11%	0.48%	0.86%	0.64%	0.23%	0.32%	2.27%	2.13%	0.31%
1950	-0.26%	0.79%	1.96%	2.68%	2.80%	1.88%	3.03%	14.79%	4.00%	0.24%	-0.11%	1.72%	2.79%
1951	-0.93%	-2.45%	0.35%	0.35%	0.39%	0.80%	1.14%	-1.19%	2.55%	1.51%	0.27%	0.73%	0.29%
1952	0.62%	-0.42%	-0.04%	0.36%	0.37%	0.46%	0.77%	1.00%	1.63%	-0.36%	0.20%	3.67%	0.69%
1953	4.48%	0.83%	0.72%	0.32%	0.72%	0.57%	1.56%	2.27%	2.48%	1.05%	0.19%	1.43%	1.38%
1954	1.03%	4.48%	3.23%	1.72%	0.80%	0.54%	1.30%	1.65%	0.20%	0.12%	0.07%	0.06%	1.27%
1955	-0.36%	-0.21%	1.98%	0.87%	0.18%	-0.51%	0.39%	1.14%	0.51%	0.28%	0.38%	0.24%	0.41%
1956	0.09%	0.12%	0.64%	0.22%	0.34%	0.68%	1.33%	2.03%	-4.58%	0.00%	-0.56%	3.13%	0.29%
1957	-8.36%	-6.30%	-1.78%	0.57%	1.56%	0.64%	1.39%	2.26%	0.56%	1.39%	0.91%	-3.60%	-0.90%
1958	0.94%	2.47%	1.54%	1.01%	0.22%	0.31%	0.63%	1.21%	1.42%	-0.76%	-0.51%	5.55%	1.17%
1959	5.73%	1.04%	0.28%	-0.11%	0.37%	0.66%	0.19%	-0.07%	0.33%	-0.57%	-0.28%	0.01%	0.63%
1960	0.03%	-0.10%	-0.10%	-0.18%	-0.04%	0.25%	0.20%	0.96%	0.49%	0.17%	0.08%	0.05%	0.15%
1961	0.20%	0.05%	0.51%	0.46%	0.60%	0.53%	0.27%	0.67%	0.29%	0.12%	0.08%	0.46%	0.35%
1962	0.17%	-1.05%	-0.75%	0.06%	0.23%	0.17%	0.33%	0.51%	0.27%	0.15%	0.06%	0.08%	0.02%
1963	1.26%	1.67%	1.83%	1.01%	1.09%	0.56%	0.77%	2.28%	1.12%	-0.25%	0.12%	-1.79%	0.81%
1964	-0.41%	1.61%	0.39%	24.97%	13.27%	3.40%	-0.08%	-1.11%	-0.13%	0.12%	0.24%	-0.82%	3.46%
1965	-0.02%	0.14%	0.63%	0.30%	0.61%	0.48%	1.36%	1.67%	-2.85%	3.33%	1.75%	1.71%	0.76%
1966	1.31%	1.21%	1.43%	1.44%	1.06%	0.86%	1.27%	0.99%	0.24%	0.06%	0.08%	0.11%	0.84%
1967	0.08%	0.10%	0.86%	0.50%	0.54%	0.51%	0.98%	1.19%	1.59%	-0.19%	4.12%	7.79%	1.51%
1968	4.55%	0.84%	0.83%	0.96%	0.54%	0.76%	0.35%	0.68%	0.14%	-0.02%	0.06%	0.04%	0.81%
1969	-0.20%	-0.07%	0.76%	0.56%	0.26%	0.47%	0.92%	1.09%	1.16%	-0.70%	-0.49%	8.71%	1.04%
1970	9.70%	0.76%	0.31%	0.16%	0.21%	0.65%	0.80%	1.51%	0.12%	0.65%	0.27%	0.03%	1.26%
1971	0.08%	0.89%	1.54%	0.56%	0.67%	0.80%	0.96%	2.49%	1.83%	0.60%	0.07%	1.19%	0.98%
1972	0.89%	0.14%	4.31%	3.83%	2.11%	1.24%	0.07%	0.08%	0.29%	0.12%	-0.05%	-0.01%	1.09%
1973	-0.59%	-1.93%	-4.48%	0.04%	0.36%	0.49%	1.22%	-1.71%	0.01%	1.99%	-0.05%	4.56%	-0.01%
1974	8.37%	5.89%	0.48%	0.22%	0.59%	0.22%	0.66%	1.24%	-1.57%	4.48%	1.74%	12.78%	2.93%
1975	9.73%	1.79%	1.16%	0.63%	0.46%	0.84%	2.37%	2.38%	-1.41%	-0.65%	3.13%	5.75%	2.18%
1976	0.59%	0.36%	0.73%	0.17%	-2.45%	0.64%	1.86%	0.31%	0.33%	-0.29%	0.73%	0.17%	0.26%
1977	-0.76%	-0.97%	0.16%	0.24%	0.00%	0.10%	0.05%	-0.01%	0.08%	0.51%	0.17%	0.14%	-0.02%
1978	0.09%	0.17%	0.05%	0.18%	0.51%	0.41%	1.12%	1.98%	1.51%	0.49%	0.17%	1.02%	0.64%
1979	0.77%	0.13%	0.24%	2.22%	0.90%	0.82%	0.50%	-0.98%	0.28%	0.28%	0.09%	0.27%	0.46%
1980	0.03%	-0.28%	0.91%	0.92%	0.38%	0.94%	2.70%	5.02%	4.24%	1.67%	0.24%	1.46%	1.52%
1981	1.24%	-0.29%	0.37%	5.49%	3.13%	1.80%	1.69%	0.78%	0.25%	0.10%	0.12%	0.08%	1.23%
1982	0.05%	0.15%	0.36%	0.40%	0.35%	0.35%	0.47%	1.33%	-1.43%	-0.63%	-0.28%	4.33%	0.45%
1983	8.39%	1.44%	0.43%	0.25%	0.18%	0.13%	0.67%	0.94%	1.10%	1.24%	5.38%	7.34%	2.29%
1984	3.14%	0.67%	0.21%	0.41%	0.65%	0.78%	0.76%	1.76%	0.53%	1.12%	0.46%	0.33%	0.90%
1985	0.35%	1.83%	1.79%	0.43%	0.77%	1.64%	1.25%	1.27%	0.08%	-0.15%	0.13%	0.12%	0.79%
1986	0.17%	0.10%	0.77%	8.64%	0.17%	0.18%	1.35%	-2.98%	-2.24%	-0.63%	2.44%	2.95%	0.91%
1987	1.26%	-0.53%	0.43%	-0.10%	3.55%	5.50%	0.05%	0.23%	2.18%	1.21%	1.50%	0.92%	1.35%
1988	-0.25%	-0.39%	0.73%	1.46%	0.35%	0.20%	0.39%	0.47%	-0.15%	-0.24%	0.10%	0.22%	0.24%
1989	-0.27%	-0.39%	-0.12%	0.06%	0.11%	0.50%	1.18%	0.44%	0.22%	0.09%	-0.03%	-0.28%	0.13%
1990	0.37%	1.10%	0.76%	0.24%	0.06%	-0.25%	-0.11%	0.60%	0.14%	-0.18%	-0.27%	-0.24%	0.19%
1991	0.36%	0.08%	0.00%	0.23%	0.15%	0.70%	-0.18%	-0.64%	0.08%	0.24%	-0.01%	-0.19%	0.07%
AVG:	1.32%	0.75%	1.06%	1.24%	0.82%	0.72%	0.91%	0.99%	0.46%	0.41%	0.39%	1.37%	0.87%
MIN:	-8.36%	-6.30%	-4.48%	-1.04%	-2.74%	-0.51%	-0.18%	-5.21%	-4.58%	-2.52%	-1.75%	-3.60%	-0.90%
MAX:	14.06%	23.68%	29.47%	24.97%	13.27%	5.50%	4.19%	14.79%	7.47%	5.82%	5.38%	12.78%	5.92%

Table 4.4.5-43 Simulated monthly average electrical conductivity (µS/cm) at Jersey Point, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				319	242	194	180	177	174	223	1028	2163	522
1923	2267	2301	387	205	206	239	197	189	228	794	1791	2496	942
1924	2357	1706	1609	1423	993	387	445	1176	1379	868	1573	2678	1383
1925	2628	2073	1264	762	269	197	193	182	229	562	2005	2722	1091
1926	2278	1760	1395	531	223	235	208	197	459	1301	1501	2074	1013
1927	2350	934	268	230	197	178	166	168	188	303	1222	2510	726
1928	2540	1517	892	489	259	178	174	188	314	652	1514	2719	953
1929	2480	1744	1218	1464	1185	445	420	594	692	1345	1877	2230	1308
1930	2604	1833	1011	277	222	207	196	247	465	1440	1941	2348	1066
1931	2444	1666	1047	922	681	629	729	1078	1281	1112	1793	2776	1346
1932	2446	1857	532	211	217	233	231	228	225	489	1071	2282	835
1933	2581	1912	1002	536	367	389	292	474	704	1215	1313	1897	1057
1934	2732	1915	1226	363	240	243	255	493	613	1011	1702	2483	1106
1935	2440	1873	1432	566	238	232	188	194	202	492	1692	2738	1024
1936	2622	1538	1604	742	240	197	178	187	233	700	1789	2760	1066
1937	2633	1392	2164	1690	331	238	225	203	214	586	1665	2720	1172
1938	2713	1110	178	180	224	191	172	165	171	205	935	1131	615
1939	301	582	867	431	521	395	262	294	534	1779	2342	2847	930
1940	2252	1520	1891	618	238	192	173	174	215	631	1497	2520	993
1941	2432	1529	396	201	204	185	190	189	178	265	1085	1632	707
1942	1136	1666	401	206	184	180	194	183	173	265	1150	1584	610
1943	930	825	247	188	188	197	188	198	213	279	1158	2506	593
1944	2670	1830	1706	1424	471	224	205	244	342	1349	2635	3240	1362
1945	2125	1996	1859	867	276	186	206	211	246	846	1839	2672	1111
1946	2475	1762	244	166	172	181	191	203	256	889	1934	2743	935
1947	2399	1730	1020	813	747	357	237	262	460	1620	2502	3012	1263
1948	2171	1735	1510	938	592	409	208	166	178	653	1819	2674	1088
1949	2370	1716	1204	857	865	292	186	211	328	1266	1748	2537	1132
1950	2260	2013	1512	431	193	191	178	174	236	900	1985	2642	1060
1951	2751	416	171	188	183	173	180	191	227	568	1538	2651	770
1952	2510	1612	352	207	178	181	187	179	174	231	1018	834	639
1953	223	594	240	171	178	187	188	188	203	280	1101	1510	422
1954	1629	1939	1918	1107	212	170	167	179	271	699	1534	2629	1038
1955	2549	1795	1061	334	269	377	286	253	420	1109	1821	2656	1077
1956	2073	1682	296	208	182	169	173	174	171	354	1258	1315	671
1957	645	1080	1722	1387	487	180	168	175	222	570	1459	2564	888
1958	1548	1411	505	201	199	199	201	182	172	223	1009	955	567
1959	288	715	1772	899	209	191	218	323	444	980	1992	2450	873
1960	2430	1426	1260	1441	566	229	202	235	454	1655	1950	2398	1187
1961	2124	1656	1057	655	457	231	266	314	451	1781	2357	2588	1162
1962	3175	1879	1748	1056	340	204	192	212	386	1117	1950	2781	1253
1963	721	714	468	316	212	175	185	180	178	288	1238	2430	592
1964	2130	549	778	610	244	363	281	287	439	1633	2446	2808	1047
1965	2325	1878	235	173	173	172	174	178	214	320	1114	2382	778
1966	2631	944	387	297	190	185	184	226	333	975	1941	2823	926
1967	2112	1987	396	220	197	179	217	194	177	183	759	649	606
1968	234	717	1355	632	195	171	186	274	435	1011	2009	2876	841
1969	2199	1685	980	238	209	186	180	163	165	202	986	862	671
1970	218	393	217	200	184	175	187	212	306	403	1146	2519	513
1971	2502	1640	246	170	170	166	166	179	192	298	1027	1535	691
1972	1568	2058	2043	818	425	205	194	342	304	728	1881	2736	1108
1973	2410	1841	465	216	202	180	182	189	215	568	1493	2534	874
1974	2552	387	164	167	170	177	188	186	180	300	1214	1108	566
1975	452	1169	1762	1160	287	182	199	189	172	324	1186	1157	687
1976	427	679	1401	1749	1475	714	353	846	1621	2358	2611	2833	1422
1977	2416	1947	1154	1035	1028	919	817	1063	1352	1211	1806	2754	1458
1978	2516	1872	1245	284	210	201	220	202	192	256	1288	2286	898
1979	2123	2054	1420	397	234	207	191	189	220	688	1753	2783	1022
1980	2506	1808	710	202	200	185	185	195	211	334	1351	2236	844
1981	2085	2490	2401	536	191	172	181	252	603	1944	2466	2762	1340
1982	2204	868	187	205	185	204	178	169	172	221	1066	640	525
1983	178	171	175	197	172	178	175	166	151	163	204	193	177
1984	174	171	161	165	175	174	176	195	244	361	1130	2542	472
1985	2773	632	192	479	710	359	239	262	512	1808	2492	2712	1097
1986	2281	1836	879	432	222	201	203	203	212	424	1147	1959	833
1987	2244	1985	1557	1449	741	240	211	308	587	1602	2397	3241	1380
1988	1880	1364	545	278	266	329	500	692	614	1002	1555	2276	942
1989	2377	1934	1526	1013	620	258	175	228	440	1650	2306	2431	1247
1990	2700	1451	1544	1350	519	416	321	542	1110	1178	1740	2835	1309
1991	2305	2082	1421	1262	1134	463	206	307	780	1778	1696	2203	1303
AVG:	2012	1472	988	602	363	255	231	284	387	826	1608	2282	939
MIN:	174	171	161	165	170	166	166	163	151	163	204	193	177
MAX:	3175	2490	2401	1749	1475	919	817	1176	1621	2358	2635	3241	1458

Table 4.4.5-44 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.53%	0.94%	0.69%	1.40%	1.21%	1.48%	2.27%	0.84%	0.47%	1.20%
1923	0.70%	-0.24%	0.10%	0.65%	0.89%	1.22%	1.67%	2.44%	3.04%	1.70%	0.60%	0.43%	1.10%
1924	0.82%	-0.37%	0.73%	-0.03%	0.10%	1.13%	3.58%	3.24%	-0.10%	2.46%	1.51%	-1.07%	1.00%
1925	-1.19%	-1.46%	-1.61%	-1.31%	0.02%	0.65%	1.49%	2.87%	2.84%	1.13%	-1.21%	-1.44%	0.07%
1926	1.41%	-0.26%	-0.08%	1.08%	0.66%	0.13%	1.40%	3.51%	1.70%	0.18%	0.00%	-1.06%	0.72%
1927	0.77%	2.55%	6.57%	5.43%	0.23%	0.13%	0.79%	1.61%	1.93%	1.76%	1.12%	0.71%	1.97%
1928	0.79%	2.14%	3.34%	2.92%	1.46%	0.51%	1.30%	2.38%	2.56%	1.61%	0.67%	0.35%	1.67%
1929	-0.17%	-0.19%	-0.40%	-0.55%	0.00%	-0.42%	0.70%	1.22%	0.49%	-0.80%	0.74%	5.79%	0.53%
1930	1.02%	0.19%	0.91%	0.59%	1.01%	1.28%	1.90%	3.64%	-1.31%	-4.81%	2.94%	4.18%	0.96%
1931	-3.03%	0.23%	0.79%	-3.66%	-6.37%	-5.54%	-2.39%	-0.62%	-0.06%	1.20%	0.29%	-0.61%	-1.65%
1932	-0.22%	-0.74%	1.44%	1.38%	1.83%	1.95%	2.83%	4.15%	3.14%	0.18%	0.44%	0.32%	1.39%
1933	-0.04%	-0.21%	0.07%	6.52%	6.43%	2.61%	2.20%	1.56%	1.36%	-0.31%	0.32%	0.57%	1.76%
1934	-0.85%	-0.12%	-0.73%	-2.61%	-0.06%	0.39%	1.69%	1.11%	1.62%	10.36%	5.33%	-0.19%	1.33%
1935	-1.23%	-2.94%	-0.97%	0.95%	1.09%	1.98%	1.34%	2.13%	3.30%	-2.46%	-0.44%	-2.93%	-0.01%
1936	-0.08%	-3.64%	-2.30%	-0.72%	-2.17%	-0.68%	1.42%	2.32%	2.72%	3.47%	0.99%	0.46%	0.15%
1937	0.41%	-1.72%	-0.65%	0.46%	0.92%	0.13%	0.68%	1.69%	2.58%	9.18%	-1.76%	-0.30%	0.97%
1938	0.06%	0.95%	1.11%	0.96%	0.26%	0.15%	0.37%	0.46%	1.01%	2.29%	0.83%	1.92%	0.86%
1939	3.85%	1.70%	1.62%	2.26%	1.37%	1.32%	2.42%	2.58%	1.63%	0.64%	0.30%	0.28%	1.66%
1940	-0.29%	0.57%	-0.88%	-0.74%	0.31%	-0.66%	-0.06%	1.96%	2.29%	0.26%	0.32%	0.38%	0.29%
1941	0.06%	-1.19%	-0.68%	0.36%	0.23%	0.02%	0.36%	0.95%	2.55%	2.37%	0.90%	2.07%	0.67%
1942	5.52%	4.05%	2.28%	0.29%	0.23%	0.65%	0.88%	1.27%	2.15%	1.99%	0.67%	1.65%	1.80%
1943	3.75%	6.52%	4.64%	0.42%	0.31%	0.19%	1.00%	1.76%	2.67%	2.91%	0.97%	0.49%	2.14%
1944	0.36%	-0.09%	0.36%	0.14%	0.35%	1.09%	2.28%	3.40%	3.19%	1.09%	0.42%	0.29%	1.07%
1945	0.28%	1.73%	2.13%	1.40%	1.82%	1.13%	1.90%	2.87%	2.93%	1.10%	0.78%	0.46%	1.54%
1946	0.12%	0.71%	1.01%	0.51%	0.76%	1.05%	2.09%	3.40%	3.27%	1.02%	0.45%	0.37%	1.23%
1947	-0.96%	0.22%	1.91%	-0.16%	0.30%	1.30%	1.34%	2.88%	1.98%	0.15%	0.39%	0.33%	0.81%
1948	0.10%	0.59%	0.31%	0.68%	0.53%	0.75%	1.68%	2.27%	2.87%	1.29%	0.46%	0.35%	0.99%
1949	0.04%	-1.03%	0.64%	0.04%	0.90%	1.01%	1.84%	3.02%	2.74%	-0.32%	1.46%	1.01%	0.94%
1950	1.54%	2.33%	1.87%	3.03%	1.87%	1.27%	2.04%	3.86%	4.97%	1.24%	0.69%	0.46%	2.10%
1951	0.15%	-0.58%	0.30%	0.53%	0.42%	0.58%	1.49%	2.43%	3.13%	3.29%	1.08%	0.51%	1.11%
1952	0.48%	-0.17%	0.37%	0.32%	0.32%	0.34%	0.50%	0.56%	1.20%	1.80%	-0.20%	1.15%	0.56%
1953	2.69%	1.32%	0.98%	0.37%	0.71%	1.03%	1.86%	2.31%	2.83%	1.98%	0.69%	1.75%	1.54%
1954	1.62%	4.97%	5.47%	2.23%	1.03%	0.51%	1.06%	1.97%	2.16%	0.95%	0.41%	0.24%	1.89%
1955	0.19%	0.19%	1.50%	2.58%	1.46%	1.11%	1.80%	3.12%	2.35%	0.22%	-0.18%	0.08%	1.20%
1956	0.89%	0.91%	0.80%	0.21%	0.27%	0.55%	1.68%	1.67%	2.68%	2.11%	0.73%	1.66%	1.18%
1957	3.63%	1.67%	-0.81%	0.37%	0.55%	0.67%	1.57%	2.96%	3.10%	1.69%	0.79%	0.40%	1.38%
1958	2.87%	3.71%	2.20%	0.88%	0.30%	0.27%	0.32%	0.68%	1.55%	2.19%	0.80%	3.64%	1.62%
1959	5.17%	1.39%	0.50%	0.27%	0.62%	1.02%	2.02%	2.22%	1.52%	0.97%	-0.17%	-0.02%	1.29%
1960	-0.70%	0.64%	1.45%	1.19%	1.81%	1.29%	2.22%	4.60%	-0.68%	-0.51%	-0.92%	-0.76%	0.80%
1961	1.76%	0.16%	0.72%	2.22%	2.27%	1.61%	1.81%	2.37%	1.80%	0.17%	0.09%	0.12%	1.26%
1962	-0.41%	-1.57%	-0.85%	0.89%	0.38%	0.73%	2.35%	3.49%	1.67%	0.29%	-0.61%	-0.03%	0.53%
1963	1.19%	2.47%	2.00%	1.63%	-1.68%	0.04%	0.50%	1.42%	2.94%	3.41%	0.95%	0.27%	1.26%
1964	-0.29%	1.76%	0.78%	5.01%	4.70%	2.70%	3.08%	0.78%	1.77%	1.38%	0.16%	-0.05%	1.81%
1965	-0.02%	-0.75%	-0.53%	0.17%	0.47%	0.93%	1.08%	1.79%	2.83%	3.44%	0.93%	0.55%	0.91%
1966	0.63%	3.40%	5.36%	2.51%	1.07%	0.96%	1.97%	2.91%	2.20%	0.60%	0.23%	0.20%	1.84%
1967	0.32%	0.88%	1.60%	0.50%	0.52%	0.45%	0.56%	0.65%	1.09%	2.87%	3.17%	3.65%	1.35%
1968	3.15%	1.17%	1.27%	0.74%	0.71%	0.66%	1.88%	3.80%	2.20%	0.07%	0.16%	0.15%	1.33%
1969	-0.33%	-0.39%	0.47%	-0.88%	-0.36%	0.31%	0.55%	0.53%	1.32%	2.61%	1.08%	2.84%	0.65%
1970	3.63%	3.32%	2.02%	0.14%	0.14%	0.53%	1.67%	3.04%	2.66%	1.33%	0.84%	0.40%	1.64%
1971	0.00%	1.23%	1.45%	0.50%	0.73%	0.70%	1.57%	2.02%	2.67%	2.54%	0.62%	1.51%	1.30%
1972	1.56%	1.34%	3.31%	5.97%	3.09%	1.33%	1.84%	2.01%	2.56%	1.17%	-0.02%	0.08%	2.02%
1973	0.19%	0.81%	1.59%	0.64%	0.37%	0.41%	1.54%	2.59%	5.75%	-14.85%	-2.51%	0.70%	-0.23%
1974	4.33%	2.71%	0.43%	0.28%	0.48%	0.00%	0.30%	1.51%	2.64%	2.83%	1.16%	3.99%	1.72%
1975	6.91%	1.88%	1.30%	1.21%	0.74%	1.01%	1.67%	1.75%	2.55%	2.12%	2.53%	3.50%	2.26%
1976	-0.13%	-1.06%	1.04%	0.41%	-1.85%	-1.02%	3.53%	2.06%	-1.05%	1.17%	-0.11%	0.96%	0.33%
1977	-1.12%	-1.79%	-0.74%	-1.62%	-1.24%	-0.81%	0.26%	0.74%	0.86%	0.41%	-3.56%	-0.60%	-0.77%
1978	0.54%	0.91%	0.68%	0.53%	0.41%	0.37%	0.60%	1.27%	2.63%	19.60%	3.67%	1.67%	2.74%
1979	1.49%	-4.40%	0.43%	6.24%	0.74%	0.63%	1.69%	2.60%	2.16%	0.83%	0.59%	0.43%	1.12%
1980	-0.23%	-0.37%	4.62%	1.12%	-0.94%	-0.42%	1.31%	2.31%	3.58%	3.38%	1.11%	1.71%	1.43%
1981	1.77%	-0.80%	0.44%	2.07%	1.24%	0.98%	1.90%	4.08%	2.53%	0.23%	0.30%	0.30%	1.25%
1982	-0.29%	1.28%	-0.05%	-0.03%	0.24%	0.19%	0.26%	0.70%	2.15%	2.78%	1.01%	1.87%	0.84%
1983	1.88%	0.90%	0.28%	0.10%	0.08%	0.09%	0.32%	0.40%	0.42%	1.79%	2.99%	3.07%	1.03%
1984	1.55%	0.48%	0.21%	0.24%	0.48%	0.67%	1.75%	3.11%	4.11%	3.04%	0.67%	0.34%	1.39%
1985	0.38%	1.45%	1.33%	0.86%	1.00%	1.79%	2.54%	3.09%	1.62%	0.09%	0.27%	0.35%	1.23%
1986	0.32%	0.94%	1.53%	-39.50%	-3.87%	0.00%	0.97%	2.21%	3.66%	1.59%	2.01%	1.65%	-2.37%
1987	0.84%	-0.16%	0.56%	0.07%	4.62%	3.45%	2.01%	2.39%	2.49%	1.46%	-0.24%	0.24%	1.48%
1988	-0.33%	-0.01%	1.57%	2.81%	1.69%	0.44%	3.62%	-3.96%	0.82%	1.15%	3.43%	2.39%	1.14%
1989	-1.03%	0.08%	2.34%	3.18%	2.95%	1.58%	1.64%	2.45%	1.51%	-1.24%	-0.25%	0.47%	1.14%
1990	-1.49%	-0.16%	0.55%	-0.76%	-0.80%	-0.29%	1.50%	5.91%	2.78%	0.08%	0.17%	0.69%	0.68%
1991	0.06%	-2.07%	-0.85%	0.82%	0.53%	0.30%	2.08%	3.70%	2.29%	-5.98%	2.78%	8.89%	1.05%
AVG:	0.83%	0.55%	1.03%	0.41%	0.61%	0.62%	1.47%	2.16%	2.15%	1.40%	0.68%	0.95%	1.07%
MIN:	-3.03%	-4.40%	-2.30%	-39.50%	-6.37%	-5.54%	-2.39%	-3.96%	-1.31%	-14.85%	-3.56%	-2.93%	-2.37%
MAX:	6.91%	6.52%	6.57%	6.52%	6.43%	3.45%	3.62%	5.91%	5.75%	19.60%	5.33%	8.89%	2.74%

Table 4.4.5-45 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.47%	0.92%	0.69%	1.40%	1.20%	0.95%	1.72%	2.49%	2.29%	1.46%
1923	2.49%	-1.07%	-0.42%	0.48%	0.66%	1.22%	1.67%	2.46%	2.35%	2.65%	1.43%	1.43%	1.28%
1924	2.05%	-1.45%	1.65%	0.05%	-1.24%	0.65%	1.56%	0.93%	0.64%	1.62%	0.88%	0.47%	0.65%
1925	-1.36%	-1.13%	-1.60%	-1.83%	-0.20%	0.61%	1.47%	3.13%	4.00%	1.88%	1.51%	1.47%	0.66%
1926	-0.33%	-0.89%	-0.44%	-0.30%	0.82%	0.54%	1.38%	3.14%	1.06%	0.63%	-2.58%	-3.23%	-0.02%
1927	0.77%	1.32%	3.69%	4.18%	0.59%	0.47%	0.87%	1.93%	1.95%	7.52%	6.56%	3.63%	2.79%
1928	2.98%	5.09%	6.43%	3.87%	1.65%	0.53%	1.29%	2.36%	2.90%	3.52%	0.72%	0.23%	2.63%
1929	0.16%	2.33%	0.33%	-1.00%	0.32%	1.16%	1.44%	1.71%	1.10%	-0.12%	0.99%	1.89%	0.86%
1930	0.27%	0.83%	2.20%	1.86%	1.38%	1.38%	2.06%	3.16%	1.62%	0.89%	0.22%	-0.05%	1.32%
1931	0.49%	0.57%	1.23%	0.66%	-0.62%	0.05%	0.89%	0.40%	0.74%	2.04%	2.06%	0.76%	0.77%
1932	0.09%	0.19%	0.95%	1.16%	1.14%	1.34%	2.84%	4.23%	3.52%	1.50%	1.33%	0.77%	1.59%
1933	0.34%	1.02%	1.75%	4.16%	4.43%	2.81%	2.56%	1.96%	1.74%	0.86%	0.97%	0.80%	1.95%
1934	0.42%	0.54%	0.49%	0.61%	1.11%	1.26%	1.95%	1.60%	1.78%	1.09%	1.84%	1.35%	1.17%
1935	0.17%	0.59%	0.41%	0.23%	0.95%	0.71%	1.01%	1.71%	3.54%	-1.75%	0.21%	-2.01%	0.48%
1936	2.02%	-2.86%	-3.47%	1.69%	1.17%	1.45%	1.91%	2.19%	1.17%	7.85%	3.22%	2.16%	1.54%
1937	1.14%	-2.23%	-1.06%	0.64%	1.12%	-0.18%	0.28%	0.92%	1.33%	15.42%	2.76%	1.65%	1.81%
1938	0.82%	-9.21%	-0.65%	0.99%	0.25%	0.14%	0.38%	0.47%	0.19%	1.84%	2.46%	8.19%	0.49%
1939	12.98%	6.22%	3.26%	6.50%	4.54%	2.01%	2.13%	2.89%	1.92%	0.16%	0.45%	0.54%	3.63%
1940	-0.54%	0.87%	-0.19%	-1.11%	0.28%	0.33%	0.71%	1.79%	4.11%	5.07%	2.37%	2.22%	1.33%
1941	2.66%	-3.28%	-3.31%	0.31%	0.22%	-0.11%	0.27%	0.73%	1.74%	2.88%	2.28%	7.40%	0.98%
1942	21.57%	15.46%	6.07%	0.55%	0.25%	0.66%	0.89%	1.28%	1.41%	13.35%	4.29%	7.65%	6.12%
1943	9.94%	36.12%	30.00%	0.99%	0.47%	0.20%	0.99%	0.32%	1.25%	7.78%	4.67%	2.71%	7.95%
1944	2.02%	-0.91%	1.67%	-0.06%	-2.31%	0.28%	2.03%	3.33%	3.18%	1.12%	0.43%	0.30%	0.92%
1945	-0.26%	1.39%	1.58%	0.64%	1.82%	1.18%	1.93%	3.18%	0.62%	2.18%	3.70%	2.29%	1.69%
1946	0.60%	2.90%	2.85%	0.51%	0.55%	0.76%	2.10%	1.56%	1.49%	1.93%	1.24%	1.19%	1.47%
1947	-0.18%	1.01%	0.92%	-0.36%	0.21%	1.20%	1.62%	2.82%	-0.68%	-0.36%	-0.10%	-0.01%	0.51%
1948	-0.04%	-0.96%	-5.88%	-1.86%	-1.10%	-0.17%	1.27%	2.20%	2.75%	0.95%	0.37%	0.27%	-0.18%
1949	-1.45%	-0.48%	-1.32%	-1.01%	-0.87%	-0.26%	1.79%	3.04%	3.67%	-0.23%	6.02%	4.71%	1.13%
1950	-0.42%	2.93%	4.91%	4.00%	1.89%	1.70%	2.58%	4.21%	2.90%	2.41%	1.91%	2.19%	2.60%
1951	-0.80%	-2.65%	0.27%	0.15%	0.26%	0.69%	1.85%	2.11%	4.09%	6.32%	1.88%	1.22%	1.28%
1952	1.14%	-0.75%	-0.22%	0.31%	0.30%	0.34%	0.41%	0.56%	0.59%	1.44%	-2.14%	4.08%	0.51%
1953	5.51%	1.58%	0.94%	0.38%	0.68%	1.01%	1.87%	2.32%	3.00%	2.26%	0.91%	1.77%	1.85%
1954	1.77%	5.78%	6.38%	2.56%	1.11%	0.51%	1.06%	1.97%	2.15%	1.08%	0.37%	0.21%	2.08%
1955	-1.17%	-0.51%	1.03%	1.31%	0.58%	-0.60%	1.16%	3.27%	2.35%	-0.05%	-0.21%	0.14%	0.61%
1956	0.33%	0.46%	1.25%	0.28%	0.25%	0.54%	1.67%	1.66%	2.01%	-16.73%	-1.27%	6.41%	-0.26%
1957	-6.17%	-11.39%	-0.60%	3.06%	0.97%	0.67%	1.49%	2.93%	1.79%	1.32%	-0.33%	-0.19%	-0.54%
1958	0.52%	4.47%	2.50%	0.90%	0.33%	0.26%	0.31%	0.68%	0.94%	1.98%	2.42%	9.08%	2.03%
1959	9.82%	1.76%	0.53%	-1.80%	-0.02%	0.76%	1.81%	2.12%	1.61%	1.00%	-0.20%	0.10%	1.46%
1960	0.13%	-0.15%	-0.04%	-0.21%	-0.30%	0.57%	1.96%	3.40%	1.14%	0.16%	0.10%	0.20%	0.58%
1961	0.67%	0.34%	0.55%	1.29%	0.96%	0.99%	1.62%	2.29%	1.86%	0.24%	0.28%	0.31%	0.95%
1962	0.02%	-1.88%	-1.51%	-0.60%	-0.32%	0.48%	1.76%	2.99%	1.68%	0.49%	0.26%	0.22%	0.30%
1963	1.14%	2.08%	2.05%	1.41%	1.68%	0.79%	0.71%	1.96%	3.54%	13.50%	3.91%	2.15%	2.91%
1964	0.18%	1.70%	0.72%	12.52%	11.46%	3.87%	2.52%	1.58%	2.71%	0.66%	0.43%	0.21%	3.21%
1965	-0.13%	-0.16%	0.52%	0.31%	0.47%	0.93%	1.07%	1.80%	0.80%	4.35%	5.05%	2.86%	1.49%
1966	2.39%	1.81%	2.10%	1.66%	0.99%	0.96%	1.97%	2.88%	2.18%	0.63%	0.25%	0.22%	1.50%
1967	0.23%	0.14%	0.73%	0.53%	0.65%	0.45%	0.53%	0.62%	0.70%	2.28%	9.01%	13.62%	2.46%
1968	7.13%	1.36%	1.29%	0.95%	0.56%	0.62%	1.86%	2.67%	1.69%	0.49%	0.25%	0.17%	1.59%
1969	-0.37%	-0.36%	0.22%	0.66%	0.26%	0.27%	0.42%	0.48%	0.69%	2.60%	2.48%	11.19%	1.55%
1970	10.23%	0.25%	0.35%	0.17%	0.20%	0.52%	1.66%	3.09%	2.77%	1.53%	1.03%	0.47%	1.85%
1971	0.00%	1.09%	1.34%	0.50%	0.73%	0.70%	1.57%	2.01%	2.73%	2.88%	0.87%	1.53%	1.33%
1972	1.72%	1.40%	3.48%	6.31%	3.18%	1.34%	1.97%	2.09%	2.56%	1.15%	0.79%	0.31%	2.19%
1973	-1.24%	-2.71%	-2.96%	0.27%	0.52%	0.45%	1.54%	2.21%	4.61%	-13.54%	-1.15%	2.44%	-0.80%
1974	6.67%	4.92%	0.44%	0.28%	0.48%	-0.20%	0.16%	1.24%	1.87%	9.76%	6.07%	14.26%	3.83%
1975	18.80%	3.49%	1.83%	1.38%	0.79%	2.31%	2.75%	1.90%	2.23%	2.22%	6.69%	10.36%	4.56%
1976	5.77%	0.99%	1.52%	0.54%	-5.66%	-4.02%	2.14%	1.23%	-0.29%	2.84%	2.13%	0.51%	0.64%
1977	-1.57%	-1.99%	-0.40%	0.68%	-0.56%	-0.78%	0.28%	0.67%	0.83%	-0.07%	1.17%	0.67%	-0.09%
1978	0.48%	0.67%	0.42%	0.43%	0.40%	0.35%	0.57%	1.26%	2.63%	2.56%	0.57%	1.50%	0.99%
1979	1.50%	-0.45%	0.43%	1.88%	0.52%	0.57%	1.63%	2.43%	2.07%	0.96%	0.52%	0.31%	1.03%
1980	0.01%	0.49%	1.47%	0.63%	1.55%	1.87%	1.98%	3.07%	5.21%	6.17%	2.68%	2.99%	2.34%
1981	2.91%	-1.65%	0.32%	3.57%	1.69%	1.01%	1.83%	2.84%	1.59%	0.35%	0.29%	0.25%	1.25%
1982	0.07%	-0.12%	0.37%	0.57%	0.40%	0.19%	0.24%	0.72%	1.74%	2.39%	2.05%	5.98%	1.22%
1983	3.02%	0.94%	0.26%	0.06%	0.07%	0.05%	0.26%	0.40%	0.43%	1.46%	5.47%	7.25%	1.64%
1984	1.91%	0.45%	0.19%	0.26%	0.45%	0.63%	1.70%	3.09%	3.07%	3.17%	1.71%	0.93%	1.46%
1985	0.61%	1.54%	1.36%	0.91%	1.03%	1.73%	2.47%	3.15%	1.62%	0.02%	0.29%	0.36%	1.26%
1986	0.18%	0.87%	1.52%	-39.49%	-3.83%	-0.05%	0.98%	1.39%	1.77%	0.04%	6.03%	5.80%	-2.06%
1987	2.87%	-1.24%	1.34%	-0.53%	6.32%	4.91%	2.02%	2.42%	3.55%	2.44%	-1.07%	0.13%	1.93%
1988	-0.42%	-0.63%	1.27%	1.73%	1.03%	-0.32%	1.29%	-2.68%	0.21%	4.61%	2.83%	0.70%	0.80%
1989	-0.41%	-0.65%	-0.09%	0.41%	0.71%	0.95%	1.62%	2.44%	1.56%	0.51%	0.17%	0.09%	0.61%
1990	-1.10%	0.28%	0.35%	-0.65%	-0.63%	-0.77%	0.71%	2.22%	1.16%	0.59%	-0.78%	-0.45%	0.08%
1991	0.82%	0.37%	0.27%	0.75%	0.69%	1.00%	1.91%	0.70%	-0.07%	-0.12%	-1.08%	1.02%	0.52%
AVG:	1.95%	0.97%	1.24%	0.49%	0.73%	0.70%	1.44%	1.96%	1.92%	2.03%	1.65%	2.35%	1.45%
MIN:	-6.17%	-11.39%	-5.88%	-39.49%	-5.66%	-4.02%	0.16%	-2.68%	-0.68%	-16.73%	-2.58%	-3.23%	-2.06%
MAX:	21.57%	36.12%	30.00%	12.52%	11.46%	4.91%	2.84%	4.23%	5.21%	15.42%	9.01%	14.26%	7.95%

Table 4.4.5-46 Simulated monthly average electrical conductivity (µS/cm) in Barker Slough at North Bay Aqueduct Intake, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				219	310	444	385	240	189	179	180	182	194
1923	183	185	223	410	477	419	288	221	193	185	181	183	263
1924	184	186	187	188	200	228	251	260	246	224	209	204	214
1925	203	202	200	224	265	327	409	381	303	242	207	198	263
1926	197	199	199	201	244	364	410	323	245	203	190	190	247
1927	190	194	210	211	259	432	397	272	209	187	182	183	244
1928	183	184	192	210	247	257	279	261	217	195	187	187	217
1929	188	189	199	228	248	275	287	276	249	222	206	202	231
1930	202	206	210	217	274	337	348	297	228	199	188	187	241
1931	187	186	187	195	227	266	281	283	257	227	210	203	226
1932	203	204	204	259	380	429	448	381	283	227	203	201	285
1933	203	203	202	210	266	332	332	294	241	213	201	199	241
1934	200	200	202	215	233	282	326	295	242	211	198	198	234
1935	201	203	210	216	266	390	376	314	227	188	181	182	246
1936	182	181	186	194	231	470	438	273	207	188	183	184	243
1937	185	188	195	204	231	353	535	317	203	184	182	183	247
1938	184	186	197	250	362	571	657	403	240	193	186	187	301
1939	186	185	186	195	223	234	230	216	194	188	184	184	200
1940	185	187	191	190	230	504	560	342	229	191	183	184	265
1941	185	186	218	374	559	668	544	405	270	202	187	187	332
1942	185	185	194	238	373	458	386	308	236	192	184	185	260
1943	185	188	194	214	370	387	301	247	205	189	185	186	237
1944	188	189	190	196	231	339	324	240	202	187	182	184	221
1945	184	184	197	222	241	291	308	251	207	187	182	183	220
1946	183	181	195	285	290	266	245	217	194	185	182	183	217
1947	185	186	187	189	204	235	253	232	202	191	185	187	203
1948	187	183	185	188	196	216	230	223	195	185	183	184	196
1949	185	187	193	205	219	246	275	289	243	209	194	193	220
1950	195	197	197	197	238	310	294	233	198	187	183	184	218
1951	183	186	206	308	361	334	301	232	197	185	181	183	238
1952	183	185	200	277	503	497	376	280	207	185	183	185	272
1953	185	185	202	303	393	368	282	226	196	184	181	183	241
1954	184	185	183	192	223	248	267	233	201	187	181	182	206
1955	184	184	188	203	255	335	338	290	241	213	198	197	236
1956	200	201	202	348	568	542	364	252	202	187	183	184	286
1957	183	185	190	196	223	251	238	215	194	189	184	185	203
1958	185	183	192	215	385	604	604	450	286	202	187	186	307
1959	187	189	190	203	250	319	312	244	205	191	185	184	222
1960	184	191	194	192	203	250	287	269	234	211	196	195	217
1961	198	201	206	205	239	311	300	245	207	195	187	187	223
1962	188	189	185	186	194	312	424	283	214	192	185	185	228
1963	189	225	229	250	397	447	396	362	269	202	186	185	278
1964	183	187	196	206	286	316	270	230	200	189	185	186	219
1965	186	186	198	264	400	404	309	243	207	191	185	186	247
1966	188	192	204	236	292	310	269	220	194	184	181	183	221
1967	184	192	220	294	501	514	413	381	246	188	183	184	292
1968	184	186	185	207	263	268	258	227	197	188	182	183	211
1969	186	187	188	206	369	585	467	291	214	189	186	187	271
1970	183	181	193	242	410	482	355	260	210	190	183	184	256
1971	185	193	239	351	355	310	259	213	191	183	181	183	237
1972	183	185	194	209	221	233	237	218	200	191	186	187	204
1973	184	186	242	288	493	656	502	325	225	192	184	185	305
1974	184	194	235	324	420	395	381	299	217	189	184	186	267
1975	185	184	188	199	227	343	403	294	211	187	182	184	232
1976	180	178	185	192	212	222	227	215	199	192	185	184	198
1977	187	190	190	191	197	219	242	256	252	235	220	210	216
1978	206	207	208	217	335	568	585	403	243	195	186	185	295
1979	187	188	188	212	381	537	441	292	214	189	183	185	266
1980	184	182	193	247	390	590	480	295	217	193	185	186	279
1981	187	190	192	202	268	286	261	233	202	191	185	185	215
1982	184	189	214	297	503	526	567	459	256	192	185	185	313
1983	184	195	274	321	464	651	728	473	269	197	186	185	344
1984	184	188	213	352	350	296	261	219	196	187	183	185	234
1985	185	199	250	263	281	283	282	243	201	188	182	183	228
1986	182	186	197	211	236	437	593	415	256	205	190	189	275
1987	190	192	192	194	222	253	270	235	201	188	184	186	209
1988	187	188	194	207	237	315	359	341	293	248	222	211	250
1989	211	213	212	210	216	232	256	233	198	188	183	182	211
1990	180	181	188	191	202	241	298	312	271	235	215	207	227
1991	206	207	207	206	210	225	252	303	294	248	219	207	232
AVG:	185	188	198	234	303	369	359	286	224	197	189	188	243
MIN:	180	178	183	186	194	216	227	213	189	179	180	182	194
MAX:	211	225	274	410	568	668	728	473	303	248	222	211	344

Table 4.4.5-47 Difference in simulated monthly average electrical conductivity (%) in Barker Slough at North Bay Aqueduct Intake, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.5%	0.7%	0.3%	0.3%	1.1%	1.4%	1.8%	3.1%	3.6%	1.5%
1923	3.3%	3.0%	1.9%	0.6%	0.4%	0.5%	0.7%	0.8%	2.5%	3.7%	3.6%	3.6%	2.0%
1924	3.5%	3.0%	2.8%	2.5%	2.0%	1.5%	1.1%	1.2%	2.4%	4.0%	5.0%	5.2%	2.8%
1925	5.1%	4.8%	4.6%	3.6%	2.4%	1.7%	0.3%	0.5%	1.1%	2.1%	3.5%	4.0%	2.8%
1926	3.6%	3.5%	3.3%	3.0%	2.1%	1.0%	1.0%	0.9%	2.2%	3.9%	4.1%	4.3%	2.8%
1927	4.6%	4.2%	2.8%	2.1%	1.1%	0.4%	0.2%	0.5%	2.0%	2.9%	3.3%	3.5%	2.3%
1928	3.4%	3.2%	2.3%	1.7%	1.1%	0.9%	0.5%	0.8%	1.9%	3.4%	3.5%	3.4%	2.2%
1929	3.2%	2.9%	2.4%	1.8%	1.5%	1.2%	1.1%	1.4%	2.6%	4.2%	5.0%	4.8%	2.7%
1930	4.3%	3.3%	2.9%	2.6%	0.8%	0.6%	3.2%	5.6%	7.4%	5.9%	4.6%	4.3%	3.8%
1931	4.4%	4.2%	3.7%	3.2%	2.4%	1.8%	1.5%	1.5%	2.3%	3.9%	4.6%	4.2%	3.1%
1932	4.0%	3.8%	3.8%	3.6%	1.2%	1.6%	-1.4%	-2.1%	-0.1%	1.5%	3.0%	4.2%	1.9%
1933	4.3%	3.6%	3.2%	2.7%	2.6%	1.3%	0.5%	0.0%	1.3%	3.8%	4.9%	4.8%	2.8%
1934	5.0%	4.5%	4.0%	3.2%	2.2%	1.3%	0.5%	-0.1%	0.0%	2.6%	4.1%	4.6%	2.7%
1935	4.9%	4.7%	4.2%	3.6%	1.9%	0.3%	0.7%	0.5%	1.4%	2.9%	3.5%	3.8%	2.7%
1936	3.7%	3.2%	3.0%	2.8%	1.4%	-0.4%	0.4%	1.1%	2.7%	3.7%	3.7%	3.7%	2.4%
1937	3.6%	3.1%	2.6%	2.3%	1.8%	2.2%	0.7%	0.3%	3.0%	3.6%	3.6%	4.0%	2.6%
1938	4.0%	3.4%	2.0%	0.7%	0.2%	0.4%	0.1%	0.1%	0.7%	1.7%	3.1%	3.5%	1.7%
1939	2.9%	2.4%	2.1%	1.8%	1.4%	1.3%	1.4%	2.6%	3.9%	4.6%	4.0%	3.7%	2.7%
1940	3.6%	2.6%	4.4%	5.1%	3.1%	0.2%	0.4%	0.7%	1.7%	3.1%	3.1%	3.6%	2.6%
1941	3.4%	3.3%	2.3%	0.4%	-0.1%	0.0%	0.0%	0.1%	0.7%	2.3%	3.2%	3.5%	1.6%
1942	2.8%	2.6%	2.1%	1.1%	0.4%	0.1%	0.1%	0.4%	1.0%	2.0%	3.0%	3.4%	1.6%
1943	2.8%	2.4%	1.9%	1.3%	0.4%	0.3%	0.3%	0.8%	2.0%	3.2%	3.4%	3.5%	1.9%
1944	3.3%	2.9%	2.6%	2.3%	1.7%	0.5%	0.7%	2.2%	3.9%	4.0%	3.6%	3.6%	2.6%
1945	3.3%	2.9%	2.2%	1.7%	1.4%	0.8%	0.6%	1.6%	3.0%	3.4%	3.3%	3.5%	2.3%
1946	3.4%	3.2%	2.3%	0.8%	0.6%	0.6%	0.7%	2.0%	3.3%	3.5%	3.3%	3.4%	2.3%
1947	3.3%	2.9%	2.5%	2.1%	1.8%	1.5%	1.1%	1.7%	3.4%	3.9%	3.5%	3.3%	2.6%
1948	3.1%	3.1%	2.8%	2.6%	2.4%	1.9%	1.6%	1.5%	1.8%	2.5%	2.9%	3.1%	2.4%
1949	3.0%	2.7%	2.4%	2.1%	1.8%	1.3%	0.9%	1.4%	2.7%	3.5%	3.6%	3.6%	2.4%
1950	3.7%	3.4%	3.2%	2.7%	2.2%	1.1%	0.8%	1.5%	2.8%	3.3%	3.2%	3.4%	2.6%
1951	3.3%	2.8%	1.7%	0.9%	0.4%	0.2%	0.4%	1.5%	2.6%	3.4%	3.2%	3.4%	2.0%
1952	3.3%	3.1%	2.4%	0.9%	0.3%	0.2%	0.3%	0.8%	0.8%	1.5%	2.8%	3.4%	1.7%
1953	2.6%	2.1%	1.7%	0.6%	0.3%	0.4%	0.6%	1.5%	2.1%	2.4%	2.9%	3.3%	1.7%
1954	2.7%	2.3%	2.0%	1.7%	1.1%	-3.2%	-4.5%	-1.3%	1.2%	3.3%	3.2%	3.4%	1.0%
1955	3.0%	2.6%	2.1%	1.6%	1.1%	0.7%	0.7%	1.0%	2.0%	2.9%	3.5%	3.6%	2.1%
1956	3.8%	3.5%	3.2%	1.0%	0.2%	0.1%	0.2%	1.0%	1.5%	2.6%	3.1%	3.3%	2.0%
1957	2.9%	2.4%	2.1%	2.0%	1.6%	1.1%	0.8%	1.3%	2.3%	3.0%	3.1%	3.3%	2.2%
1958	3.2%	2.6%	1.9%	1.3%	0.4%	0.1%	0.0%	0.1%	0.6%	1.6%	2.9%	3.5%	1.5%
1959	2.5%	2.0%	1.9%	1.7%	1.1%	0.6%	0.6%	1.9%	3.4%	3.3%	3.1%	3.3%	2.1%
1960	3.3%	2.8%	2.4%	2.3%	2.0%	1.1%	1.2%	1.7%	3.1%	4.2%	4.3%	3.9%	2.7%
1961	4.1%	4.1%	3.3%	3.2%	2.5%	1.5%	0.8%	1.5%	3.1%	4.2%	3.7%	3.2%	2.9%
1962	3.1%	3.0%	2.7%	2.3%	2.0%	0.9%	0.1%	1.5%	3.2%	3.7%	3.2%	3.3%	2.4%
1963	2.9%	1.6%	1.3%	0.9%	0.1%	0.3%	0.3%	0.3%	0.9%	2.7%	3.4%	3.5%	1.5%
1964	3.1%	2.2%	1.5%	1.1%	-0.2%	0.6%	1.4%	2.5%	3.5%	4.1%	3.7%	3.5%	2.3%
1965	3.2%	3.1%	2.5%	1.1%	0.3%	0.2%	0.3%	0.7%	1.5%	3.2%	3.3%	3.4%	1.9%
1966	3.3%	2.8%	2.0%	1.3%	0.9%	0.7%	0.7%	1.8%	3.2%	3.4%	3.3%	3.3%	2.2%
1967	3.2%	2.6%	1.7%	0.8%	0.1%	0.1%	0.2%	0.2%	0.8%	1.7%	3.3%	3.5%	1.5%
1968	2.5%	1.9%	1.8%	1.5%	1.0%	0.8%	1.4%	2.3%	3.8%	3.6%	3.2%	3.4%	2.3%
1969	3.1%	2.7%	2.3%	1.4%	0.6%	0.4%	0.1%	0.4%	0.9%	2.3%	3.3%	3.4%	1.8%
1970	2.6%	2.2%	1.7%	0.9%	0.3%	0.1%	0.2%	1.3%	3.1%	3.7%	3.0%	3.0%	1.9%
1971	2.9%	2.6%	1.6%	0.5%	0.5%	0.5%	0.6%	1.2%	1.6%	2.6%	2.7%	3.2%	1.7%
1972	2.7%	2.3%	1.9%	1.5%	1.2%	1.0%	0.8%	1.6%	3.3%	3.5%	3.2%	3.2%	2.2%
1973	3.4%	3.3%	1.9%	1.0%	0.4%	0.1%	0.1%	0.9%	2.1%	2.8%	3.4%	3.3%	1.9%
1974	3.3%	2.8%	1.2%	0.5%	0.2%	0.3%	0.2%	0.4%	1.5%	2.5%	3.0%	3.4%	1.6%
1975	2.4%	2.1%	1.9%	1.5%	1.3%	0.6%	0.2%	0.7%	1.5%	2.3%	2.9%	3.3%	1.7%
1976	2.7%	2.2%	1.8%	1.5%	1.3%	1.3%	1.3%	2.4%	4.8%	5.9%	5.2%	4.9%	2.9%
1977	4.5%	4.0%	3.8%	3.6%	3.3%	2.6%	2.4%	2.1%	2.4%	3.6%	4.3%	4.2%	3.4%
1978	4.1%	4.1%	3.9%	3.5%	-1.8%	-3.8%	-0.8%	0.0%	1.5%	3.0%	2.8%	3.3%	1.7%
1979	2.9%	2.7%	2.6%	1.8%	0.4%	0.2%	0.2%	1.1%	2.5%	3.0%	3.2%	3.5%	2.0%
1980	3.4%	3.2%	2.5%	1.3%	-0.6%	-0.5%	0.1%	0.7%	2.4%	3.7%	4.2%	3.7%	2.0%
1981	3.3%	2.9%	2.6%	2.2%	1.0%	0.9%	0.8%	1.6%	3.4%	3.9%	3.5%	3.3%	2.5%
1982	3.3%	2.9%	1.9%	0.6%	0.2%	0.0%	0.0%	0.1%	0.9%	2.4%	3.5%	3.7%	1.6%
1983	2.8%	1.8%	0.7%	0.3%	0.2%	0.1%	0.0%	0.1%	0.5%	1.1%	2.1%	2.5%	1.0%
1984	2.0%	1.6%	0.9%	0.3%	0.2%	0.5%	0.5%	1.4%	3.2%	3.9%	3.2%	3.4%	1.8%
1985	3.1%	2.3%	1.2%	0.9%	0.8%	0.8%	0.9%	2.0%	3.4%	3.9%	3.6%	3.5%	2.2%
1986	3.2%	2.8%	2.3%	1.8%	1.4%	0.6%	0.1%	0.6%	2.2%	3.7%	3.6%	3.4%	2.1%
1987	3.2%	2.8%	2.6%	2.4%	1.8%	1.3%	1.1%	1.7%	3.5%	4.2%	3.8%	3.9%	2.7%
1988	3.7%	3.2%	5.2%	3.9%	2.6%	1.2%	1.1%	1.4%	2.3%	3.5%	4.3%	4.5%	3.1%
1989	4.8%	4.7%	4.4%	3.9%	3.3%	2.5%	1.6%	1.8%	3.0%	4.2%	4.0%	3.8%	3.5%
1990	3.8%	3.8%	0.9%	1.3%	1.5%	1.4%	1.2%	1.0%	1.8%	3.5%	4.8%	5.0%	2.5%
1991	4.7%	4.3%	3.8%	3.7%	3.4%	2.9%	2.4%	1.6%	1.8%	3.2%	4.6%	4.9%	3.4%
AVG:	3.4%	3.0%	2.5%	1.9%	1.2%	0.7%	0.6%	1.1%	2.3%	3.2%	3.5%	3.7%	2.2%
MIN:	2.0%	1.6%	0.7%	0.3%	-1.8%	-3.8%	-4.5%	-2.1%	-0.1%	1.1%	2.1%	2.5%	1.0%
MAX:	5.1%	4.8%	5.2%	5.1%	3.4%	2.9%	3.2%	5.6%	7.4%	5.9%	5.2%	5.2%	3.8%

Table 4.4.5-48 Difference in simulated monthly average electrical conductivity (%) in Barker Slough at North Bay Aqueduct Intake, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.4%	0.7%	0.3%	0.3%	1.1%	1.4%	1.8%	3.1%	3.5%	1.5%
1923	3.3%	3.0%	1.9%	0.6%	0.4%	0.5%	0.7%	0.8%	2.5%	3.7%	3.5%	3.6%	2.0%
1924	3.5%	3.0%	2.8%	2.5%	2.0%	1.5%	1.1%	1.1%	2.3%	3.9%	5.0%	5.1%	2.8%
1925	4.9%	4.6%	4.4%	3.3%	2.2%	1.6%	0.2%	0.6%	1.2%	2.2%	3.4%	4.0%	2.7%
1926	3.6%	3.6%	3.3%	3.0%	1.7%	0.3%	0.9%	1.1%	2.2%	4.0%	4.2%	4.3%	2.7%
1927	4.6%	4.1%	2.8%	2.1%	0.9%	0.4%	0.2%	0.5%	2.0%	2.9%	3.3%	3.5%	2.3%
1928	3.4%	3.2%	2.4%	1.7%	1.3%	1.1%	0.5%	0.8%	2.0%	3.4%	3.4%	3.4%	2.2%
1929	3.2%	3.0%	2.5%	1.8%	1.5%	1.2%	1.1%	1.4%	2.6%	4.2%	4.9%	4.7%	2.7%
1930	4.5%	4.3%	3.9%	3.4%	1.6%	0.9%	3.3%	5.5%	7.4%	5.8%	4.4%	4.1%	4.1%
1931	4.1%	4.0%	3.6%	3.1%	2.1%	1.7%	1.6%	1.6%	2.6%	4.1%	4.7%	4.2%	3.1%
1932	4.0%	3.9%	3.7%	2.3%	0.8%	0.6%	0.4%	1.1%	2.3%	3.0%	3.6%	4.4%	2.5%
1933	4.7%	4.1%	3.6%	3.0%	2.0%	1.3%	1.0%	1.3%	2.6%	4.5%	5.1%	5.1%	3.2%
1934	5.3%	4.8%	4.3%	3.5%	2.7%	1.6%	1.0%	1.4%	2.8%	4.5%	5.0%	5.4%	3.5%
1935	5.6%	5.0%	4.2%	3.5%	2.2%	0.8%	0.6%	0.5%	1.6%	2.9%	3.5%	3.8%	2.9%
1936	3.7%	3.1%	2.9%	2.7%	1.5%	0.0%	0.4%	1.1%	2.7%	3.8%	3.5%	3.6%	2.4%
1937	3.4%	3.0%	2.6%	2.2%	1.7%	1.8%	0.9%	1.2%	3.5%	3.8%	3.6%	3.9%	2.6%
1938	3.9%	3.4%	2.0%	0.7%	0.2%	0.2%	0.1%	0.2%	0.8%	1.7%	3.1%	3.4%	1.6%
1939	2.8%	2.4%	2.2%	1.8%	1.4%	1.3%	1.4%	2.5%	3.9%	4.6%	4.0%	3.7%	2.7%
1940	3.6%	3.2%	3.5%	3.4%	2.5%	0.5%	0.4%	0.5%	1.8%	3.2%	3.0%	3.5%	2.4%
1941	3.4%	3.2%	2.2%	0.3%	-0.2%	0.0%	0.0%	0.1%	0.7%	2.3%	3.3%	3.4%	1.6%
1942	2.8%	2.7%	2.2%	1.2%	0.4%	0.1%	0.1%	0.4%	1.0%	2.0%	2.5%	3.1%	1.5%
1943	2.9%	2.3%	2.1%	1.4%	0.5%	0.3%	0.3%	0.8%	2.1%	3.2%	3.5%	3.6%	1.9%
1944	3.3%	2.9%	2.6%	2.4%	1.9%	0.8%	0.8%	2.2%	3.9%	4.0%	3.6%	3.7%	2.7%
1945	3.3%	2.9%	2.3%	1.7%	1.5%	0.9%	0.7%	1.3%	3.0%	3.5%	3.3%	3.4%	2.3%
1946	3.2%	3.2%	2.3%	0.8%	0.6%	0.6%	0.7%	2.0%	3.2%	3.5%	3.2%	3.3%	2.2%
1947	3.1%	2.9%	2.5%	2.1%	1.6%	1.2%	1.2%	1.9%	3.5%	4.2%	3.7%	3.4%	2.6%
1948	3.3%	3.2%	2.9%	2.8%	2.6%	2.3%	1.9%	1.6%	1.8%	2.5%	2.9%	3.1%	2.6%
1949	3.0%	2.7%	2.3%	1.9%	1.7%	1.3%	0.9%	1.2%	2.5%	3.5%	3.5%	3.5%	2.3%
1950	3.7%	3.4%	3.2%	2.7%	2.1%	1.0%	0.8%	1.6%	2.8%	3.4%	3.2%	3.3%	2.6%
1951	3.4%	2.9%	1.7%	0.7%	0.3%	0.2%	0.4%	1.5%	2.5%	3.4%	3.1%	3.4%	2.0%
1952	3.3%	3.1%	2.4%	1.0%	0.2%	0.2%	0.2%	0.4%	0.8%	1.6%	2.7%	3.5%	1.6%
1953	2.6%	2.1%	1.7%	0.6%	0.3%	0.3%	0.6%	1.5%	2.1%	2.4%	2.9%	3.3%	1.7%
1954	2.7%	2.2%	2.0%	1.7%	1.1%	-3.2%	-4.5%	-1.3%	1.2%	3.3%	3.2%	3.3%	1.0%
1955	3.0%	2.6%	2.1%	1.6%	1.4%	0.7%	0.6%	0.9%	1.9%	2.9%	3.4%	3.6%	2.1%
1956	3.8%	3.4%	3.3%	1.1%	0.2%	-0.1%	0.1%	1.0%	1.5%	2.6%	3.5%	3.4%	2.0%
1957	2.8%	2.2%	2.0%	1.7%	1.3%	1.5%	1.3%	1.2%	2.3%	3.0%	3.1%	3.3%	2.1%
1958	3.0%	2.5%	1.9%	1.1%	0.2%	0.1%	0.0%	0.1%	0.6%	1.6%	2.9%	3.4%	1.4%
1959	2.5%	2.0%	1.9%	1.6%	1.1%	0.6%	0.5%	1.9%	3.4%	3.3%	3.1%	3.3%	2.1%
1960	3.3%	2.8%	2.4%	2.3%	2.1%	1.5%	1.1%	1.2%	2.3%	3.4%	3.8%	3.6%	2.5%
1961	3.9%	3.7%	3.2%	2.8%	2.1%	1.1%	0.8%	1.5%	3.1%	4.2%	3.7%	3.3%	2.8%
1962	3.1%	2.9%	2.6%	2.3%	2.1%	1.1%	0.4%	1.5%	3.1%	3.6%	3.2%	3.2%	2.4%
1963	2.9%	1.6%	1.2%	0.9%	0.4%	0.1%	0.3%	0.3%	1.0%	2.6%	3.0%	3.3%	1.5%
1964	3.0%	2.2%	1.5%	1.1%	0.3%	1.3%	1.2%	2.0%	3.3%	3.9%	3.5%	3.3%	2.2%
1965	3.1%	3.0%	2.5%	1.2%	0.3%	0.4%	0.6%	0.7%	1.5%	3.2%	3.4%	3.4%	1.9%
1966	3.4%	2.9%	2.1%	1.3%	0.7%	0.7%	0.7%	1.8%	3.1%	3.4%	3.3%	3.3%	2.2%
1967	3.2%	2.6%	1.8%	0.8%	0.1%	0.1%	0.2%	0.2%	0.8%	1.7%	3.3%	3.5%	1.5%
1968	2.5%	1.9%	1.8%	1.5%	1.0%	0.8%	1.4%	2.3%	3.8%	3.6%	3.2%	3.4%	2.3%
1969	3.1%	2.7%	2.3%	1.6%	0.5%	0.1%	0.1%	0.4%	1.0%	2.3%	3.3%	3.3%	1.7%
1970	2.6%	2.3%	1.8%	1.0%	0.3%	0.1%	0.2%	1.3%	3.1%	3.7%	3.0%	3.0%	1.9%
1971	2.9%	2.6%	1.6%	0.5%	0.5%	0.5%	0.7%	1.2%	1.9%	2.6%	2.7%	3.2%	1.7%
1972	2.7%	2.3%	1.9%	1.5%	1.2%	1.0%	0.8%	1.6%	3.3%	3.5%	3.2%	3.2%	2.2%
1973	3.4%	3.3%	1.9%	1.1%	0.3%	0.0%	0.1%	0.8%	2.1%	2.8%	3.4%	3.2%	1.9%
1974	3.3%	2.9%	1.4%	0.5%	0.2%	0.3%	0.2%	0.4%	1.5%	2.5%	3.0%	3.4%	1.6%
1975	2.5%	2.1%	1.9%	1.5%	1.3%	0.6%	0.2%	0.7%	1.5%	2.3%	2.9%	3.4%	1.7%
1976	2.6%	2.2%	1.8%	1.5%	1.4%	1.4%	1.3%	2.4%	4.8%	5.8%	5.1%	4.9%	2.9%
1977	4.4%	3.9%	3.7%	3.4%	3.1%	2.7%	2.3%	2.1%	2.3%	3.5%	4.2%	4.2%	3.3%
1978	4.1%	4.0%	3.8%	3.5%	1.2%	0.0%	0.0%	0.3%	1.6%	3.1%	3.6%	3.5%	2.4%
1979	3.1%	2.8%	2.6%	2.1%	0.7%	0.2%	1.0%	6.8%	7.0%	4.0%	3.4%	3.5%	3.1%
1980	3.5%	3.2%	2.4%	1.4%	0.6%	0.2%	0.2%	0.9%	2.5%	3.7%	4.0%	3.6%	2.2%
1981	3.3%	2.9%	2.6%	2.1%	1.0%	0.9%	0.8%	1.5%	3.3%	3.9%	3.5%	3.3%	2.4%
1982	3.3%	2.9%	1.8%	0.6%	0.2%	0.1%	0.1%	0.1%	0.9%	2.3%	3.5%	3.7%	1.6%
1983	2.8%	1.8%	0.7%	0.2%	0.2%	0.1%	0.0%	0.1%	0.5%	1.1%	2.1%	2.6%	1.0%
1984	1.9%	1.6%	1.0%	0.3%	0.2%	0.3%	0.4%	1.4%	3.2%	3.9%	3.2%	3.3%	1.7%
1985	3.1%	2.2%	1.2%	0.9%	0.7%	0.8%	0.9%	2.0%	3.4%	3.9%	3.6%	3.5%	2.2%
1986	3.2%	2.8%	2.3%	1.8%	1.4%	0.6%	0.1%	0.6%	2.2%	3.7%	3.6%	3.4%	2.1%
1987	3.2%	2.8%	2.6%	2.3%	1.6%	1.3%	1.1%	1.8%	3.7%	4.2%	3.9%	4.0%	2.7%
1988	3.8%	3.2%	2.5%	2.2%	1.6%	1.6%	1.0%	0.9%	1.6%	2.8%	3.7%	4.1%	2.4%
1989	4.4%	4.5%	4.4%	4.0%	3.3%	2.6%	1.6%	1.5%	2.8%	4.1%	3.8%	3.7%	3.4%
1990	3.7%	3.6%	0.7%	1.2%	1.4%	1.3%	0.9%	0.9%	1.8%	3.5%	4.9%	5.1%	2.4%
1991	4.8%	4.3%	3.8%	3.7%	3.4%	3.0%	2.4%	1.6%	1.7%	3.0%	4.4%	4.7%	3.4%
AVG:	3.4%	3.0%	2.5%	1.8%	1.2%	0.8%	0.7%	1.3%	2.4%	3.3%	3.5%	3.7%	2.3%
MIN:	1.9%	1.6%	0.7%	0.2%	-0.2%	-3.2%	-4.5%	-1.3%	0.5%	1.1%	2.1%	2.6%	1.0%
MAX:	5.6%	5.0%	4.4%	4.0%	3.4%	3.0%	3.3%	6.8%	7.4%	5.8%	5.1%	5.4%	4.1%

Table 4.4.5-49 Simulated monthly average electrical conductivity (µS/cm) at Rock Slough Entrance at Old River, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				213	268	235	232	261	224	187	293	662	286
1923	810	782	395	245	258	227	245	255	201	258	524	826	419
1924	878	765	571	554	461	418	387	423	614	511	477	924	582
1925	1137	971	633	369	264	367	281	233	195	231	541	932	513
1926	972	766	631	376	230	220	215	236	236	388	536	671	456
1927	922	526	201	198	231	197	202	204	181	188	330	778	346
1928	956	648	329	283	208	196	215	331	229	256	423	874	412
1929	971	730	487	479	541	389	352	398	368	423	635	766	545
1930	1025	931	495	253	214	201	200	217	226	405	643	789	467
1931	972	803	543	398	367	360	409	447	564	475	514	966	568
1932	1103	890	489	243	256	250	310	291	212	225	371	674	443
1933	986	878	592	344	298	257	290	322	358	414	541	651	494
1934	1011	988	548	290	225	270	287	298	341	361	580	881	507
1935	1051	832	597	417	255	213	249	337	211	210	471	904	479
1936	1002	712	556	453	347	235	230	283	203	244	503	895	472
1937	1014	756	736	825	422	330	398	326	204	223	464	871	547
1938	1038	572	234	207	268	216	196	179	218	191	275	425	335
1939	254	214	334	273	264	280	286	278	262	503	790	962	392
1940	998	691	733	555	288	252	234	217	192	239	438	808	470
1941	946	721	331	238	289	245	320	324	213	187	305	537	388
1942	444	494	382	332	242	225	268	266	193	183	320	541	324
1943	390	308	208	250	261	259	255	334	216	193	311	764	312
1944	960	823	625	562	354	224	250	296	231	380	846	1151	558
1945	945	646	784	493	260	215	299	296	208	273	548	874	487
1946	948	690	254	176	198	197	231	251	203	282	583	920	411
1947	925	693	422	325	361	260	219	264	239	461	862	1055	507
1948	968	665	605	414	299	262	222	196	174	236	550	908	458
1949	907	722	483	383	377	271	219	226	205	355	602	785	461
1950	961	864	805	425	198	180	194	212	188	286	606	903	485
1951	969	370	207	237	224	197	235	281	204	227	437	864	371
1952	968	711	309	278	211	226	276	243	225	186	297	377	359
1953	206	213	247	194	211	194	305	251	186	191	307	536	253
1954	502	653	600	611	227	177	195	279	214	261	446	863	419
1955	939	703	553	296	230	236	267	238	219	327	571	857	453
1956	963	659	550	354	229	182	211	232	193	190	355	496	385
1957	294	333	550	547	327	195	195	215	192	226	417	816	359
1958	676	413	364	216	248	290	280	243	207	182	288	396	317
1959	219	229	509	505	282	259	258	257	230	318	615	886	380
1960	863	701	453	548	395	214	261	253	233	462	702	811	491
1961	932	683	453	329	288	205	206	223	246	515	858	903	487
1962	1293	1003	716	617	344	223	219	261	222	351	613	957	568
1963	487	254	336	227	206	185	258	250	193	187	331	754	306
1964	790	353	254	369	215	220	279	242	225	467	852	991	438
1965	967	710	276	212	187	182	219	236	197	195	304	729	368
1966	936	537	229	236	209	185	246	242	206	305	598	952	407
1967	899	649	339	256	217	205	290	246	243	194	244	314	341
1968	190	226	432	387	246	188	334	283	230	318	614	975	368
1969	924	643	509	366	311	264	213	173	178	183	284	381	369
1970	210	189	201	245	248	219	249	268	220	214	321	793	282
1971	937	663	237	179	183	173	188	291	198	187	295	533	339
1972	501	689	924	479	271	199	195	219	223	247	557	937	453
1973	992	892	456	258	267	221	233	245	196	225	429	815	436
1974	923	333	176	191	181	230	327	300	194	184	333	453	319
1975	238	313	560	465	264	228	318	266	189	185	338	448	318
1976	250	229	405	567	634	462	362	347	579	774	916	1010	545
1977	1040	894	688	466	526	512	500	482	593	480	535	976	641
1978	1137	918	582	346	262	250	252	252	230	197	344	738	459
1979	780	773	667	350	334	266	247	237	194	241	512	910	459
1980	998	698	387	246	387	264	265	311	224	203	355	714	421
1981	756	939	1109	490	204	184	278	265	254	567	876	962	574
1982	900	504	202	275	257	298	216	207	203	187	296	349	324
1983	207	199	236	257	200	223	199	187	152	180	176	174	199
1984	213	197	163	172	215	206	218	248	217	203	314	776	262
1985	1008	461	183	210	316	277	355	286	239	517	865	964	473
1986	871	711	436	272	461	341	273	288	226	208	334	603	419
1987	761	794	657	523	435	264	222	245	257	452	787	1093	541
1988	995	550	398	224	217	240	279	333	351	358	555	816	443
1989	1019	876	660	482	373	243	186	189	219	464	787	867	530
1990	930	708	477	519	331	264	279	280	410	533	570	922	519
1991	1052	866	740	577	612	371	270	275	304	556	684	742	587
AVG:	815	631	470	359	293	249	262	270	246	306	503	774	430
MIN:	190	189	163	172	181	173	186	173	152	180	176	174	199
MAX:	1293	1003	1109	825	634	512	500	482	614	774	916	1151	641

Table 4.4.5-50 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.33%	0.75%	0.40%	0.56%	0.48%	0.65%	2.44%	2.61%	1.29%	1.17%
1923	1.23%	0.67%	0.15%	0.32%	0.36%	0.98%	1.02%	1.07%	3.02%	3.37%	2.09%	1.45%	1.31%
1924	1.65%	0.90%	0.25%	0.62%	0.31%	0.63%	0.91%	3.80%	2.85%	1.73%	4.49%	0.90%	1.59%
1925	0.36%	-1.51%	-1.29%	-0.74%	0.12%	0.55%	0.71%	1.41%	3.40%	3.68%	0.24%	-1.35%	0.47%
1926	0.31%	1.68%	-0.23%	1.38%	0.86%	1.17%	1.71%	2.09%	3.72%	2.06%	1.13%	0.18%	1.34%
1927	0.77%	1.94%	2.58%	2.48%	0.02%	-0.24%	0.48%	0.77%	2.40%	3.27%	2.55%	0.89%	1.49%
1928	0.71%	1.57%	3.04%	2.48%	1.60%	0.63%	0.67%	0.42%	2.89%	3.16%	2.12%	0.96%	1.69%
1929	1.04%	0.75%	0.94%	0.59%	0.11%	1.57%	2.44%	2.20%	4.53%	3.11%	2.11%	7.39%	2.23%
1930	6.17%	2.02%	1.78%	0.69%	0.70%	0.80%	1.10%	2.63%	4.17%	-2.00%	1.30%	7.23%	2.21%
1931	1.86%	-1.69%	3.13%	-1.29%	-2.04%	-2.42%	-1.38%	0.58%	2.02%	2.52%	2.08%	1.13%	0.37%
1932	1.10%	1.18%	1.16%	0.89%	1.45%	1.26%	3.57%	2.94%	3.40%	3.71%	3.26%	2.38%	2.19%
1933	1.30%	1.18%	1.30%	2.17%	3.12%	2.84%	1.82%	1.85%	3.28%	3.19%	2.11%	3.15%	2.28%
1934	1.33%	0.85%	1.05%	-0.25%	0.55%	2.23%	2.01%	2.16%	2.49%	5.15%	6.67%	1.79%	2.17%
1935	1.15%	-0.41%	-0.38%	0.93%	0.61%	0.88%	1.55%	0.88%	2.42%	2.13%	-0.57%	-1.74%	0.62%
1936	-0.37%	2.83%	-1.03%	-0.95%	-8.07%	-2.94%	-0.01%	0.27%	2.68%	4.50%	2.73%	1.25%	0.07%
1937	1.01%	-0.48%	-0.11%	0.36%	-1.85%	-1.52%	-0.48%	-0.47%	2.04%	6.49%	1.82%	-0.97%	0.49%
1938	0.47%	0.90%	4.80%	1.37%	0.27%	0.08%	0.00%	0.00%	0.03%	2.20%	2.81%	2.27%	1.27%
1939	2.78%	2.31%	1.78%	2.07%	1.80%	1.69%	2.94%	2.89%	3.15%	1.92%	1.02%	0.83%	2.10%
1940	0.41%	-0.21%	0.54%	-0.34%	0.21%	-0.40%	-1.07%	0.74%	2.78%	2.31%	1.43%	1.03%	0.62%
1941	1.05%	0.54%	-0.12%	0.30%	0.13%	-0.79%	-0.68%	-0.07%	1.79%	3.53%	3.10%	2.71%	0.96%
1942	4.50%	5.06%	1.70%	-0.07%	0.14%	0.28%	0.40%	0.44%	1.54%	2.93%	2.26%	2.06%	1.77%
1943	3.46%	4.85%	3.40%	0.39%	0.09%	0.03%	0.15%	0.12%	2.21%	3.77%	2.62%	1.17%	1.86%
1944	0.96%	0.61%	0.63%	0.78%	0.54%	1.00%	1.11%	1.63%	3.47%	2.47%	1.06%	0.68%	1.24%
1945	0.67%	1.61%	2.59%	1.80%	1.45%	1.03%	0.68%	1.10%	2.96%	2.66%	1.71%	1.18%	1.62%
1946	1.06%	1.21%	0.98%	0.44%	0.55%	0.86%	1.04%	1.75%	3.38%	2.64%	1.38%	0.96%	1.35%
1947	0.45%	-0.14%	2.21%	1.31%	0.84%	1.09%	1.39%	1.98%	3.46%	1.34%	0.85%	0.83%	1.30%
1948	0.43%	0.94%	1.26%	1.37%	1.02%	1.12%	1.43%	1.68%	2.72%	2.74%	1.32%	0.71%	1.39%
1949	0.72%	0.38%	1.42%	1.12%	0.99%	1.06%	0.87%	2.47%	3.47%	1.67%	1.64%	2.10%	1.49%
1950	1.86%	2.93%	2.88%	2.81%	1.49%	1.20%	1.43%	2.54%	3.81%	2.68%	1.56%	1.10%	2.19%
1951	0.23%	-0.51%	0.21%	1.30%	0.52%	-0.30%	-0.14%	0.71%	2.79%	3.84%	2.53%	1.22%	1.03%
1952	1.07%	0.62%	0.42%	0.25%	0.23%	0.16%	0.02%	0.00%	0.30%	2.38%	1.55%	1.24%	0.69%
1953	2.13%	1.94%	1.10%	0.45%	0.48%	0.93%	0.47%	1.29%	2.46%	2.97%	2.22%	2.08%	1.54%
1954	2.51%	4.02%	6.74%	2.90%	1.04%	0.49%	0.65%	0.55%	2.57%	2.68%	1.47%	0.74%	2.20%
1955	0.61%	0.66%	1.16%	1.82%	1.24%	1.35%	1.55%	2.62%	3.80%	2.27%	0.94%	0.73%	1.56%
1956	0.97%	1.64%	0.91%	0.13%	0.11%	0.44%	0.77%	0.93%	1.98%	3.26%	2.14%	1.99%	1.27%
1957	3.30%	2.69%	0.77%	0.48%	0.94%	0.19%	0.60%	1.62%	3.18%	3.17%	2.11%	1.14%	1.68%
1958	2.07%	4.35%	2.44%	0.82%	0.30%	0.16%	0.01%	0.01%	0.70%	2.67%	2.61%	2.95%	1.59%
1959	3.54%	2.12%	0.82%	0.32%	0.49%	1.20%	1.40%	2.43%	3.13%	2.60%	0.94%	0.31%	1.61%
1960	-0.32%	0.77%	2.60%	1.78%	1.82%	1.16%	0.75%	2.37%	4.96%	0.80%	0.28%	-0.28%	1.39%
1961	0.97%	1.94%	0.32%	2.16%	1.89%	1.55%	1.77%	2.99%	3.96%	1.24%	0.42%	0.46%	1.64%
1962	-0.40%	-0.41%	-1.19%	1.38%	0.50%	-0.03%	1.15%	3.01%	3.58%	1.96%	0.21%	0.08%	0.82%
1963	0.88%	1.57%	1.58%	1.12%	-0.76%	-0.32%	0.15%	0.55%	2.40%	3.87%	2.63%	1.12%	1.23%
1964	0.13%	1.42%	1.28%	2.48%	2.70%	2.22%	1.97%	2.47%	2.91%	2.54%	0.87%	0.32%	1.78%
1965	0.47%	0.47%	-0.40%	-0.09%	0.36%	0.67%	0.52%	0.74%	2.69%	3.85%	2.64%	1.28%	1.10%
1966	1.29%	2.14%	3.27%	2.08%	0.94%	0.89%	0.74%	1.99%	3.37%	2.17%	1.06%	0.66%	1.72%
1967	0.77%	1.21%	1.45%	0.43%	0.50%	0.36%	0.05%	0.01%	0.32%	2.16%	4.09%	3.66%	1.25%
1968	2.53%	1.79%	1.29%	1.14%	0.71%	0.56%	0.25%	1.99%	3.81%	1.72%	1.04%	0.61%	1.45%
1969	0.27%	-0.01%	0.32%	-0.27%	-0.20%	0.10%	0.02%	0.00%	0.01%	2.53%	2.79%	2.56%	0.68%
1970	2.62%	2.31%	1.71%	0.12%	-0.19%	0.32%	0.57%	1.36%	3.27%	2.98%	2.22%	1.11%	1.54%
1971	0.65%	1.11%	1.24%	0.46%	0.56%	0.67%	0.92%	0.67%	2.28%	3.16%	2.43%	2.07%	1.35%
1972	2.53%	1.88%	2.94%	4.82%	2.90%	1.15%	1.24%	2.71%	3.35%	2.90%	0.88%	0.68%	2.33%
1973	0.67%	0.84%	1.31%	0.60%	0.36%	0.28%	0.60%	1.28%	2.27%	-3.30%	-4.98%	0.72%	0.05%
1974	4.71%	3.40%	0.34%	0.27%	0.42%	-0.63%	-0.66%	0.23%	2.16%	3.34%	2.47%	3.01%	1.59%
1975	4.65%	2.66%	1.58%	1.63%	0.85%	2.59%	1.05%	0.74%	2.08%	3.14%	3.21%	3.55%	2.31%
1976	2.28%	0.17%	1.20%	0.64%	-0.45%	-0.75%	1.15%	2.74%	1.76%	1.82%	1.05%	0.87%	1.04%
1977	1.59%	-2.26%	-0.49%	-1.02%	-0.96%	-0.49%	0.12%	1.13%	1.90%	2.09%	-0.68%	-0.81%	0.01%
1978	0.69%	1.17%	1.30%	0.59%	0.30%	0.26%	0.04%	-0.01%	1.16%	2.56%	6.44%	2.28%	1.40%
1979	2.36%	-0.96%	-2.72%	2.93%	0.56%	0.31%	0.69%	1.31%	2.56%	2.55%	1.56%	1.16%	1.03%
1980	1.17%	0.37%	2.52%	1.08%	-0.02%	-1.16%	-0.11%	0.31%	2.45%	4.22%	2.56%	2.20%	1.30%
1981	2.68%	0.41%	-0.02%	1.68%	1.11%	0.86%	0.48%	2.01%	4.04%	1.23%	0.78%	0.79%	1.34%
1982	0.62%	1.22%	-0.08%	-0.39%	0.10%	0.04%	-0.01%	-0.11%	0.97%	3.17%	2.73%	1.85%	0.84%
1983	1.40%	0.63%	-0.33%	-0.06%	-0.02%	0.00%	0.02%	0.01%	0.01%	0.39%	2.70%	2.77%	0.63%
1984	0.98%	0.14%	0.03%	0.05%	0.08%	0.55%	1.08%	1.65%	3.54%	3.94%	2.48%	1.08%	1.30%
1985	0.86%	1.18%	1.11%	1.29%	1.19%	1.56%	1.00%	2.01%	3.30%	1.18%	0.73%	0.78%	1.35%
1986	0.77%	0.97%	1.37%	-17.43%	-6.34%	-0.89%	-0.12%	0.25%	2.43%	3.67%	2.92%	2.71%	-0.81%
1987	1.58%	0.73%	0.48%	0.94%	0.85%	2.05%	1.47%	2.30%	3.82%	2.81%	0.77%	0.43%	1.52%
1988	1.08%	1.48%	1.54%	1.71%	1.52%	2.16%	2.57%	5.50%	2.20%	2.29%	3.82%	3.66%	2.46%
1989	1.12%	-0.59%	2.54%	3.64%	2.23%	1.38%	1.20%	2.51%	3.67%	-0.05%	-0.59%	0.79%	1.49%
1990	0.11%	0.01%	1.43%	-0.19%	-0.53%	0.39%	0.75%	2.88%	5.49%	1.99%	1.81%	1.32%	1.29%
1991	0.60%	-1.07%	-1.17%	-0.06%	0.52%	0.51%	0.51%	1.64%	4.81%	0.85%	0.31%	8.13%	1.30%
AVG:	1.41%	1.11%	1.15%	0.69%	0.38%	0.54%	0.77%	1.42%	2.70%	2.53%	1.82%	1.54%	1.34%
MIN:	-0.40%	-2.26%	-2.72%	-17.43%	-8.07%	-2.94%	-1.38%	-0.47%	0.01%	-3.30%	-4.98%	-1.74%	-0.81%
MAX:	6.17%	5.06%	6.74%	4.82%	3.12%	2.84%	3.57%	5.50%	5.49%	6.49%	6.67%	8.13%	2.46%

Table 4.4.5-51 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.31%	0.74%	0.42%	0.56%	0.48%	0.66%	2.17%	4.14%	4.10%	1.62%
1923	3.90%	0.85%	-0.35%	-0.35%	-0.07%	0.94%	1.02%	1.09%	2.93%	4.21%	3.23%	2.73%	1.68%
1924	3.03%	0.97%	0.10%	1.87%	-0.70%	0.03%	0.63%	2.08%	1.74%	2.40%	2.81%	1.33%	1.36%
1925	-0.05%	-1.84%	-0.90%	-1.04%	-0.05%	0.51%	0.69%	1.44%	3.64%	3.98%	3.03%	3.29%	1.06%
1926	2.49%	0.31%	1.21%	0.71%	0.43%	0.63%	1.34%	1.69%	3.56%	2.69%	0.57%	-2.05%	1.13%
1927	0.51%	1.94%	1.19%	1.80%	1.23%	0.30%	0.36%	0.85%	2.41%	4.08%	8.12%	5.52%	2.36%
1928	4.14%	3.89%	5.95%	3.41%	1.39%	0.65%	0.66%	0.53%	2.32%	3.93%	2.50%	0.84%	2.52%
1929	0.63%	1.89%	2.37%	-0.50%	0.03%	1.31%	1.67%	1.71%	3.60%	2.50%	1.79%	2.69%	1.64%
1930	1.36%	0.86%	2.00%	1.62%	1.13%	1.07%	1.34%	2.69%	3.87%	2.45%	1.34%	0.79%	1.71%
1931	0.97%	1.37%	2.05%	1.40%	0.86%	0.67%	1.10%	1.69%	1.86%	2.46%	3.26%	1.96%	1.64%
1932	0.97%	0.62%	0.97%	0.92%	0.85%	1.02%	3.46%	3.01%	3.59%	3.79%	3.10%	1.99%	2.02%
1933	1.05%	1.19%	2.04%	2.38%	2.52%	2.64%	1.99%	1.95%	2.87%	2.84%	2.06%	2.17%	2.14%
1934	1.19%	0.98%	1.11%	1.07%	1.12%	1.18%	1.29%	1.96%	2.86%	3.14%	2.73%	2.46%	1.76%
1935	1.30%	0.64%	1.12%	0.58%	0.76%	1.08%	0.88%	0.35%	2.63%	2.45%	0.28%	-0.70%	0.95%
1936	0.72%	3.85%	-1.47%	0.32%	-5.98%	-0.31%	0.51%	-0.11%	2.06%	6.69%	6.84%	4.34%	1.46%
1937	2.44%	-0.71%	-0.63%	0.17%	-1.73%	-3.72%	-2.13%	-1.69%	1.14%	8.77%	7.73%	2.81%	1.04%
1938	2.08%	-1.58%	2.90%	1.47%	0.34%	0.09%	0.00%	0.00%	0.00%	1.90%	4.30%	7.06%	1.55%
1939	8.04%	4.69%	3.26%	2.81%	3.34%	2.37%	2.01%	2.51%	3.21%	1.39%	0.91%	1.09%	2.97%
1940	0.34%	-0.17%	0.92%	-0.57%	0.17%	0.18%	0.35%	0.99%	2.74%	5.32%	4.58%	3.87%	1.56%
1941	3.76%	0.94%	-1.61%	0.23%	0.12%	-1.26%	-1.05%	-0.15%	-0.66%	2.85%	4.24%	7.63%	1.25%
1942	16.71%	19.04%	8.68%	1.21%	0.07%	0.26%	0.30%	0.39%	0.86%	3.32%	7.70%	7.91%	5.54%
1943	10.54%	18.75%	19.40%	3.29%	1.33%	0.41%	0.16%	-1.05%	0.60%	4.59%	6.19%	4.09%	5.69%
1944	3.40%	1.13%	0.55%	1.94%	-0.78%	0.39%	0.82%	1.52%	3.45%	2.48%	1.10%	0.69%	1.39%
1945	0.67%	1.25%	1.95%	0.88%	1.26%	1.11%	0.78%	1.34%	2.78%	3.46%	5.38%	4.59%	2.12%
1946	2.64%	2.57%	2.41%	0.45%	-0.29%	0.28%	0.97%	1.33%	2.08%	3.54%	2.91%	2.50%	1.78%
1947	1.48%	1.38%	1.49%	0.97%	0.72%	1.07%	1.45%	2.24%	3.65%	0.71%	0.43%	0.27%	1.32%
1948	0.87%	0.58%	0.17%	1.24%	-0.17%	0.32%	1.02%	1.57%	2.68%	2.57%	1.20%	0.69%	1.06%
1949	-0.37%	-2.10%	-1.03%	-0.91%	-0.10%	-0.07%	0.73%	2.41%	3.44%	1.87%	4.51%	7.27%	1.30%
1950	2.63%	1.39%	5.45%	4.29%	1.61%	1.37%	1.78%	2.78%	3.71%	3.76%	4.00%	3.92%	3.06%
1951	1.40%	-2.04%	0.18%	-0.46%	-0.02%	0.51%	0.78%	0.49%	2.43%	5.42%	3.94%	2.28%	1.24%
1952	2.07%	0.77%	0.10%	0.23%	0.19%	0.16%	0.02%	0.00%	0.14%	2.03%	0.46%	2.02%	0.68%
1953	3.85%	2.08%	1.26%	0.44%	0.42%	0.93%	0.49%	1.30%	2.55%	3.06%	2.38%	2.91%	1.81%
1954	3.11%	4.56%	7.83%	3.32%	1.13%	0.49%	0.65%	0.55%	2.57%	2.76%	1.48%	0.70%	2.43%
1955	-0.58%	-1.24%	0.35%	1.01%	0.81%	0.79%	0.67%	2.33%	3.78%	2.11%	0.84%	0.78%	0.97%
1956	0.72%	0.91%	0.70%	0.07%	0.10%	0.42%	0.75%	0.92%	0.86%	0.04%	-2.49%	5.82%	0.74%
1957	2.93%	-8.65%	-2.52%	1.95%	2.28%	-0.40%	0.19%	1.52%	3.57%	2.88%	1.13%	0.07%	0.41%
1958	-0.06%	4.75%	2.79%	0.83%	0.30%	0.16%	0.00%	0.00%	0.53%	2.38%	4.13%	7.16%	1.91%
1959	6.91%	2.54%	1.07%	-0.36%	-0.18%	0.43%	0.89%	2.27%	3.13%	2.54%	0.81%	0.49%	1.71%
1960	0.40%	0.31%	0.40%	0.31%	0.12%	0.62%	0.52%	2.03%	3.89%	1.45%	0.90%	0.87%	0.99%
1961	0.94%	1.10%	0.91%	1.49%	1.18%	1.04%	1.62%	2.92%	3.76%	1.34%	0.62%	0.71%	1.47%
1962	0.12%	-1.19%	-1.99%	-0.68%	-0.26%	-0.23%	0.65%	1.51%	3.15%	1.76%	0.97%	0.55%	0.36%
1963	0.99%	1.85%	1.93%	1.14%	1.27%	0.80%	0.41%	0.58%	3.11%	4.97%	6.62%	4.13%	2.32%
1964	1.69%	1.51%	1.25%	5.22%	5.95%	3.34%	2.22%	2.58%	3.45%	1.93%	0.94%	0.78%	2.57%
1965	0.25%	0.72%	0.46%	0.28%	0.37%	0.66%	0.49%	0.68%	2.11%	3.65%	5.97%	4.16%	1.65%
1966	3.26%	2.19%	1.71%	1.40%	0.85%	0.89%	0.69%	1.99%	3.38%	2.18%	1.08%	0.68%	1.69%
1967	0.67%	0.58%	0.67%	0.47%	0.74%	0.37%	0.04%	0.00%	0.07%	1.79%	7.09%	10.61%	1.93%
1968	5.03%	2.11%	1.53%	1.30%	0.58%	0.50%	0.42%	1.75%	3.33%	1.97%	1.12%	0.65%	1.69%
1969	0.20%	-0.10%	0.25%	0.36%	0.04%	0.02%	0.00%	0.00%	-0.02%	2.31%	4.37%	7.78%	1.27%
1970	6.72%	2.14%	0.70%	0.09%	0.04%	0.24%	0.49%	1.31%	3.30%	3.05%	2.42%	1.27%	1.81%
1971	0.71%	1.03%	1.15%	0.45%	0.56%	0.67%	0.91%	0.55%	2.28%	3.24%	2.66%	3.09%	1.44%
1972	3.12%	1.98%	2.97%	5.03%	2.99%	1.16%	1.23%	2.76%	3.36%	2.88%	1.82%	1.11%	2.54%
1973	-0.22%	-2.67%	-2.66%	-0.04%	0.57%	0.31%	0.54%	1.02%	1.75%	-2.85%	-3.48%	2.68%	-0.42%
1974	7.64%	5.70%	0.36%	0.27%	0.42%	-1.18%	-1.13%	-0.22%	1.62%	4.34%	7.88%	10.48%	3.01%
1975	13.09%	4.50%	1.96%	1.81%	0.90%	6.81%	2.88%	1.03%	1.60%	3.00%	6.38%	9.81%	4.48%
1976	6.64%	1.61%	1.71%	0.96%	-1.76%	-4.37%	-0.70%	1.73%	1.72%	2.65%	3.43%	2.04%	1.31%
1977	-0.79%	-1.99%	-1.59%	0.71%	0.12%	-0.01%	0.30%	1.21%	1.86%	2.04%	1.99%	1.57%	0.45%
1978	1.09%	1.05%	1.11%	0.53%	0.27%	0.23%	0.03%	0.03%	1.21%	3.40%	2.13%	1.77%	1.07%
1979	2.33%	0.92%	0.48%	1.14%	0.27%	0.27%	0.55%	1.14%	2.51%	2.62%	1.49%	0.89%	1.22%
1980	0.60%	0.38%	1.20%	0.63%	0.19%	1.86%	1.19%	1.22%	3.58%	5.11%	4.12%	3.94%	2.00%
1981	4.03%	-0.18%	-0.88%	2.67%	1.51%	0.90%	0.43%	1.69%	3.34%	1.30%	0.79%	0.73%	1.36%
1982	0.51%	0.18%	0.33%	0.31%	0.41%	0.05%	0.00%	-0.10%	0.74%	2.94%	3.73%	4.62%	1.14%
1983	2.46%	0.71%	-1.74%	-0.25%	0.01%	0.00%	0.00%	0.01%	0.01%	0.30%	2.70%	4.06%	0.69%
1984	1.44%	0.20%	0.03%	0.02%	0.05%	0.37%	0.78%	1.45%	3.14%	3.68%	3.26%	1.84%	1.36%
1985	1.27%	1.30%	1.12%	1.30%	1.21%	1.55%	0.98%	1.98%	3.31%	1.11%	0.74%	0.83%	1.39%
1986	0.73%	0.87%	1.34%	-17.43%	-6.34%	-0.89%	-0.11%	-0.15%	1.08%	3.05%	5.74%	8.11%	-0.33%
1987	4.57%	0.75%	-0.56%	1.35%	0.20%	2.86%	1.56%	2.00%	4.13%	3.83%	0.35%	0.01%	1.75%
1988	0.41%	0.03%	0.62%	1.28%	1.11%	2.95%	2.50%	3.21%	2.58%	3.53%	4.00%	1.55%	1.98%
1989	0.51%	-0.18%	0.18%	0.74%	1.03%	1.03%	1.17%	2.50%	3.49%	1.83%	0.85%	0.59%	1.14%
1990	-0.30%	-0.32%	0.95%	-0.20%	-0.36%	0.24%	0.28%	1.97%	3.03%	2.10%	1.17%	-0.04%	0.71%
1991	0.67%	1.44%	0.88%	1.15%	1.10%	1.14%	0.89%	1.59%	3.24%	2.97%	1.40%	1.79%	1.52%
AVG:	2.44%	1.40%	1.30%	0.77%	0.44%	0.61%	0.73%	1.24%	2.41%	2.84%	2.84%	2.88%	1.66%
MIN:	-0.79%	-8.65%	-2.66%	-17.43%	-6.34%	-4.37%	-2.13%	-1.69%	-0.66%	-2.85%	-3.48%	-2.05%	-0.42%
MAX:	16.71%	19.04%	19.40%	5.22%	5.95%	6.81%	3.46%	3.21%	4.13%	8.77%	8.12%	10.61%	5.69%

Table 4.4.5-52 Simulated monthly average electrical conductivity (µS/cm) at Old River at CCWD's Los Vaqueros intake, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				245	342	293	301	339	276	210	264	554	314
1923	697	680	431	305	331	286	319	348	248	250	445	698	420
1924	752	680	515	516	455	552	572	460	536	504	423	712	556
1925	908	827	600	382	319	553	408	327	240	237	453	779	503
1926	825	678	572	394	267	271	285	340	285	351	468	552	441
1927	755	505	215	224	304	247	260	265	213	201	291	645	344
1928	807	597	316	293	230	239	278	420	279	255	365	730	401
1929	833	658	457	446	508	456	505	536	424	387	544	625	532
1930	812	774	481	285	250	232	249	296	256	356	557	659	434
1931	803	702	525	400	386	421	466	470	514	452	443	757	528
1932	886	761	522	317	325	311	363	384	264	243	326	558	438
1933	812	757	575	377	384	324	413	449	415	385	447	529	489
1934	790	802	526	317	271	367	426	421	393	349	458	694	484
1935	838	734	545	433	317	261	312	339	245	215	400	752	449
1936	866	649	500	450	461	296	305	368	245	238	427	746	463
1937	865	695	636	778	519	478	351	378	238	226	397	722	524
1938	879	545	290	255	176	169	182	161	193	215	258	388	309
1939	278	217	309	301	313	334	390	372	313	437	678	811	396
1940	862	632	624	591	387	314	298	286	231	234	380	675	459
1941	804	661	367	312	397	323	308	348	262	214	276	469	395
1942	417	433	403	479	304	296	347	345	239	205	287	475	353
1943	378	297	225	325	354	220	295	331	257	218	282	633	318
1944	823	726	566	526	397	288	340	397	279	337	707	976	530
1945	845	578	692	514	311	275	372	389	252	259	468	734	474
1946	814	626	289	209	255	255	311	333	246	266	495	776	406
1947	804	630	405	324	370	293	273	407	282	398	734	898	485
1948	854	596	540	404	308	288	288	266	204	228	466	769	434
1949	787	646	452	375	383	321	303	318	243	317	523	657	444
1950	808	742	738	489	242	209	249	305	223	266	513	765	462
1951	828	391	249	302	273	241	314	371	248	227	376	722	379
1952	826	651	342	376	268	277	255	213	259	207	271	354	358
1953	237	217	277	247	275	241	390	329	216	204	274	471	282
1954	438	571	522	571	260	210	253	386	265	256	385	725	404
1955	810	635	505	334	296	304	346	335	252	304	489	711	443
1956	815	597	461	181	263	215	275	302	244	205	312	446	360
1957	301	306	472	507	348	244	258	292	234	225	361	682	352
1958	618	371	359	252	341	393	224	216	237	209	263	367	321
1959	245	229	436	490	373	376	382	348	257	296	521	759	393
1960	742	639	420	501	430	253	477	377	279	401	611	677	484
1961	779	616	429	353	307	229	238	276	279	441	740	775	455
1962	1071	960	637	617	412	275	287	364	264	318	521	811	545
1963	478	234	331	257	253	222	344	336	241	207	293	628	319
1964	691	352	239	365	260	266	402	334	253	402	729	848	428
1965	836	639	324	263	217	221	280	308	241	210	272	603	368
1966	795	522	247	259	255	221	378	335	240	282	508	799	403
1967	796	576	362	346	280	270	255	218	288	228	237	303	347
1968	218	222	382	398	323	238	423	376	260	294	519	822	373
1969	812	582	480	488	164	242	185	155	157	204	265	358	341
1970	239	199	220	170	290	275	329	363	265	223	287	658	293
1971	805	609	276	216	228	214	241	391	241	197	266	467	346
1972	438	590	805	491	289	219	240	286	257	242	471	785	426
1973	857	799	500	357	361	277	303	326	234	225	371	682	441
1974	793	351	209	244	221	285	360	385	231	197	294	415	332
1975	250	284	486	439	303	279	316	332	234	200	299	408	319
1976	264	226	354	501	571	489	508	432	509	664	783	852	513
1977	869	764	644	479	516	535	544	531	553	454	456	756	592
1978	910	787	556	442	354	317	227	234	262	225	304	624	437
1979	678	662	595	398	404	327	317	307	228	234	436	758	445
1980	865	633	382	295	294	325	329	360	278	241	314	604	410
1981	653	765	987	539	264	237	393	363	281	481	753	821	545
1982	792	486	226	366	331	411	166	194	230	219	271	344	336
1983	241	232	165	160	121	158	183	173	131	204	189	202	180
1984	256	175	129	149	257	255	292	345	275	217	281	643	273
1985	860	465	203	223	316	328	515	405	275	442	739	827	466
1986	762	631	423	291	470	218	236	315	277	227	300	512	389
1987	656	677	588	492	441	341	318	349	287	394	668	915	511
1988	889	520	399	244	246	296	337	375	381	345	440	639	426
1989	809	759	598	466	410	287	224	226	236	401	677	745	487
1990	797	650	431	477	348	303	354	359	393	464	496	760	486
1991	867	733	703	580	571	417	384	392	339	478	582	617	555
AVG:	703	567	444	377	330	299	326	339	277	294	434	652	419
MIN:	218	175	129	149	121	158	166	155	131	197	189	202	180
MAX:	1071	960	987	778	571	553	572	536	553	664	783	976	592

Table 4.4.5-53 Difference in simulated monthly average electrical conductivity (%) at Old River at CCWD's Los Vaqueros intake, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.06%	0.51%	0.20%	0.23%	0.21%	0.32%	1.77%	2.71%	1.45%	0.94%
1923	1.24%	0.78%	0.19%	0.06%	0.11%	0.56%	0.61%	0.46%	1.86%	3.17%	2.28%	1.58%	1.08%
1924	1.72%	1.09%	0.40%	0.66%	0.37%	0.31%	0.15%	1.89%	2.66%	1.84%	4.22%	-0.01%	1.28%
1925	0.54%	-0.80%	-1.17%	-0.51%	0.03%	0.27%	0.37%	0.54%	2.28%	3.24%	0.74%	-1.17%	0.36%
1926	0.17%	1.69%	0.13%	1.19%	0.91%	1.45%	1.55%	1.16%	2.75%	2.33%	1.42%	0.33%	1.26%
1927	0.89%	1.83%	2.22%	1.97%	-0.82%	-0.56%	0.17%	0.20%	1.36%	2.77%	2.69%	1.10%	1.15%
1928	0.78%	1.47%	2.73%	2.13%	1.31%	0.52%	0.30%	0.04%	1.79%	3.17%	2.31%	1.11%	1.47%
1929	1.07%	0.82%	0.91%	0.63%	0.23%	2.13%	1.95%	1.01%	4.82%	3.59%	2.08%	6.14%	2.12%
1930	7.40%	3.48%	1.85%	0.75%	0.70%	0.72%	0.53%	1.17%	4.00%	-1.06%	0.69%	6.59%	2.24%
1931	2.50%	-1.20%	1.93%	-0.82%	-1.01%	-1.06%	-0.83%	0.00%	1.36%	2.41%	2.17%	1.19%	0.55%
1932	1.19%	1.26%	1.10%	0.90%	2.02%	1.03%	-1.10%	0.81%	2.45%	3.15%	3.21%	2.56%	1.55%
1933	1.41%	1.21%	1.23%	0.93%	0.99%	1.89%	0.93%	0.68%	1.57%	3.01%	2.07%	3.19%	1.59%
1934	1.74%	1.13%	1.04%	0.30%	0.67%	2.51%	1.70%	1.18%	0.01%	2.57%	8.91%	2.19%	2.00%
1935	1.11%	-0.08%	-0.28%	0.79%	0.39%	0.13%	1.35%	-0.10%	2.29%	2.44%	-0.24%	-1.51%	0.53%
1936	-0.74%	2.76%	0.00%	-0.78%	-10.88%	-3.63%	-0.50%	-0.17%	1.65%	3.66%	2.92%	1.40%	-0.36%
1937	1.29%	-0.04%	-0.05%	0.64%	-3.02%	-2.51%	0.64%	0.73%	1.32%	4.04%	2.08%	-0.95%	0.35%
1938	0.48%	0.91%	4.95%	1.63%	0.09%	0.01%	0.00%	0.00%	0.03%	1.46%	2.77%	2.19%	1.21%
1939	2.14%	1.97%	1.71%	1.63%	1.29%	1.33%	2.19%	1.65%	2.03%	2.10%	1.17%	0.93%	1.68%
1940	0.69%	-0.17%	0.38%	-0.26%	0.08%	-0.64%	-1.23%	0.10%	1.74%	2.33%	1.60%	1.14%	0.48%
1941	1.02%	0.74%	0.07%	0.22%	0.08%	-1.68%	-0.44%	-0.15%	1.25%	2.79%	3.06%	2.68%	0.80%
1942	3.79%	4.78%	1.63%	-0.06%	0.09%	0.12%	0.17%	0.17%	0.94%	2.37%	2.37%	2.05%	1.54%
1943	2.91%	4.09%	2.92%	0.35%	0.08%	0.01%	0.02%	0.01%	1.37%	2.96%	2.70%	1.31%	1.56%
1944	1.03%	0.70%	0.60%	0.82%	0.50%	0.87%	0.69%	0.64%	2.38%	2.59%	1.22%	0.78%	1.07%
1945	0.74%	1.48%	2.50%	1.71%	1.14%	0.81%	0.30%	0.40%	1.96%	2.60%	1.84%	1.30%	1.40%
1946	0.99%	1.19%	0.91%	0.32%	0.38%	0.56%	0.52%	0.78%	2.31%	2.63%	1.54%	1.04%	1.10%
1947	0.68%	-0.10%	1.97%	1.37%	0.88%	0.61%	0.68%	1.03%	2.42%	1.59%	0.94%	0.88%	1.08%
1948	0.54%	0.96%	1.20%	1.35%	0.97%	0.99%	1.01%	1.07%	2.12%	2.68%	1.49%	0.82%	1.27%
1949	0.83%	0.45%	1.65%	1.21%	0.92%	0.88%	0.38%	1.37%	2.40%	1.94%	1.57%	2.25%	1.32%
1950	1.82%	2.89%	2.96%	2.65%	1.31%	1.05%	0.93%	1.81%	2.80%	2.70%	1.70%	1.21%	1.99%
1951	0.52%	-0.47%	0.13%	2.53%	0.83%	-0.53%	-0.70%	-0.01%	1.91%	3.45%	2.68%	1.36%	0.97%
1952	1.16%	0.79%	0.42%	0.15%	0.15%	0.10%	0.00%	0.00%	0.08%	1.96%	2.23%	1.28%	0.69%
1953	1.59%	1.64%	1.01%	0.47%	-0.17%	0.65%	0.10%	0.64%	1.84%	2.89%	2.38%	2.10%	1.26%
1954	2.54%	3.61%	6.50%	2.97%	1.06%	0.40%	0.37%	0.14%	1.57%	2.67%	1.66%	0.88%	2.03%
1955	0.69%	0.68%	1.08%	1.53%	0.86%	0.89%	0.89%	1.36%	2.88%	2.15%	0.97%	0.87%	1.24%
1956	1.01%	1.70%	0.62%	-0.01%	0.06%	0.28%	0.37%	0.45%	1.22%	2.71%	2.27%	1.99%	1.06%
1957	2.74%	2.54%	0.93%	0.49%	0.99%	-0.35%	-0.12%	0.67%	2.15%	3.02%	2.29%	1.32%	1.39%
1958	1.94%	3.96%	2.46%	0.76%	0.22%	0.11%	-0.02%	0.01%	0.34%	2.37%	2.67%	2.76%	1.47%
1959	2.76%	1.90%	0.89%	0.37%	0.38%	1.19%	0.94%	1.24%	2.56%	2.45%	1.18%	0.48%	1.36%
1960	-0.13%	0.55%	2.42%	1.74%	1.54%	1.08%	-0.23%	1.21%	5.72%	1.38%	0.47%	-0.07%	1.31%
1961	0.92%	1.98%	0.46%	2.19%	1.62%	1.43%	1.25%	2.01%	3.48%	1.59%	0.54%	0.55%	1.50%
1962	-0.79%	-0.39%	-1.13%	1.00%	0.51%	0.24%	0.80%	2.25%	2.73%	2.39%	0.46%	0.18%	0.69%
1963	0.82%	1.41%	1.39%	0.83%	-0.50%	-0.78%	0.05%	0.43%	1.61%	3.05%	2.77%	1.37%	1.04%
1964	0.25%	1.35%	1.28%	2.05%	2.08%	1.85%	0.95%	1.34%	2.50%	2.65%	1.05%	0.46%	1.49%
1965	0.45%	0.66%	-0.28%	-0.20%	0.30%	-0.32%	0.29%	0.48%	1.64%	3.15%	2.72%	1.41%	0.86%
1966	1.38%	1.91%	2.52%	1.66%	0.71%	0.80%	0.27%	0.97%	2.58%	2.30%	1.25%	0.79%	1.43%
1967	0.84%	1.24%	1.34%	0.19%	0.46%	0.30%	0.01%	0.00%	0.19%	1.30%	3.52%	3.41%	1.07%
1968	2.01%	1.68%	1.26%	-0.72%	0.64%	0.47%	0.04%	1.10%	3.02%	1.90%	1.22%	0.74%	1.11%
1969	0.39%	0.11%	0.32%	-0.26%	-0.20%	0.01%	0.01%	0.00%	0.00%	1.77%	2.77%	2.46%	0.61%
1970	2.07%	1.89%	1.46%	0.02%	-0.13%	0.60%	0.38%	0.57%	2.14%	2.90%	2.35%	1.28%	1.29%
1971	0.76%	1.06%	1.00%	0.39%	0.47%	0.59%	0.61%	0.20%	1.76%	2.82%	2.55%	2.12%	1.19%
1972	2.56%	1.92%	2.82%	4.33%	2.59%	1.11%	0.79%	1.38%	2.60%	2.73%	1.16%	0.74%	2.06%
1973	0.78%	0.85%	1.16%	0.36%	0.36%	0.37%	0.56%	0.71%	1.06%	-1.25%	-4.67%	0.55%	0.07%
1974	4.31%	3.58%	0.30%	0.19%	0.28%	-0.77%	-0.58%	-0.07%	1.42%	2.86%	2.58%	2.78%	1.41%
1975	3.91%	2.57%	1.58%	1.54%	0.76%	2.88%	0.31%	0.37%	1.41%	2.65%	3.08%	3.40%	2.04%
1976	2.16%	0.39%	1.16%	0.69%	-0.19%	-0.36%	0.46%	1.28%	1.43%	1.98%	1.39%	0.74%	0.93%
1977	1.84%	-1.53%	-0.74%	-0.88%	-0.50%	-0.40%	-0.12%	0.37%	1.59%	2.23%	-0.36%	-0.89%	0.05%
1978	0.67%	1.14%	1.31%	0.46%	0.17%	0.18%	0.01%	-0.03%	0.51%	-1.42%	5.59%	2.36%	0.91%
1979	2.32%	-0.50%	-2.49%	0.00%	0.29%	0.20%	0.32%	0.57%	1.59%	2.79%	1.70%	1.20%	0.67%
1980	1.22%	0.53%	2.16%	1.06%	-0.01%	-1.19%	-0.44%	-0.18%	1.29%	2.74%	2.66%	2.19%	1.00%
1981	2.58%	0.54%	-0.09%	1.41%	0.86%	0.62%	0.13%	1.02%	2.99%	1.47%	0.88%	0.90%	1.11%
1982	0.70%	1.18%	0.09%	-0.38%	0.04%	0.01%	-0.03%	-0.11%	0.48%	2.20%	2.73%	1.76%	0.72%
1983	1.11%	0.43%	-0.49%	-0.02%	-0.04%	0.02%	0.03%	0.02%	0.01%	0.07%	2.07%	2.13%	0.44%
1984	0.62%	0.03%	0.00%	0.03%	-0.03%	0.28%	0.56%	0.66%	2.39%	3.67%	2.66%	1.23%	1.01%
1985	0.94%	1.14%	0.96%	1.09%	1.04%	1.21%	0.26%	0.92%	2.41%	1.42%	0.83%	0.89%	1.09%
1986	0.83%	1.03%	1.29%	-11.58%	-3.54%	-0.09%	-0.01%	-0.05%	1.30%	3.09%	2.88%	2.80%	-0.17%
1987	1.67%	0.87%	0.53%	1.00%	0.42%	1.06%	0.69%	1.07%	2.99%	2.90%	1.02%	0.48%	1.22%
1988	1.00%	1.77%	1.56%	1.51%	1.26%	2.89%	2.06%	6.84%	3.10%	1.77%	4.33%	3.95%	2.67%
1989	1.60%	-0.24%	1.95%	3.26%	1.03%	1.00%	0.79%	1.68%	3.18%	0.60%	-0.52%	0.78%	1.26%
1990	0.31%	-0.09%	1.40%	-0.06%	-0.50%	0.24%	0.25%	0.98%	3.45%	2.53%	2.02%	1.53%	1.00%
1991	1.12%	-0.51%	-1.49%	-1.02%	0.09%	0.34%	0.13%	0.37%	3.92%	0.66%	0.23%	8.43%	1.02%
AVG:	1.39%	1.16%	1.08%	0.63%	0.24%	0.39%	0.37%	0.74%	1.96%	2.28%	1.95%	1.56%	1.15%
MIN:	-0.79%	-1.53%	-2.49%	-11.58%	-10.88%	-3.63%	-1.23%	-0.18%	0.00%	-1.42%	-4.67%	-1.51%	-0.36%
MAX:	7.40%	4.78%	6.50%	4.33%	2.59%	2.89%	2.19%	6.84%	5.72%	4.04%	8.91%	8.43%	2.67%

Table 4.4.5-54 Difference in simulated monthly average electrical conductivity (%) at Old River at CCWD's Los Vaqueros intake, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				1.05%	0.50%	0.22%	0.24%	0.21%	0.34%	1.06%	3.98%	4.24%	1.31%
1923	3.97%	1.16%	-0.19%	-0.87%	-0.35%	0.49%	0.59%	0.49%	1.78%	3.64%	3.39%	2.81%	1.41%
1924	3.13%	1.38%	0.16%	1.91%	-0.30%	-0.07%	0.06%	1.13%	1.55%	2.07%	3.00%	1.67%	1.31%
1925	0.53%	-1.28%	-0.88%	-0.69%	-0.10%	0.25%	0.34%	0.63%	2.40%	3.61%	3.23%	3.31%	0.95%
1926	2.86%	0.72%	1.11%	0.96%	0.27%	0.53%	0.93%	0.81%	2.61%	2.79%	1.13%	-1.51%	1.10%
1927	0.42%	1.86%	1.02%	1.47%	3.21%	0.52%	0.21%	0.45%	1.52%	3.27%	7.48%	5.77%	2.27%
1928	4.43%	3.70%	5.29%	2.97%	1.28%	0.55%	0.29%	0.04%	1.11%	3.28%	2.70%	1.01%	2.22%
1929	0.72%	1.71%	2.46%	-0.15%	0.06%	1.23%	1.03%	0.61%	3.42%	2.86%	1.84%	2.97%	1.56%
1930	1.73%	1.16%	1.83%	1.44%	0.96%	0.91%	0.75%	1.23%	3.07%	2.62%	1.55%	0.91%	1.51%
1931	1.05%	1.27%	2.07%	1.39%	1.01%	0.80%	0.69%	1.27%	1.68%	2.34%	3.24%	2.30%	1.59%
1932	1.32%	0.95%	0.92%	0.61%	5.35%	0.66%	-1.08%	0.81%	2.51%	3.17%	3.12%	2.26%	1.72%
1933	1.17%	1.22%	1.80%	1.76%	1.38%	1.77%	0.91%	0.72%	1.49%	2.73%	2.20%	2.45%	1.63%
1934	1.52%	1.21%	1.17%	1.07%	0.91%	0.84%	0.65%	0.78%	1.65%	2.88%	3.14%	2.74%	1.55%
1935	1.65%	0.85%	1.16%	0.63%	0.52%	1.12%	0.80%	-0.04%	2.61%	2.87%	0.54%	-0.44%	1.02%
1936	0.43%	3.89%	-0.19%	0.28%	-9.24%	-1.52%	0.09%	-0.31%	1.16%	4.93%	6.90%	4.55%	0.91%
1937	3.10%	0.02%	-0.51%	0.38%	-2.97%	-6.14%	0.06%	0.91%	0.54%	5.31%	7.55%	3.06%	0.94%
1938	2.35%	-0.53%	3.78%	1.72%	0.13%	-0.01%	0.00%	0.00%	0.02%	1.65%	4.06%	6.38%	1.63%
1939	6.29%	3.77%	3.07%	1.73%	1.97%	1.71%	1.35%	1.33%	1.85%	1.64%	1.01%	1.20%	2.24%
1940	0.61%	-0.17%	0.82%	-0.34%	0.07%	0.13%	0.22%	0.36%	1.73%	4.67%	4.59%	3.94%	1.39%
1941	4.01%	1.59%	-0.87%	0.16%	0.08%	-2.52%	-0.67%	-0.25%	-1.15%	1.71%	4.12%	7.04%	1.10%
1942	13.80%	17.70%	8.86%	1.57%	0.20%	0.14%	0.14%	0.15%	0.52%	0.94%	6.88%	7.39%	4.86%
1943	9.13%	14.51%	16.08%	4.06%	2.15%	0.05%	0.06%	2.01%	-0.13%	3.65%	5.82%	4.15%	5.13%
1944	3.51%	1.51%	0.36%	2.06%	-0.31%	0.25%	0.38%	0.51%	2.36%	2.60%	1.25%	0.79%	1.27%
1945	0.73%	1.16%	1.91%	0.78%	0.93%	0.86%	0.29%	0.55%	1.81%	3.00%	5.67%	4.86%	1.88%
1946	2.79%	2.39%	2.19%	0.37%	-0.34%	-0.04%	0.41%	0.36%	1.02%	3.32%	3.04%	2.71%	1.52%
1947	1.65%	1.35%	1.42%	1.06%	0.79%	0.84%	0.80%	1.46%	3.05%	1.08%	0.55%	0.36%	1.20%
1948	0.81%	0.85%	-0.07%	1.45%	0.10%	0.43%	0.68%	0.94%	1.96%	2.54%	1.38%	0.80%	0.99%
1949	-0.10%	-1.73%	-1.04%	-0.86%	-0.15%	-0.12%	0.17%	1.30%	1.96%	2.09%	3.86%	7.30%	1.06%
1950	3.08%	1.51%	4.53%	3.95%	1.43%	1.30%	1.23%	2.03%	2.83%	3.43%	4.13%	4.04%	2.79%
1951	2.06%	-1.59%	0.09%	-1.14%	-0.30%	0.36%	0.38%	-0.04%	1.17%	4.70%	4.03%	2.41%	1.01%
1952	2.18%	1.17%	0.21%	0.16%	0.10%	0.10%	0.00%	0.00%	0.04%	0.96%	0.87%	1.92%	0.64%
1953	3.02%	1.78%	1.26%	0.38%	0.32%	0.66%	0.11%	0.65%	1.91%	3.03%	2.52%	2.76%	1.53%
1954	3.12%	4.11%	7.54%	3.41%	1.15%	0.40%	0.37%	0.14%	1.57%	2.65%	1.68%	0.85%	2.25%
1955	-0.31%	-1.27%	0.23%	0.72%	0.34%	0.32%	0.21%	0.98%	2.81%	2.34%	0.87%	0.92%	0.68%
1956	0.84%	1.00%	0.49%	-0.01%	0.05%	0.26%	0.36%	0.45%	-0.61%	2.19%	-1.84%	5.41%	0.72%
1957	3.55%	-6.66%	-2.64%	1.46%	2.64%	-0.86%	-0.93%	0.52%	2.23%	2.98%	1.16%	0.41%	0.32%
1958	-0.05%	4.16%	2.80%	0.77%	0.22%	0.11%	-0.03%	0.00%	0.30%	0.53%	3.94%	6.52%	1.61%
1959	5.54%	2.30%	1.12%	1.26%	0.03%	0.28%	0.38%	1.05%	2.57%	2.46%	1.05%	0.60%	1.55%
1960	0.54%	0.40%	0.43%	0.36%	0.17%	0.43%	-0.31%	0.89%	3.34%	1.79%	1.02%	1.05%	0.84%
1961	1.05%	1.23%	0.98%	1.70%	1.10%	0.90%	1.11%	1.92%	3.06%	1.63%	0.73%	0.80%	1.35%
1962	0.37%	-1.03%	-1.93%	-1.01%	-0.28%	-0.27%	0.17%	0.60%	2.17%	1.96%	1.12%	0.70%	0.21%
1963	0.98%	1.65%	1.86%	0.93%	1.00%	0.76%	0.31%	0.31%	2.36%	3.51%	6.20%	4.43%	2.02%
1964	2.03%	1.46%	1.19%	4.20%	4.66%	2.83%	1.39%	1.53%	2.97%	2.12%	1.05%	0.93%	2.20%
1965	0.30%	0.82%	0.39%	0.23%	0.24%	-0.48%	0.16%	0.23%	0.66%	2.54%	5.58%	4.34%	1.25%
1966	3.48%	2.16%	1.39%	1.12%	0.62%	0.72%	0.27%	0.92%	2.56%	2.29%	1.27%	0.81%	1.47%
1967	0.76%	0.68%	0.65%	0.31%	0.69%	0.27%	0.00%	-0.01%	-0.01%	0.99%	5.56%	9.43%	1.61%
1968	4.14%	1.95%	1.49%	1.70%	0.55%	0.31%	0.08%	0.75%	2.63%	2.10%	1.29%	0.79%	1.48%
1969	0.35%	-0.01%	0.27%	0.21%	0.01%	0.02%	0.00%	0.00%	-0.01%	1.56%	4.04%	6.95%	1.12%
1970	5.36%	1.96%	0.79%	0.04%	0.01%	0.11%	0.12%	0.39%	2.11%	2.94%	2.51%	1.45%	1.48%
1971	0.83%	0.99%	0.98%	0.35%	0.37%	0.55%	0.51%	0.13%	1.75%	2.86%	2.72%	2.96%	1.25%
1972	3.14%	2.02%	2.84%	4.51%	2.64%	1.09%	0.65%	1.39%	2.59%	2.70%	1.96%	1.29%	2.23%
1973	0.07%	-2.39%	-2.65%	-0.22%	0.45%	0.21%	0.20%	0.20%	-0.24%	-0.99%	-3.26%	2.52%	-0.51%
1974	7.21%	5.84%	0.35%	0.19%	0.28%	-1.42%	-0.96%	-0.40%	1.61%	3.08%	7.26%	9.41%	2.70%
1975	10.96%	4.36%	1.95%	1.71%	0.80%	7.19%	0.87%	0.71%	0.43%	2.33%	5.67%	9.09%	3.84%
1976	5.93%	1.60%	1.65%	0.98%	-1.01%	-3.30%	-0.98%	0.35%	1.40%	2.73%	3.48%	2.37%	1.27%
1977	-0.13%	-1.44%	-1.53%	0.04%	0.32%	0.16%	0.18%	0.53%	1.58%	2.24%	2.18%	1.87%	0.50%
1978	1.36%	1.23%	1.17%	0.48%	0.17%	0.14%	0.01%	0.02%	0.56%	2.50%	2.36%	1.78%	0.98%
1979	2.27%	0.99%	0.56%	-0.65%	0.08%	0.14%	0.16%	0.37%	1.56%	2.56%	1.65%	1.03%	0.89%
1980	0.71%	0.42%	1.08%	0.57%	0.15%	1.53%	0.61%	-0.24%	2.23%	3.22%	4.02%	3.93%	1.52%
1981	3.95%	0.13%	-1.04%	2.06%	1.23%	0.57%	0.10%	0.68%	2.54%	1.52%	0.89%	0.85%	1.12%
1982	0.62%	0.28%	0.28%	0.23%	0.33%	0.04%	-0.02%	-0.10%	0.31%	2.16%	3.61%	4.10%	0.99%
1983	2.16%	0.54%	-2.21%	-0.01%	0.01%	0.00%	0.01%	0.02%	0.01%	0.07%	2.08%	3.03%	0.48%
1984	1.06%	0.03%	-0.01%	0.00%	-0.04%	0.19%	0.30%	0.56%	1.85%	3.18%	3.22%	2.00%	1.03%
1985	1.39%	1.27%	0.97%	1.11%	1.07%	1.21%	0.25%	0.90%	2.40%	1.36%	0.83%	0.93%	1.14%
1986	0.81%	0.94%	1.25%	-11.57%	-3.54%	-0.09%	-0.01%	0.25%	0.24%	2.87%	5.17%	7.94%	0.35%
1987	4.75%	1.22%	-0.47%	1.56%	-0.40%	1.30%	0.73%	0.71%	3.20%	3.83%	0.67%	-0.02%	1.42%
1988	0.50%	0.31%	0.52%	1.08%	0.91%	4.71%	2.57%	4.18%	3.41%	2.86%	5.07%	2.27%	2.37%
1989	0.79%	0.02%	0.21%	0.70%	0.81%	0.89%	0.77%	1.67%	2.84%	2.05%	1.00%	0.72%	1.04%
1990	-0.11%	-0.39%	0.87%	-0.09%	-0.35%	0.09%	-0.13%	0.48%	2.04%	2.19%	1.57%	0.19%	0.53%
1991	0.63%	1.44%	0.42%	0.91%	1.01%	1.03%	0.47%	0.63%	3.36%	3.21%	1.55%	2.30%	1.41%
AVG:	2.39%	1.44%	1.22%	0.75%	0.40%	0.41%	0.32%	0.64%	1.67%	2.51%	2.85%	2.90%	1.46%
MIN:	-0.31%	-6.66%	-2.65%	-11.57%	-9.24%	-6.14%	-1.08%	-0.40%	-1.15%	-0.99%	-3.26%	-1.51%	-0.51%
MAX:	13.80%	17.70%	16.08%	4.51%	5.35%	7.19%	2.57%	4.18%	3.42%	5.31%	7.55%	9.43%	5.13%

Table 4.4.5-55 Simulated monthly average electrical conductivity (µS/cm) at Tracy Pumping Plant, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				378	373	331	328	317	255	351	385	613	370
1923	547	639	393	273	325	475	377	395	415	371	484	707	450
1924	669	656	530	532	565	828	710	595	598	601	482	728	624
1925	786	733	597	494	437	635	439	423	391	379	476	734	544
1926	744	669	593	520	460	483	436	527	452	412	548	653	541
1927	722	528	329	347	368	376	338	367	344	322	380	657	423
1928	725	570	377	371	375	331	346	444	407	346	412	707	451
1929	741	644	504	498	589	739	657	608	555	440	545	691	601
1930	743	752	532	447	459	431	519	569	379	399	548	702	540
1931	738	694	638	491	606	843	688	603	571	482	453	741	629
1932	811	723	452	339	286	372	355	407	393	392	374	548	454
1933	669	658	589	544	590	619	580	528	531	460	560	590	576
1934	689	727	537	437	539	725	661	623	516	460	543	719	598
1935	793	676	545	392	381	385	324	346	336	320	426	692	468
1936	746	659	527	483	265	351	309	372	376	343	453	701	465
1937	707	683	575	629	187	303	267	260	348	340	434	682	451
1938	662	575	314	259	196	180	184	173	190	334	367	490	327
1939	278	390	421	442	474	482	463	468	464	457	614	788	478
1940	790	705	662	511	424	308	324	369	372	358	444	682	496
1941	703	664	439	347	229	274	268	285	337	364	396	583	407
1942	425	502	372	292	270	385	340	349	337	343	394	576	382
1943	383	418	326	186	225	222	297	332	375	365	396	647	348
1944	660	690	582	565	519	473	476	452	443	420	635	880	566
1945	787	607	647	599	359	338	353	405	400	379	503	732	509
1946	641	605	310	286	355	395	387	409	398	379	514	749	453
1947	708	601	447	427	479	495	527	601	426	428	673	854	555
1948	800	643	583	509	486	538	429	414	336	337	484	738	525
1949	723	638	518	517	586	483	477	462	381	383	527	671	531
1950	733	694	702	553	392	413	425	489	357	347	506	730	528
1951	757	406	222	222	220	334	354	376	359	334	430	691	392
1952	702	628	419	397	305	260	254	222	225	319	368	480	381
1953	275	370	400	265	349	404	425	402	339	325	376	578	376
1954	512	582	530	579	432	402	378	431	422	356	442	719	482
1955	718	631	531	462	528	613	592	526	388	385	508	733	551
1956	812	633	243	232	175	309	343	378	332	331	395	537	393
1957	347	413	478	519	453	378	374	386	363	336	419	684	429
1958	617	465	472	405	504	378	223	222	264	333	366	490	395
1959	301	400	476	505	405	513	483	464	373	358	505	748	461
1960	702	642	532	562	549	472	646	604	424	420	580	730	572
1961	740	624	481	473	477	476	503	469	384	446	672	769	543
1962	923	882	615	659	425	370	380	447	385	377	508	757	561
1963	542	369	421	365	371	376	368	358	375	329	372	627	406
1964	643	440	340	434	496	537	633	503	388	413	649	804	523
1965	779	614	349	191	244	334	305	348	377	338	376	624	407
1966	682	484	269	287	336	369	511	484	380	370	506	762	453
1967	740	597	423	481	423	348	264	226	207	270	352	438	397
1968	299	386	440	458	408	389	464	476	381	362	511	774	446
1969	756	624	527	240	182	194	188	166	169	323	374	484	352
1970	266	365	343	180	234	321	365	391	400	347	390	668	356
1971	703	604	428	364	428	384	385	437	360	325	372	578	447
1972	511	580	676	534	472	421	518	472	372	324	468	756	509
1973	774	748	608	544	372	315	324	371	367	345	433	681	490
1974	690	478	380	302	322	356	296	334	335	328	386	530	395
1975	368	409	492	484	353	306	317	358	331	331	400	529	390
1976	352	367	412	513	623	661	646	563	568	607	673	824	567
1977	647	598	591	583	832	908	757	649	577	467	473	759	653
1978	798	760	570	440	300	328	232	246	249	350	392	610	440
1979	499	613	571	355	232	296	318	349	360	344	468	717	427
1980	714	611	448	172	160	219	280	327	337	337	385	576	380
1981	463	657	785	569	458	393	453	454	400	480	663	780	546
1982	748	574	419	328	194	252	164	202	275	351	389	449	362
1983	217	259	139	220	149	197	182	181	143	194	336	341	213
1984	215	176	151	144	227	348	388	421	446	357	396	668	328
1985	730	525	345	372	494	563	591	465	402	454	649	787	531
1986	723	662	514	420	240	197	231	302	337	359	401	591	415
1987	538	618	564	520	571	587	545	543	406	431	612	858	566
1988	817	582	505	396	440	857	619	560	532	461	494	690	579
1989	750	719	591	528	690	480	408	392	354	423	614	755	559
1990	733	638	478	508	530	564	655	595	503	511	520	740	581
1991	785	695	710	642	802	518	520	525	446	477	544	605	606
AVG:	638	582	477	422	403	431	417	417	382	381	473	670	474
MIN:	215	176	139	144	149	180	164	166	143	194	336	341	213
MAX:	923	882	785	659	832	908	757	649	598	607	673	880	653

Table 4.4.5-56 Difference in simulated monthly average electrical conductivity (%) at Tracy Pumping Plant, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.37%	0.08%	0.02%	0.02%	0.00%	0.01%	0.65%	1.24%	0.82%	0.36%
1923	0.72%	0.56%	0.10%	-0.05%	0.01%	0.14%	0.07%	0.02%	0.51%	1.48%	1.39%	1.01%	0.50%
1924	1.10%	0.71%	0.05%	0.39%	0.20%	0.01%	0.00%	0.47%	1.10%	0.70%	3.51%	-0.42%	0.65%
1925	0.30%	-0.21%	-0.74%	-0.75%	-0.04%	0.00%	0.07%	0.05%	0.78%	1.46%	0.74%	-0.59%	0.09%
1926	0.04%	0.96%	0.07%	0.54%	0.39%	0.94%	0.51%	0.04%	2.14%	1.53%	0.71%	0.53%	0.70%
1927	0.54%	1.05%	0.85%	0.74%	-0.12%	-0.30%	0.02%	0.00%	0.18%	1.15%	1.43%	0.80%	0.53%
1928	0.64%	0.91%	1.24%	0.96%	0.49%	0.14%	0.04%	-0.01%	0.69%	1.68%	1.49%	0.81%	0.76%
1929	0.72%	0.53%	0.62%	0.38%	0.32%	3.74%	0.38%	0.00%	6.05%	3.51%	1.77%	3.94%	1.83%
1930	5.09%	1.56%	1.14%	0.31%	0.24%	0.25%	-0.06%	0.07%	3.01%	0.24%	0.29%	4.01%	1.35%
1931	1.90%	-1.35%	0.16%	-0.27%	1.09%	-0.11%	-0.13%	-0.03%	0.50%	1.70%	1.63%	0.89%	0.50%
1932	0.22%	0.87%	0.61%	0.42%	0.27%	-0.15%	0.00%	0.02%	1.45%	1.66%	2.02%	1.69%	0.76%
1933	0.96%	0.45%	0.21%	-0.41%	0.02%	0.28%	0.01%	0.00%	0.44%	1.92%	0.75%	1.86%	0.54%
1934	1.31%	0.38%	0.62%	0.70%	0.06%	1.80%	0.32%	0.13%	0.47%	-3.34%	1.92%	2.27%	0.55%
1935	0.73%	0.23%	-0.10%	0.39%	0.09%	-0.33%	-0.08%	0.29%	0.84%	2.49%	0.02%	-1.03%	0.30%
1936	-0.64%	3.79%	0.17%	-0.48%	-5.09%	-1.26%	0.01%	0.08%	0.62%	2.21%	1.92%	1.03%	0.20%
1937	0.97%	0.17%	0.06%	0.19%	-0.74%	-0.31%	-0.01%	-0.01%	0.51%	1.22%	1.65%	-0.48%	0.27%
1938	0.33%	0.58%	2.57%	0.18%	0.06%	0.01%	-0.02%	0.00%	0.01%	0.43%	1.27%	0.93%	0.53%
1939	0.48%	1.05%	0.68%	0.52%	0.34%	0.48%	0.13%	0.19%	0.71%	1.50%	0.92%	0.54%	0.63%
1940	0.42%	-0.39%	0.62%	-0.09%	0.00%	-0.09%	-0.23%	-0.01%	0.46%	1.09%	1.02%	0.75%	0.30%
1941	0.66%	0.61%	0.10%	0.08%	0.00%	-0.02%	0.00%	0.00%	0.39%	1.03%	1.36%	1.27%	0.46%
1942	1.56%	2.20%	0.95%	0.26%	0.05%	-0.02%	-0.05%	0.00%	0.28%	0.91%	1.14%	0.99%	0.69%
1943	1.12%	1.51%	0.96%	0.11%	0.04%	0.05%	-0.01%	0.00%	0.45%	1.10%	1.25%	0.81%	0.62%
1944	0.66%	0.46%	0.41%	0.47%	0.22%	0.34%	0.04%	0.01%	0.91%	1.41%	0.92%	0.58%	0.54%
1945	0.49%	0.77%	1.47%	0.91%	0.40%	0.05%	-0.02%	0.00%	0.67%	1.20%	1.11%	0.84%	0.66%
1946	0.60%	0.72%	0.30%	0.08%	0.07%	0.14%	0.05%	0.08%	0.77%	1.27%	1.00%	0.70%	0.48%
1947	0.54%	0.02%	0.94%	0.70%	0.45%	0.15%	0.08%	0.02%	0.87%	1.17%	0.83%	0.72%	0.54%
1948	0.38%	0.50%	0.90%	0.75%	0.43%	0.28%	0.21%	0.16%	0.79%	1.29%	1.03%	0.52%	0.60%
1949	0.57%	1.19%	0.81%	0.75%	0.29%	0.32%	0.07%	0.30%	0.97%	1.31%	0.48%	1.41%	0.71%
1950	1.20%	1.86%	1.57%	1.34%	0.49%	0.38%	0.22%	0.16%	1.08%	1.51%	1.21%	0.85%	0.99%
1951	0.47%	-0.18%	0.01%	2.71%	0.04%	-0.30%	-0.06%	0.00%	0.73%	1.59%	1.58%	0.94%	0.63%
1952	0.79%	0.56%	0.21%	0.03%	0.04%	0.00%	0.00%	0.00%	0.00%	0.62%	0.84%	0.58%	0.30%
1953	0.38%	0.53%	0.30%	0.12%	0.08%	0.21%	0.00%	0.11%	0.75%	1.26%	1.23%	1.10%	0.51%
1954	1.27%	1.94%	3.66%	1.82%	0.43%	0.13%	0.07%	0.00%	0.52%	1.44%	1.02%	0.63%	1.08%
1955	0.49%	0.48%	0.62%	0.66%	0.24%	0.20%	0.11%	0.26%	1.19%	1.47%	0.95%	0.72%	0.62%
1956	0.57%	1.04%	0.06%	-0.01%	-0.03%	0.07%	0.06%	0.04%	0.35%	1.08%	1.21%	0.96%	0.45%
1957	0.99%	1.09%	0.60%	0.35%	0.62%	-0.40%	-0.09%	0.07%	0.79%	1.48%	1.39%	0.89%	0.65%
1958	1.10%	1.87%	1.06%	0.31%	0.09%	-0.01%	-0.02%	0.02%	0.02%	0.72%	1.24%	1.15%	0.63%
1959	0.81%	0.61%	0.45%	0.26%	0.06%	0.30%	0.08%	0.20%	1.24%	1.67%	0.93%	0.39%	0.58%
1960	0.06%	0.90%	1.20%	0.95%	0.67%	0.46%	-0.02%	0.07%	3.82%	1.27%	0.47%	0.20%	0.84%
1961	0.41%	1.29%	0.36%	0.61%	0.62%	2.66%	0.38%	0.53%	1.58%	1.38%	0.55%	0.45%	0.90%
1962	-0.40%	-0.26%	-0.70%	0.46%	0.16%	0.11%	0.18%	0.21%	1.21%	1.49%	0.48%	0.18%	0.26%
1963	0.49%	0.55%	0.66%	0.33%	-0.27%	-0.42%	0.00%	0.06%	0.56%	1.26%	1.50%	1.05%	0.48%
1964	0.24%	0.69%	0.57%	0.98%	0.55%	0.72%	0.00%	0.04%	0.66%	1.93%	1.02%	0.52%	0.66%
1965	0.37%	0.52%	-0.09%	0.06%	0.01%	0.00%	0.06%	0.03%	0.44%	1.32%	1.30%	0.95%	0.42%
1966	0.64%	0.99%	0.82%	0.65%	0.13%	0.25%	0.02%	0.15%	1.08%	1.33%	0.93%	0.60%	0.63%
1967	0.53%	0.75%	0.62%	0.03%	0.17%	0.08%	0.00%	0.00%	0.00%	0.23%	1.45%	1.23%	0.42%
1968	0.53%	0.59%	0.59%	0.51%	0.16%	0.17%	0.01%	0.26%	1.39%	1.27%	0.90%	0.58%	0.58%
1969	0.31%	0.13%	0.18%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.49%	1.30%	1.01%	0.29%
1970	0.45%	0.62%	0.30%	0.06%	1.08%	0.09%	0.03%	0.03%	0.70%	1.40%	1.19%	0.83%	0.56%
1971	0.57%	0.63%	0.31%	0.14%	0.14%	0.21%	0.10%	0.01%	0.78%	1.29%	1.26%	1.12%	0.55%
1972	1.29%	1.18%	1.91%	2.45%	0.90%	0.41%	0.06%	0.24%	1.26%	1.66%	0.94%	0.61%	1.08%
1973	0.58%	0.58%	0.56%	0.12%	0.08%	0.08%	0.06%	0.02%	-1.54%	0.16%	-2.24%	0.38%	-0.10%
1974	2.49%	1.75%	0.10%	0.05%	0.06%	-0.27%	-0.01%	0.00%	0.47%	1.15%	1.32%	1.28%	0.70%
1975	1.31%	1.04%	0.91%	0.81%	0.23%	0.29%	0.00%	0.01%	0.44%	1.05%	1.41%	1.51%	0.75%
1976	0.76%	0.25%	0.58%	0.42%	0.03%	0.65%	0.04%	0.18%	3.96%	1.61%	1.25%	0.56%	0.86%
1977	0.73%	-0.31%	-0.10%	-0.47%	0.06%	-0.03%	-0.02%	0.01%	0.90%	1.86%	0.31%	-0.40%	0.21%
1978	0.46%	0.38%	0.82%	0.18%	0.02%	0.03%	0.00%	-0.03%	0.07%	-1.58%	2.41%	1.33%	0.34%
1979	1.35%	-0.09%	-1.34%	0.33%	0.36%	-0.20%	0.01%	0.05%	0.30%	1.24%	1.15%	0.83%	0.33%
1980	0.84%	0.43%	1.04%	0.43%	-0.47%	-0.16%	0.21%	0.01%	0.31%	0.97%	1.44%	1.21%	0.52%
1981	1.45%	0.50%	-0.02%	0.79%	0.22%	0.19%	0.01%	0.21%	1.37%	1.15%	0.74%	0.67%	0.61%
1982	0.43%	0.63%	0.06%	-0.09%	0.00%	-0.03%	-0.01%	-0.11%	0.03%	0.67%	1.24%	0.62%	0.29%
1983	0.04%	0.05%	0.07%	-0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.02%	0.60%	0.45%	0.11%
1984	0.10%	0.01%	-0.01%	0.02%	0.04%	0.05%	0.07%	0.02%	0.76%	1.61%	1.27%	0.82%	0.40%
1985	0.64%	0.63%	0.36%	0.40%	0.33%	0.41%	-0.01%	0.13%	1.02%	1.08%	0.70%	0.65%	0.53%
1986	0.53%	0.42%	0.61%	-4.19%	-0.35%	0.01%	0.01%	0.03%	0.31%	1.51%	1.43%	1.39%	0.14%
1987	1.01%	0.65%	0.39%	0.61%	-0.40%	0.16%	0.07%	0.20%	1.23%	1.87%	0.91%	0.53%	0.60%
1988	0.71%	1.75%	0.87%	0.65%	0.51%	0.87%	0.74%	4.83%	1.59%	0.60%	1.33%	2.36%	1.40%
1989	1.36%	-0.11%	1.12%	1.57%	-2.81%	0.18%	0.34%	0.47%	3.15%	0.79%	-0.27%	0.63%	0.53%
1990	0.39%	0.10%	0.83%	0.04%	-0.29%	0.08%	0.02%	0.13%	1.30%	1.70%	2.14%	0.90%	0.61%
1991	0.95%	-0.12%	-2.89%	-0.87%	-0.02%	0.13%	0.00%	0.01%	1.59%	3.07%	-0.23%	5.92%	0.63%
AVG:	0.75%	0.68%	0.51%	0.34%	0.05%	0.20%	0.06%	0.15%	0.91%	1.19%	1.09%	0.95%	0.57%
MIN:	-0.64%	-1.35%	-2.89%	-4.19%	-5.09%	-1.26%	-0.23%	-0.11%	-1.54%	-3.34%	-2.24%	-1.03%	-0.10%
MAX:	5.09%	3.79%	3.66%	2.71%	1.09%	3.74%	0.74%	4.83%	6.05%	3.51%	3.51%	5.92%	1.83%

Table 4.4.5-57 Difference in simulated monthly average electrical conductivity (%) at Tracy Pumping Plant, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.37%	0.08%	0.02%	0.02%	0.00%	0.02%	0.67%	1.72%	2.33%	0.58%
1923	2.31%	0.88%	-0.01%	-0.42%	-0.06%	0.12%	0.06%	0.03%	0.47%	1.63%	2.00%	1.72%	0.73%
1924	1.98%	0.99%	-0.09%	1.03%	0.02%	0.00%	0.00%	0.26%	0.64%	0.67%	1.93%	1.42%	0.74%
1925	0.46%	-0.49%	-0.55%	-0.80%	-0.08%	0.00%	0.06%	0.08%	0.76%	2.30%	2.07%	2.09%	0.49%
1926	1.88%	0.59%	0.53%	0.38%	0.03%	0.21%	0.23%	0.00%	2.03%	1.18%	0.68%	-0.52%	0.60%
1927	-0.16%	1.04%	0.39%	0.55%	0.97%	0.29%	0.03%	0.09%	0.23%	1.31%	3.55%	3.61%	0.99%
1928	3.08%	2.26%	2.36%	1.33%	0.57%	0.15%	0.02%	-0.01%	0.28%	1.86%	1.70%	0.74%	1.20%
1929	0.54%	0.97%	1.75%	0.08%	0.22%	1.55%	0.15%	0.00%	4.00%	2.75%	1.62%	1.79%	1.28%
1930	1.25%	0.37%	1.03%	0.54%	0.30%	0.31%	0.08%	0.07%	1.70%	1.54%	1.49%	0.80%	0.79%
1931	0.74%	0.67%	0.63%	0.82%	1.04%	0.14%	0.11%	0.33%	0.75%	1.64%	2.04%	1.56%	0.87%
1932	0.82%	0.42%	0.47%	0.23%	0.07%	0.16%	0.05%	0.01%	1.40%	1.56%	1.98%	1.56%	0.73%
1933	0.88%	0.46%	0.28%	0.19%	0.05%	0.15%	-0.02%	0.00%	0.44%	1.58%	0.81%	1.51%	0.53%
1934	1.16%	0.44%	0.78%	0.70%	0.15%	0.28%	0.07%	0.07%	0.61%	1.32%	1.19%	1.66%	0.70%
1935	1.05%	0.60%	0.65%	0.37%	0.12%	0.11%	0.00%	0.13%	0.99%	2.56%	0.53%	-0.26%	0.57%
1936	0.16%	3.65%	0.34%	0.15%	-4.71%	-0.50%	0.09%	0.14%	0.52%	3.17%	4.30%	3.13%	0.87%
1937	2.35%	0.29%	-0.16%	0.06%	-0.61%	-1.50%	-0.05%	-0.03%	0.32%	0.21%	4.59%	2.09%	0.63%
1938	1.64%	0.60%	2.29%	0.18%	0.21%	0.03%	-0.01%	0.00%	0.01%	0.56%	1.82%	2.58%	0.83%
1939	1.43%	0.96%	1.13%	-0.13%	0.42%	0.38%	0.07%	0.18%	0.54%	1.16%	0.79%	0.80%	0.64%
1940	0.44%	-0.38%	0.37%	-0.08%	0.00%	0.02%	0.03%	0.00%	0.75%	2.00%	2.50%	2.32%	0.66%
1941	2.41%	1.26%	-0.26%	0.06%	0.00%	-0.09%	0.00%	0.00%	-1.17%	0.38%	1.81%	3.20%	0.63%
1942	5.37%	8.01%	3.04%	0.50%	0.09%	-0.02%	-0.05%	0.00%	0.11%	-0.60%	2.79%	3.33%	1.88%
1943	3.46%	5.01%	4.93%	0.14%	0.01%	0.00%	0.00%	0.12%	0.02%	1.22%	2.31%	2.34%	1.63%
1944	2.18%	1.06%	0.31%	1.08%	0.00%	0.07%	0.01%	-0.01%	0.90%	1.41%	0.93%	0.58%	0.71%
1945	0.55%	0.62%	1.12%	0.41%	0.26%	0.06%	-0.01%	0.01%	0.61%	1.26%	3.05%	2.98%	0.91%
1946	1.78%	1.36%	0.79%	0.08%	-0.39%	-0.06%	0.04%	-0.02%	0.22%	1.54%	1.87%	1.80%	0.75%
1947	1.12%	0.81%	0.72%	0.55%	0.38%	0.27%	0.11%	0.03%	2.11%	0.96%	0.55%	0.34%	0.66%
1948	0.55%	0.59%	5.15%	1.05%	0.14%	0.11%	0.12%	0.13%	0.70%	1.23%	0.95%	0.54%	0.94%
1949	0.07%	-0.92%	-0.59%	-0.84%	-0.15%	-0.07%	0.04%	0.30%	0.57%	1.38%	1.44%	4.27%	0.46%
1950	2.20%	1.05%	2.12%	1.93%	0.58%	0.70%	0.40%	0.21%	1.16%	1.83%	2.85%	2.75%	1.48%
1951	1.68%	-0.61%	0.03%	-1.26%	-0.03%	0.08%	0.02%	0.00%	0.90%	2.10%	2.30%	1.63%	0.57%
1952	1.42%	0.70%	0.16%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.45%	0.36%	0.87%	0.33%
1953	0.73%	0.58%	0.49%	0.12%	0.06%	0.20%	0.00%	0.11%	0.77%	1.31%	1.28%	1.35%	0.58%
1954	1.54%	2.20%	4.25%	2.10%	0.47%	0.13%	0.07%	0.00%	0.52%	1.47%	1.03%	0.61%	1.20%
1955	-0.07%	-0.77%	0.08%	0.26%	-0.05%	-0.15%	0.01%	0.16%	1.15%	1.25%	0.91%	0.74%	0.29%
1956	0.50%	0.65%	0.04%	-0.01%	-0.03%	0.06%	0.06%	0.04%	-0.64%	2.70%	-0.50%	2.48%	0.45%
1957	1.55%	-2.26%	-1.46%	0.73%	1.02%	-1.32%	-0.36%	0.04%	2.11%	1.60%	0.93%	0.27%	0.24%
1958	-0.01%	1.89%	1.18%	0.30%	0.05%	-0.10%	-0.01%	0.09%	-0.05%	0.75%	1.79%	2.65%	0.71%
1959	1.52%	0.78%	0.53%	-0.02%	0.04%	0.06%	0.02%	0.16%	1.27%	1.65%	0.84%	0.43%	0.61%
1960	0.40%	0.34%	0.10%	0.21%	0.11%	0.13%	0.00%	0.04%	1.88%	1.44%	0.96%	0.73%	0.53%
1961	0.66%	0.82%	0.67%	0.52%	0.49%	0.63%	0.28%	0.56%	1.54%	1.42%	0.72%	0.64%	0.75%
1962	0.33%	-0.68%	-1.36%	-0.80%	-0.16%	-0.16%	0.03%	0.05%	0.91%	1.32%	0.90%	0.57%	0.08%
1963	0.56%	0.65%	0.96%	0.38%	0.37%	0.30%	0.05%	0.04%	0.77%	0.96%	2.97%	2.89%	0.91%
1964	1.43%	0.72%	0.51%	1.95%	1.32%	0.93%	0.06%	0.29%	0.67%	1.62%	0.99%	1.06%	0.96%
1965	0.23%	0.56%	0.16%	0.15%	0.01%	-0.05%	0.03%	-0.02%	-0.30%	1.14%	2.49%	2.64%	0.59%
1966	2.04%	1.21%	0.48%	0.46%	0.09%	0.19%	0.03%	0.11%	1.06%	1.32%	0.94%	0.62%	0.71%
1967	0.47%	0.44%	0.30%	0.07%	0.24%	0.05%	0.00%	0.00%	0.00%	0.19%	2.12%	3.26%	0.60%
1968	1.12%	0.67%	0.69%	0.62%	0.07%	0.06%	0.01%	0.13%	1.21%	1.34%	0.94%	0.61%	0.62%
1969	0.30%	0.05%	0.16%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.42%	1.81%	2.69%	0.46%
1970	1.18%	0.51%	0.20%	0.06%	1.09%	0.01%	0.01%	0.02%	0.67%	1.42%	1.25%	0.93%	0.61%
1971	0.62%	0.60%	0.32%	0.12%	0.10%	0.19%	0.07%	0.00%	0.76%	1.31%	1.33%	1.46%	0.57%
1972	1.55%	1.24%	1.92%	2.54%	0.90%	0.39%	0.02%	0.24%	1.25%	1.64%	1.46%	1.03%	1.18%
1973	0.19%	-1.45%	-1.37%	-0.11%	0.09%	0.03%	0.18%	0.00%	-1.84%	0.24%	-1.51%	1.57%	-0.33%
1974	4.25%	2.79%	0.10%	0.04%	0.06%	-0.44%	-0.02%	0.00%	0.32%	0.86%	3.32%	4.20%	1.29%
1975	3.62%	1.74%	1.10%	0.89%	0.25%	0.76%	0.01%	0.03%	0.16%	0.87%	2.45%	4.01%	1.32%
1976	2.02%	0.67%	0.81%	0.55%	0.41%	-1.07%	-0.03%	0.04%	1.48%	1.90%	2.37%	1.70%	0.90%
1977	0.25%	-0.29%	-0.16%	-0.21%	0.18%	0.10%	0.02%	0.03%	0.91%	1.86%	1.78%	1.27%	0.48%
1978	1.01%	0.46%	0.76%	0.20%	0.03%	0.02%	0.00%	0.02%	0.04%	0.85%	1.31%	0.99%	0.47%
1979	1.31%	0.69%	0.38%	0.26%	0.35%	-0.21%	0.00%	0.02%	0.32%	1.27%	1.12%	0.72%	0.52%
1980	0.54%	0.37%	0.56%	0.39%	-0.46%	-0.08%	-0.02%	0.00%	0.62%	1.22%	2.06%	2.12%	0.61%
1981	2.21%	0.35%	-0.60%	0.96%	0.34%	0.15%	0.00%	0.10%	1.15%	1.17%	0.76%	0.63%	0.60%
1982	0.43%	0.19%	0.09%	0.02%	0.00%	-0.03%	0.00%	-0.09%	0.03%	0.74%	1.62%	1.41%	0.37%
1983	0.17%	0.08%	0.34%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.03%	0.62%	0.62%	0.16%
1984	0.09%	-0.02%	-0.02%	-0.12%	-0.01%	0.03%	0.02%	0.01%	0.50%	1.31%	1.45%	1.31%	0.38%
1985	0.96%	0.71%	0.36%	0.41%	0.34%	0.39%	-0.01%	0.12%	1.00%	1.03%	0.70%	0.67%	0.56%
1986	0.50%	0.37%	0.58%	-4.20%	-0.36%	0.01%	0.01%	0.03%	-0.02%	0.98%	2.41%	3.77%	0.34%
1987	2.86%	1.00%	-0.18%	0.86%	-1.47%	0.13%	0.08%	0.11%	1.31%	2.39%	0.73%	0.19%	0.67%
1988	0.36%	0.29%	-0.23%	0.46%	0.38%	1.52%	0.65%	1.94%	1.56%	-0.69%	3.12%	1.76%	0.93%
1989	0.73%	0.13%	0.15%	0.40%	0.20%	0.37%	0.25%	0.52%	1.60%	1.47%	0.94%	0.58%	0.61%
1990	0.05%	-0.13%	0.46%	0.01%	-0.17%	-0.37%	-0.02%	0.03%	0.77%	1.35%	1.57%	0.33%	0.32%
1991	0.28%	0.90%	-1.13%	0.36%	0.14%	0.52%	0.02%	0.03%	1.42%	2.67%	1.49%	2.00%	0.72%
AVG:	1.21%	0.76%	0.61%	0.29%	0.09%	0.09%	0.05%	0.10%	0.71%	1.29%	1.60%	1.62%	0.70%
MIN:	-0.16%	-2.26%	-1.46%	-4.20%	-4.71%	-1.50%	-0.36%	-0.09%	-1.84%	-0.69%	-1.51%	-0.52%	-0.33%
MAX:	5.37%	8.01%	5.15%	2.54%	1.32%	1.55%	0.65%	1.94%	4.00%	3.17%	4.59%	4.27%	1.88%

Table 4.4.5-58 Simulated monthly average electrical conductivity (µS/cm) at Clifton Court Forebay, DSM2 results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				341	360	327	320	303	249	298	313	544	339
1923	555	624	391	279	323	475	362	383	411	306	434	654	433
1924	664	649	520	510	543	785	677	556	565	558	453	714	599
1925	780	733	583	462	416	629	430	410	384	365	430	703	527
1926	738	659	582	493	417	452	423	491	418	387	498	612	514
1927	711	508	300	312	346	367	329	354	335	278	316	600	396
1928	713	558	353	346	337	307	332	426	390	305	361	662	424
1929	735	628	483	463	566	661	622	593	519	427	533	666	575
1930	730	738	502	412	428	372	463	498	364	379	530	660	506
1931	725	684	585	450	579	715	612	553	540	460	440	726	589
1932	801	713	438	333	290	367	341	393	379	369	356	521	442
1933	670	664	567	448	536	510	543	509	491	425	501	567	536
1934	684	726	521	415	433	638	603	570	467	404	479	697	553
1935	773	670	536	393	376	371	318	329	322	310	385	668	454
1936	744	652	511	463	244	345	299	353	368	332	410	669	449
1937	713	677	570	643	170	279	253	247	343	318	391	650	438
1938	673	548	288	253	144	161	177	157	173	302	305	426	301
1939	276	369	392	431	471	466	444	452	458	423	603	755	462
1940	782	694	650	513	404	316	319	355	368	281	388	633	475
1941	699	652	415	333	214	279	262	273	325	313	326	491	382
1942	411	466	361	280	287	380	337	340	320	289	330	495	358
1943	371	379	302	205	236	206	294	313	380	325	327	593	327
1944	669	684	565	543	498	448	452	437	444	355	617	857	547
1945	779	577	636	574	347	328	340	397	395	305	452	680	484
1946	649	591	301	265	344	380	371	396	393	306	466	706	431
1947	704	590	430	406	459	444	487	576	420	378	647	807	529
1948	788	627	563	459	436	516	408	395	321	263	435	695	492
1949	708	619	487	481	568	458	446	440	359	336	500	622	502
1950	723	685	699	541	356	375	405	445	332	281	465	693	500
1951	735	397	217	195	220	324	346	359	362	282	371	653	372
1952	703	618	401	360	301	264	247	203	211	267	304	405	357
1953	262	323	386	264	345	403	404	389	311	275	308	490	347
1954	458	547	501	554	381	356	361	413	410	302	381	666	444
1955	709	606	500	423	510	589	550	497	366	349	482	684	522
1956	795	602	211	135	200	281	331	362	321	270	336	467	359
1957	330	372	456	499	439	363	359	372	354	281	368	633	402
1958	591	412	454	384	449	369	210	209	252	287	304	414	361
1959	285	357	454	492	393	504	461	446	349	305	470	709	435
1960	686	621	511	541	524	416	617	550	409	384	565	692	543
1961	727	602	450	434	413	415	444	423	374	400	651	717	504
1962	920	884	598	644	419	352	363	436	363	324	472	724	542
1963	495	303	380	323	344	339	353	350	370	288	313	577	370
1964	623	402	300	400	476	519	596	480	370	370	637	766	495
1965	769	598	336	211	238	315	300	338	373	291	302	568	387
1966	679	483	261	279	325	334	489	467	356	306	470	726	431
1967	729	563	408	426	390	326	239	210	192	255	284	376	367
1968	278	336	411	439	399	384	443	460	357	311	474	735	419
1969	745	589	503	213	126	192	177	150	153	295	312	414	322
1970	256	357	323	141	238	314	353	378	395	294	314	611	331
1971	699	586	388	328	410	345	369	424	335	262	305	488	412
1972	452	554	684	515	431	339	461	442	352	272	433	721	471
1973	764	731	586	483	357	308	316	354	358	278	377	630	462
1974	686	429	348	281	292	348	290	316	315	271	324	449	362
1975	329	359	468	474	338	303	307	342	316	271	329	444	357
1976	324	311	373	488	613	644	615	531	544	601	676	805	544
1977	642	614	594	571	753	783	692	618	566	452	454	736	623
1978	793	748	550	419	321	325	220	226	241	317	330	572	422
1979	517	604	564	355	229	303	315	338	347	287	422	682	414
1980	720	599	423	191	129	233	271	308	326	312	332	548	366
1981	485	657	801	556	454	381	434	438	384	440	657	750	536
1982	735	530	365	321	207	231	157	188	260	318	322	407	337
1983	219	250	124	143	115	154	170	168	128	187	259	297	185
1984	218	168	120	139	229	337	374	401	444	300	320	613	305
1985	729	498	301	329	471	549	568	450	388	410	642	748	507
1986	705	651	476	380	183	175	226	289	325	351	339	520	385
1987	542	611	554	496	561	571	508	508	386	403	600	825	547
1988	809	561	481	332	392	688	538	513	476	413	460	663	527
1989	740	713	581	505	615	418	391	371	344	393	601	712	532
1990	712	620	446	472	506	536	580	522	458	481	497	717	546
1991	778	687	680	627	727	496	487	492	417	469	538	583	582
AVG:	628	563	457	397	380	403	394	395	366	339	429	624	447
MIN:	218	168	120	135	115	154	157	150	128	187	259	297	185
MAX:	920	884	801	644	753	785	692	618	566	601	676	857	623

Table 4.4.5-59 Difference in simulated monthly average electrical conductivity (%) at Clifton Court Forebay, DSM2 results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.49%	0.21%	0.06%	0.03%	0.01%	0.06%	0.89%	1.87%	1.22%	0.54%
1923	0.80%	0.67%	0.14%	0.08%	0.01%	0.13%	0.10%	0.06%	0.53%	2.07%	1.88%	1.37%	0.66%
1924	1.26%	0.78%	0.05%	0.48%	0.23%	0.04%	0.01%	0.69%	1.61%	1.17%	3.41%	-0.62%	0.76%
1925	0.36%	-0.30%	-0.83%	-0.64%	-0.03%	0.01%	0.09%	0.08%	1.07%	1.57%	0.96%	-0.73%	0.13%
1926	0.06%	1.07%	0.11%	0.65%	0.48%	2.15%	0.56%	0.17%	1.40%	1.74%	0.99%	1.45%	0.90%
1927	0.52%	1.26%	1.08%	0.96%	-0.36%	-0.32%	0.02%	0.00%	0.19%	1.56%	2.06%	1.08%	0.67%
1928	0.78%	1.09%	1.55%	1.19%	0.70%	0.24%	0.05%	-0.01%	0.78%	2.18%	2.00%	1.03%	0.97%
1929	0.83%	0.58%	0.72%	0.49%	0.46%	3.11%	0.30%	0.06%	4.43%	3.03%	1.68%	4.47%	1.68%
1930	5.66%	2.18%	1.41%	0.38%	0.40%	0.35%	0.03%	0.26%	2.52%	0.56%	0.48%	5.06%	1.61%
1931	2.12%	-1.47%	0.58%	-0.33%	0.19%	-0.30%	-0.26%	-0.02%	0.81%	1.96%	1.79%	0.97%	0.50%
1932	0.59%	0.88%	0.63%	0.45%	0.35%	0.17%	-0.03%	0.07%	1.05%	1.36%	2.28%	2.06%	0.82%
1933	1.13%	0.74%	0.54%	-0.04%	-0.03%	0.68%	0.05%	0.04%	0.71%	2.25%	1.35%	2.10%	0.79%
1934	1.43%	0.58%	0.76%	1.24%	0.27%	2.73%	0.60%	0.33%	0.25%	-1.38%	4.39%	2.10%	1.11%
1935	0.83%	0.18%	-0.14%	0.46%	0.10%	-0.42%	-0.14%	0.05%	3.45%	1.85%	0.16%	-0.88%	0.46%
1936	-0.70%	2.66%	0.00%	-0.55%	6.93%	-1.36%	-0.01%	0.08%	0.67%	1.38%	2.40%	1.29%	1.07%
1937	1.08%	0.13%	0.05%	0.21%	7.09%	-0.21%	0.02%	0.20%	0.52%	-5.04%	2.49%	-0.61%	0.49%
1938	0.36%	0.72%	0.96%	0.64%	0.03%	0.00%	0.00%	0.00%	0.01%	0.57%	1.87%	1.39%	0.55%
1939	0.84%	0.52%	0.79%	0.56%	0.35%	0.44%	0.27%	0.31%	0.73%	1.82%	1.08%	0.92%	0.72%
1940	0.45%	-0.35%	0.52%	-0.12%	0.00%	-0.38%	-0.32%	-0.01%	0.47%	1.71%	1.33%	1.01%	0.36%
1941	0.75%	0.68%	0.14%	0.12%	0.01%	0.03%	0.00%	0.00%	0.46%	1.44%	2.01%	1.91%	0.63%
1942	1.99%	2.77%	0.90%	-0.02%	0.03%	0.02%	0.03%	0.02%	0.34%	1.36%	1.67%	1.47%	0.88%
1943	1.50%	1.95%	1.23%	0.11%	0.01%	0.00%	0.00%	0.00%	0.44%	1.41%	1.89%	1.14%	0.81%
1944	0.77%	0.52%	0.46%	0.55%	0.23%	0.41%	0.05%	0.06%	0.89%	2.05%	1.16%	0.74%	0.66%
1945	0.54%	0.97%	1.73%	1.11%	0.52%	0.29%	0.00%	0.03%	0.70%	1.83%	1.47%	1.15%	0.86%
1946	0.65%	0.86%	0.44%	0.14%	0.10%	0.17%	0.07%	0.12%	0.80%	1.94%	1.37%	0.96%	0.64%
1947	0.61%	0.02%	1.11%	0.95%	0.52%	-0.04%	0.11%	0.09%	0.83%	1.58%	1.00%	0.86%	0.64%
1948	0.41%	0.59%	1.18%	0.95%	0.53%	0.30%	0.25%	0.21%	0.92%	2.03%	1.40%	0.77%	0.80%
1949	0.71%	1.01%	1.05%	0.91%	0.29%	0.38%	0.08%	0.37%	1.08%	1.88%	0.94%	1.82%	0.88%
1950	1.37%	2.10%	1.75%	1.45%	0.66%	0.47%	0.26%	0.62%	1.24%	2.25%	1.60%	1.10%	1.24%
1951	0.42%	-0.23%	0.07%	-2.20%	0.18%	-0.50%	-0.11%	-0.01%	0.82%	2.01%	2.25%	1.22%	0.33%
1952	0.91%	0.63%	0.23%	0.06%	0.07%	0.02%	0.00%	0.00%	0.00%	1.01%	2.34%	0.89%	0.51%
1953	0.62%	0.73%	0.33%	0.21%	0.12%	0.18%	0.00%	0.14%	0.90%	1.81%	1.81%	1.60%	0.70%
1954	1.76%	2.46%	4.55%	2.29%	0.58%	0.17%	0.08%	0.01%	0.58%	1.97%	1.46%	0.83%	1.39%
1955	0.60%	0.59%	0.78%	0.85%	0.26%	0.22%	0.17%	0.32%	1.36%	1.96%	1.22%	0.96%	0.78%
1956	0.65%	1.25%	0.12%	-0.02%	-0.01%	0.08%	0.06%	0.07%	0.40%	1.61%	1.72%	1.43%	0.61%
1957	1.36%	1.46%	0.88%	0.41%	0.63%	-0.41%	-0.10%	0.11%	0.85%	2.03%	1.87%	1.15%	0.85%
1958	1.40%	2.52%	1.17%	0.35%	0.08%	0.04%	-0.02%	0.08%	0.06%	1.03%	1.86%	1.77%	0.86%
1959	1.20%	0.79%	0.55%	0.31%	0.08%	0.35%	0.14%	0.28%	1.43%	1.69%	1.20%	0.10%	0.68%
1960	0.05%	0.83%	1.64%	1.05%	0.78%	0.55%	-0.05%	0.29%	3.52%	1.56%	0.56%	0.26%	0.92%
1961	0.40%	1.55%	0.46%	0.82%	0.88%	1.57%	0.41%	0.57%	1.69%	1.77%	0.64%	0.65%	0.95%
1962	-0.39%	-0.33%	-0.83%	0.53%	0.32%	0.18%	0.18%	0.36%	1.38%	1.53%	0.62%	0.31%	0.32%
1963	0.65%	0.79%	0.85%	0.45%	-0.28%	-0.54%	0.00%	0.11%	0.57%	1.55%	2.15%	1.27%	0.63%
1964	0.32%	0.88%	0.75%	1.24%	0.62%	0.77%	0.05%	0.36%	0.78%	2.55%	1.16%	0.53%	0.83%
1965	0.41%	0.68%	-0.11%	-0.13%	0.14%	-0.09%	0.03%	0.05%	0.46%	1.71%	2.02%	1.28%	0.54%
1966	0.89%	1.18%	1.21%	0.87%	0.26%	0.38%	0.03%	0.18%	1.24%	1.89%	1.19%	0.74%	0.84%
1967	0.62%	0.95%	0.72%	0.03%	0.24%	0.15%	0.00%	0.00%	0.00%	0.44%	2.22%	1.85%	0.60%
1968	0.79%	0.81%	0.74%	0.78%	0.18%	0.17%	0.01%	0.28%	1.60%	1.62%	1.19%	0.73%	0.74%
1969	0.37%	0.16%	0.22%	0.02%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.68%	1.90%	1.54%	0.40%
1970	0.81%	0.64%	0.41%	0.01%	-0.03%	0.20%	0.04%	0.06%	0.73%	1.97%	1.83%	1.13%	0.65%
1971	0.60%	0.75%	0.41%	0.18%	0.16%	0.28%	0.13%	0.01%	0.92%	1.74%	1.86%	1.63%	0.72%
1972	1.83%	1.42%	2.25%	2.98%	1.13%	0.61%	0.14%	0.33%	1.42%	2.18%	1.25%	0.72%	1.36%
1973	0.67%	0.71%	0.63%	0.15%	0.20%	0.19%	0.10%	0.10%	-1.93%	5.25%	-3.04%	0.85%	0.32%
1974	2.99%	2.27%	0.12%	0.07%	0.11%	-0.45%	-0.02%	-0.01%	0.62%	1.64%	1.88%	1.89%	0.93%
1975	1.83%	1.42%	1.12%	0.88%	0.41%	0.83%	0.00%	0.06%	0.54%	1.55%	2.14%	2.33%	1.09%
1976	1.10%	0.34%	0.76%	0.51%	0.34%	0.23%	0.06%	0.35%	1.90%	1.69%	1.29%	0.67%	0.77%
1977	0.85%	-0.61%	-0.28%	-0.56%	0.10%	-0.10%	-0.04%	0.05%	1.03%	2.10%	0.42%	-0.46%	0.21%
1978	0.50%	0.61%	0.99%	0.19%	0.07%	0.07%	0.00%	-0.03%	0.08%	-5.11%	3.38%	1.86%	0.22%
1979	1.58%	-0.11%	-1.47%	0.68%	0.02%	0.05%	0.04%	0.09%	0.30%	1.70%	1.46%	1.10%	0.45%
1980	0.93%	0.67%	1.28%	0.38%	-0.05%	-0.02%	-0.02%	0.00%	0.35%	1.27%	2.02%	1.66%	0.71%
1981	1.72%	0.62%	0.18%	0.80%	0.25%	0.21%	0.01%	0.25%	1.33%	1.50%	0.88%	0.82%	0.71%
1982	0.64%	0.81%	0.07%	-0.21%	0.01%	0.05%	-0.04%	-0.22%	0.08%	0.96%	1.83%	0.93%	0.41%
1983	0.21%	0.12%	0.00%	0.02%	-0.02%	0.01%	0.01%	0.02%	0.01%	0.03%	1.14%	0.78%	0.19%
1984	0.19%	0.01%	0.00%	0.02%	0.05%	0.06%	0.10%	0.08%	0.77%	2.22%	1.96%	1.08%	0.54%
1985	0.77%	0.77%	0.48%	0.52%	0.39%	0.45%	-0.01%	0.20%	1.01%	1.45%	0.85%	0.83%	0.64%
1986	0.60%	0.46%	0.78%	-4.66%	-0.37%	0.01%	0.01%	0.03%	0.37%	1.46%	1.99%	2.02%	0.23%
1987	1.19%	0.72%	0.41%	0.73%	-0.70%	0.14%	0.14%	0.26%	1.36%	2.09%	1.07%	0.52%	0.66%
1988	0.74%	1.85%	0.95%	0.90%	0.62%	2.25%	0.83%	4.64%	1.97%	0.92%	2.94%	2.67%	1.77%
1989	1.52%	-0.13%	1.25%	1.82%	-1.45%	0.41%	0.28%	0.54%	2.34%	1.93%	-0.32%	0.76%	0.75%
1990	0.50%	0.24%	1.02%	0.06%	-0.48%	0.22%	0.05%	0.35%	1.84%	2.08%	1.81%	1.07%	0.73%
1991	0.90%	-0.17%	-0.39%	-0.90%	-0.03%	0.19%	0.01%	0.04%	1.84%	2.08%	-0.25%	6.61%	0.83%
AVG:	0.92%	0.79%	0.64%	0.36%	0.37%	0.26%	0.07%	0.20%	0.94%	1.46%	1.52%	1.25%	0.73%
MIN:	-0.70%	-1.47%	-1.47%	-4.66%	-1.45%	-1.36%	-0.32%	-0.22%	-1.93%	-5.11%	-3.04%	-0.88%	0.13%
MAX:	5.66%	2.77%	4.55%	2.98%	7.09%	3.11%	0.83%	4.64%	4.43%	5.25%	4.39%	6.61%	1.77%

Table 4.4.5-60 Difference in simulated monthly average electrical conductivity (%) at Clifton Court Forebay, DSM2 results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922				0.49%	0.21%	0.06%	0.03%	0.01%	0.05%	1.13%	2.61%	3.44%	0.89%
1923	2.70%	1.05%	-0.02%	-0.07%	-0.07%	0.12%	0.10%	0.07%	0.49%	2.01%	2.70%	2.46%	0.96%
1924	2.25%	1.10%	-0.43%	1.29%	0.00%	-0.01%	0.00%	0.42%	0.94%	1.18%	2.25%	1.62%	0.88%
1925	0.51%	-0.66%	-0.62%	-0.71%	-0.08%	0.01%	0.08%	0.12%	0.78%	2.54%	2.75%	2.63%	0.61%
1926	2.08%	0.66%	0.60%	0.43%	0.22%	0.57%	0.26%	0.09%	1.31%	1.99%	0.93%	-0.61%	0.71%
1927	-0.29%	1.26%	0.50%	0.71%	1.29%	0.31%	0.04%	0.07%	0.24%	1.77%	5.11%	4.87%	1.32%
1928	3.60%	2.71%	2.95%	1.66%	0.86%	0.26%	0.04%	-0.02%	0.33%	2.10%	2.32%	0.95%	1.48%
1929	0.62%	1.12%	1.88%	0.11%	0.35%	1.31%	0.13%	0.03%	2.81%	2.43%	1.54%	1.90%	1.19%
1930	1.38%	0.62%	1.28%	0.65%	0.40%	0.43%	0.15%	0.22%	1.61%	1.99%	1.47%	0.94%	0.93%
1931	0.84%	0.72%	1.10%	1.02%	0.72%	0.29%	0.24%	0.64%	1.07%	1.92%	2.52%	1.73%	1.07%
1932	0.96%	0.62%	0.51%	0.24%	0.11%	0.21%	-0.02%	0.06%	1.02%	1.33%	2.23%	1.90%	0.76%
1933	1.03%	0.77%	0.79%	0.75%	0.26%	0.49%	0.01%	0.04%	0.70%	1.95%	1.36%	1.71%	0.82%
1934	1.27%	0.70%	0.94%	0.78%	0.32%	0.46%	0.15%	0.19%	0.90%	1.91%	2.01%	1.90%	0.96%
1935	1.21%	0.63%	0.73%	0.44%	0.14%	0.42%	0.08%	0.03%	3.66%	2.35%	0.77%	-0.04%	0.87%
1936	0.20%	3.21%	0.26%	0.20%	4.60%	-0.46%	0.17%	0.16%	0.55%	0.69%	5.45%	3.93%	1.58%
1937	2.65%	0.25%	-0.22%	0.05%	7.23%	-0.39%	0.03%	0.36%	0.36%	-7.84%	6.01%	2.59%	0.92%
1938	1.82%	2.12%	1.01%	0.75%	0.07%	0.00%	0.00%	0.00%	0.01%	1.14%	2.59%	3.85%	1.11%
1939	2.46%	1.39%	1.38%	-0.31%	0.44%	0.39%	0.16%	0.27%	0.62%	1.50%	0.94%	1.00%	0.86%
1940	0.46%	-0.34%	0.41%	-0.10%	0.00%	0.05%	0.05%	0.05%	0.83%	3.13%	3.44%	3.17%	0.93%
1941	2.72%	1.81%	-0.28%	0.09%	0.01%	0.03%	0.00%	0.00%	-1.60%	0.73%	2.69%	4.78%	0.92%
1942	7.06%	10.10%	3.39%	0.40%	0.11%	0.02%	0.02%	0.01%	0.15%	-3.49%	4.06%	4.98%	2.23%
1943	4.76%	6.48%	6.45%	-0.32%	0.30%	0.00%	0.00%	-0.01%	0.03%	1.98%	3.89%	3.38%	2.25%
1944	2.54%	1.16%	0.28%	1.28%	-0.01%	0.09%	0.02%	0.03%	0.88%	2.06%	1.19%	0.74%	0.85%
1945	0.61%	0.78%	1.32%	0.51%	0.39%	0.31%	0.00%	0.05%	0.63%	1.92%	3.91%	3.97%	1.20%
1946	1.95%	1.62%	1.03%	0.18%	-0.52%	-0.06%	0.05%	-0.01%	0.24%	2.35%	2.56%	2.29%	0.97%
1947	1.28%	0.95%	0.85%	0.77%	0.49%	0.19%	0.15%	0.13%	2.30%	1.28%	0.65%	0.45%	0.79%
1948	0.63%	0.78%	5.45%	1.20%	0.17%	0.13%	0.15%	0.17%	0.78%	1.94%	1.30%	0.76%	1.12%
1949	0.10%	-1.08%	-0.71%	-0.90%	-0.21%	-0.07%	0.04%	0.36%	0.67%	1.98%	2.17%	5.46%	0.65%
1950	2.49%	1.17%	2.39%	2.05%	0.73%	0.77%	0.41%	0.69%	1.36%	2.70%	3.77%	3.57%	1.84%
1951	2.08%	-0.72%	0.04%	3.08%	-0.03%	0.12%	0.04%	0.01%	1.11%	2.72%	3.26%	2.09%	1.15%
1952	1.63%	0.81%	0.17%	0.07%	0.04%	0.02%	0.00%	0.00%	0.00%	1.02%	2.43%	1.31%	0.62%
1953	1.19%	0.79%	0.63%	0.22%	0.08%	0.17%	0.00%	0.14%	0.94%	1.91%	1.89%	1.97%	0.83%
1954	2.14%	2.78%	5.27%	2.64%	0.63%	0.17%	0.08%	0.01%	0.58%	1.97%	1.48%	0.80%	1.54%
1955	-0.07%	-0.92%	0.11%	0.33%	0.00%	-0.01%	0.02%	0.20%	1.30%	2.00%	1.18%	0.99%	0.43%
1956	0.56%	0.78%	0.08%	-0.02%	-0.01%	0.08%	0.06%	0.07%	-1.01%	8.09%	-0.61%	3.67%	0.98%
1957	2.13%	-2.95%	-1.93%	0.83%	1.62%	-1.36%	-0.38%	0.07%	2.27%	2.37%	1.58%	0.00%	0.35%
1958	-0.02%	2.55%	1.29%	0.26%	0.04%	0.03%	-0.03%	0.06%	0.04%	1.18%	2.68%	4.06%	1.01%
1959	2.43%	1.02%	0.64%	0.35%	-0.03%	0.05%	0.04%	0.23%	1.46%	1.79%	1.09%	0.49%	0.80%
1960	0.46%	0.38%	0.18%	0.24%	0.13%	0.18%	-0.03%	0.17%	1.80%	1.82%	1.07%	0.85%	0.60%
1961	0.76%	0.96%	0.82%	0.65%	0.66%	0.54%	0.32%	0.60%	1.65%	1.81%	0.83%	0.86%	0.87%
1962	0.38%	-0.77%	-1.59%	-0.93%	-0.25%	-0.20%	0.03%	0.09%	1.06%	1.81%	1.16%	0.73%	0.13%
1963	0.76%	0.94%	1.23%	0.52%	0.48%	0.39%	0.07%	0.07%	0.82%	0.23%	4.37%	3.73%	1.13%
1964	1.86%	0.93%	0.68%	2.50%	1.39%	0.99%	0.14%	0.42%	0.79%	2.13%	1.13%	1.07%	1.17%
1965	0.27%	0.67%	0.21%	0.14%	0.11%	-0.19%	-0.01%	-0.02%	-0.25%	1.72%	3.85%	3.62%	0.84%
1966	2.54%	1.42%	0.69%	0.59%	0.21%	0.30%	0.05%	0.13%	1.22%	1.88%	1.20%	0.76%	0.92%
1967	0.55%	0.57%	0.36%	0.09%	0.34%	0.11%	0.00%	0.00%	0.00%	0.31%	3.25%	4.89%	0.87%
1968	1.67%	0.92%	0.87%	0.88%	0.16%	0.08%	0.01%	0.17%	1.40%	1.78%	1.24%	0.77%	0.83%
1969	0.34%	0.07%	0.20%	0.05%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.58%	2.63%	4.06%	0.66%
1970	2.09%	1.03%	0.28%	0.01%	0.00%	0.03%	0.01%	0.04%	0.71%	2.02%	1.93%	1.26%	0.78%
1971	0.66%	0.71%	0.42%	0.16%	0.11%	0.25%	0.10%	0.01%	0.90%	1.74%	1.96%	2.12%	0.76%
1972	2.20%	1.49%	2.25%	3.10%	1.13%	0.58%	0.09%	0.33%	1.40%	2.15%	1.77%	1.22%	1.48%
1973	0.23%	-1.77%	-1.55%	-0.14%	0.24%	0.08%	0.02%	0.01%	-2.20%	5.38%	-2.02%	2.52%	0.07%
1974	5.05%	3.64%	0.15%	0.07%	0.11%	-0.76%	-0.04%	0.01%	0.27%	0.85%	4.73%	6.19%	1.69%
1975	5.05%	2.36%	1.35%	0.97%	0.43%	1.96%	0.00%	0.12%	0.06%	1.27%	3.71%	6.02%	1.94%
1976	2.89%	0.94%	1.05%	0.66%	0.49%	-1.10%	-0.07%	0.07%	1.14%	2.15%	2.72%	1.94%	1.07%
1977	0.27%	-0.60%	-0.52%	-0.25%	0.33%	0.18%	0.06%	0.10%	1.03%	2.03%	1.87%	1.42%	0.49%
1978	1.10%	0.70%	0.92%	0.22%	0.08%	0.05%	0.00%	0.02%	0.09%	1.12%	1.87%	1.38%	0.63%
1979	1.53%	0.79%	0.43%	0.45%	0.01%	0.04%	0.03%	0.04%	0.32%	1.76%	1.46%	0.93%	0.65%
1980	0.62%	0.23%	0.68%	0.21%	0.01%	-1.30%	-0.01%	-0.01%	0.69%	1.51%	2.90%	2.94%	0.70%
1981	2.70%	0.40%	-0.47%	1.09%	0.35%	0.16%	0.00%	0.14%	1.23%	1.54%	0.90%	0.77%	0.73%
1982	0.48%	0.25%	0.13%	0.12%	0.06%	0.05%	-0.03%	-0.20%	0.05%	1.15%	2.38%	2.07%	0.54%
1983	0.52%	0.18%	0.07%	0.04%	-0.01%	0.01%	0.01%	0.02%	0.01%	0.03%	1.16%	1.09%	0.26%
1984	0.27%	0.01%	0.00%	0.01%	0.04%	0.04%	0.04%	0.06%	0.51%	1.82%	2.24%	1.43%	0.54%
1985	1.16%	0.87%	0.49%	0.53%	0.40%	0.43%	-0.01%	0.19%	0.98%	1.40%	0.85%	0.87%	0.68%
1986	0.60%	0.40%	0.75%	-4.66%	-0.39%	0.01%	0.01%	0.04%	-0.01%	1.89%	3.35%	4.68%	0.56%
1987	3.36%	1.14%	-0.24%	0.96%	-2.01%	0.12%	0.15%	0.16%	1.60%	2.82%	0.95%	0.16%	0.76%
1988	0.39%	0.32%	0.01%	0.65%	0.46%	4.10%	0.96%	2.15%	2.22%	0.59%	3.99%	1.98%	1.48%
1989	0.83%	0.13%	0.16%	0.44%	0.30%	0.50%	0.28%	0.60%	1.63%	1.79%	1.05%	0.64%	0.69%
1990	0.05%	-0.19%	0.57%	0.01%	-0.24%	-0.14%	-0.04%	0.11%	1.12%	1.70%	1.54%	0.36%	0.40%
1991	0.34%	1.02%	-0.05%	0.47%	0.34%	0.62%	0.05%	0.12%	1.62%	2.69%	1.56%	2.12%	0.91%
AVG:	1.51%	0.96%	0.72%	0.45%	0.38%	0.19%	0.06%	0.15%	0.78%	1.65%	2.20%	2.16%	0.93%
MIN:	-0.29%	-2.95%	-1.93%	-4.66%	-2.01%	-1.36%	-0.38%	-0.20%	-2.20%	-7.84%	-2.02%	-0.61%	0.07%
MAX:	7.06%	10.10%	6.45%	3.10%	7.23%	4.10%	0.96%	2.15%	3.66%	8.09%	6.01%	6.19%	2.25%

Table 4.4.5-61 Simulated running annual average bromate concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				5.10
1923	5.12	5.09	5.63	5.87
1924	6.74	7.63	7.97	8.45
1925	7.94	7.05	6.78	6.46
1926	6.22	6.19	6.15	5.35
1927	5.07	4.92	4.51	4.85
1928	4.94	5.21	5.51	5.79
1929	6.69	7.15	7.48	7.73
1930	6.80	6.16	6.17	6.06
1931	6.66	7.64	7.75	7.88
1932	7.40	6.66	5.91	5.91
1933	6.11	6.32	6.74	6.81
1934	6.66	6.60	6.80	6.74
1935	6.86	6.68	6.38	6.18
1936	6.38	6.27	6.34	6.57
1937	7.17	7.44	7.35	6.62
1938	5.58	5.12	4.39	3.28
1939	3.46	3.80	5.29	7.05
1940	7.37	7.11	6.29	5.84
1941	5.45	5.75	5.24	4.58
1942	4.61	4.44	4.45	3.94
1943	3.90	4.01	4.24	5.85
1944	6.29	6.26	7.42	7.39
1945	7.18	7.21	6.54	6.00
1946	5.47	5.31	5.40	5.59
1947	6.13	6.18	6.79	7.00
1948	7.03	6.83	6.11	5.99
1949	6.06	6.15	6.25	6.76
1950	6.42	6.34	6.36	5.19
1951	5.02	5.21	4.91	5.41
1952	5.49	5.53	4.80	3.32
1953	3.15	3.14	3.34	4.64
1954	5.14	5.07	5.66	6.08
1955	5.82	5.88	6.09	6.07
1956	6.06	5.93	5.13	4.08
1957	4.46	4.41	4.85	5.17
1958	4.80	4.98	4.32	3.72
1959	4.08	4.11	5.17	6.36
1960	6.48	6.48	6.67	6.72
1961	6.32	6.21	6.50	7.37
1962	7.79	7.83	7.46	5.53
1963	4.82	4.82	4.09	4.41
1964	4.67	4.74	5.86	6.43
1965	6.12	5.98	4.81	4.54
1966	4.62	4.68	5.38	5.61
1967	5.68	5.80	4.57	3.40
1968	3.59	3.68	4.96	6.34
1969	6.52	6.11	4.94	3.23
1970	2.92	3.19	3.72	5.12
1971	4.85	4.75	4.42	4.75
1972	5.32	5.27	6.05	6.25
1973	6.01	6.07	5.78	4.78
1974	4.56	4.76	4.21	3.94
1975	4.42	4.35	4.35	4.08
1976	4.91	5.55	7.37	9.21
1977	9.04	9.37	8.68	8.68
1978	7.90	6.89	6.09	5.73
1979	5.85	5.76	6.18	6.01
1980	5.93	6.11	5.69	6.39
1981	6.33	6.32	7.53	6.30
1982	6.28	6.03	4.33	3.24
1983	3.02	2.87	2.44	2.33
1984	2.20	2.43	3.37	4.59
1985	4.89	5.16	6.30	6.78
1986	7.12	7.00	5.72	5.93
1987	6.10	6.01	7.26	6.95
1988	6.27	6.59	6.01	6.63
1989	7.16	6.64	7.04	6.62
1990	6.63	7.15	7.07	7.59
1991	8.10	7.95	7.93	

Table 4.4.5-62 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				1.08%
1923	1.02%	1.25%	1.29%	1.34%
1924	1.20%	1.37%	1.38%	0.84%
1925	0.79%	0.57%	0.04%	0.52%
1926	0.76%	0.88%	1.12%	1.51%
1927	1.48%	1.24%	1.57%	1.53%
1928	1.69%	1.65%	1.60%	1.36%
1929	1.09%	1.40%	2.03%	2.76%
1930	3.08%	3.16%	2.68%	1.75%
1931	1.09%	0.72%	0.48%	0.54%
1932	1.09%	1.64%	1.99%	2.04%
1933	2.28%	2.08%	2.02%	1.95%
1934	1.66%	1.64%	2.01%	1.73%
1935	1.71%	1.61%	0.33%	0.43%
1936	-0.52%	-0.65%	0.16%	0.07%
1937	0.59%	0.47%	0.24%	0.58%
1938	1.02%	1.07%	1.37%	1.80%
1939	2.14%	2.82%	1.96%	1.20%
1940	0.84%	0.50%	0.53%	0.68%
1941	0.75%	0.63%	0.99%	2.12%
1942	2.16%	2.36%	2.16%	2.16%
1943	2.19%	2.15%	2.05%	0.98%
1944	1.05%	1.27%	1.01%	1.26%
1945	1.41%	1.32%	1.51%	1.40%
1946	1.31%	1.43%	1.35%	1.18%
1947	1.19%	1.24%	1.05%	1.08%
1948	1.09%	1.05%	1.20%	1.20%
1949	1.16%	1.21%	1.35%	1.90%
1950	2.13%	2.20%	2.13%	1.46%
1951	1.17%	0.87%	1.05%	1.23%
1952	1.15%	0.96%	0.78%	1.19%
1953	1.37%	1.79%	2.00%	2.80%
1954	2.86%	2.87%	2.45%	1.23%
1955	1.16%	1.40%	1.31%	1.45%
1956	1.22%	0.99%	1.33%	1.78%
1957	1.74%	1.88%	1.69%	1.91%
1958	2.00%	1.63%	1.94%	1.66%
1959	1.60%	2.13%	1.44%	1.05%
1960	1.26%	1.31%	1.05%	1.14%
1961	1.19%	1.24%	1.34%	0.66%
1962	0.49%	0.45%	0.42%	1.17%
1963	1.13%	0.78%	1.42%	1.20%
1964	1.71%	2.01%	1.49%	1.26%
1965	0.93%	0.74%	1.10%	1.78%
1966	1.97%	2.10%	1.63%	1.32%
1967	1.15%	0.80%	1.34%	1.81%
1968	1.86%	2.36%	1.41%	0.84%
1969	0.65%	0.34%	0.65%	1.53%
1970	1.77%	2.18%	1.80%	1.22%
1971	1.38%	1.30%	1.49%	2.08%
1972	2.51%	2.75%	2.23%	1.66%
1973	1.14%	0.96%	0.12%	0.86%
1974	0.81%	0.59%	2.24%	1.94%
1975	2.19%	2.42%	2.53%	2.18%
1976	1.34%	1.43%	0.92%	0.50%
1977	0.40%	0.28%	-0.03%	0.33%
1978	0.59%	0.47%	1.37%	0.91%
1979	1.09%	1.29%	0.81%	1.37%
1980	1.10%	0.97%	1.27%	1.10%
1981	1.36%	1.59%	1.08%	1.11%
1982	0.86%	0.55%	0.96%	1.10%
1983	1.20%	1.17%	0.94%	0.91%
1984	1.08%	1.84%	1.70%	1.54%
1985	1.70%	1.66%	1.18%	1.13%
1986	-0.60%	-0.82%	-0.63%	-0.60%
1987	1.41%	1.73%	1.20%	1.33%
1988	1.49%	1.65%	2.41%	2.13%
1989	2.19%	2.09%	1.15%	1.02%
1990	0.48%	0.67%	1.12%	0.78%
1991	0.82%	0.67%	1.07%	

Table 4.4.5-63 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				1.91%
1923	1.77%	1.99%	1.88%	1.77%
1924	1.62%	1.53%	1.27%	0.57%
1925	0.48%	0.47%	0.77%	1.63%
1926	1.84%	1.90%	1.01%	0.93%
1927	1.06%	0.87%	2.81%	3.96%
1928	4.06%	3.87%	2.69%	1.65%
1929	1.19%	1.38%	1.45%	1.39%
1930	1.72%	1.81%	1.54%	1.57%
1931	1.43%	1.23%	1.49%	1.32%
1932	1.36%	1.70%	1.79%	1.98%
1933	2.24%	2.02%	1.89%	1.79%
1934	1.57%	1.54%	1.64%	1.63%
1935	1.55%	1.42%	0.77%	0.81%
1936	0.24%	0.16%	1.59%	1.35%
1937	1.28%	0.94%	0.90%	1.11%
1938	1.83%	2.26%	1.85%	3.64%
1939	4.17%	4.55%	2.66%	1.30%
1940	0.79%	0.60%	1.41%	1.91%
1941	2.03%	1.57%	1.70%	6.07%
1942	6.23%	6.76%	7.12%	7.05%
1943	7.41%	7.03%	6.24%	2.13%
1944	1.85%	2.21%	1.30%	1.14%
1945	1.22%	1.17%	2.10%	2.62%
1946	2.67%	2.70%	2.13%	1.71%
1947	1.72%	1.88%	1.10%	0.83%
1948	0.76%	0.65%	0.92%	0.35%
1949	0.16%	0.24%	1.31%	2.64%
1950	3.32%	3.44%	3.14%	2.50%
1951	1.99%	1.65%	1.44%	1.68%
1952	1.69%	1.47%	0.90%	1.31%
1953	1.49%	1.94%	2.37%	3.21%
1954	3.29%	3.30%	2.73%	0.82%
1955	0.58%	0.75%	0.67%	1.12%
1956	1.00%	0.78%	0.91%	-0.23%
1957	0.17%	0.37%	0.24%	1.67%
1958	1.48%	1.13%	2.23%	2.66%
1959	2.29%	2.77%	1.49%	0.74%
1960	0.81%	0.82%	0.81%	0.99%
1961	1.21%	1.32%	1.23%	0.50%
1962	0.22%	0.09%	0.10%	0.91%
1963	1.38%	1.28%	2.82%	2.69%
1964	3.47%	3.75%	2.21%	1.79%
1965	1.07%	0.79%	1.81%	2.72%
1966	2.81%	2.97%	1.79%	1.13%
1967	1.03%	0.67%	1.96%	3.17%
1968	3.13%	3.58%	1.61%	0.82%
1969	0.68%	0.40%	1.27%	2.80%
1970	3.08%	3.37%	2.11%	1.26%
1971	1.41%	1.33%	1.62%	2.30%
1972	2.73%	2.99%	2.47%	0.93%
1973	0.33%	0.11%	-0.52%	1.97%
1974	1.95%	1.63%	4.33%	4.29%
1975	4.67%	5.22%	4.91%	4.34%
1976	2.31%	1.94%	1.19%	0.19%
1977	0.55%	0.58%	0.29%	0.97%
1978	1.07%	1.01%	1.09%	1.18%
1979	1.20%	1.38%	1.17%	0.97%
1980	1.04%	1.13%	1.85%	1.74%
1981	1.94%	1.92%	1.07%	1.08%
1982	0.78%	0.52%	1.25%	1.61%
1983	1.61%	1.62%	1.01%	1.11%
1984	1.28%	1.90%	1.87%	1.72%
1985	1.89%	1.89%	1.24%	1.11%
1986	-0.62%	-0.92%	-0.01%	0.26%
1987	2.28%	2.71%	1.41%	1.07%
1988	1.17%	1.22%	1.81%	1.60%
1989	1.40%	1.34%	0.84%	0.84%
1990	0.63%	0.58%	0.56%	0.83%
1991	1.03%	1.04%	1.30%	

Table 4.4.5-64 Simulated running annual average total trihalomethanes concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				65.7
1923	64.8	64.6	69.1	70.9
1924	75.4	81.5	84.5	89.9
1925	87.1	81.1	79.3	75.4
1926	74.2	74.1	72.4	67.0
1927	65.9	65.1	62.7	64.8
1928	65.2	66.6	69.1	71.0
1929	75.5	78.2	80.6	83.2
1930	78.5	74.8	74.9	73.4
1931	76.2	82.6	84.0	86.0
1932	83.7	78.6	71.7	70.9
1933	71.8	73.0	76.1	77.1
1934	76.5	76.1	78.6	77.9
1935	78.4	77.4	75.3	73.4
1936	74.3	73.7	74.2	76.0
1937	79.8	81.3	80.5	75.8
1938	70.1	67.6	61.0	51.6
1939	52.3	54.0	67.6	81.0
1940	82.7	81.3	73.4	70.2
1941	68.3	69.9	65.5	59.0
1942	59.1	58.1	58.2	55.4
1943	55.3	55.9	58.2	70.6
1944	72.8	72.6	84.5	84.0
1945	82.9	83.1	75.3	72.0
1946	69.8	68.9	69.9	70.7
1947	72.9	73.2	79.6	81.1
1948	81.3	80.3	73.0	71.9
1949	72.3	72.7	72.8	77.2
1950	75.8	75.4	76.2	68.0
1951	67.2	68.2	65.5	68.8
1952	69.1	69.3	62.7	51.6
1953	51.0	51.0	52.5	60.4
1954	62.8	62.5	67.8	72.3
1955	70.7	71.0	72.7	72.6
1956	72.5	71.9	64.9	56.1
1957	57.9	57.7	61.9	64.5
1958	62.7	63.6	57.9	53.7
1959	55.4	55.5	64.8	73.7
1960	74.4	74.4	75.8	76.4
1961	74.3	73.8	77.2	86.6
1962	88.9	89.1	85.4	67.6
1963	64.2	64.2	57.7	60.8
1964	61.9	62.2	72.8	77.7
1965	76.4	75.8	64.7	62.6
1966	62.9	63.2	69.4	70.6
1967	70.9	71.5	60.8	51.9
1968	52.7	53.2	64.5	74.7
1969	75.4	73.4	62.9	51.2
1970	49.8	51.1	55.8	66.1
1971	65.1	64.7	61.5	62.4
1972	64.7	64.4	71.8	75.0
1973	73.8	74.1	71.2	64.1
1974	63.3	64.4	59.5	55.5
1975	57.5	57.1	57.1	55.6
1976	60.4	64.8	82.8	97.6
1977	96.6	99.0	91.1	91.8
1978	87.4	80.3	73.3	68.5
1979	69.1	68.6	72.5	72.3
1980	72.0	73.0	68.9	74.4
1981	74.2	74.1	85.8	76.6
1982	76.4	75.1	59.3	51.1
1983	50.2	49.5	47.1	46.8
1984	46.3	47.4	54.3	63.6
1985	64.9	66.3	77.0	79.0
1986	80.7	80.0	67.7	68.9
1987	69.6	69.2	81.6	80.3
1988	77.1	78.9	72.1	77.1
1989	79.5	76.7	80.8	76.9
1990	77.0	79.9	78.9	83.7
1991	86.8	85.7	85.1	

Table 4.4.5-65 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				0.63%
1923	0.62%	0.70%	0.85%	0.93%
1924	0.91%	1.17%	1.22%	0.71%
1925	0.68%	0.41%	-0.18%	0.21%
1926	0.29%	0.35%	0.66%	0.78%
1927	0.74%	0.62%	0.73%	0.77%
1928	0.83%	0.84%	0.88%	0.82%
1929	0.77%	1.02%	1.81%	2.73%
1930	2.84%	2.77%	2.45%	1.41%
1931	1.14%	1.00%	0.61%	0.70%
1932	0.95%	1.15%	1.25%	1.28%
1933	1.40%	1.35%	1.44%	1.39%
1934	1.27%	1.24%	1.59%	1.37%
1935	1.36%	1.28%	0.07%	0.07%
1936	-0.33%	-0.39%	0.34%	0.32%
1937	0.53%	0.47%	0.15%	0.27%
1938	0.41%	0.42%	0.60%	0.63%
1939	0.75%	1.08%	1.02%	0.78%
1940	0.64%	0.46%	0.39%	0.52%
1941	0.54%	0.50%	0.65%	1.15%
1942	1.17%	1.24%	1.13%	0.91%
1943	0.92%	0.91%	0.90%	0.65%
1944	0.70%	0.80%	0.78%	0.96%
1945	1.01%	0.97%	1.04%	0.91%
1946	0.84%	0.87%	0.83%	0.67%
1947	0.71%	0.74%	0.69%	0.75%
1948	0.76%	0.71%	0.70%	0.70%
1949	0.69%	0.72%	0.91%	1.51%
1950	1.58%	1.60%	1.50%	0.75%
1951	0.64%	0.55%	0.59%	0.79%
1952	0.77%	0.69%	0.47%	0.39%
1953	0.42%	0.54%	0.71%	1.55%
1954	1.68%	1.68%	1.52%	0.76%
1955	0.67%	0.78%	0.76%	0.87%
1956	0.79%	0.68%	0.78%	0.78%
1957	0.81%	0.85%	0.85%	1.07%
1958	1.06%	0.94%	0.96%	0.64%
1959	0.66%	0.88%	0.69%	0.58%
1960	0.70%	0.72%	0.53%	0.70%
1961	0.67%	0.68%	0.81%	0.26%
1962	0.22%	0.21%	0.13%	0.57%
1963	0.50%	0.35%	0.64%	0.56%
1964	0.74%	0.87%	0.77%	0.74%
1965	0.61%	0.52%	0.58%	0.91%
1966	0.96%	1.03%	0.89%	0.74%
1967	0.70%	0.56%	0.67%	0.63%
1968	0.67%	0.87%	0.69%	0.52%
1969	0.45%	0.30%	0.35%	0.52%
1970	0.55%	0.72%	0.71%	0.69%
1971	0.73%	0.68%	0.72%	1.22%
1972	1.46%	1.56%	1.36%	0.93%
1973	0.69%	0.62%	0.12%	0.73%
1974	0.71%	0.63%	1.41%	0.83%
1975	0.98%	1.07%	1.14%	0.95%
1976	0.67%	0.85%	0.80%	0.57%
1977	0.52%	0.46%	0.02%	0.33%
1978	0.47%	0.33%	0.98%	0.66%
1979	0.73%	0.81%	0.54%	0.87%
1980	0.76%	0.71%	0.84%	0.81%
1981	0.92%	1.04%	0.82%	0.74%
1982	0.64%	0.49%	0.48%	0.40%
1983	0.41%	0.39%	0.21%	0.20%
1984	0.22%	0.44%	0.66%	0.78%
1985	0.85%	0.87%	0.76%	0.76%
1986	0.09%	-0.02%	0.09%	0.13%
1987	0.94%	1.08%	0.85%	0.90%
1988	0.91%	1.04%	1.67%	1.54%
1989	1.64%	1.50%	0.66%	0.49%
1990	0.24%	0.44%	0.88%	0.66%
1991	0.69%	0.56%	1.02%	

Table 4.4.5-66 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on DSM2 estimated salinity for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				1.33%
1923	1.31%	1.39%	1.45%	1.38%
1924	1.35%	1.40%	1.21%	0.47%
1925	0.42%	0.31%	0.59%	1.41%
1926	1.48%	1.51%	0.67%	0.41%
1927	0.43%	0.33%	1.62%	2.56%
1928	2.61%	2.58%	1.74%	0.96%
1929	0.83%	1.00%	1.20%	1.21%
1930	1.32%	1.26%	1.00%	0.98%
1931	0.98%	1.00%	1.29%	1.17%
1932	1.17%	1.25%	1.09%	1.23%
1933	1.35%	1.29%	1.31%	1.26%
1934	1.16%	1.13%	1.29%	1.28%
1935	1.25%	1.16%	0.46%	0.48%
1936	0.25%	0.21%	1.52%	1.40%
1937	1.34%	1.15%	0.98%	1.06%
1938	1.35%	1.54%	1.06%	1.36%
1939	1.56%	1.81%	1.28%	0.82%
1940	0.62%	0.51%	1.06%	1.61%
1941	1.66%	1.48%	1.43%	3.55%
1942	3.61%	3.79%	4.00%	3.05%
1943	3.14%	3.03%	2.74%	1.60%
1944	1.54%	1.72%	1.15%	0.89%
1945	0.90%	0.87%	1.70%	2.07%
1946	2.05%	2.05%	1.56%	1.27%
1947	1.30%	1.38%	0.73%	0.54%
1948	0.52%	0.44%	0.60%	0.13%
1949	0.05%	0.09%	1.20%	2.41%
1950	2.67%	2.71%	2.38%	1.68%
1951	1.49%	1.39%	1.01%	1.22%
1952	1.22%	1.13%	0.64%	0.42%
1953	0.45%	0.59%	0.86%	1.81%
1954	1.96%	1.96%	1.71%	0.40%
1955	0.24%	0.32%	0.31%	0.69%
1956	0.65%	0.55%	0.62%	0.03%
1957	0.21%	0.28%	0.11%	0.77%
1958	0.64%	0.52%	1.06%	1.10%
1959	1.02%	1.22%	0.72%	0.48%
1960	0.51%	0.52%	0.56%	0.72%
1961	0.79%	0.83%	0.79%	0.23%
1962	0.12%	0.06%	0.03%	0.52%
1963	0.66%	0.62%	1.43%	1.49%
1964	1.78%	1.91%	1.18%	0.96%
1965	0.69%	0.56%	1.07%	1.71%
1966	1.74%	1.81%	1.16%	0.65%
1967	0.62%	0.48%	0.96%	1.17%
1968	1.20%	1.39%	0.77%	0.51%
1969	0.46%	0.32%	0.68%	1.05%
1970	1.07%	1.22%	0.83%	0.72%
1971	0.75%	0.71%	0.81%	1.36%
1972	1.62%	1.72%	1.57%	0.38%
1973	0.12%	0.03%	-0.29%	1.67%
1974	1.65%	1.52%	2.78%	2.01%
1975	2.25%	2.47%	2.31%	1.99%
1976	1.22%	1.16%	1.23%	0.48%
1977	0.73%	0.76%	0.26%	0.97%
1978	1.01%	0.91%	0.82%	0.85%
1979	0.86%	0.93%	0.83%	0.62%
1980	0.64%	0.70%	1.16%	1.19%
1981	1.28%	1.27%	0.78%	0.69%
1982	0.57%	0.44%	0.60%	0.62%
1983	0.60%	0.59%	0.24%	0.24%
1984	0.27%	0.45%	0.79%	0.96%
1985	1.04%	1.08%	0.83%	0.75%
1986	0.08%	-0.07%	0.63%	0.94%
1987	1.75%	1.96%	1.02%	0.64%
1988	0.63%	0.70%	1.17%	1.08%
1989	1.03%	0.93%	0.55%	0.48%
1990	0.39%	0.44%	0.39%	0.70%
1991	0.83%	0.81%	1.10%	

Table 4.4.5-67 Simulated monthly average electrical conductivity (mS/cm) at Martinez/Benicia, G-model results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	29.571	29.282	24.517	21.831	8.589	9.255	10.951	4.697	6.595	17.220	25.339	28.234	18.007
1923	28.971	28.454	11.400	9.120	14.229	19.047	12.791	14.395	20.196	24.029	26.798	28.567	19.833
1924	29.167	28.347	27.810	27.023	23.281	21.365	23.520	26.655	27.792	26.668	27.923	29.937	26.624
1925	30.179	29.370	26.941	25.212	3.714	8.528	12.062	15.980	20.624	24.866	27.560	29.212	21.187
1926	29.438	28.898	28.114	23.068	8.214	16.419	14.676	17.790	23.726	26.725	27.680	29.108	22.821
1927	29.740	22.299	19.643	12.909	0.600	5.298	5.015	10.029	17.792	21.525	25.313	28.418	16.548
1928	29.304	25.293	23.884	19.961	15.459	1.205	8.075	14.344	21.598	23.886	25.996	28.610	19.801
1929	29.221	27.932	26.609	26.688	23.400	21.647	23.460	24.943	25.735	27.389	28.419	29.434	26.240
1930	30.123	28.966	24.888	17.353	16.528	11.773	17.406	21.025	23.910	26.437	27.550	29.032	22.916
1931	29.658	28.524	27.040	25.631	24.063	24.635	25.296	26.640	27.680	26.691	27.928	29.939	26.977
1932	29.962	29.018	19.151	14.869	14.652	18.239	20.026	19.463	20.377	24.245	27.215	29.075	22.191
1933	29.805	28.981	26.793	24.026	22.267	21.738	21.485	24.010	25.875	27.422	28.085	29.070	25.796
1934	30.243	28.981	26.340	20.065	18.460	19.538	20.764	23.988	25.371	26.944	28.819	29.983	24.958
1935	30.020	28.758	27.707	14.078	16.731	14.331	4.504	9.050	16.650	22.613	26.533	29.058	20.003
1936	29.325	28.014	27.878	11.301	2.171	8.204	11.392	14.458	20.173	24.063	26.805	29.097	19.407
1937	29.688	28.061	27.632	26.865	7.227	4.763	9.192	13.304	18.911	23.381	26.670	29.098	20.399
1938	29.814	22.859	3.098	7.817	0.479	0.329	1.711	1.997	5.121	16.680	25.305	25.395	11.717
1939	20.831	23.762	25.388	23.462	23.212	21.494	20.989	21.458	24.430	26.846	27.839	29.221	24.078
1940	29.267	28.523	28.391	11.715	3.388	0.997	2.321	11.373	19.724	22.957	26.001	28.677	17.778
1941	29.465	27.988	8.248	1.218	0.659	1.278	1.944	4.867	13.577	20.707	25.459	26.341	13.479
1942	26.125	27.249	4.065	1.723	0.521	7.762	4.859	6.515	11.709	19.407	25.519	26.198	13.471
1943	25.517	24.237	15.169	1.859	3.162	1.470	7.605	11.787	18.550	21.870	25.389	28.467	15.423
1944	29.345	28.605	28.154	26.743	16.182	15.263	18.522	20.412	22.405	25.335	28.016	29.258	24.020
1945	28.613	27.688	24.867	23.982	6.965	11.184	16.280	17.404	20.323	23.706	26.733	28.742	21.374
1946	29.381	26.818	3.515	4.938	10.049	14.622	17.831	18.371	20.883	23.909	26.773	28.694	18.815
1947	29.080	27.848	25.386	25.261	21.435	17.771	19.078	21.331	23.640	25.988	27.643	28.934	24.449
1948	28.788	28.315	27.775	24.800	21.409	20.553	12.874	10.484	16.539	22.525	26.518	28.366	22.412
1949	28.818	28.040	26.536	25.565	24.586	7.713	15.076	19.530	22.199	25.450	27.338	28.907	23.313
1950	29.334	28.458	27.380	18.836	10.596	15.084	15.504	15.916	20.075	23.777	26.747	28.657	21.697
1951	29.135	6.947	1.244	2.271	2.378	8.562	14.556	14.145	19.367	22.791	25.882	28.615	14.658
1952	29.419	27.784	7.866	1.552	2.078	2.772	2.248	2.191	5.503	16.856	25.316	22.704	12.191
1953	19.528	23.792	7.988	1.236	9.001	15.126	15.068	12.452	15.143	19.570	24.898	25.472	15.773
1954	26.442	26.477	26.783	15.042	4.415	5.347	6.260	11.239	20.227	23.489	25.871	28.222	18.318
1955	28.803	27.148	20.863	18.563	19.472	22.051	20.805	20.711	23.128	25.796	27.779	29.401	23.710
1956	29.233	28.321	1.502	0.316	1.540	6.911	12.417	7.171	13.927	20.725	25.667	25.014	14.395
1957	24.132	26.287	27.896	26.462	12.628	6.186	12.122	15.610	19.979	22.757	25.935	28.563	20.713
1958	25.567	25.536	19.021	8.963	0.312	1.109	1.083	3.500	7.538	17.692	25.372	23.817	13.293
1959	20.850	24.304	27.405	13.339	4.253	10.939	18.948	22.109	22.594	23.931	26.632	28.308	20.301
1960	28.914	27.409	27.160	27.145	14.159	14.987	18.720	20.440	23.803	26.515	27.838	29.319	23.867
1961	29.365	28.073	25.608	24.554	12.817	15.913	20.045	21.919	24.218	26.364	27.210	28.410	23.708
1962	29.101	27.658	25.509	25.481	6.913	11.428	17.784	19.541	22.691	24.469	26.552	28.449	22.131
1963	14.613	19.776	17.127	19.659	3.239	8.721	1.701	7.046	16.434	21.760	25.685	28.260	15.335
1964	27.604	18.214	21.935	18.601	18.520	21.514	20.814	21.044	23.364	25.905	27.508	28.667	22.808
1965	29.084	27.758	2.690	0.717	7.477	13.189	6.173	10.457	19.222	21.515	24.787	28.291	15.947
1966	29.255	22.631	20.299	13.412	12.217	13.168	16.305	19.221	21.758	24.121	26.817	28.955	20.680
1967	28.650	27.392	10.111	5.242	4.622	3.613	3.743	3.569	4.966	15.544	24.150	22.291	12.824
1968	20.100	24.170	26.196	15.349	3.525	7.544	15.018	20.806	22.870	24.329	26.861	28.679	19.621
1969	28.744	27.812	19.694	0.848	0.533	2.878	3.124	2.403	6.591	17.385	25.350	23.059	13.202
1970	18.943	22.392	5.100	0.247	1.351	6.195	13.962	19.035	22.319	21.044	24.331	28.034	15.246
1971	29.044	26.309	4.514	5.333	9.717	6.993	11.675	10.409	16.380	19.824	24.483	25.420	15.842
1972	26.326	27.999	24.974	22.667	16.566	11.490	17.605	22.397	21.504	23.159	26.629	29.086	22.533
1973	29.252	24.047	15.009	1.942	1.374	3.452	12.129	15.337	19.117	22.365	25.901	28.411	16.528
1974	28.872	5.772	2.879	0.619	5.959	0.922	2.125	9.183	15.669	20.590	25.411	23.331	11.778
1975	22.025	25.302	26.302	25.193	4.202	1.561	8.332	9.441	13.759	20.174	25.279	24.421	17.166
1976	21.894	23.412	25.520	26.710	25.523	22.178	21.849	25.474	28.197	29.025	29.384	29.937	25.759
1977	30.027	29.471	27.557	27.127	26.548	25.974	25.501	26.681	27.704	26.690	27.953	29.947	27.598
1978	30.040	29.023	26.486	3.463	4.136	2.915	4.837	9.584	15.304	20.833	25.681	27.898	16.683
1979	28.660	28.906	28.063	17.126	5.246	8.144	13.989	16.354	19.225	23.108	26.619	29.027	20.372
1980	29.256	27.925	22.837	1.186	0.570	3.421	10.896	14.159	19.514	22.834	25.980	28.027	17.217
1981	28.741	28.900	27.099	17.662	12.658	10.406	14.250	20.003	24.482	26.719	27.730	28.909	22.297
1982	28.818	13.925	1.820	1.904	1.045	1.630	0.456	3.990	10.950	19.284	25.507	21.699	10.919
1983	13.168	7.446	1.834	0.856	0.297	0.214	1.190	1.701	1.587	7.985	17.035	14.308	5.635
1984	12.741	2.079	0.382	2.157	5.886	7.564	13.545	17.978	21.338	21.270	24.684	28.246	13.156
1985	28.946	16.016	16.028	22.256	22.335	20.595	19.611	20.345	23.765	26.460	27.802	28.443	22.717
1986	28.572	28.145	24.432	16.965	0.255	0.405	7.912	15.197	19.914	22.639	25.233	27.404	18.090
1987	28.595	28.757	27.977	26.921	20.181	13.919	17.864	22.017	24.398	26.315	28.136	29.684	24.564
1988	28.524	27.766	22.428	15.189	17.971	21.981	24.036	25.024	25.217	26.906	28.589	29.732	24.447
1989	29.967	29.045	28.046	26.362	24.672	8.112	12.827	18.840	23.678	26.491	27.511	28.539	23.674
1990	28.984	27.118	26.994	24.448	20.939	21.369	21.724	24.311	27.264	27.745	28.424	29.836	25.763
1991	29.695	29.410	27.920	27.470	26.517	13.492	16.489	21.999	26.101	28.338	28.612	29.420	25.455
AVG:	27.406	25.375	19.935	15.292	10.804	10.948	13.071	15.532	19.470	23.208	26.470	27.800	19.609
MIN:	12.741	2.079	0.382	0.247	0.255	0.214	0.456	1.701	1.587	7.985	17.035	14.308	5.635
MAX:	30.243	29.471	28.391	27.470	26.548	25.974	25.501	26.681	28.197	29.025	29.384	29.983	27.598

Table 4.4.5-68 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, G-model results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.15%	0.21%	0.43%	0.28%	0.13%	0.47%	0.32%	0.05%	0.00%	0.06%	0.17%
1923	0.10%	0.01%	0.55%	0.44%	0.27%	0.11%	0.12%	0.22%	0.05%	-0.01%	0.00%	0.10%	0.16%
1924	0.11%	-0.05%	-0.10%	-0.11%	0.07%	0.09%	0.37%	0.34%	-0.15%	0.23%	0.37%	0.12%	0.11%
1925	-0.08%	-0.16%	-0.22%	-0.21%	1.30%	0.12%	0.11%	0.11%	0.02%	-0.01%	-0.21%	-0.22%	0.05%
1926	0.11%	-0.02%	-0.04%	-0.01%	0.04%	0.01%	0.59%	0.47%	0.11%	-0.01%	-0.11%	-0.11%	0.09%
1927	0.03%	0.71%	1.82%	0.96%	0.46%	0.09%	-0.52%	-0.38%	-0.42%	-0.02%	0.09%	0.08%	0.24%
1928	0.07%	0.36%	0.39%	0.29%	0.16%	0.27%	0.18%	0.03%	0.00%	0.03%	0.02%	0.01%	0.15%
1929	0.01%	0.03%	0.01%	-0.01%	0.53%	0.35%	0.03%	-0.01%	-0.01%	0.00%	0.19%	0.20%	0.11%
1930	0.00%	0.03%	0.16%	-0.05%	0.37%	0.59%	0.00%	0.35%	0.06%	-0.10%	0.77%	0.79%	0.25%
1931	-0.11%	0.20%	0.05%	-0.52%	-0.92%	-0.73%	-0.25%	-0.03%	-0.01%	-0.11%	-0.09%	-0.03%	-0.21%
1932	0.01%	-0.07%	1.80%	0.86%	1.85%	0.66%	0.05%	0.15%	0.07%	0.01%	0.05%	0.05%	0.46%
1933	0.02%	0.00%	0.00%	0.86%	0.92%	0.44%	0.14%	0.01%	0.00%	0.00%	0.04%	0.04%	0.21%
1934	-0.06%	0.02%	-0.03%	-0.58%	-0.31%	-0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.08%
1935	-0.11%	-0.26%	-0.08%	1.09%	0.25%	0.69%	1.99%	-0.19%	1.03%	0.56%	0.08%	0.02%	0.42%
1936	0.31%	-0.09%	-0.34%	0.30%	3.12%	3.50%	0.98%	0.15%	-0.01%	-0.02%	0.00%	0.08%	0.66%
1937	-0.05%	-0.18%	-0.10%	0.06%	1.47%	0.70%	0.27%	0.22%	0.02%	-0.02%	0.00%	0.00%	0.20%
1938	0.00%	0.27%	-0.33%	0.14%	0.18%	0.07%	0.19%	0.24%	0.30%	0.04%	0.00%	0.26%	0.11%
1939	0.79%	0.32%	0.20%	0.24%	0.10%	0.35%	0.20%	-0.12%	-0.05%	0.01%	0.00%	0.06%	0.17%
1940	-0.08%	0.00%	0.07%	0.78%	1.84%	-1.63%	0.06%	0.14%	-0.22%	-0.17%	-0.03%	0.05%	0.07%
1941	0.06%	-0.13%	0.29%	0.75%	0.15%	0.76%	0.21%	0.30%	0.01%	-0.01%	0.05%	0.28%	0.23%
1942	0.70%	0.52%	0.90%	0.18%	0.11%	0.17%	0.22%	0.36%	0.32%	0.08%	0.01%	0.24%	0.32%
1943	0.44%	0.92%	0.78%	0.18%	0.19%	0.18%	0.23%	0.13%	0.02%	0.04%	0.03%	0.06%	0.27%
1944	0.06%	-0.01%	0.01%	-0.01%	0.24%	0.42%	0.21%	0.17%	0.17%	0.08%	0.02%	0.02%	0.12%
1945	0.00%	0.21%	0.31%	0.13%	1.44%	0.48%	0.14%	0.19%	0.07%	0.01%	0.00%	0.07%	0.25%
1946	0.07%	0.14%	0.55%	0.18%	-0.04%	0.02%	0.08%	0.34%	0.14%	0.01%	0.00%	0.14%	0.14%
1947	0.00%	0.12%	0.20%	0.04%	0.33%	-0.38%	-0.23%	0.03%	-0.06%	-0.07%	0.03%	-0.04%	0.00%
1948	-0.05%	0.02%	0.10%	0.08%	0.01%	0.03%	0.23%	0.37%	0.23%	0.08%	0.01%	0.15%	0.10%
1949	0.07%	0.11%	0.16%	0.01%	0.14%	-0.90%	-0.08%	0.03%	0.00%	0.00%	0.07%	0.10%	-0.02%
1950	0.15%	0.09%	0.09%	1.10%	1.16%	0.22%	0.16%	3.00%	1.04%	0.01%	0.00%	0.05%	0.59%
1951	-0.38%	2.20%	0.30%	-0.76%	0.09%	1.14%	0.34%	0.23%	0.20%	0.15%	0.05%	0.07%	0.30%
1952	0.07%	-0.06%	1.06%	0.23%	0.17%	0.19%	1.66%	0.32%	0.29%	0.05%	0.00%	0.30%	0.36%
1953	0.46%	0.16%	0.33%	0.03%	0.07%	0.05%	0.20%	0.26%	0.35%	0.12%	0.01%	0.27%	0.19%
1954	0.25%	0.92%	0.78%	0.39%	0.19%	0.19%	0.21%	-0.02%	-0.01%	0.00%	0.00%	0.00%	0.24%
1955	0.03%	0.03%	0.69%	0.54%	0.12%	0.03%	-0.04%	0.09%	0.07%	0.01%	0.02%	0.02%	0.13%
1956	0.07%	0.06%	1.14%	0.06%	0.15%	0.21%	0.11%	0.42%	0.26%	0.08%	0.01%	0.27%	0.24%
1957	0.45%	0.22%	0.06%	0.08%	0.05%	0.81%	0.11%	0.22%	0.05%	0.03%	0.03%	-0.02%	0.18%
1958	0.71%	0.59%	0.36%	0.20%	0.31%	0.17%	0.17%	0.26%	0.29%	0.05%	0.00%	0.80%	0.33%
1959	0.83%	0.21%	0.04%	0.11%	0.16%	-0.01%	-0.01%	-0.04%	-0.04%	-0.14%	-0.10%	-0.13%	0.07%
1960	-0.12%	0.24%	0.26%	0.25%	0.82%	0.43%	0.12%	0.62%	0.28%	0.00%	-0.09%	-0.10%	0.23%
1961	0.13%	0.00%	0.18%	0.23%	1.69%	0.39%	0.02%	0.04%	0.05%	0.03%	-0.03%	0.05%	0.23%
1962	0.31%	-0.10%	-0.06%	0.14%	-0.41%	0.31%	0.56%	0.24%	0.01%	-0.21%	-0.16%	0.02%	0.05%
1963	1.52%	0.67%	0.62%	0.40%	-2.41%	-0.04%	-0.12%	0.54%	0.10%	0.01%	0.01%	-0.26%	0.09%
1964	-0.11%	0.44%	0.13%	3.20%	1.29%	0.44%	0.25%	-0.63%	-0.11%	0.16%	0.00%	-0.08%	0.42%
1965	0.03%	-0.01%	1.12%	0.14%	0.20%	0.00%	0.58%	-0.01%	-0.03%	0.06%	0.04%	0.10%	0.18%
1966	0.10%	1.37%	0.95%	0.38%	0.19%	0.12%	0.19%	0.14%	-0.01%	-0.03%	-0.01%	0.00%	0.28%
1967	0.00%	0.09%	1.03%	0.43%	0.70%	0.26%	0.22%	0.26%	0.29%	0.28%	0.33%	0.52%	0.37%
1968	0.44%	0.15%	0.15%	0.03%	0.17%	0.68%	0.12%	0.45%	0.03%	-0.15%	-0.03%	-0.01%	0.17%
1969	-0.03%	-0.04%	0.52%	0.39%	0.11%	0.23%	0.25%	0.36%	0.35%	0.06%	0.00%	0.63%	0.24%
1970	0.72%	0.39%	0.59%	0.03%	0.15%	0.21%	0.01%	0.16%	0.01%	0.06%	0.05%	0.01%	0.20%
1971	0.00%	0.24%	0.50%	0.18%	-0.05%	1.07%	0.01%	0.51%	0.27%	0.02%	-0.02%	0.25%	0.25%
1972	0.22%	0.07%	1.02%	0.94%	0.39%	0.24%	0.00%	-0.02%	-0.01%	0.00%	0.00%	0.00%	0.24%
1973	0.01%	0.27%	0.39%	0.93%	0.19%	0.64%	0.14%	0.15%	0.02%	-0.01%	0.00%	0.54%	0.27%
1974	1.12%	-5.19%	-0.24%	0.12%	0.18%	0.69%	0.23%	0.19%	0.17%	0.18%	0.08%	1.14%	-0.11%
1975	0.99%	0.26%	0.18%	0.13%	0.23%	-1.38%	0.06%	0.50%	0.30%	0.08%	0.22%	0.49%	0.17%
1976	-0.64%	-0.28%	0.11%	0.04%	-0.23%	0.70%	0.75%	0.20%	0.01%	-0.02%	-0.19%	0.07%	0.04%
1977	-0.10%	-0.18%	-0.18%	-0.26%	-0.11%	-0.02%	0.00%	0.00%	0.00%	0.02%	0.02%	0.01%	-0.07%
1978	0.02%	0.06%	0.03%	0.17%	0.22%	0.37%	0.87%	0.32%	0.22%	0.07%	0.01%	0.17%	0.21%
1979	0.18%	-0.34%	0.09%	3.37%	0.93%	0.70%	0.30%	0.11%	-0.01%	-0.02%	0.00%	0.16%	0.46%
1980	0.09%	0.11%	1.28%	1.16%	-1.72%	0.39%	0.17%	0.25%	0.23%	0.10%	0.02%	0.17%	0.19%
1981	0.18%	-0.01%	0.10%	0.75%	0.37%	0.91%	0.86%	0.71%	0.20%	-0.03%	0.01%	0.02%	0.34%
1982	0.06%	2.00%	-1.56%	0.69%	0.18%	0.17%	0.11%	0.25%	0.31%	0.08%	0.01%	0.42%	0.23%
1983	0.77%	0.42%	0.11%	0.11%	0.05%	0.01%	0.18%	0.23%	0.24%	0.30%	0.31%	0.47%	0.27%
1984	0.46%	0.33%	0.09%	0.16%	0.24%	0.24%	0.01%	0.17%	0.23%	0.05%	-0.02%	0.03%	0.17%
1985	0.07%	0.89%	0.39%	0.08%	0.16%	0.38%	0.25%	0.17%	0.00%	-0.04%	0.01%	0.02%	0.20%
1986	0.04%	0.04%	0.18%	0.54%	0.33%	0.22%	0.10%	0.21%	0.19%	0.08%	0.20%	0.22%	0.19%
1987	0.10%	-0.02%	0.03%	-0.01%	0.91%	1.18%	0.06%	-0.05%	0.15%	0.12%	0.09%	0.07%	0.22%
1988	0.03%	0.01%	0.44%	0.91%	0.23%	0.01%	0.42%	0.21%	-0.03%	-0.01%	0.27%	0.29%	0.23%
1989	-0.06%	0.00%	0.35%	0.35%	0.13%	-0.12%	0.15%	0.03%	0.10%	0.09%	0.05%	0.11%	0.10%
1990	0.24%	0.49%	0.33%	0.02%	-0.04%	0.22%	0.14%	0.56%	0.17%	-0.13%	0.01%	0.03%	0.17%
1991	-0.05%	-0.23%	-0.05%	0.10%	0.14%	0.56%	0.58%	0.52%	0.23%	0.01%	0.46%	0.51%	0.23%
AVG:	0.17%	0.14%	0.30%	0.35%	0.32%	0.28%	0.23%	0.23%	0.12%	0.03%	0.04%	0.15%	0.20%
MIN:	-0.64%	-5.19%	-1.56%	-0.76%	-2.41%	-1.63%	-0.52%	-0.63%	-0.42%	-0.21%	-0.21%	-0.26%	-0.21%
MAX:	1.52%	2.20%	1.82%	3.37%	3.12%	3.50%	1.99%	3.00%	1.04%	0.56%	0.77%	1.14%	0.66%

Table 4.4.5-69 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, G-model results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.14%	0.21%	0.41%	0.27%	0.12%	0.46%	-1.14%	-0.18%	-0.01%	0.15%	0.04%
1923	0.20%	0.00%	1.13%	0.91%	0.35%	0.11%	0.12%	0.24%	0.06%	-0.01%	0.00%	0.16%	0.27%
1924	0.18%	-0.09%	-0.06%	-0.10%	0.01%	0.07%	0.23%	0.20%	-0.09%	0.14%	0.22%	0.07%	0.06%
1925	-0.13%	-0.16%	-0.23%	-0.24%	0.58%	0.07%	0.10%	0.35%	0.09%	-0.01%	-0.11%	-0.07%	0.02%
1926	0.06%	-0.01%	-0.01%	-0.01%	0.61%	0.06%	0.34%	0.33%	0.09%	-0.01%	-0.23%	-0.23%	0.08%
1927	0.03%	0.38%	1.53%	0.84%	0.44%	0.09%	-0.11%	0.24%	-0.34%	0.37%	0.34%	0.22%	0.34%
1928	0.19%	0.69%	0.61%	0.34%	0.24%	0.26%	0.18%	0.03%	0.00%	0.01%	0.01%	0.00%	0.21%
1929	0.01%	0.11%	0.01%	-0.06%	0.52%	0.35%	0.03%	0.00%	-0.01%	0.00%	0.16%	0.17%	0.11%
1930	0.00%	0.05%	0.22%	0.12%	0.37%	0.44%	0.02%	0.20%	0.05%	-0.05%	0.42%	0.43%	0.19%
1931	-0.05%	0.14%	0.07%	-0.26%	-0.55%	-0.42%	-0.13%	-0.03%	-0.02%	-0.05%	-0.04%	-0.01%	-0.11%
1932	-0.01%	-0.05%	1.03%	0.55%	1.10%	0.40%	0.04%	0.14%	0.07%	0.01%	0.05%	0.04%	0.28%
1933	0.02%	0.04%	0.06%	0.68%	0.76%	0.35%	0.10%	0.01%	0.00%	0.00%	0.03%	0.03%	0.17%
1934	-0.03%	0.02%	-0.01%	-0.30%	-0.16%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.04%	0.04%	-0.04%
1935	-0.07%	-0.13%	-0.04%	0.60%	0.14%	0.34%	0.98%	-0.10%	1.19%	0.62%	0.09%	0.02%	0.30%
1936	0.29%	-0.14%	-0.38%	1.77%	7.10%	3.71%	1.28%	-0.42%	-0.18%	-0.01%	0.00%	0.11%	1.09%
1937	-0.05%	-0.23%	-0.12%	0.08%	1.49%	1.18%	0.33%	-0.30%	-0.08%	0.01%	0.00%	0.00%	0.19%
1938	0.00%	-0.59%	-0.57%	0.17%	0.17%	0.06%	0.19%	0.26%	-1.17%	-0.16%	-0.01%	0.60%	-0.09%
1939	1.88%	0.76%	0.28%	0.52%	0.29%	0.24%	0.12%	-0.04%	-0.03%	-0.01%	0.01%	0.06%	0.34%
1940	-0.09%	0.02%	0.03%	0.36%	0.97%	-0.05%	0.32%	-0.32%	0.01%	0.06%	0.01%	0.13%	0.12%
1941	0.14%	-0.23%	0.46%	0.79%	0.14%	0.97%	0.22%	-0.05%	-0.01%	0.00%	-0.02%	0.53%	0.25%
1942	1.56%	1.14%	0.41%	0.10%	0.10%	0.17%	0.22%	0.37%	-1.04%	-0.31%	-0.02%	0.57%	0.27%
1943	0.74%	2.80%	2.43%	-0.51%	0.14%	0.16%	0.24%	-0.23%	-0.07%	0.56%	0.35%	0.20%	0.57%
1944	0.16%	-0.03%	0.05%	-0.03%	-0.31%	0.12%	0.15%	0.16%	0.18%	0.08%	0.02%	0.04%	0.05%
1945	0.02%	0.22%	0.28%	0.08%	1.57%	0.46%	0.19%	0.32%	0.12%	0.01%	0.00%	0.07%	0.28%
1946	0.08%	0.34%	0.57%	0.17%	-0.06%	0.02%	0.11%	-0.49%	-0.24%	-0.02%	0.00%	0.05%	0.04%
1947	0.00%	0.12%	0.14%	0.02%	0.31%	-0.21%	-0.16%	0.02%	-0.06%	-0.06%	-0.01%	-0.02%	0.01%
1948	0.03%	0.00%	0.17%	0.11%	-0.03%	0.00%	0.03%	0.21%	0.14%	0.05%	0.01%	0.11%	0.07%
1949	-0.01%	-0.04%	-0.03%	-0.07%	0.05%	0.00%	0.04%	0.03%	0.00%	0.00%	0.27%	0.30%	0.04%
1950	0.08%	0.15%	0.26%	0.91%	1.19%	0.33%	0.38%	3.01%	1.02%	0.01%	0.00%	0.17%	0.63%
1951	-0.27%	1.72%	0.23%	0.10%	0.18%	0.59%	0.22%	-0.40%	0.22%	0.27%	0.07%	0.10%	0.25%
1952	0.10%	-0.08%	1.35%	0.25%	0.16%	0.18%	0.18%	0.26%	-0.94%	-0.13%	-0.01%	0.67%	0.17%
1953	0.69%	0.17%	0.21%	0.08%	0.07%	0.05%	0.20%	0.29%	0.37%	0.15%	0.02%	0.29%	0.22%
1954	0.27%	0.99%	0.84%	0.41%	0.19%	0.18%	0.21%	-0.02%	-0.01%	-0.01%	0.00%	0.00%	0.25%
1955	-0.04%	-0.02%	0.59%	0.37%	0.06%	-0.05%	0.02%	0.14%	0.07%	0.01%	0.02%	0.02%	0.10%
1956	0.04%	0.04%	1.97%	0.07%	0.15%	0.22%	0.11%	0.43%	-0.57%	-0.24%	-0.02%	0.55%	0.23%
1957	-0.53%	-0.64%	-0.16%	0.10%	-0.17%	1.34%	0.19%	0.24%	0.06%	0.11%	0.09%	-0.28%	0.03%
1958	0.53%	0.63%	0.38%	0.20%	0.54%	0.16%	0.17%	0.27%	-1.15%	-0.21%	-0.01%	1.11%	0.22%
1959	1.06%	0.23%	0.04%	-0.21%	0.08%	0.01%	0.00%	-0.05%	-0.01%	-0.13%	-0.10%	-0.08%	0.07%
1960	-0.07%	0.11%	0.12%	0.11%	0.43%	0.21%	0.05%	0.38%	0.18%	0.00%	-0.05%	-0.05%	0.12%
1961	0.09%	0.00%	0.14%	0.17%	0.93%	0.24%	0.02%	0.05%	0.04%	0.01%	-0.02%	0.06%	0.14%
1962	0.18%	-0.17%	-0.13%	0.07%	-0.19%	0.07%	0.29%	0.14%	0.01%	-0.11%	-0.09%	0.01%	0.01%
1963	1.17%	0.54%	0.49%	0.30%	0.11%	-0.09%	0.37%	1.70%	0.27%	0.00%	0.01%	-0.26%	0.38%
1964	-0.11%	0.41%	0.12%	5.51%	2.29%	0.46%	0.03%	-0.48%	-0.08%	0.09%	0.02%	-0.10%	0.68%
1965	-0.01%	-0.01%	2.09%	0.19%	0.20%	-0.01%	0.53%	-0.01%	-0.31%	0.36%	0.30%	0.22%	0.29%
1966	0.19%	0.89%	0.65%	0.33%	0.19%	0.12%	0.19%	0.13%	-0.01%	-0.03%	0.00%	0.00%	0.22%
1967	0.01%	0.05%	0.91%	0.69%	0.71%	0.25%	0.20%	0.27%	-0.31%	0.04%	0.53%	1.13%	0.37%
1968	0.69%	0.16%	0.15%	0.05%	0.18%	0.41%	0.08%	0.28%	0.01%	-0.10%	-0.02%	-0.01%	0.16%
1969	-0.04%	-0.03%	0.37%	1.00%	0.12%	0.19%	0.22%	0.31%	-1.14%	-0.19%	-0.01%	1.48%	0.19%
1970	1.29%	0.29%	0.43%	0.02%	0.15%	0.20%	0.01%	0.18%	0.01%	0.08%	0.06%	0.01%	0.23%
1971	0.00%	0.23%	0.49%	0.18%	-0.05%	1.10%	0.01%	0.54%	0.29%	0.04%	-0.02%	0.27%	0.26%
1972	0.24%	0.08%	1.04%	0.96%	0.40%	0.24%	0.00%	-0.02%	-0.01%	0.00%	0.00%	0.00%	0.24%
1973	-0.06%	-0.14%	-0.67%	1.07%	0.25%	0.88%	0.16%	-0.34%	-0.08%	0.02%	0.00%	0.64%	0.14%
1974	1.34%	-4.76%	-0.22%	0.12%	0.18%	0.90%	0.24%	-0.19%	-0.25%	0.44%	0.31%	2.21%	0.03%
1975	1.71%	0.36%	0.21%	0.13%	0.23%	-3.01%	-0.05%	0.52%	-0.21%	-0.10%	0.39%	0.90%	0.09%
1976	-0.24%	-0.14%	0.14%	0.04%	-0.45%	0.46%	0.61%	0.14%	0.02%	-0.01%	-0.04%	0.05%	0.05%
1977	-0.14%	-0.20%	-0.10%	-0.12%	-0.07%	-0.01%	0.00%	-0.01%	0.00%	0.04%	0.03%	0.01%	-0.05%
1978	0.01%	0.04%	0.01%	0.14%	0.21%	0.25%	0.68%	0.32%	0.19%	0.06%	0.01%	0.18%	0.18%
1979	0.18%	-0.17%	0.08%	2.16%	0.62%	0.43%	0.12%	-0.16%	-0.05%	0.01%	0.00%	0.10%	0.28%
1980	0.05%	0.04%	0.78%	0.60%	1.42%	0.92%	0.48%	0.72%	0.53%	0.22%	0.03%	0.23%	0.50%
1981	0.23%	-0.04%	0.12%	1.20%	0.51%	0.81%	0.59%	0.45%	0.12%	-0.02%	0.01%	0.01%	0.33%
1982	0.03%	0.97%	-0.24%	1.22%	0.19%	0.15%	0.11%	0.27%	-0.68%	-0.19%	-0.01%	0.86%	0.22%
1983	1.45%	0.52%	-0.10%	0.08%	0.05%	0.01%	0.18%	0.25%	0.26%	-0.60%	0.55%	1.21%	0.32%
1984	0.60%	0.28%	0.08%	0.17%	0.23%	0.24%	0.01%	0.19%	0.16%	0.12%	0.04%	0.05%	0.18%
1985	0.08%	0.92%	0.40%	0.08%	0.16%	0.35%	0.24%	0.19%	0.00%	-0.05%	0.01%	0.02%	0.20%
1986	0.04%	0.04%	0.18%	0.55%	0.36%	0.21%	0.10%	-0.40%	-0.24%	-0.06%	0.34%	0.44%	0.13%
1987	0.23%	-0.05%	0.06%	-0.03%	1.14%	1.08%	0.01%	-0.05%	0.26%	0.21%	0.15%	0.12%	0.26%
1988	0.00%	-0.04%	0.33%	0.59%	0.14%	0.01%	0.26%	0.13%	-0.02%	0.00%	0.19%	0.20%	0.15%
1989	-0.05%	-0.04%	0.17%	0.18%	0.07%	0.05%	0.13%	0.02%	0.06%	0.05%	0.02%	0.03%	0.06%
1990	0.13%	0.37%	0.26%	0.03%	-0.03%	0.08%	0.05%	0.34%	0.11%	-0.09%	-0.03%	-0.02%	0.10%
1991	0.00%	-0.12%	-0.02%	0.08%	0.09%	0.40%	0.24%	0.18%	0.08%	2.35%	1.25%	-8.93%	-0.37%
AVG:	0.23%	0.12%	0.32%	0.39%	0.43%	0.28%	0.19%	0.17%	-0.06%	0.05%	0.08%	0.11%	0.19%
MIN:	-0.53%	-4.76%	-0.67%	-0.51%	-0.55%	-3.01%	-0.16%	-0.49%	-1.17%	-0.60%	-0.23%	-8.93%	-0.37%
MAX:	1.88%	2.80%	2.43%	5.51%	7.10%	3.71%	1.28%	3.01%	1.19%	2.35%	1.25%	2.21%	1.09%

Table 4.4.5-70 Simulated monthly average electrical conductivity (mS/cm) at Chipps Island, G-model results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	13.100	12.615	6.522	3.928	0.293	0.300	0.411	0.191	0.213	1.333	6.141	10.016	4.589
1923	11.529	10.990	0.537	0.297	0.776	2.097	0.650	0.823	2.561	5.167	8.124	10.785	4.528
1924	11.992	10.926	10.115	9.048	5.167	3.552	4.869	7.967	9.698	8.462	9.988	13.304	8.757
1925	14.018	12.749	9.185	6.929	0.185	0.262	0.509	1.140	2.815	5.886	9.144	11.860	6.224
1926	12.550	11.815	10.651	5.114	0.277	1.142	0.948	1.628	4.792	8.011	9.513	11.786	6.519
1927	13.099	4.618	2.578	0.674	0.180	0.193	0.193	0.334	1.577	3.379	6.338	10.368	3.628
1928	12.119	7.147	5.465	2.851	1.128	0.180	0.243	0.802	3.246	5.153	7.211	10.777	4.694
1929	12.063	10.323	8.523	8.476	5.230	3.714	4.847	6.209	7.106	9.105	10.730	12.471	8.233
1930	13.882	12.082	6.821	1.796	1.342	0.514	1.462	3.099	5.094	7.736	9.344	11.655	6.236
1931	12.948	11.287	9.160	7.362	5.691	6.021	6.685	8.155	9.617	8.510	10.004	13.313	9.063
1932	13.633	12.145	2.707	0.983	0.906	1.798	2.624	2.420	2.813	5.341	8.671	11.591	5.469
1933	13.137	11.981	8.904	5.787	4.187	3.716	3.525	5.232	7.165	9.124	10.250	11.835	7.904
1934	14.039	12.105	8.375	3.037	2.018	2.411	3.016	5.157	6.644	8.471	11.247	13.431	7.496
1935	13.761	11.755	10.108	0.966	1.303	0.880	0.189	0.284	1.256	3.972	7.687	11.440	5.300
1936	12.276	10.448	10.176	0.525	0.181	0.249	0.447	0.837	2.547	5.194	8.134	11.583	5.216
1937	12.917	10.582	9.851	8.842	0.244	0.190	0.292	0.653	2.010	4.599	7.915	11.545	5.803
1938	13.114	5.024	0.183	0.239	0.180	0.180	0.180	0.180	0.193	1.179	6.090	6.711	2.788
1939	3.310	4.977	6.678	5.071	4.774	3.621	3.219	3.470	5.572	8.268	9.778	12.010	5.896
1940	12.344	11.245	11.013	0.578	0.183	0.180	0.181	0.409	2.315	4.348	7.144	10.842	5.065
1941	12.451	10.427	0.286	0.180	0.180	0.180	0.180	0.191	0.647	2.808	6.431	7.754	3.476
1942	7.638	9.010	0.188	0.180	0.180	0.232	0.192	0.212	0.461	2.159	6.414	7.585	2.871
1943	6.972	5.785	1.140	0.180	0.182	0.180	0.232	0.479	1.841	3.609	6.437	10.453	3.124
1944	12.198	11.285	10.619	8.748	1.467	1.019	1.924	2.807	3.998	6.463	9.830	12.025	6.865
1945	11.281	9.965	6.647	5.536	0.234	0.411	1.209	1.588	2.704	4.920	8.032	11.031	5.297
1946	12.356	8.904	0.184	0.191	0.337	0.858	1.683	1.935	3.015	5.115	8.104	10.973	4.471
1947	11.872	10.205	7.161	6.773	3.735	1.811	2.188	3.304	4.927	7.227	9.424	11.503	6.677
1948	11.525	10.858	10.091	6.584	3.682	3.006	0.672	0.382	1.234	3.910	7.664	10.414	5.835
1949	11.392	10.423	8.441	7.210	6.139	0.259	0.871	2.346	3.808	6.555	8.950	11.391	6.482
1950	12.361	11.127	9.579	2.478	0.410	0.925	1.090	1.167	2.545	4.961	8.048	10.906	5.466
1951	11.950	0.237	0.180	0.181	0.181	0.262	0.835	0.822	2.176	4.228	7.005	10.737	3.233
1952	12.362	10.136	0.269	0.180	0.180	0.181	0.181	0.181	0.197	1.227	6.106	4.472	2.973
1953	2.522	4.927	0.268	0.180	0.273	0.951	0.994	0.578	0.963	2.319	5.837	6.803	2.218
1954	7.879	8.121	8.459	1.158	0.189	0.196	0.208	0.420	2.475	4.777	7.034	10.194	4.259
1955	11.351	9.227	3.495	2.084	2.385	3.731	3.159	3.026	4.522	6.987	9.572	12.248	5.982
1956	12.279	10.932	0.180	0.180	0.180	0.217	0.535	0.232	0.704	2.822	6.634	6.423	3.443
1957	5.583	7.657	9.839	8.248	0.685	0.209	0.493	1.076	2.494	4.225	7.067	10.667	4.853
1958	7.299	6.989	2.480	0.304	0.180	0.180	0.180	0.183	0.234	1.484	6.191	5.322	2.585
1959	3.233	5.434	8.940	0.800	0.187	0.387	1.987	3.767	4.210	5.246	7.975	10.419	4.382
1960	11.568	9.599	9.120	9.105	0.965	0.932	1.997	2.825	4.983	7.813	9.723	12.147	6.731
1961	12.503	10.599	7.451	6.128	0.700	1.100	2.567	3.678	5.423	7.691	8.923	10.682	6.454
1962	11.948	9.968	7.272	7.012	0.233	0.428	1.614	2.398	4.123	5.712	7.908	10.625	5.770
1963	1.073	2.279	1.601	2.351	0.183	0.268	0.180	0.219	1.175	3.466	6.717	10.178	2.474
1964	9.637	2.186	3.535	2.167	1.962	3.390	3.133	3.207	4.711	7.121	9.237	11.077	5.114
1965	11.944	10.110	0.182	0.180	0.227	0.634	0.210	0.361	2.055	3.443	5.838	10.146	3.777
1966	12.011	4.785	2.902	0.754	0.536	0.651	1.228	2.214	3.545	5.336	8.186	11.384	4.461
1967	11.255	9.536	0.405	0.195	0.189	0.184	0.184	0.184	0.192	0.943	5.046	4.131	2.704
1968	2.771	5.268	7.513	1.206	0.184	0.233	0.896	2.892	4.339	5.579	8.276	10.988	4.179
1969	11.368	10.118	2.902	0.180	0.180	0.181	0.182	0.181	0.212	1.384	6.158	4.733	3.148
1970	2.287	3.907	0.197	0.180	0.180	0.205	0.716	2.098	3.876	3.295	5.429	9.757	2.677
1971	11.635	8.211	0.191	0.195	0.320	0.226	0.457	0.381	1.190	2.488	5.474	6.731	3.125
1972	7.741	10.005	6.684	4.492	1.483	0.480	1.520	3.889	3.550	4.562	7.901	11.539	5.321
1973	12.186	5.967	1.100	0.180	0.180	0.183	0.479	1.028	2.128	3.922	7.000	10.434	3.732
1974	11.468	0.208	0.182	0.180	0.201	0.180	0.180	0.285	1.051	2.795	6.378	4.977	2.340
1975	3.899	6.437	7.751	6.690	0.188	0.180	0.252	0.315	0.707	2.536	6.235	5.847	3.420
1976	3.895	4.812	6.763	8.229	7.090	4.194	3.768	6.578	10.106	11.670	12.473	13.560	7.762
1977	13.869	12.961	10.026	9.187	8.409	7.624	7.065	8.269	9.686	8.520	10.045	13.333	9.916
1978	13.775	12.166	8.582	0.184	0.186	0.182	0.191	0.312	0.974	2.899	6.660	9.664	4.648
1979	11.058	11.654	10.511	1.809	0.197	0.252	0.736	1.268	2.203	4.412	7.846	11.428	5.281
1980	12.176	10.322	4.900	0.180	0.180	0.183	0.384	0.797	2.251	4.258	7.113	9.919	4.389
1981	11.229	11.674	9.231	1.973	0.614	0.379	0.787	2.477	5.519	8.080	9.609	11.497	6.089
1982	11.585	0.939	0.180	0.180	0.180	0.180	0.180	0.185	0.392	2.100	6.395	3.832	2.194
1983	0.715	0.239	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.242	1.340	0.879	0.390
1984	0.603	0.181	0.180	0.180	0.201	0.237	0.665	1.717	3.254	3.375	5.753	10.079	2.202
1985	11.520	1.451	1.169	3.708	4.075	3.030	2.513	2.806	4.960	7.750	9.670	10.798	5.288
1986	11.141	10.594	6.266	1.645	0.180	0.180	0.235	0.955	2.470	4.135	6.370	9.022	4.433
1987	10.933	11.407	10.363	8.918	3.116	0.826	1.650	3.656	5.576	7.643	10.136	12.796	7.252
1988	11.242	10.063	4.609	1.110	1.712	3.635	5.280	6.303	6.601	8.454	10.915	12.972	6.908
1989	13.631	12.189	10.615	8.316	6.324	0.275	0.566	1.996	4.802	7.750	9.280	10.896	7.220
1990	11.780	9.255	8.895	6.183	3.364	3.421	3.650	5.489	8.761	9.706	10.778	13.199	7.873
1991	13.193	12.758	10.502	9.660	8.420	0.830	1.239	3.592	7.172	10.329	11.064	12.484	8.437
AVG:	10.400	8.547	5.542	3.239	1.537	1.164	1.403	2.092	3.408	5.196	7.944	10.148	5.052
MIN:	0.603	0.181	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.242	1.340	0.879	0.390
MAX:	14.039	12.961	11.013	9.660	8.420	7.624	7.065	8.269	10.106	11.670	12.473	13.560	9.916

Table 4.4.5-71 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, G-model results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.53%	0.84%	0.64%	0.43%	0.28%	0.10%	0.19%	0.19%	0.01%	0.22%	0.29%
1923	0.39%	0.08%	1.38%	0.67%	0.80%	0.41%	0.34%	0.64%	0.22%	-0.02%	0.00%	0.37%	0.44%
1924	0.44%	-0.15%	-0.40%	-0.43%	0.21%	0.34%	1.39%	1.43%	-0.46%	0.83%	1.53%	0.58%	0.44%
1925	-0.24%	-0.62%	-0.85%	-0.88%	0.14%	0.17%	0.25%	0.37%	0.10%	-0.02%	-0.79%	-0.92%	-0.27%
1926	0.35%	-0.06%	-0.17%	-0.03%	0.04%	0.04%	1.79%	1.71%	0.52%	-0.01%	-0.41%	-0.45%	0.28%
1927	0.08%	2.53%	6.78%	3.10%	0.00%	0.02%	-0.12%	-0.65%	-1.41%	-0.17%	0.33%	0.31%	0.90%
1928	0.30%	1.34%	1.61%	1.19%	0.60%	0.00%	0.17%	0.12%	0.00%	0.10%	0.09%	0.06%	0.46%
1929	0.03%	0.12%	0.04%	-0.05%	1.91%	1.49%	0.23%	0.01%	-0.02%	0.00%	0.73%	0.85%	0.45%
1930	0.07%	0.13%	0.63%	-0.10%	1.18%	1.49%	0.09%	1.22%	0.33%	-0.37%	2.96%	3.34%	0.91%
1931	-0.16%	0.78%	0.36%	-1.89%	-3.48%	-3.02%	-1.21%	-0.25%	-0.07%	-0.42%	-0.40%	-0.15%	-0.83%
1932	0.03%	-0.26%	6.33%	3.26%	5.70%	2.67%	0.30%	0.53%	0.30%	0.04%	0.19%	0.20%	1.61%
1933	0.09%	0.03%	0.00%	3.16%	3.75%	1.91%	0.68%	0.09%	0.00%	0.00%	0.16%	0.18%	0.84%
1934	-0.21%	0.06%	-0.08%	-2.03%	-1.25%	-0.25%	-0.03%	0.01%	0.01%	0.00%	-0.01%	-0.01%	-0.32%
1935	-0.44%	-1.02%	-0.41%	3.31%	1.03%	2.08%	0.38%	-0.19%	3.23%	2.33%	0.44%	0.14%	0.91%
1936	1.24%	-0.20%	-1.33%	0.65%	0.04%	3.74%	2.50%	0.48%	-0.01%	-0.08%	-0.02%	0.32%	0.61%
1937	-0.16%	-0.71%	-0.43%	0.18%	1.46%	0.15%	0.40%	0.62%	0.11%	-0.07%	-0.01%	0.00%	0.13%
1938	0.00%	0.95%	-0.02%	0.12%	0.00%	0.00%	0.00%	0.00%	0.07%	0.17%	0.01%	0.97%	0.19%
1939	2.92%	1.45%	0.84%	0.98%	0.47%	1.28%	0.83%	-0.37%	-0.23%	0.03%	-0.01%	0.23%	0.70%
1940	-0.28%	-0.02%	0.26%	2.05%	0.12%	0.00%	0.00%	0.29%	-0.74%	-0.66%	-0.14%	0.17%	0.09%
1941	0.24%	-0.46%	0.38%	0.00%	0.00%	0.00%	0.00%	0.06%	0.06%	-0.04%	0.17%	1.06%	0.12%
1942	2.74%	2.22%	0.14%	0.00%	0.00%	0.14%	0.05%	0.20%	0.75%	0.34%	0.04%	0.91%	0.63%
1943	1.74%	3.57%	2.83%	0.00%	0.01%	0.00%	0.19%	0.31%	0.07%	0.16%	0.12%	0.24%	0.77%
1944	0.26%	0.00%	0.06%	-0.03%	0.77%	1.34%	0.80%	0.63%	0.68%	0.35%	0.10%	0.11%	0.42%
1945	0.03%	0.79%	1.25%	0.59%	1.26%	1.08%	0.49%	0.65%	0.31%	0.04%	0.01%	0.26%	0.56%
1946	0.31%	0.55%	0.05%	0.04%	-0.06%	0.04%	0.27%	1.16%	0.61%	0.08%	0.02%	0.55%	0.30%
1947	0.05%	0.43%	0.82%	0.24%	1.21%	-1.13%	-0.93%	0.07%	-0.22%	-0.27%	0.09%	-0.17%	0.02%
1948	-0.23%	0.06%	0.38%	0.32%	0.05%	0.10%	0.63%	0.75%	0.78%	0.33%	0.06%	0.59%	0.32%
1949	0.33%	0.45%	0.67%	0.11%	0.55%	-0.99%	-0.35%	0.09%	0.01%	0.00%	0.26%	0.42%	0.13%
1950	0.61%	0.42%	0.38%	3.90%	2.65%	0.78%	0.52%	9.76%	4.50%	0.26%	0.06%	0.20%	2.00%
1951	-1.43%	1.98%	0.00%	-0.01%	0.00%	1.31%	1.15%	0.70%	0.74%	0.58%	0.24%	0.28%	0.46%
1952	0.28%	-0.19%	1.31%	0.00%	0.00%	0.01%	0.02%	0.00%	0.09%	0.18%	0.01%	1.09%	0.23%
1953	1.73%	0.71%	0.42%	0.00%	0.08%	0.15%	0.61%	0.70%	1.08%	0.50%	0.07%	1.02%	0.59%
1954	1.05%	3.56%	3.33%	1.54%	0.04%	0.05%	0.10%	-0.02%	-0.05%	-0.01%	-0.01%	0.00%	0.80%
1955	0.13%	0.13%	2.48%	2.14%	0.54%	0.14%	-0.12%	0.30%	0.27%	0.05%	0.08%	0.08%	0.52%
1956	0.27%	0.25%	0.00%	0.00%	0.00%	0.13%	0.29%	0.34%	0.76%	0.35%	0.05%	1.01%	0.29%
1957	1.77%	1.00%	0.32%	0.35%	0.18%	0.42%	0.32%	0.69%	0.25%	0.11%	0.11%	-0.06%	0.46%
1958	2.61%	2.50%	1.50%	0.35%	0.00%	0.00%	0.00%	0.02%	0.25%	0.22%	0.02%	2.94%	0.87%
1959	3.30%	1.02%	0.25%	0.37%	0.02%	-0.01%	-0.03%	-0.13%	-0.16%	-0.53%	-0.43%	-0.54%	0.26%
1960	-0.52%	0.84%	1.08%	1.03%	2.64%	1.44%	0.49%	2.22%	1.22%	0.08%	-0.34%	-0.39%	0.82%
1961	0.49%	0.04%	0.63%	0.96%	4.84%	1.55%	0.13%	0.16%	0.21%	0.12%	-0.12%	0.17%	0.76%
1962	1.21%	-0.27%	-0.28%	0.54%	-0.33%	0.62%	1.93%	0.98%	0.10%	-0.76%	-0.68%	0.02%	0.26%
1963	4.82%	2.72%	2.23%	1.54%	-0.14%	-0.11%	0.00%	0.35%	0.38%	0.03%	0.03%	-0.99%	0.90%
1964	-0.49%	1.47%	0.59%	11.41%	5.53%	1.83%	1.06%	-2.13%	-0.59%	0.57%	0.02%	-0.29%	1.58%
1965	0.08%	-0.03%	0.04%	0.00%	0.15%	0.03%	0.30%	0.01%	-0.10%	0.20%	0.15%	0.39%	0.10%
1966	0.43%	5.00%	4.02%	1.30%	0.50%	0.35%	0.63%	0.52%	0.00%	-0.10%	-0.03%	0.01%	1.05%
1967	0.02%	0.33%	2.19%	0.13%	0.13%	0.02%	0.02%	0.02%	0.07%	0.87%	1.30%	1.97%	0.59%
1968	1.74%	0.67%	0.61%	0.17%	0.01%	0.57%	0.45%	1.60%	0.23%	-0.56%	-0.14%	-0.05%	0.44%
1969	-0.14%	-0.15%	1.80%	0.00%	0.00%	0.01%	0.01%	0.01%	0.19%	0.24%	0.02%	2.30%	0.36%
1970	2.74%	1.63%	0.19%	0.00%	0.00%	0.09%	0.05%	0.53%	0.10%	0.20%	0.21%	0.05%	0.48%
1971	0.02%	0.89%	0.11%	0.05%	-0.08%	0.79%	0.12%	0.98%	0.93%	0.13%	-0.08%	0.93%	0.40%
1972	0.94%	0.36%	3.80%	3.90%	1.61%	0.62%	0.03%	-0.09%	-0.03%	-0.01%	0.00%	0.00%	0.93%
1973	0.03%	0.99%	1.33%	0.01%	0.00%	0.04%	0.35%	0.46%	0.10%	-0.05%	-0.01%	2.09%	0.45%
1974	4.56%	-2.40%	-0.01%	0.00%	0.07%	0.00%	0.00%	0.26%	0.55%	0.68%	0.36%	4.18%	0.69%
1975	4.08%	1.30%	0.83%	0.57%	0.04%	0.00%	0.04%	0.80%	0.88%	0.32%	0.83%	1.88%	0.96%
1976	-2.07%	-1.28%	0.36%	0.14%	-0.84%	2.40%	3.02%	0.98%	0.15%	-0.03%	-0.74%	0.23%	0.19%
1977	-0.37%	-0.73%	-0.73%	-1.07%	-0.53%	-0.15%	-0.04%	-0.02%	-0.01%	0.09%	0.09%	0.04%	-0.29%
1978	0.09%	0.24%	0.13%	0.01%	0.03%	0.01%	0.18%	0.53%	0.70%	0.31%	0.04%	0.68%	0.25%
1979	0.76%	-1.23%	0.23%	11.91%	0.37%	0.74%	0.91%	0.39%	-0.01%	-0.06%	-0.01%	0.61%	1.22%
1980	0.40%	0.45%	4.73%	0.00%	0.00%	0.02%	0.35%	0.72%	0.83%	0.42%	0.09%	0.66%	0.72%
1981	0.74%	0.02%	0.40%	2.64%	1.13%	1.79%	2.58%	2.67%	0.91%	-0.05%	0.05%	0.07%	1.08%
1982	0.22%	6.24%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.02%	0.62%	0.34%	0.04%	1.51%	0.75%
1983	2.28%	0.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	1.05%	1.46%	0.46%
1984	1.26%	0.00%	0.00%	0.00%	0.09%	0.22%	0.04%	0.57%	0.88%	0.23%	-0.08%	0.10%	0.28%
1985	0.27%	2.96%	1.46%	0.37%	0.61%	1.39%	0.99%	0.67%	0.07%	-0.16%	0.02%	0.07%	0.73%
1986	0.14%	0.16%	0.66%	1.87%	0.00%	0.00%	0.09%	0.63%	0.70%	0.32%	0.77%	0.90%	0.52%
1987	0.47%	-0.02%	0.11%	-0.03%	3.22%	3.79%	0.42%	-0.19%	0.56%	0.50%	0.39%	0.33%	0.80%
1988	0.16%	0.06%	1.57%	3.05%	0.96%	0.07%	1.57%	0.94%	-0.05%	-0.02%	1.03%	1.21%	0.88%
1989	-0.15%	0.01%	1.34%	1.44%	0.64%	-0.13%	0.35%	0.14%	0.39%	0.38%	0.22%	0.45%	0.42%
1990	0.96%	1.94%	1.45%	0.26%	-0.11%	0.78%	0.59%	2.11%	0.84%	-0.44%	0.03%	0.14%	0.71%
1991	-0.17%	-0.90%	-0.29%	0.37%	0.53%	1.69%	1.94%	2.03%	1.01%	0.13%	1.81%	2.17%	0.86%
AVG:	0.65%	0.65%	0.89%	0.95%	0.60%	0.53%	0.44%	0.59%	0.35%	0.12%	0.17%	0.56%	0.54%
MIN:	-2.07%	-2.40%	-1.33%	-2.03%	-3.48%	-3.02%	-1.21%	-2.13%	-1.41%	-0.76%	-0.79%	-0.99%	-0.83%
MAX:	4.82%	6.24%	6.78%	11.91%	5.70%	3.79%	3.02%	9.76%	4.50%	2.33%	2.96%	4.18%	2.00%

Table 4.4.5-72 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, G-model results for Alternative 6 vs. Alternative 1, 2001 LOD.

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.45%	0.77%	0.60%	0.40%	0.27%	0.09%	-1.27%	-1.65%	-0.12%	1.01%	0.05%
1923	1.35%	0.05%	4.26%	2.06%	1.34%	0.44%	0.35%	0.76%	0.27%	-0.02%	-0.01%	0.93%	0.98%
1924	1.11%	-0.43%	-0.10%	-0.31%	-0.26%	0.22%	0.28%	0.12%	-0.09%	0.12%	0.17%	0.06%	0.07%
1925	-0.68%	-0.68%	-0.92%	-1.12%	0.01%	0.02%	0.21%	1.89%	0.76%	-0.06%	0.03%	0.48%	-0.01%
1926	0.06%	-0.02%	0.07%	-0.06%	1.43%	0.46%	0.25%	0.64%	0.26%	0.00%	-1.42%	-1.54%	0.01%
1927	0.02%	0.07%	4.28%	2.29%	0.00%	0.03%	0.05%	1.34%	-0.74%	2.72%	2.62%	1.72%	1.20%
1928	1.49%	4.13%	3.71%	1.72%	1.10%	0.00%	0.17%	0.12%	-0.01%	-0.02%	-0.02%	-0.05%	1.03%
1929	0.04%	0.80%	0.15%	-0.41%	1.79%	1.46%	0.23%	0.01%	-0.01%	0.00%	0.49%	0.56%	0.43%
1930	0.04%	0.29%	1.08%	1.12%	1.27%	0.80%	0.14%	0.14%	0.13%	0.04%	0.04%	0.04%	0.43%
1931	0.08%	0.33%	0.35%	0.15%	-0.46%	-0.29%	0.01%	-0.09%	-0.12%	0.07%	0.11%	0.04%	0.02%
1932	-0.11%	-0.12%	0.73%	0.79%	1.06%	0.53%	0.12%	0.49%	0.29%	0.04%	0.17%	0.17%	0.35%
1933	0.08%	0.33%	0.56%	1.78%	2.29%	1.14%	0.28%	0.03%	0.00%	0.00%	0.04%	0.05%	0.55%
1934	0.00%	0.04%	0.01%	0.01%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.32%	0.38%	0.06%
1935	-0.05%	0.05%	0.03%	0.35%	0.15%	-0.03%	0.04%	-0.01%	4.35%	2.87%	0.54%	0.17%	0.70%
1936	1.09%	-0.63%	-1.67%	7.97%	0.14%	4.29%	3.83%	-2.64%	-1.57%	-0.05%	-0.01%	0.55%	0.94%
1937	-0.20%	-1.07%	-0.63%	0.28%	1.51%	0.32%	0.59%	-2.08%	-0.80%	0.13%	0.03%	0.01%	-0.16%
1938	0.00%	-5.35%	-0.05%	0.18%	0.00%	0.00%	0.00%	0.00%	-0.53%	-1.38%	-0.09%	3.67%	-0.30%
1939	11.68%	5.81%	1.88%	3.30%	2.22%	0.62%	0.16%	0.22%	-0.02%	-0.13%	0.12%	0.22%	2.17%
1940	-0.36%	0.11%	0.01%	-0.13%	0.02%	0.00%	0.01%	-1.47%	0.71%	1.26%	0.26%	0.90%	0.11%
1941	1.03%	-1.22%	0.80%	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.11%	0.02%	-0.34%	3.10%	0.27%
1942	10.29%	8.27%	0.04%	0.00%	0.00%	0.14%	0.05%	0.21%	-4.96%	-2.94%	-0.33%	3.51%	1.19%
1943	4.46%	19.86%	15.83%	-0.01%	0.00%	0.00%	0.19%	-1.24%	-0.66%	4.06%	3.10%	1.63%	3.94%
1944	1.29%	-0.10%	0.38%	-0.13%	-2.86%	-0.72%	0.26%	0.57%	0.68%	0.36%	0.10%	0.21%	0.00%
1945	0.18%	0.90%	0.99%	0.17%	1.46%	1.00%	0.81%	1.58%	0.71%	0.09%	0.02%	0.29%	0.68%
1946	0.34%	2.18%	0.06%	0.04%	-0.14%	0.05%	0.49%	-4.49%	-2.70%	-0.36%	-0.08%	-0.27%	-0.41%
1947	0.00%	0.48%	0.27%	0.02%	1.02%	-0.02%	-0.29%	-0.01%	-0.21%	-0.19%	-0.21%	0.04%	0.07%
1948	0.47%	-0.02%	0.93%	0.69%	-0.22%	-0.12%	-0.43%	0.11%	0.18%	0.06%	0.01%	0.25%	0.16%
1949	-0.41%	-0.89%	-1.00%	-0.71%	-0.30%	0.85%	0.59%	0.14%	0.02%	0.00%	1.94%	2.24%	0.21%
1950	0.15%	0.85%	1.87%	2.69%	2.72%	1.49%	1.91%	9.92%	4.33%	0.23%	0.05%	1.27%	2.29%
1951	-0.42%	1.19%	0.00%	0.01%	0.00%	0.13%	0.29%	-2.89%	0.60%	1.57%	0.45%	0.58%	0.13%
1952	0.59%	-0.32%	2.00%	0.00%	0.00%	0.00%	-0.01%	0.00%	-0.56%	-1.22%	-0.08%	3.88%	0.36%
1953	3.73%	0.96%	0.17%	0.00%	0.09%	0.15%	0.61%	0.82%	1.26%	0.70%	0.16%	1.18%	0.82%
1954	1.22%	4.17%	3.89%	1.74%	0.04%	0.05%	0.10%	-0.02%	-0.05%	-0.05%	-0.04%	-0.01%	0.92%
1955	-0.46%	-0.31%	1.65%	0.82%	0.01%	-0.47%	0.24%	0.72%	0.30%	0.05%	0.12%	0.13%	0.23%
1956	0.05%	0.08%	0.01%	0.00%	0.00%	0.14%	0.30%	0.36%	-3.67%	-2.41%	-0.34%	3.21%	-0.19%
1957	-5.51%	-6.58%	-2.11%	0.15%	-1.07%	0.90%	0.74%	0.81%	0.28%	0.76%	0.65%	-2.20%	-1.10%
1958	0.97%	2.76%	1.59%	0.35%	0.00%	0.00%	0.00%	0.02%	-1.89%	-1.91%	-0.15%	5.36%	0.59%
1959	5.33%	1.35%	0.33%	-1.47%	0.00%	0.06%	0.02%	-0.22%	0.02%	-0.40%	-0.43%	-0.12%	0.37%
1960	-0.04%	-0.17%	-0.17%	-0.20%	0.11%	-0.03%	-0.05%	0.42%	0.27%	0.05%	0.00%	-0.01%	0.02%
1961	0.13%	0.02%	0.36%	0.40%	0.61%	0.28%	0.08%	0.18%	0.08%	-0.01%	-0.02%	0.25%	0.20%
1962	0.14%	-0.94%	-0.83%	-0.14%	-0.02%	-0.31%	0.00%	0.10%	0.01%	-0.01%	-0.01%	0.01%	-0.17%
1963	2.60%	1.59%	1.28%	0.73%	0.11%	-0.11%	0.00%	1.79%	1.78%	-0.02%	0.03%	-0.99%	0.73%
1964	-0.53%	1.30%	0.53%	30.26%	14.81%	2.45%	-0.47%	-1.17%	-0.26%	0.03%	0.14%	-0.50%	3.88%
1965	-0.22%	-0.03%	0.10%	0.00%	0.15%	0.00%	0.26%	0.01%	-2.09%	2.30%	2.50%	1.55%	0.37%
1966	1.33%	1.40%	1.26%	0.91%	0.51%	0.32%	0.61%	0.49%	0.00%	-0.10%	-0.02%	0.02%	0.56%
1967	0.02%	0.04%	1.67%	0.26%	0.13%	0.02%	0.02%	0.02%	-0.17%	-0.70%	2.79%	6.91%	0.92%
1968	4.00%	0.93%	0.66%	0.32%	0.01%	0.16%	0.11%	0.34%	0.04%	-0.13%	-0.03%	-0.01%	0.53%
1969	-0.22%	-0.14%	0.72%	0.00%	0.00%	0.01%	0.01%	0.00%	-1.23%	-1.74%	-0.13%	9.04%	0.53%
1970	7.72%	1.09%	0.10%	0.00%	0.00%	0.09%	0.05%	0.67%	0.12%	0.35%	0.34%	0.08%	0.88%
1971	0.03%	0.83%	0.11%	0.05%	-0.07%	0.85%	0.13%	1.09%	1.07%	0.28%	-0.01%	1.09%	0.45%
1972	1.06%	0.38%	4.04%	4.10%	1.65%	0.62%	0.03%	-0.10%	-0.03%	-0.01%	0.00%	0.00%	0.98%
1973	-0.57%	-2.21%	-5.49%	0.01%	0.00%	0.06%	0.47%	-2.50%	-0.84%	0.17%	0.03%	2.97%	-0.66%
1974	6.55%	-2.04%	-0.01%	0.00%	0.07%	0.00%	0.00%	-0.69%	-2.13%	2.40%	2.38%	13.12%	1.64%
1975	10.81%	2.56%	1.19%	0.71%	0.04%	-0.01%	-0.23%	0.85%	-1.83%	-1.19%	2.17%	5.25%	1.69%
1976	1.23%	0.12%	0.69%	0.24%	-2.50%	0.37%	1.74%	0.37%	0.10%	0.04%	0.56%	0.17%	0.26%
1977	-0.69%	-0.95%	-0.13%	0.16%	-0.08%	-0.01%	0.00%	-0.04%	-0.01%	0.19%	0.17%	0.07%	-0.11%
1978	0.02%	0.11%	0.01%	0.01%	0.02%	0.01%	0.11%	0.50%	0.52%	0.19%	0.03%	0.69%	0.18%
1979	0.77%	0.19%	0.24%	3.08%	0.14%	0.21%	-0.10%	-1.36%	-0.40%	0.11%	0.02%	0.13%	0.25%
1980	-0.02%	-0.19%	0.81%	0.00%	0.00%	0.07%	1.56%	3.54%	3.23%	1.47%	0.30%	1.18%	1.00%
1981	1.28%	-0.14%	0.48%	5.88%	2.08%	1.44%	1.01%	0.62%	0.18%	-0.03%	0.01%	0.02%	1.07%
1982	-0.01%	-0.12%	0.00%	0.01%	0.00%	0.00%	0.00%	0.03%	-3.03%	-1.97%	-0.21%	4.81%	-0.04%
1983	6.43%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.22%	2.33%	6.08%	1.19%
1984	2.21%	0.00%	0.00%	0.00%	0.09%	0.22%	0.04%	0.71%	0.34%	0.70%	0.50%	0.32%	0.43%
1985	0.42%	3.22%	1.53%	0.37%	0.61%	1.23%	0.89%	0.76%	0.08%	-0.20%	0.03%	0.08%	0.75%
1986	0.15%	0.17%	0.68%	1.93%	0.00%	0.00%	0.08%	-2.93%	-2.64%	-0.91%	1.82%	2.83%	0.10%
1987	1.70%	-0.15%	0.39%	-0.09%	4.89%	3.37%	-0.01%	-0.19%	1.44%	1.33%	0.93%	0.74%	1.20%
1988	-0.09%	-0.37%	0.73%	0.93%	0.21%	0.01%	0.25%	0.15%	-0.01%	0.00%	0.36%	0.42%	0.22%
1989	-0.11%	-0.37%	-0.20%	-0.04%	0.00%	0.25%	0.29%	0.06%	0.02%	0.04%	-0.04%	-0.22%	-0.03%
1990	-0.01%	0.81%	0.74%	0.19%	-0.01%	-0.29%	-0.22%	0.32%	0.15%	-0.13%	-0.33%	-0.32%	0.08%
1991	0.19%	0.06%	0.08%	0.24%	0.13%	0.75%	-0.27%	-0.76%	-0.42%	-0.09%	-0.19%	-0.21%	-0.04%
AVG:	1.22%	0.64%	0.76%	1.08%	0.55%	0.37%	0.27%	0.13%	-0.15%	0.05%	0.35%	1.27%	0.55%
MIN:	-5.51%	-6.58%	-5.49%	-1.47%	-2.86%	-0.72%	-0.47%	-4.49%	-4.96%	-2.94%	-1.42%	-2.20%	-1.10%
MAX:	11.68%	19.86%	15.83%	30.26%	14.81%	4.29%	3.83%	9.92%	4.35%	4.06%	3.10%	13.12%	3.94%

Table 4.4.5-73 Simulated monthly average electrical conductivity (mS/cm) at Collinsville, G-model results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.696	7.165	1.883	1.080	0.150	0.151	0.154	0.150	0.150	0.429	3.686	6.591	2.440
1923	7.214	6.072	0.152	0.151	0.196	0.584	0.161	0.197	0.865	2.392	4.749	6.793	2.460
1924	7.412	5.821	5.224	4.270	1.461	0.966	2.036	4.610	5.602	3.959	5.800	8.962	4.677
1925	8.956	7.227	3.873	2.676	0.150	0.151	0.160	0.260	0.943	3.063	5.613	7.782	3.404
1926	7.707	6.643	5.479	1.279	0.150	0.340	0.188	0.423	2.370	4.644	5.474	7.516	3.518
1927	8.267	0.928	0.606	0.162	0.150	0.150	0.150	0.152	0.447	1.151	3.452	6.842	1.871
1928	7.755	2.440	2.002	0.570	0.212	0.150	0.150	0.197	1.379	2.148	3.901	7.005	2.326
1929	7.516	5.224	3.831	4.128	1.527	1.062	1.966	2.849	3.416	5.219	6.373	7.915	4.252
1930	8.913	6.535	2.168	0.277	0.277	0.156	0.404	0.984	2.324	4.281	5.320	7.415	3.254
1931	8.132	5.978	4.180	2.988	2.002	2.578	3.012	4.355	5.409	3.982	5.803	8.963	4.782
1932	8.507	6.675	0.370	0.199	0.196	0.464	0.709	0.573	0.795	2.617	5.205	7.630	2.828
1933	8.462	6.696	3.809	1.872	1.229	1.112	1.041	2.366	3.633	5.269	5.845	7.340	4.056
1934	9.268	6.538	3.364	0.542	0.440	0.615	0.889	2.394	3.143	4.743	7.148	8.902	3.999
1935	8.563	6.211	4.941	0.166	0.330	0.182	0.150	0.151	0.326	1.716	4.589	7.751	2.923
1936	7.589	5.330	5.376	0.152	0.150	0.150	0.156	0.197	0.864	2.414	4.754	7.729	2.905
1937	8.251	5.294	5.046	4.101	0.150	0.150	0.151	0.174	0.587	2.050	4.668	7.777	3.200
1938	8.514	1.108	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.380	3.672	3.026	1.479
1939	0.739	2.320	3.137	1.710	1.712	0.974	0.912	1.057	2.681	4.687	5.663	7.670	2.772
1940	7.336	6.075	5.982	0.153	0.150	0.150	0.150	0.159	0.766	1.732	3.986	7.143	2.815
1941	7.965	5.248	0.150	0.150	0.150	0.150	0.150	0.150	0.188	1.000	3.609	3.945	1.904
1942	3.650	4.933	0.150	0.150	0.150	0.150	0.150	0.150	0.159	0.721	3.760	3.782	1.492
1943	3.095	2.114	0.190	0.150	0.150	0.150	0.150	0.158	0.552	1.258	3.496	6.906	1.531
1944	7.816	6.218	5.656	3.882	0.211	0.220	0.488	0.807	1.474	3.336	6.208	7.731	3.671
1945	6.259	5.003	2.292	2.064	0.150	0.156	0.278	0.336	0.839	2.188	4.701	7.113	2.615
1946	7.764	3.792	0.150	0.150	0.152	0.204	0.398	0.430	0.978	2.287	4.724	7.015	2.337
1947	7.221	5.124	2.689	2.931	0.865	0.343	0.555	1.079	2.093	3.839	5.522	7.222	3.290
1948	6.596	5.874	5.133	2.249	0.907	0.788	0.161	0.153	0.315	1.678	4.580	6.545	2.915
1949	6.868	5.455	3.727	3.016	2.352	0.150	0.245	0.630	1.433	3.453	5.194	7.270	3.316
1950	7.574	5.964	4.599	0.363	0.152	0.226	0.220	0.245	0.806	2.239	4.713	6.962	2.839
1951	7.334	0.150	0.150	0.150	0.150	0.151	0.204	0.182	0.694	1.651	3.884	7.061	1.813
1952	7.897	4.977	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.395	3.676	1.307	1.609
1953	0.559	2.392	0.150	0.150	0.151	0.221	0.206	0.161	0.221	0.684	3.211	3.112	0.935
1954	4.174	3.893	4.355	0.181	0.150	0.150	0.150	0.156	0.970	1.963	3.820	6.389	2.196
1955	6.881	4.285	0.676	0.441	0.604	1.362	0.804	0.861	1.829	3.698	5.761	8.051	2.938
1956	7.254	5.779	0.150	0.150	0.150	0.150	0.164	0.150	0.195	1.003	3.826	2.648	1.802
1957	2.174	4.093	5.807	3.698	0.157	0.150	0.163	0.234	0.785	1.628	3.934	6.961	2.482
1958	2.767	3.245	0.402	0.150	0.150	0.150	0.150	0.150	0.150	0.478	3.699	1.859	1.113
1959	0.809	2.662	5.435	0.161	0.150	0.156	0.618	1.344	1.471	2.199	4.544	6.386	2.161
1960	7.033	4.566	4.601	4.532	0.168	0.217	0.515	0.811	2.295	4.379	5.730	7.863	3.559
1961	7.499	5.375	2.816	2.351	0.159	0.269	0.757	1.264	2.453	4.166	4.858	6.439	3.200
1962	7.256	4.863	2.822	3.094	0.150	0.158	0.420	0.610	1.690	2.517	4.408	6.618	2.884
1963	0.173	0.882	0.277	0.732	0.150	0.151	0.150	0.150	0.323	1.284	3.775	6.516	1.214
1964	5.039	0.312	1.526	0.391	0.480	1.157	0.829	0.952	1.946	3.782	5.346	6.798	2.380
1965	7.179	4.988	0.150	0.150	0.150	0.173	0.150	0.153	0.708	1.076	3.027	6.710	2.051
1966	7.709	1.064	0.736	0.166	0.160	0.170	0.277	0.587	1.237	2.381	4.746	7.461	2.224
1967	6.411	4.639	0.151	0.150	0.150	0.150	0.150	0.150	0.150	0.279	2.734	1.191	1.359
1968	0.679	2.610	3.926	0.190	0.150	0.150	0.228	1.003	1.644	2.460	4.765	6.955	2.063
1969	6.635	5.155	0.455	0.150	0.150	0.150	0.150	0.150	0.150	0.446	3.690	1.463	1.562
1970	0.459	1.593	0.150	0.150	0.150	0.150	0.194	0.575	1.484	0.863	2.715	6.364	1.237
1971	7.398	3.349	0.150	0.150	0.152	0.150	0.159	0.152	0.306	0.687	2.884	3.098	1.553
1972	4.050	5.922	2.367	1.372	0.242	0.155	0.427	1.536	1.004	1.849	4.620	7.762	2.609
1973	7.435	1.668	0.188	0.150	0.150	0.150	0.165	0.219	0.602	1.485	3.933	6.719	1.905
1974	6.959	0.150	0.150	0.150	0.150	0.150	0.150	0.151	0.249	0.932	3.595	1.581	1.197
1975	1.221	3.353	3.903	2.777	0.150	0.150	0.151	0.151	0.184	0.870	3.463	2.251	1.552
1976	1.093	1.944	3.368	4.387	2.963	1.120	1.178	3.555	6.438	7.294	7.643	8.540	4.127
1977	8.508	7.399	4.564	4.485	3.838	3.423	3.025	4.364	5.418	3.980	5.836	8.975	5.318
1978	8.662	6.660	3.461	0.150	0.150	0.150	0.150	0.151	0.233	1.023	3.831	5.959	2.548
1979	6.739	6.871	5.450	0.241	0.150	0.150	0.190	0.268	0.600	1.898	4.632	7.662	2.904
1980	7.463	5.216	1.204	0.150	0.150	0.150	0.155	0.187	0.710	1.679	3.975	6.075	2.259
1981	6.829	6.833	4.185	0.277	0.162	0.152	0.195	0.809	2.772	4.552	5.526	7.141	3.286
1982	6.636	0.164	0.150	0.150	0.150	0.150	0.150	0.150	0.155	0.701	3.755	0.935	1.104
1983	0.164	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.371	0.180	0.172
1984	0.164	0.150	0.150	0.150	0.150	0.150	0.182	0.421	1.121	0.964	2.956	6.654	1.101
1985	7.160	0.199	0.265	1.600	1.290	0.781	0.591	0.783	2.267	4.323	5.685	6.342	2.607
1986	6.368	5.641	1.968	0.258	0.150	0.150	0.150	0.227	0.758	1.582	3.226	5.317	2.150
1987	6.708	6.652	5.371	4.152	0.546	0.175	0.432	1.373	2.560	4.100	6.199	8.485	3.896
1988	5.977	5.161	1.047	0.198	0.433	1.363	2.290	2.876	2.922	4.693	6.757	8.461	3.515
1989	8.524	6.711	5.339	3.503	2.335	0.150	0.172	0.560	2.277	4.376	5.267	6.576	3.816
1990	7.023	4.200	4.445	2.066	0.802	1.048	1.129	2.572	5.266	5.423	6.349	8.625	4.079
1991	7.953	7.435	5.044	4.859	3.739	0.162	0.309	1.417	4.169	6.576	6.536	7.820	4.668
AVG:	6.151	4.334	2.487	1.291	0.541	0.407	0.477	0.820	1.506	2.505	4.591	6.265	2.615
MIN:	0.164	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.371	0.180	0.172
MAX:	9.268	7.435	5.982	4.859	3.838	3.423	3.025	4.610	6.438	7.294	7.643	8.975	5.318

Table 4.4.5-74 Difference in simulated monthly average electrical conductivity (%) at Collinsville, G-model results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	1.13%	1.31%	0.01%	0.02%	0.03%	0.00%	0.00%	0.19%	0.01%	0.40%	0.26%
1923	0.64%	-0.01%	0.08%	0.02%	0.52%	0.53%	0.07%	0.45%	0.21%	-0.07%	-0.01%	0.68%	0.26%
1924	0.66%	-0.48%	-0.70%	-0.68%	0.70%	0.47%	2.72%	2.13%	-1.39%	1.98%	2.29%	0.52%	0.69%
1925	-0.76%	-1.13%	-1.47%	-1.25%	0.00%	0.00%	0.06%	0.39%	0.08%	-0.04%	-1.47%	-1.36%	-0.58%
1926	0.99%	-0.28%	-0.16%	-0.12%	0.00%	0.03%	1.08%	2.33%	0.54%	-0.14%	-0.81%	-0.65%	0.23%
1927	0.31%	5.07%	11.42%	0.50%	0.00%	0.00%	0.00%	-0.05%	-2.19%	0.18%	0.55%	0.48%	1.36%
1928	0.41%	2.70%	2.40%	1.48%	0.35%	0.00%	0.00%	0.05%	-0.01%	0.21%	0.12%	0.08%	0.65%
1929	0.03%	0.22%	0.00%	-0.10%	4.02%	1.79%	0.04%	-0.07%	-0.04%	-0.01%	1.39%	1.23%	0.71%
1930	-0.18%	0.17%	1.12%	-0.31%	1.57%	0.19%	-0.16%	2.54%	0.05%	-0.71%	5.82%	4.86%	1.25%
1931	-1.50%	1.52%	-0.17%	-3.70%	-6.14%	-4.27%	-1.15%	0.02%	0.02%	-0.79%	-0.53%	-0.12%	-1.40%
1932	0.15%	-0.51%	9.90%	1.37%	4.08%	2.79%	0.16%	0.89%	0.36%	0.01%	0.34%	0.28%	1.65%
1933	0.09%	0.00%	-0.02%	6.66%	5.61%	2.42%	0.63%	-0.02%	-0.04%	-0.01%	0.31%	0.26%	1.32%
1934	-0.44%	0.22%	-0.29%	-3.39%	-1.29%	-0.19%	0.00%	0.02%	0.01%	0.00%	-0.02%	-0.02%	-0.45%
1935	-0.80%	-1.75%	-0.24%	1.01%	0.78%	1.10%	0.00%	-0.01%	5.15%	3.25%	0.29%	0.06%	0.74%
1936	2.23%	-1.11%	-2.29%	0.05%	0.00%	0.11%	0.28%	0.26%	-0.12%	-0.13%	-0.02%	0.57%	-0.01%
1937	-0.41%	-1.29%	-0.51%	0.61%	0.00%	0.00%	0.02%	0.26%	0.02%	-0.12%	-0.01%	0.00%	-0.12%
1938	0.00%	1.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	0.00%	1.98%	0.34%
1939	5.07%	1.63%	1.22%	1.53%	0.50%	2.39%	0.98%	-0.95%	-0.25%	0.10%	-0.01%	0.42%	1.05%
1940	-0.65%	0.14%	0.44%	0.14%	0.00%	0.00%	0.00%	0.07%	-1.55%	-0.98%	-0.09%	0.37%	-0.17%
1941	0.38%	-1.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.06%	0.33%	2.05%	0.14%
1942	4.96%	3.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	0.40%	0.02%	1.82%	0.87%
1943	3.01%	6.54%	1.19%	0.00%	0.00%	0.00%	0.00%	0.05%	0.06%	0.32%	0.17%	0.41%	0.98%
1944	0.38%	-0.11%	0.11%	-0.13%	0.61%	1.13%	1.01%	1.03%	1.13%	0.44%	0.07%	0.15%	0.48%
1945	-0.01%	1.56%	2.04%	0.60%	0.00%	0.17%	0.45%	0.88%	0.35%	0.01%	0.00%	0.47%	0.54%
1946	0.46%	0.98%	0.00%	0.00%	-0.01%	0.05%	0.40%	1.86%	0.72%	0.03%	0.00%	1.00%	0.46%
1947	-0.14%	0.91%	1.29%	0.14%	2.25%	-2.07%	-1.05%	0.32%	-0.49%	-0.40%	0.25%	-0.33%	0.06%
1948	-0.33%	0.19%	0.75%	0.42%	-0.02%	0.18%	0.14%	0.06%	0.95%	0.43%	0.04%	1.07%	0.32%
1949	0.36%	0.78%	1.01%	-0.09%	1.08%	0.00%	-0.14%	0.14%	0.00%	0.00%	0.50%	0.66%	0.36%
1950	0.98%	0.50%	0.56%	5.62%	0.15%	0.49%	0.43%	11.35%	4.96%	-0.26%	-0.03%	0.32%	2.09%
1951	-2.75%	0.00%	0.00%	0.00%	0.00%	0.05%	0.63%	0.35%	1.19%	0.93%	0.27%	0.43%	0.09%
1952	0.40%	-0.52%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.01%	2.24%	0.19%
1953	2.56%	0.80%	0.00%	0.00%	0.01%	0.12%	0.47%	0.15%	0.95%	0.60%	0.04%	2.06%	0.65%
1954	1.52%	6.83%	4.62%	0.41%	0.00%	0.00%	0.00%	-0.01%	-0.07%	-0.02%	-0.01%	0.00%	1.11%
1955	0.24%	0.19%	4.64%	2.46%	0.47%	0.16%	-0.29%	0.67%	0.37%	0.02%	0.14%	0.11%	0.77%
1956	0.48%	0.34%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	0.51%	0.44%	0.03%	2.07%	0.33%
1957	3.01%	1.21%	0.22%	0.51%	0.01%	0.00%	0.06%	0.71%	0.21%	0.20%	0.16%	-0.14%	0.51%
1958	5.58%	3.35%	1.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.22%	0.01%	6.18%	1.40%
1959	4.72%	0.96%	0.12%	0.06%	0.00%	0.00%	-0.04%	-0.27%	-0.25%	-1.02%	-0.58%	-0.86%	0.24%
1960	-0.72%	1.99%	1.62%	1.58%	0.76%	1.06%	0.51%	4.29%	1.43%	-0.16%	-0.72%	-0.58%	0.92%
1961	1.07%	-0.21%	1.46%	1.39%	0.86%	1.08%	0.06%	0.29%	0.35%	0.15%	-0.28%	0.37%	0.55%
1962	2.18%	-1.20%	-0.17%	1.00%	0.00%	0.16%	2.96%	1.16%	0.01%	-1.57%	-0.95%	0.27%	0.32%
1963	1.86%	3.80%	2.30%	2.35%	0.00%	0.00%	0.00%	0.00%	0.29%	0.03%	0.04%	-1.83%	0.74%
1964	-0.48%	2.00%	0.60%	18.92%	5.28%	2.71%	1.28%	-4.42%	-0.10%	1.11%	-0.10%	-0.54%	2.19%
1965	0.26%	-0.14%	0.00%	0.00%	0.00%	-0.01%	0.00%	-0.01%	-0.13%	0.43%	0.20%	0.67%	0.11%
1966	0.64%	10.19%	4.78%	0.26%	0.10%	0.12%	0.75%	0.74%	-0.15%	-0.18%	-0.02%	0.03%	1.44%
1967	0.03%	0.65%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.12%	2.27%	3.50%	0.63%
1968	2.47%	0.74%	0.99%	0.01%	0.00%	0.01%	0.25%	3.19%	-0.28%	-0.97%	-0.12%	-0.02%	0.52%
1969	-0.24%	-0.21%	3.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.01%	4.79%	0.64%
1970	3.51%	2.43%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	-0.05%	0.43%	0.28%	0.04%	0.64%
1971	0.01%	1.86%	0.00%	0.00%	-0.01%	0.00%	-0.02%	0.07%	1.03%	0.01%	-0.14%	1.91%	0.39%
1972	1.35%	0.34%	7.89%	5.42%	0.96%	0.07%	-0.08%	-0.15%	-0.04%	-0.01%	0.00%	0.00%	1.31%
1973	0.06%	2.06%	0.62%	0.00%	0.00%	0.00%	0.10%	0.40%	0.03%	-0.09%	-0.01%	3.85%	0.58%
1974	7.72%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.56%	1.16%	0.47%	8.71%	1.55%
1975	5.80%	1.22%	1.11%	0.67%	0.00%	0.00%	0.00%	0.03%	0.46%	0.38%	1.55%	3.49%	1.23%
1976	-5.00%	-1.21%	0.94%	0.20%	-1.79%	5.51%	4.51%	0.96%	-0.07%	-0.17%	-1.39%	0.72%	0.27%
1977	-0.83%	-1.05%	-1.24%	-1.57%	-0.51%	-0.03%	0.01%	-0.02%	-0.01%	0.19%	0.13%	0.03%	-0.41%
1978	0.15%	0.41%	0.11%	0.00%	0.00%	0.00%	0.00%	0.03%	0.66%	0.38%	0.02%	1.25%	0.25%
1979	1.12%	-2.61%	1.15%	12.27%	0.00%	0.01%	0.49%	0.36%	-0.11%	-0.10%	-0.01%	1.09%	1.14%
1980	0.50%	0.77%	9.50%	0.00%	0.00%	0.00%	0.05%	0.43%	1.36%	0.57%	0.05%	1.21%	1.20%
1981	1.09%	-0.25%	0.80%	2.93%	0.20%	0.13%	1.71%	4.42%	0.94%	-0.32%	0.06%	0.09%	0.98%
1982	0.40%	1.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.39%	0.02%	3.01%	0.46%
1983	0.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	1.53%	0.68%	0.23%
1984	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.98%	1.50%	0.13%	-0.16%	0.20%	0.25%
1985	0.47%	1.93%	1.20%	0.41%	1.14%	2.38%	1.27%	1.03%	-0.12%	-0.30%	0.08%	0.12%	0.80%
1986	0.24%	0.23%	1.29%	1.85%	0.00%	0.00%	0.00%	0.60%	1.13%	0.41%	1.43%	1.39%	0.72%
1987	0.55%	-0.27%	0.21%	-0.18%	5.86%	1.38%	-0.08%	-0.28%	1.15%	0.72%	0.57%	0.42%	0.84%
1988	0.14%	0.03%	3.15%	1.84%	0.86%	0.00%	3.18%	1.08%	-0.37%	-0.05%	1.92%	1.77%	1.13%
1989	-0.73%	0.05%	2.52%	2.16%	0.55%	0.00%	0.18%	0.09%	0.77%	0.57%	0.29%	0.75%	0.60%
1990	1.59%	3.45%	1.80%	-0.25%	-0.28%	1.59%	0.79%	4.06%	0.73%	-1.06%	0.12%	0.23%	1.06%
1991	-0.35%	-1.61%	-0.07%	0.78%	0.97%	0.37%	2.48%	3.43%	1.28%	-0.09%	3.35%	3.13%	1.14%
AVG:	0.82%	0.87%	1.22%	0.96%	0.43%	0.35%	0.39%	0.71%	0.34%	0.13%	0.29%	1.01%	0.63%
MIN:	-5.00%	-2.61%	-2.29%	-3.70%	-6.14%	-4.27%	-1.15%	-4.42%	-2.19%	-1.57%	-1.47%	-1.83%	-1.40%
MAX:	7.72%	10.19%	11.42%	18.92%	5.86%	5.51%	4.51%	11.35%	5.15%	3.25%	5.82%	8.71%	2.19%

Table 4.4.5-75 Difference in simulated monthly average electrical conductivity (%) at Collinsville, G-model results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.96%	1.23%	0.01%	0.02%	0.03%	0.00%	-0.01%	-1.65%	-0.05%	1.89%	0.20%
1923	2.11%	-0.44%	0.26%	0.06%	0.76%	0.55%	0.07%	0.54%	0.25%	-0.08%	-0.01%	1.72%	0.48%
1924	1.67%	-1.33%	0.06%	-0.74%	-0.15%	0.40%	0.52%	0.11%	-0.20%	0.27%	0.25%	0.06%	0.08%
1925	-1.27%	-0.97%	-1.59%	-1.61%	0.00%	0.00%	0.05%	2.25%	0.75%	-0.21%	0.05%	0.84%	-0.14%
1926	-0.09%	-0.01%	0.07%	-0.11%	0.01%	0.25%	0.15%	0.97%	0.30%	-0.06%	-2.71%	-2.21%	-0.29%
1927	0.60%	0.15%	8.21%	0.36%	0.00%	0.00%	0.00%	0.12%	-1.82%	6.15%	3.71%	2.40%	1.66%
1928	1.97%	8.02%	4.85%	1.71%	0.71%	0.00%	0.00%	0.05%	-0.02%	-0.05%	-0.02%	-0.08%	1.43%
1929	0.10%	1.58%	-0.19%	-0.79%	3.90%	1.79%	0.04%	-0.07%	-0.04%	-0.01%	0.93%	0.82%	0.67%
1930	-0.13%	0.51%	1.99%	0.98%	1.41%	0.09%	0.08%	0.28%	0.18%	0.04%	0.07%	0.05%	0.46%
1931	0.13%	0.60%	0.52%	0.11%	-1.02%	-0.32%	0.11%	-0.16%	-0.19%	0.19%	0.18%	0.04%	0.02%
1932	-0.23%	-0.17%	1.12%	0.46%	0.69%	0.62%	0.11%	0.86%	0.35%	0.01%	0.30%	0.25%	0.36%
1933	0.08%	0.60%	0.93%	3.39%	3.58%	1.32%	0.19%	-0.02%	-0.02%	-0.01%	0.08%	0.07%	0.85%
1934	-0.01%	0.07%	-0.01%	0.03%	-0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.58%	0.55%	0.10%
1935	-0.23%	0.12%	-0.03%	0.10%	0.12%	-0.02%	0.00%	0.00%	6.70%	3.97%	0.36%	0.07%	0.93%
1936	1.92%	-1.88%	-2.72%	0.49%	0.00%	0.12%	0.51%	-2.18%	-1.74%	0.15%	0.02%	0.99%	-0.36%
1937	-0.57%	-1.94%	-0.75%	0.93%	0.00%	0.00%	0.02%	-1.00%	-0.63%	0.30%	0.03%	0.01%	-0.30%
1938	0.00%	-10.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.32%	-0.04%	7.67%	-0.35%
1939	21.23%	6.58%	1.85%	5.80%	2.75%	0.47%	0.10%	0.39%	-0.15%	-0.22%	0.27%	0.35%	3.29%
1940	-0.77%	0.43%	-0.11%	-0.01%	0.00%	0.00%	0.00%	-0.41%	2.20%	1.95%	0.18%	1.53%	0.42%
1941	1.51%	-2.89%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%	0.03%	-0.66%	6.43%	0.37%
1942	19.40%	11.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.10%	-3.41%	-0.16%	7.33%	2.79%
1943	7.11%	42.21%	6.65%	0.00%	0.00%	0.00%	0.00%	-0.27%	-0.69%	8.50%	4.24%	2.08%	5.82%
1944	1.61%	-0.83%	0.75%	-0.65%	-2.06%	-0.29%	0.49%	1.01%	1.14%	0.45%	0.07%	0.33%	0.17%
1945	0.24%	1.72%	1.43%	-0.06%	0.00%	0.14%	0.90%	2.15%	0.81%	0.02%	0.00%	0.52%	0.66%
1946	0.51%	4.40%	0.00%	0.00%	-0.01%	0.07%	0.75%	-7.35%	-3.24%	-0.13%	-0.01%	-0.44%	-0.45%
1947	0.13%	0.93%	0.30%	-0.07%	1.99%	-0.42%	-0.37%	0.03%	-0.43%	-0.28%	-0.33%	0.16%	0.14%
1948	0.87%	-0.25%	1.91%	0.69%	-0.55%	-0.18%	-0.09%	0.01%	0.20%	0.08%	0.01%	0.47%	0.26%
1949	-0.88%	-1.50%	-1.60%	-0.85%	-0.28%	0.00%	0.48%	0.17%	0.01%	0.00%	3.73%	3.30%	0.21%
1950	-0.56%	1.54%	3.03%	3.23%	0.17%	1.13%	1.62%	11.25%	4.72%	-0.27%	-0.03%	2.29%	2.34%
1951	-1.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	-1.57%	2.27%	2.58%	0.44%	0.89%	0.29%
1952	0.83%	-0.94%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.18%	-0.04%	8.17%	0.57%
1953	4.74%	0.87%	0.00%	0.00%	0.01%	0.12%	0.47%	0.18%	1.10%	0.92%	0.16%	2.36%	0.91%
1954	1.77%	8.01%	5.42%	0.45%	0.00%	0.00%	0.00%	-0.01%	-0.07%	-0.09%	-0.05%	-0.01%	1.29%
1955	-0.85%	-0.37%	3.21%	0.64%	-0.08%	-0.95%	0.70%	1.18%	0.34%	0.01%	0.21%	0.17%	0.35%
1956	0.05%	0.12%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	-2.78%	-3.10%	-0.19%	6.91%	0.09%
1957	-12.65%	-9.44%	-1.74%	1.64%	-0.16%	0.00%	0.13%	0.83%	0.22%	1.54%	0.90%	-4.18%	-1.91%
1958	3.40%	4.27%	1.62%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-1.97%	-0.07%	11.52%	1.56%
1959	7.29%	1.10%	0.14%	-0.32%	0.00%	0.01%	0.02%	-0.45%	0.16%	-0.85%	-0.62%	-0.09%	0.53%
1960	0.00%	-0.31%	-0.23%	-0.32%	0.05%	-0.06%	-0.06%	0.82%	0.35%	0.02%	-0.02%	-0.02%	0.02%
1961	0.24%	-0.03%	0.77%	0.56%	0.10%	0.25%	0.08%	0.34%	0.08%	-0.05%	-0.05%	0.48%	0.23%
1962	0.14%	-1.93%	-1.10%	0.04%	0.00%	-0.07%	0.12%	0.14%	0.00%	-0.02%	-0.01%	0.02%	-0.22%
1963	0.98%	2.27%	1.30%	1.07%	0.00%	-0.01%	0.00%	0.02%	1.35%	-0.14%	0.03%	-1.83%	0.42%
1964	-0.56%	1.80%	0.54%	56.62%	14.49%	2.32%	-1.81%	-1.84%	-0.15%	0.13%	0.27%	-0.98%	5.90%
1965	-0.18%	-0.04%	0.00%	0.00%	0.00%	-0.03%	0.00%	-0.01%	-3.91%	5.62%	3.49%	2.14%	0.59%
1966	1.76%	2.09%	1.73%	0.22%	0.11%	0.10%	0.74%	0.70%	-0.14%	-0.16%	-0.02%	0.04%	0.60%
1967	0.03%	0.07%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.71%	5.66%	13.04%	1.51%
1968	4.71%	0.75%	0.95%	0.09%	0.00%	0.00%	0.06%	0.68%	-0.09%	-0.23%	-0.03%	-0.01%	0.57%
1969	-0.40%	-0.16%	1.23%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-1.77%	-0.06%	19.66%	1.54%
1970	8.72%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	1.26%	-0.07%	0.74%	0.44%	0.05%	0.96%
1971	0.01%	1.72%	0.00%	0.00%	-0.01%	0.00%	-0.02%	0.08%	1.20%	0.26%	-0.06%	2.23%	0.45%
1972	1.50%	0.34%	8.37%	5.69%	0.97%	0.07%	-0.09%	-0.15%	-0.03%	-0.01%	0.00%	0.00%	1.39%
1973	-1.07%	-4.18%	-2.78%	0.00%	0.00%	0.00%	0.12%	-2.29%	-0.60%	0.38%	0.03%	5.46%	-0.41%
1974	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	-2.18%	5.57%	3.46%	28.07%	3.84%
1975	14.38%	1.79%	1.21%	0.71%	0.00%	0.00%	0.00%	0.03%	-1.19%	-1.46%	4.46%	9.94%	2.49%
1976	-0.10%	0.28%	1.12%	0.23%	-5.21%	2.44%	2.66%	0.26%	0.04%	0.01%	1.01%	0.07%	0.23%
1977	-1.32%	-1.54%	0.29%	0.33%	-0.17%	0.00%	0.00%	-0.08%	0.01%	0.38%	0.24%	0.05%	-0.15%
1978	0.00%	0.19%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.03%	0.45%	0.22%	0.01%	1.28%	0.18%
1979	1.14%	0.07%	0.35%	2.96%	0.00%	0.00%	-0.11%	-1.59%	-0.25%	0.22%	0.02%	0.23%	0.25%
1980	-0.09%	-0.36%	1.77%	0.00%	0.00%	0.00%	0.25%	2.11%	5.09%	1.94%	0.17%	2.08%	1.08%
1981	1.87%	-0.78%	1.06%	6.82%	0.33%	0.10%	0.57%	0.98%	0.17%	-0.09%	0.02%	0.02%	0.92%
1982	-0.03%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.49%	-2.29%	-0.10%	9.94%	0.58%
1983	1.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%	4.69%	2.95%	0.76%
1984	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	1.21%	0.35%	1.34%	0.64%	0.44%	0.37%
1985	0.63%	2.08%	1.23%	0.41%	1.14%	2.08%	1.15%	1.22%	-0.14%	-0.36%	0.10%	0.15%	0.81%
1986	0.26%	0.26%	1.33%	1.92%	0.00%	0.00%	0.00%	-2.91%	-3.87%	-1.07%	3.88%	4.62%	0.37%
1987	2.15%	-1.05%	0.80%	-0.61%	9.17%	0.99%	-0.43%	-0.26%	2.95%	1.93%	1.30%	0.93%	1.49%
1988	-0.56%	-0.69%	1.64%	0.49%	0.17%	0.00%	0.50%	0.17%	-0.06%	-0.01%	0.67%	0.61%	0.25%
1989	-0.36%	-0.67%	-0.24%	0.03%	0.04%	0.00%	0.12%	0.02%	0.04%	0.06%	-0.09%	-0.39%	-0.12%
1990	0.08%	1.65%	1.01%	0.00%	-0.09%	-0.59%	-0.29%	0.69%	0.15%	-0.28%	-0.58%	-0.44%	0.11%
1991	0.49%	0.03%	0.18%	0.39%	0.16%	0.17%	-0.54%	-1.35%	-0.56%	-0.04%	-0.31%	-0.29%	-0.14%
AVG:	1.53%	0.94%	0.84%	1.35%	0.47%	0.18%	0.15%	0.13%	0.10%	0.32%	0.59%	2.37%	0.75%
MIN:	-12.65%	-10.53%	-2.78%	-1.61%	-5.21%	-0.95%	-1.81%	-7.35%	-3.91%	-3.41%	-2.71%	-4.18%	-1.91%
MAX:	21.23%	42.21%	8.37%	56.62%	14.49%	2.44%	2.66%	11.25%	6.70%	8.50%	5.66%	28.07%	5.90%

Table 4.4.5-76 Simulated monthly average electrical conductivity (mS/cm) at Jersey Point, G-model results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1.996	1.864	0.589	0.288	0.200	0.200	0.200	0.200	0.200	0.201	0.405	1.008	0.613
1923	1.411	1.351	0.200	0.200	0.200	0.208	0.200	0.200	0.215	0.341	0.693	1.228	0.537
1924	1.567	1.364	1.186	0.968	0.397	0.262	0.332	0.679	1.015	0.826	1.104	1.922	0.968
1925	2.189	1.878	1.039	0.613	0.200	0.200	0.200	0.201	0.222	0.401	0.866	1.485	0.791
1926	1.732	1.589	1.325	0.402	0.200	0.201	0.201	0.203	0.307	0.670	0.968	1.494	0.774
1927	1.890	0.360	0.223	0.200	0.200	0.200	0.200	0.200	0.203	0.240	0.448	1.102	0.456
1928	1.570	0.647	0.409	0.234	0.201	0.200	0.200	0.200	0.231	0.346	0.568	1.214	0.502
1929	1.579	1.228	0.867	0.840	0.399	0.269	0.332	0.460	0.578	0.900	1.259	1.707	0.868
1930	2.141	1.700	0.621	0.209	0.202	0.200	0.202	0.231	0.339	0.642	0.941	1.464	0.741
1931	1.849	1.474	1.006	0.672	0.439	0.456	0.532	0.739	1.018	0.841	1.112	1.928	1.006
1932	2.083	1.714	0.238	0.201	0.200	0.205	0.219	0.216	0.225	0.357	0.785	1.414	0.655
1933	1.876	1.636	0.962	0.462	0.301	0.266	0.254	0.356	0.574	0.897	1.154	1.539	0.856
1934	2.169	1.703	0.872	0.247	0.210	0.215	0.231	0.345	0.507	0.777	1.353	1.957	0.882
1935	2.119	1.618	1.217	0.201	0.201	0.200	0.200	0.200	0.201	0.261	0.612	1.347	0.698
1936	1.636	1.255	1.193	0.200	0.200	0.200	0.200	0.200	0.215	0.343	0.695	1.401	0.645
1937	1.811	1.300	1.129	0.928	0.200	0.200	0.200	0.200	0.207	0.299	0.654	1.382	0.709
1938	1.856	0.395	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.398	0.513	0.397
1939	0.251	0.335	0.514	0.363	0.334	0.263	0.241	0.250	0.383	0.730	1.033	1.562	0.522
1940	1.705	1.459	1.404	0.200	0.200	0.200	0.200	0.200	0.210	0.287	0.550	1.218	0.653
1941	1.670	1.253	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.220	0.451	0.657	0.471
1942	0.664	0.897	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.208	0.441	0.631	0.353
1943	0.570	0.437	0.202	0.200	0.200	0.200	0.200	0.200	0.205	0.250	0.461	1.122	0.354
1944	1.593	1.437	1.297	0.918	0.205	0.201	0.206	0.224	0.271	0.473	1.007	1.548	0.782
1945	1.434	1.154	0.575	0.416	0.200	0.200	0.201	0.203	0.220	0.325	0.679	1.278	0.574
1946	1.659	0.949	0.200	0.200	0.200	0.200	0.204	0.207	0.229	0.342	0.694	1.270	0.529
1947	1.543	1.204	0.646	0.563	0.277	0.207	0.211	0.240	0.330	0.574	0.950	1.428	0.681
1948	1.489	1.352	1.188	0.568	0.274	0.235	0.200	0.200	0.201	0.259	0.608	1.131	0.642
1949	1.410	1.238	0.851	0.637	0.485	0.200	0.200	0.212	0.259	0.480	0.850	1.384	0.684
1950	1.683	1.422	1.084	0.227	0.200	0.200	0.201	0.201	0.216	0.327	0.680	1.251	0.641
1951	1.558	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.209	0.280	0.532	1.194	0.431
1952	1.645	1.189	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.400	0.311	0.429
1953	0.220	0.325	0.200	0.200	0.200	0.200	0.201	0.200	0.200	0.211	0.391	0.529	0.256
1954	0.685	0.751	0.809	0.202	0.200	0.200	0.200	0.200	0.212	0.315	0.540	1.089	0.450
1955	1.399	0.994	0.269	0.211	0.215	0.257	0.239	0.233	0.303	0.540	0.971	1.603	0.603
1956	1.683	1.381	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.221	0.472	0.492	0.471
1957	0.406	0.651	1.047	0.796	0.200	0.200	0.200	0.201	0.215	0.282	0.541	1.182	0.493
1958	0.648	0.581	0.224	0.200	0.200	0.200	0.200	0.200	0.200	0.202	0.411	0.376	0.304
1959	0.245	0.371	0.836	0.200	0.200	0.200	0.206	0.257	0.286	0.362	0.683	1.158	0.417
1960	1.464	1.076	0.965	0.962	0.201	0.200	0.207	0.224	0.330	0.652	1.011	1.587	0.740
1961	1.743	1.311	0.699	0.488	0.200	0.201	0.217	0.255	0.371	0.643	0.870	1.241	0.687
1962	1.579	1.162	0.661	0.597	0.200	0.200	0.203	0.214	0.274	0.401	0.675	1.201	0.614
1963	0.202	0.210	0.204	0.212	0.200	0.200	0.200	0.200	0.201	0.242	0.488	1.070	0.302
1964	1.032	0.217	0.247	0.213	0.207	0.242	0.237	0.239	0.316	0.559	0.914	1.327	0.479
1965	1.581	1.193	0.200	0.200	0.200	0.200	0.200	0.200	0.206	0.245	0.401	1.053	0.490
1966	1.538	0.367	0.233	0.200	0.200	0.200	0.201	0.210	0.248	0.363	0.711	1.364	0.486
1967	1.407	1.058	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.317	0.287	0.389
1968	0.226	0.352	0.618	0.202	0.200	0.200	0.200	0.223	0.290	0.389	0.731	1.283	0.410
1969	1.430	1.181	0.243	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.407	0.330	0.416
1970	0.215	0.264	0.200	0.200	0.200	0.200	0.200	0.208	0.262	0.244	0.367	0.976	0.295
1971	1.443	0.808	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.215	0.361	0.519	0.396
1972	0.664	1.082	0.565	0.323	0.204	0.200	0.202	0.260	0.254	0.307	0.662	1.389	0.509
1973	1.626	0.494	0.201	0.200	0.200	0.200	0.200	0.201	0.209	0.264	0.529	1.131	0.455
1974	1.427	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.221	0.446	0.353	0.337
1975	0.275	0.475	0.669	0.542	0.200	0.200	0.200	0.200	0.200	0.214	0.429	0.428	0.336
1976	0.278	0.329	0.521	0.745	0.602	0.304	0.268	0.488	1.067	1.469	1.722	2.054	0.821
1977	2.184	1.953	1.225	1.007	0.847	0.698	0.606	0.773	1.042	0.847	1.123	1.936	1.187
1978	2.124	1.723	0.916	0.200	0.200	0.200	0.200	0.200	0.200	0.223	0.476	0.968	0.636
1979	1.314	1.505	1.273	0.210	0.200	0.200	0.200	0.201	0.210	0.290	0.645	1.355	0.634
1980	1.617	1.229	0.377	0.200	0.200	0.200	0.200	0.200	0.210	0.282	0.546	1.035	0.525
1981	1.366	1.519	1.012	0.213	0.200	0.200	0.200	0.214	0.367	0.692	0.993	1.433	0.701
1982	1.507	0.201	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.207	0.439	0.275	0.336
1983	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.200	0.200
1984	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.204	0.236	0.246	0.395	1.041	0.294
1985	1.424	0.205	0.201	0.250	0.280	0.235	0.219	0.225	0.329	0.643	1.001	1.277	0.524
1986	1.390	1.288	0.529	0.206	0.200	0.200	0.200	0.200	0.214	0.276	0.463	0.862	0.502
1987	1.285	1.445	1.237	0.942	0.251	0.200	0.203	0.251	0.382	0.636	1.093	1.759	0.807
1988	1.447	1.177	0.353	0.201	0.204	0.250	0.359	0.469	0.517	0.783	1.286	1.833	0.740
1989	2.076	1.724	1.336	0.850	0.522	0.200	0.200	0.207	0.311	0.635	0.925	1.288	0.856
1990	1.540	1.016	0.922	0.508	0.255	0.249	0.259	0.378	0.807	1.028	1.278	1.908	0.846
1991	1.966	1.870	1.322	1.104	0.856	0.201	0.201	0.246	0.543	1.107	1.332	1.713	1.038
AVG:	1.363	1.024	0.625	0.379	0.251	0.220	0.223	0.251	0.317	0.436	0.723	1.186	0.583
MIN:	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.200	0.200
MAX:	2.189	1.953	1.404	1.104	0.856	0.698	0.606	0.773	1.067	1.469	1.722	2.054	1.187

Table 4.4.5-77 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, G-model results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.83%	0.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.41%	0.17%
1923	0.75%	0.20%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.06%	-0.01%	0.00%	0.68%	0.15%
1924	0.86%	-0.21%	-0.73%	-0.80%	0.20%	0.24%	1.50%	2.60%	-0.63%	1.42%	2.96%	1.26%	0.72%
1925	-0.30%	-1.08%	-1.54%	-1.54%	0.00%	0.00%	0.00%	0.01%	0.04%	-0.01%	-1.39%	-1.78%	-0.63%
1926	0.53%	-0.10%	-0.35%	-0.04%	0.00%	0.00%	0.02%	0.11%	0.60%	0.04%	-0.72%	-0.87%	-0.06%
1927	0.09%	2.94%	2.35%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.13%	0.46%	0.59%	0.52%
1928	0.58%	2.23%	2.31%	0.58%	0.02%	0.00%	0.00%	0.00%	0.00%	0.11%	0.15%	0.12%	0.51%
1929	0.07%	0.22%	0.09%	-0.08%	2.44%	1.23%	0.38%	0.08%	0.00%	0.00%	1.35%	1.66%	0.62%
1930	0.24%	0.29%	1.07%	0.00%	0.04%	0.00%	0.01%	0.49%	0.47%	-0.58%	5.36%	6.63%	1.17%
1931	0.11%	1.55%	0.92%	-3.02%	-4.81%	-4.61%	-2.27%	-0.69%	-0.26%	-0.80%	-0.81%	-0.35%	-1.25%
1932	0.01%	-0.50%	3.07%	0.06%	0.05%	0.25%	0.12%	0.13%	0.12%	0.07%	0.34%	0.39%	0.34%
1933	0.18%	0.07%	0.01%	4.52%	3.83%	1.59%	0.54%	0.19%	0.04%	0.01%	0.30%	0.35%	0.97%
1934	-0.37%	0.09%	-0.12%	-1.09%	-0.21%	-0.08%	-0.02%	0.00%	0.01%	0.00%	-0.02%	-0.02%	-0.15%
1935	-0.80%	-1.90%	-0.89%	0.07%	0.03%	0.02%	0.00%	0.00%	0.07%	1.73%	0.92%	0.36%	-0.03%
1936	2.36%	-0.16%	-2.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.09%	-0.04%	0.58%	0.02%
1937	-0.26%	-1.32%	-0.86%	0.24%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.06%	-0.03%	-0.01%	-0.19%
1938	-0.01%	1.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	1.46%	0.22%
1939	1.77%	1.84%	1.47%	1.28%	0.61%	0.90%	0.48%	-0.17%	-0.30%	0.03%	-0.02%	0.43%	0.69%
1940	-0.49%	-0.09%	0.48%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.11%	-0.59%	-0.27%	0.29%	-0.07%
1941	0.45%	-0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.24%	1.79%	0.14%
1942	4.75%	4.38%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.08%	1.50%	0.90%
1943	2.88%	5.18%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.09%	0.20%	0.47%	0.74%
1944	0.52%	0.04%	0.12%	-0.04%	0.06%	0.02%	0.09%	0.22%	0.54%	0.59%	0.23%	0.23%	0.22%
1945	0.08%	1.44%	2.09%	0.94%	0.00%	0.00%	0.01%	0.04%	0.10%	0.06%	0.02%	0.48%	0.44%
1946	0.60%	1.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.14%	0.26%	0.13%	0.06%	1.03%	0.27%
1947	0.17%	0.79%	1.45%	0.49%	0.96%	-0.11%	-0.17%	0.01%	-0.23%	-0.46%	0.12%	-0.31%	0.23%
1948	-0.44%	0.08%	0.69%	0.55%	0.06%	0.05%	0.00%	0.00%	0.02%	0.24%	0.13%	1.10%	0.21%
1949	0.68%	0.86%	1.26%	0.29%	0.83%	0.00%	0.00%	0.02%	0.01%	0.00%	0.47%	0.81%	0.44%
1950	1.18%	0.87%	0.77%	1.45%	0.00%	0.01%	0.01%	0.22%	1.25%	0.53%	0.23%	0.42%	0.58%
1951	-2.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.11%	0.50%	0.43%	0.56%	-0.08%
1952	0.57%	-0.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	1.05%	0.11%
1953	0.52%	0.87%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.10%	0.13%	1.58%	0.27%
1954	1.92%	6.33%	6.45%	0.07%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.02%	-0.01%	0.00%	1.23%
1955	0.24%	0.25%	1.80%	0.41%	0.15%	0.12%	-0.05%	0.12%	0.27%	0.10%	0.17%	0.17%	0.31%
1956	0.51%	0.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.11%	0.10%	1.50%	0.23%
1957	2.44%	1.90%	0.76%	0.71%	0.00%	0.00%	0.00%	0.01%	0.06%	0.10%	0.19%	-0.10%	0.51%
1958	4.29%	4.43%	0.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	3.61%	1.08%
1959	1.93%	1.54%	0.63%	0.00%	0.00%	0.00%	0.00%	-0.08%	-0.14%	-0.63%	-0.78%	-1.04%	0.12%
1960	-1.05%	1.42%	2.04%	1.99%	0.06%	0.01%	0.07%	0.75%	1.48%	0.27%	-0.55%	-0.74%	0.48%
1961	0.86%	0.13%	1.04%	1.53%	0.03%	0.03%	0.05%	0.11%	0.28%	0.22%	-0.19%	0.30%	0.36%
1962	2.26%	-0.31%	-0.52%	0.88%	0.00%	0.00%	0.10%	0.23%	0.12%	-0.95%	-1.21%	-0.04%	0.05%
1963	0.15%	0.49%	0.18%	0.32%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.05%	-1.80%	-0.05%
1964	-1.00%	0.36%	0.39%	2.43%	0.83%	1.12%	0.58%	-0.95%	-0.74%	0.85%	0.06%	-0.53%	0.28%
1965	0.12%	-0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.10%	0.21%	0.74%	0.09%
1966	0.85%	6.06%	1.98%	0.01%	0.00%	0.00%	0.01%	0.09%	0.02%	-0.12%	-0.05%	0.01%	0.74%
1967	0.03%	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.36%	1.72%	0.31%
1968	0.68%	0.93%	1.11%	0.01%	0.00%	0.00%	0.00%	0.51%	0.30%	-0.69%	-0.28%	-0.11%	0.20%
1969	-0.27%	-0.30%	0.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	2.42%	0.23%
1970	0.67%	1.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.09%	0.10%	0.28%	0.12%	0.22%
1971	0.05%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.04%	-0.09%	1.40%	0.25%
1972	1.69%	0.78%	6.10%	4.50%	0.13%	0.00%	0.00%	-0.06%	-0.02%	-0.01%	-0.01%	0.00%	1.09%
1973	0.06%	1.44%	0.04%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	-0.03%	-0.01%	3.87%	0.45%
1974	8.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.21%	0.56%	4.87%	1.21%
1975	3.50%	2.37%	1.66%	1.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	1.17%	2.64%	1.04%
1976	-1.45%	-1.52%	0.42%	0.22%	-1.33%	2.15%	2.38%	1.80%	0.48%	0.04%	-1.31%	0.35%	0.18%
1977	-0.63%	-1.41%	-1.39%	-2.06%	-1.11%	-0.39%	-0.13%	-0.07%	-0.04%	0.15%	0.18%	0.08%	-0.57%
1978	0.18%	0.45%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.11%	0.09%	1.24%	0.19%
1979	1.48%	-2.16%	0.28%	2.12%	0.00%	0.00%	0.00%	0.01%	0.00%	-0.06%	-0.03%	1.13%	0.23%
1980	0.81%	0.86%	5.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.38%	0.18%	1.23%	0.79%
1981	1.45%	0.14%	0.75%	0.54%	0.00%	0.00%	0.01%	0.58%	1.29%	0.03%	0.13%	0.15%	0.42%
1982	0.43%	0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.07%	1.15%	0.15%
1983	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%
1984	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.42%	0.16%	-0.08%	0.19%	0.06%
1985	0.52%	0.25%	0.03%	0.26%	0.50%	0.63%	0.30%	0.25%	0.13%	-0.25%	0.03%	0.13%	0.23%
1986	0.26%	0.31%	1.01%	0.20%	0.00%	0.00%	0.00%	0.00%	0.15%	0.28%	1.14%	1.71%	0.42%
1987	0.99%	0.05%	0.23%	-0.01%	1.89%	0.03%	0.04%	-0.10%	0.69%	0.88%	0.78%	0.68%	0.51%
1988	0.34%	0.16%	1.80%	0.09%	0.09%	0.08%	1.85%	1.54%	0.02%	0.01%	1.92%	2.37%	0.86%
1989	-0.12%	0.05%	2.50%	2.73%	1.20%	0.00%	0.00%	0.02%	0.38%	0.68%	0.43%	0.88%	0.73%
1990	1.84%	3.64%	2.92%	0.64%	-0.03%	0.45%	0.43%	2.66%	1.75%	-0.68%	0.08%	0.27%	1.16%
1991	-0.28%	-1.65%	-0.66%	0.60%	0.94%	0.02%	0.05%	1.19%	1.78%	0.38%	3.41%	4.28%	0.84%
AVG:	0.70%	0.72%	0.73%	0.34%	0.11%	0.05%	0.09%	0.17%	0.16%	0.07%	0.27%	0.82%	0.35%
MIN:	-2.58%	-2.16%	-2.42%	-3.02%	-4.81%	-4.61%	-2.27%	-0.95%	-0.74%	-0.95%	-1.39%	-1.80%	-1.25%
MAX:	8.81%	6.33%	6.45%	4.52%	3.83%	2.15%	2.38%	2.66%	1.78%	1.73%	5.36%	6.63%	1.23%

Table 4.4.5-78 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, G-model results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.70%	0.69%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.23%	1.81%	0.24%
1923	2.60%	0.25%	0.01%	0.00%	0.00%	0.06%	0.00%	0.00%	0.07%	-0.01%	-0.01%	1.72%	0.39%
1924	2.17%	-0.64%	-0.20%	-0.53%	-0.39%	0.14%	0.31%	0.24%	-0.14%	0.21%	0.33%	0.14%	0.14%
1925	-1.22%	-1.32%	-1.72%	-1.96%	0.00%	0.00%	0.00%	0.03%	0.27%	-0.02%	0.07%	0.90%	-0.41%
1926	0.17%	-0.02%	0.15%	-0.07%	0.00%	0.01%	0.00%	0.04%	0.29%	0.03%	-2.51%	-2.99%	-0.41%
1927	-0.16%	0.04%	1.38%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.03%	1.31%	4.06%	3.48%	0.84%
1928	3.06%	7.12%	5.57%	0.92%	0.03%	0.00%	0.00%	0.00%	0.00%	-0.03%	-0.03%	-0.09%	1.38%
1929	0.07%	1.46%	0.39%	-0.68%	2.26%	1.20%	0.37%	0.08%	0.00%	0.00%	0.90%	1.10%	0.60%
1930	0.15%	0.55%	1.81%	0.17%	0.05%	0.00%	0.01%	0.06%	0.15%	0.08%	0.09%	0.08%	0.27%
1931	0.15%	0.61%	0.68%	0.30%	-0.59%	-0.46%	-0.02%	-0.16%	-0.24%	0.10%	0.21%	0.09%	0.06%
1932	-0.19%	-0.22%	0.34%	0.01%	0.01%	0.05%	0.04%	0.11%	0.11%	0.07%	0.31%	0.35%	0.08%
1933	0.16%	0.63%	1.05%	2.61%	2.30%	0.95%	0.24%	0.08%	0.02%	0.00%	0.08%	0.10%	0.69%
1934	0.01%	0.07%	0.03%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59%	0.73%	0.12%
1935	-0.05%	0.11%	0.08%	0.01%	0.00%	0.00%	0.00%	0.00%	0.09%	2.15%	1.14%	0.44%	0.33%
1936	2.10%	-0.95%	-3.08%	0.02%	0.00%	0.00%	0.00%	-0.01%	-0.38%	-0.14%	-0.06%	1.00%	-0.13%
1937	-0.31%	-1.96%	-1.27%	0.37%	0.00%	0.00%	0.00%	0.00%	-0.10%	0.09%	0.04%	0.02%	-0.26%
1938	0.01%	-6.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.17%	5.59%	-0.09%
1939	7.59%	7.65%	3.67%	4.31%	2.79%	0.57%	0.13%	0.14%	0.00%	-0.21%	0.21%	0.42%	2.27%
1940	-0.64%	0.16%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%	1.12%	0.51%	1.73%	0.25%
1941	2.04%	-2.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.48%	5.17%	0.39%
1942	18.52%	16.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.40%	-0.65%	5.74%	3.33%
1943	7.64%	31.14%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.06%	2.37%	4.94%	3.40%	4.17%
1944	2.70%	0.07%	0.76%	-0.08%	-0.22%	-0.01%	0.02%	0.19%	0.53%	0.59%	0.23%	0.41%	0.43%
1945	0.38%	1.67%	1.71%	0.36%	0.00%	0.00%	0.02%	0.10%	0.23%	0.14%	0.06%	0.55%	0.43%
1946	0.67%	3.92%	0.00%	0.00%	0.00%	0.00%	0.03%	-0.48%	-1.13%	-0.59%	-0.25%	-0.54%	0.14%
1947	-0.05%	0.86%	0.50%	0.07%	0.79%	0.01%	-0.05%	-0.01%	-0.23%	-0.33%	-0.40%	0.04%	0.10%
1948	0.85%	0.02%	1.69%	1.25%	-0.12%	-0.05%	0.00%	0.00%	0.00%	0.05%	0.03%	0.47%	0.35%
1949	-0.72%	-1.67%	-1.84%	-1.32%	-0.56%	0.00%	0.00%	0.03%	0.02%	0.00%	3.46%	4.41%	0.15%
1950	0.55%	1.66%	3.60%	1.05%	0.00%	0.01%	0.03%	0.23%	1.21%	0.50%	0.21%	2.41%	0.95%
1951	-0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.05%	1.31%	0.82%	1.15%	0.23%
1952	1.19%	-0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.16%	3.78%	0.36%
1953	1.20%	1.28%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.14%	0.26%	1.84%	0.39%
1954	2.23%	7.44%	7.57%	0.08%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.05%	-0.06%	-0.02%	1.43%
1955	-0.85%	-0.63%	1.17%	0.17%	0.01%	-0.29%	0.10%	0.31%	0.32%	0.12%	0.24%	0.25%	0.08%
1956	0.12%	0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.75%	-0.67%	4.69%	0.30%
1957	-6.55%	-11.15%	-4.59%	-0.30%	-0.01%	0.00%	0.00%	0.01%	0.07%	0.62%	1.11%	-3.93%	-2.06%
1958	1.28%	4.68%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.07%	-0.30%	6.64%	1.07%
1959	3.21%	2.13%	0.87%	-0.01%	0.00%	0.00%	0.00%	-0.14%	0.00%	-0.46%	-0.77%	-0.28%	0.38%
1960	-0.10%	-0.32%	-0.34%	-0.39%	0.00%	0.00%	-0.01%	0.14%	0.32%	0.11%	0.02%	-0.01%	-0.05%
1961	0.24%	0.06%	0.61%	0.65%	0.00%	0.00%	0.02%	0.11%	0.11%	-0.01%	-0.04%	0.46%	0.18%
1962	0.28%	-1.66%	-1.49%	-0.35%	0.00%	0.00%	0.00%	0.02%	0.01%	-0.01%	-0.01%	0.02%	-0.27%
1963	0.08%	0.28%	0.10%	0.15%	0.00%	0.00%	0.00%	0.00%	0.03%	0.02%	0.06%	-1.80%	-0.09%
1964	-1.08%	0.32%	0.35%	7.53%	2.47%	1.75%	-0.06%	-0.56%	-0.33%	0.01%	0.23%	-0.90%	0.81%
1965	-0.47%	-0.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.21%	1.15%	3.55%	3.13%	0.59%
1966	2.74%	1.83%	0.60%	0.01%	0.00%	0.00%	0.01%	0.09%	0.02%	-0.11%	-0.05%	0.03%	0.43%
1967	0.04%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.81%	6.18%	0.76%
1968	1.66%	1.43%	1.27%	0.02%	0.00%	0.00%	0.00%	0.11%	0.05%	-0.17%	-0.07%	-0.03%	0.36%
1969	-0.40%	-0.29%	0.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.25%	9.92%	0.77%
1970	2.06%	1.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%	0.11%	0.18%	0.45%	0.19%	0.35%
1971	0.08%	1.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.08%	0.00%	1.66%	0.27%
1972	1.92%	0.84%	6.49%	4.75%	0.14%	0.00%	0.00%	-0.06%	-0.02%	-0.01%	-0.01%	0.00%	1.17%
1973	-1.04%	-3.23%	-0.14%	0.00%	0.00%	0.00%	0.00%	-0.03%	-0.14%	0.09%	0.05%	5.53%	0.09%
1974	12.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.66%	3.64%	16.30%	2.78%
1975	10.00%	5.03%	2.66%	1.45%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.28%	2.91%	7.50%	2.44%
1976	1.30%	0.22%	1.15%	0.50%	-3.88%	0.11%	1.30%	0.69%	0.27%	0.12%	1.06%	0.40%	0.27%
1977	-1.21%	-1.77%	-0.38%	0.24%	-0.16%	-0.04%	-0.01%	-0.07%	-0.02%	0.33%	0.34%	0.15%	-0.22%
1978	0.06%	0.21%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.06%	1.25%	0.14%
1979	1.50%	0.45%	0.50%	0.51%	0.00%	0.00%	0.00%	-0.03%	-0.08%	0.08%	0.04%	0.25%	0.27%
1980	-0.02%	-0.35%	0.96%	0.00%	0.00%	0.00%	0.00%	0.02%	0.54%	1.36%	0.63%	2.24%	0.45%
1981	2.55%	-0.08%	0.90%	1.22%	0.01%	0.00%	0.00%	0.14%	0.27%	-0.02%	0.03%	0.03%	0.42%
1982	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.25%	-0.42%	3.70%	0.25%
1983	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.06%	0.01%
1984	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.18%	0.38%	0.71%	0.65%	0.16%
1985	0.83%	0.27%	0.04%	0.27%	0.51%	0.56%	0.27%	0.28%	0.15%	-0.31%	0.04%	0.16%	0.26%
1986	0.28%	0.34%	1.05%	0.21%	0.00%	0.00%	0.00%	-0.02%	-0.57%	-0.82%	2.52%	5.27%	0.69%
1987	3.48%	0.01%	0.79%	-0.01%	2.90%	0.03%	0.01%	-0.11%	1.79%	2.37%	1.87%	1.54%	1.22%
1988	-0.02%	-0.63%	0.80%	0.03%	0.02%	0.02%	0.29%	0.24%	0.00%	0.00%	0.67%	0.82%	0.19%
1989	-0.15%	-0.67%	-0.40%	-0.11%	-0.01%	0.00%	0.00%	0.01%	0.02%	0.06%	-0.07%	-0.41%	-0.14%
1990	-0.04%	1.45%	1.44%	0.39%	0.02%	-0.16%	-0.16%	0.37%	0.30%	-0.21%	-0.60%	-0.62%	0.18%
1991	0.30%	0.11%	0.13%	0.46%	0.27%	0.01%	0.00%	-0.42%	-0.73%	-0.23%	-0.38%	-0.43%	-0.08%
AVG:	1.25%	0.99%	0.57%	0.36%	0.12%	0.06%	0.04%	0.03%	0.05%	0.18%	0.47%	1.66%	0.48%
MIN:	-6.55%	-11.15%	-4.59%	-1.96%	-3.88%	-0.46%	-0.16%	-0.56%	-1.13%	-0.82%	-2.51%	-3.93%	-2.06%
MAX:	18.52%	31.14%	7.57%	7.53%	2.90%	1.75%	1.30%	0.69%	1.79%	2.37%	4.94%	16.30%	4.17%

Table 4.4.5-79 Simulated monthly average chloride concentration (mg/L) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	211.6	211.6	127.9	46.6	26.4	22.0	22.0	22.0	22.0	22.1	34.5	81.0	70.8
1923	135.3	151.6	79.0	22.0	22.0	22.5	22.4	22.0	22.9	31.3	58.8	108.6	58.2
1924	155.6	160.1	139.2	117.3	71.9	35.5	33.1	57.5	95.0	100.2	107.7	171.0	103.7
1925	227.6	222.0	155.8	88.5	42.4	22.0	22.0	22.1	23.4	35.2	72.3	132.7	88.8
1926	178.3	181.9	158.8	89.9	32.0	22.0	22.1	22.2	28.7	55.8	91.8	138.3	85.1
1927	188.3	115.4	31.3	23.1	22.0	22.0	22.0	22.0	22.2	24.6	39.0	88.8	51.7
1928	149.5	116.8	56.8	34.4	23.8	22.1	22.0	22.0	23.9	32.4	51.5	101.6	54.7
1929	155.7	152.5	113.2	93.7	65.7	36.0	33.4	44.3	57.8	83.1	120.7	165.6	93.5
1930	214.0	208.8	121.7	43.4	22.6	22.1	22.1	24.0	31.9	55.6	88.7	135.1	82.5
1931	184.3	180.7	133.8	90.5	59.8	49.3	54.7	71.1	98.2	101.3	108.9	171.7	108.7
1932	221.5	206.8	99.2	23.9	22.1	22.3	23.4	23.9	24.3	32.7	65.2	124.4	74.1
1933	183.5	191.8	139.2	75.6	41.1	31.0	28.6	34.1	52.3	82.6	114.2	150.3	93.7
1934	207.4	210.4	137.0	58.1	24.9	23.4	24.6	32.3	47.7	72.1	120.3	185.4	95.3
1935	225.1	202.7	153.7	72.4	22.1	22.1	22.0	22.0	22.1	25.8	50.0	111.8	79.3
1936	165.6	156.9	134.3	71.1	22.0	22.0	22.0	22.0	22.9	31.4	59.0	119.2	70.7
1937	178.9	168.3	132.6	112.0	58.0	22.0	22.0	22.0	22.4	28.3	54.4	116.0	78.1
1938	180.7	115.8	31.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	34.0	50.8	47.3
1939	40.6	32.7	47.7	47.4	38.2	32.4	27.6	27.1	35.5	63.1	98.7	145.6	53.1
1940	180.5	172.7	157.1	81.6	22.0	22.0	22.0	22.0	22.6	27.8	47.5	101.0	73.2
1941	161.4	158.5	74.1	22.0	22.0	22.0	22.0	22.0	22.0	23.2	38.2	62.1	54.1
1942	72.7	87.1	56.5	22.0	22.0	22.0	22.0	22.0	22.0	22.5	37.0	60.0	39.0
1943	65.7	54.7	33.8	22.1	22.0	22.0	22.0	22.0	22.3	25.2	40.3	90.7	36.9
1944	151.9	165.8	149.6	119.7	57.8	22.3	22.4	23.8	27.5	42.0	84.4	143.5	84.2
1945	163.4	140.8	91.9	53.6	32.7	22.0	22.1	22.3	23.4	30.6	57.2	110.9	64.2
1946	163.6	139.5	59.1	22.0	22.0	22.0	22.2	22.6	24.1	32.0	58.9	111.1	58.3
1947	156.2	149.2	98.7	66.0	44.6	26.2	23.0	24.9	31.9	51.1	85.9	133.4	74.3
1948	160.7	155.5	138.8	93.2	44.7	27.7	23.7	22.0	22.1	25.6	49.6	98.6	71.8
1949	141.3	144.7	112.8	80.7	60.9	36.1	22.0	22.8	26.2	41.8	75.2	125.8	74.2
1950	170.3	169.3	136.0	67.4	23.3	22.0	22.1	22.1	23.0	30.4	57.3	109.4	71.1
1951	156.2	89.2	22.0	22.0	22.0	22.0	22.0	22.0	22.5	27.3	46.1	98.6	47.7
1952	158.6	153.3	70.9	22.0	22.0	22.0	22.0	22.0	22.0	22.0	34.2	38.6	50.8
1953	28.7	30.6	28.2	22.0	22.0	22.0	22.1	22.0	22.0	22.7	34.1	51.3	27.3
1954	67.6	79.4	86.1	52.3	22.1	22.0	22.0	22.0	22.7	29.5	48.2	92.6	47.2
1955	138.6	129.4	65.5	26.1	23.4	26.2	27.2	25.9	29.8	47.7	85.5	145.1	64.2
1956	181.2	166.9	80.5	22.0	22.0	22.0	22.0	22.0	22.0	23.3	39.5	53.1	56.4
1957	48.9	59.5	95.5	99.9	51.5	22.0	22.0	22.0	22.9	27.7	46.7	98.3	51.4
1958	97.7	67.2	42.3	23.2	22.0	22.0	22.0	22.0	22.0	22.1	34.9	43.1	36.7
1959	33.4	34.5	68.9	53.5	22.0	22.0	22.4	25.7	30.0	36.1	59.2	103.9	42.6
1960	145.9	137.6	111.6	105.9	59.8	22.1	22.5	23.8	31.0	55.7	93.4	146.1	79.6
1961	184.0	165.6	107.2	64.2	36.3	22.1	23.0	26.2	35.1	57.2	84.5	118.2	77.0
1962	156.9	148.4	97.5	68.9	41.7	22.0	22.2	23.0	27.2	37.8	60.7	106.1	67.7
1963	71.7	22.7	22.7	23.0	22.6	22.0	22.0	22.0	22.0	24.6	41.5	88.9	33.8
1964	115.4	64.2	25.7	25.1	23.1	24.9	26.3	26.2	30.9	49.5	83.0	125.6	51.7
1965	161.4	150.4	71.1	22.0	22.0	22.0	22.0	22.0	22.4	25.0	36.4	83.5	55.0
1966	145.2	98.3	32.2	23.6	22.0	22.0	22.1	22.7	25.4	34.2	61.0	117.7	52.2
1967	152.6	133.7	64.5	22.0	22.0	22.0	22.0	22.0	22.0	22.0	29.1	33.0	47.2
1968	27.9	32.5	54.8	42.8	22.1	22.0	22.0	23.4	28.6	37.9	63.5	113.8	40.9
1969	150.0	142.2	73.1	24.1	22.0	22.0	22.0	22.0	22.0	22.1	34.6	40.1	49.7
1970	29.3	26.7	25.2	22.0	22.0	22.0	22.0	22.5	26.1	27.7	34.3	77.2	29.8
1971	135.6	120.3	52.1	22.0	22.0	22.0	22.0	22.0	22.1	23.0	32.5	49.3	45.4
1972	65.9	98.3	87.7	47.5	28.3	22.2	22.1	25.7	28.3	31.1	55.2	116.8	52.4
1973	167.1	110.4	36.6	22.1	22.0	22.0	22.0	22.0	22.6	26.3	45.1	94.6	51.1
1974	142.3	82.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	23.3	37.9	43.4	40.3
1975	34.1	42.3	64.0	65.9	38.9	22.0	22.0	22.0	22.0	22.9	36.6	47.1	36.7
1976	38.0	33.7	47.8	70.9	73.3	48.1	31.2	42.8	88.7	141.7	176.9	209.5	83.6
1977	233.8	226.3	170.8	121.6	101.1	84.1	71.2	76.8	101.3	102.8	109.9	172.7	131.0
1978	224.4	209.4	140.7	57.4	22.0	22.0	22.0	22.0	22.0	23.4	39.9	82.2	73.9
1979	127.5	156.1	151.5	75.8	22.5	22.0	22.0	22.1	22.7	27.9	53.3	113.9	68.1
1980	164.9	154.4	83.7	30.8	22.0	22.0	22.0	22.0	22.6	27.5	47.0	89.6	59.0
1981	133.9	159.5	136.4	63.0	22.6	22.0	22.0	22.8	32.8	60.0	94.3	135.9	75.4
1982	162.1	86.8	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.4	36.8	38.3	41.7
1983	25.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.1	22.3
1984	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.2	24.4	26.5	36.1	82.6	28.8
1985	137.7	82.9	22.3	25.1	29.3	28.1	24.9	24.5	31.1	55.2	92.4	126.8	56.7
1986	147.3	146.7	95.8	38.7	22.3	22.0	22.0	22.0	22.9	27.3	41.7	75.0	57.0
1987	120.4	151.0	146.3	118.2	61.8	24.5	22.2	25.2	35.6	57.4	97.6	160.5	85.1
1988	174.6	142.9	79.6	29.7	22.3	25.2	34.1	46.1	54.5	72.9	116.5	174.6	81.1
1989	216.3	207.0	166.1	117.6	73.7	37.9	22.0	22.4	29.0	53.8	87.4	123.7	96.4
1990	156.9	137.7	106.1	76.4	40.6	27.7	28.0	35.7	67.5	102.1	128.2	178.7	90.5
1991	213.4	210.5	172.5	132.2	106.4	54.5	22.1	24.9	45.1	93.8	135.3	169.6	115.0
AVG:	141.2	129.4	88.5	53.9	34.0	25.8	24.4	26.2	31.6	42.1	65.3	107.5	64.2
MIN:	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.1	22.3
MAX:	233.8	226.3	172.5	132.2	106.4	84.1	71.2	76.8	101.3	141.7	176.9	209.5	131.0

Table 4.4.5-80 Difference in simulated monthly average chloride concentration (%) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.23%	0.80%	0.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.31%	0.15%
1923	0.62%	0.45%	0.17%	0.00%	0.00%	0.03%	0.03%	0.00%	0.04%	0.01%	-0.01%	0.46%	0.15%
1924	0.79%	0.31%	-0.48%	-0.77%	-0.47%	0.21%	1.01%	2.29%	0.51%	0.39%	2.38%	1.80%	0.66%
1925	0.35%	-0.70%	-1.27%	-1.54%	-1.10%	0.00%	0.00%	0.00%	0.02%	0.00%	-1.01%	-1.66%	-0.57%
1926	-0.42%	0.20%	-0.23%	-0.27%	-0.03%	0.00%	0.01%	0.07%	0.43%	0.20%	-0.44%	-0.82%	-0.11%
1927	-0.28%	0.63%	2.69%	1.13%	0.01%	0.00%	0.00%	0.00%	-0.04%	-0.10%	0.28%	0.55%	0.41%
1928	0.59%	1.14%	2.27%	1.60%	0.29%	0.01%	0.00%	0.00%	0.00%	0.07%	0.14%	0.13%	0.52%
1929	0.09%	0.14%	0.16%	0.00%	0.85%	1.89%	0.72%	0.19%	0.03%	0.00%	0.85%	1.54%	0.54%
1930	0.80%	0.26%	0.53%	0.75%	0.02%	0.02%	0.00%	0.29%	0.48%	-0.26%	3.23%	6.19%	1.03%
1931	2.67%	0.82%	1.26%	-0.85%	-3.81%	-4.70%	-3.24%	-1.28%	-0.42%	-0.53%	-0.80%	-0.49%	-0.95%
1932	-0.15%	-0.25%	0.02%	1.54%	0.05%	0.16%	0.18%	0.13%	0.12%	0.09%	0.27%	0.38%	0.21%
1933	0.26%	0.13%	0.05%	1.68%	4.21%	2.67%	1.03%	0.32%	0.09%	0.02%	0.19%	0.33%	0.91%
1934	-0.10%	-0.14%	0.01%	-0.37%	-0.65%	-0.14%	-0.05%	-0.01%	0.01%	0.01%	-0.01%	-0.02%	-0.12%
1935	-0.47%	-1.33%	-1.41%	-0.73%	0.05%	0.03%	0.01%	0.00%	0.04%	1.09%	1.13%	0.51%	-0.09%
1936	1.55%	1.14%	-1.38%	-2.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.05%	0.40%	-0.03%
1937	0.07%	-0.75%	-1.08%	-0.31%	0.19%	0.00%	0.00%	0.00%	0.01%	-0.03%	-0.04%	-0.02%	-0.16%
1938	-0.01%	0.24%	0.74%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.90%	0.16%
1939	1.58%	1.82%	1.60%	1.38%	0.92%	0.75%	0.68%	0.11%	-0.26%	-0.07%	0.00%	0.27%	0.73%
1940	-0.10%	-0.28%	0.22%	0.41%	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.41%	-0.37%	0.14%	-0.04%
1941	0.39%	-0.15%	-0.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.16%	1.23%	0.08%
1942	3.42%	4.52%	3.44%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.07%	0.98%	1.04%
1943	2.22%	3.99%	3.35%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.16%	0.40%	0.85%
1944	0.50%	0.27%	0.08%	0.05%	-0.02%	0.04%	0.06%	0.16%	0.41%	0.57%	0.33%	0.23%	0.22%
1945	0.15%	0.75%	1.69%	1.55%	0.59%	0.00%	0.01%	0.03%	0.07%	0.07%	0.03%	0.34%	0.44%
1946	0.56%	0.77%	0.80%	0.00%	0.00%	0.00%	0.01%	0.08%	0.21%	0.18%	0.08%	0.73%	0.28%
1947	0.52%	0.47%	1.05%	0.95%	0.67%	0.45%	-0.14%	-0.07%	-0.14%	-0.38%	-0.07%	-0.16%	0.26%
1948	-0.38%	-0.17%	0.39%	0.64%	0.37%	0.05%	0.02%	0.00%	0.01%	0.15%	0.16%	0.81%	0.17%
1949	0.85%	0.77%	1.04%	0.80%	0.55%	0.55%	0.00%	0.01%	0.01%	0.00%	0.32%	0.69%	0.47%
1950	1.03%	1.02%	0.82%	0.91%	0.70%	0.00%	0.01%	0.13%	0.81%	0.78%	0.31%	0.36%	0.57%
1951	-1.39%	-2.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.35%	0.45%	0.52%	-0.19%
1952	0.57%	0.17%	-0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.52%	0.09%
1953	0.81%	0.75%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.06%	0.12%	1.03%	0.27%
1954	1.79%	4.44%	6.40%	4.96%	0.03%	0.00%	0.00%	0.00%	-0.01%	-0.01%	-0.01%	-0.01%	1.47%
1955	0.14%	0.25%	0.64%	1.12%	0.27%	0.13%	0.03%	0.04%	0.22%	0.16%	0.15%	0.17%	0.28%
1956	0.36%	0.51%	0.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.10%	0.88%	0.20%
1957	1.97%	2.08%	1.15%	0.74%	0.55%	0.00%	0.00%	0.01%	0.04%	0.08%	0.16%	-0.02%	0.56%
1958	1.66%	4.36%	3.19%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	1.92%	0.95%
1959	2.87%	1.68%	0.87%	0.49%	0.00%	0.00%	0.00%	-0.05%	-0.11%	-0.44%	-0.74%	-0.96%	0.30%
1960	-1.04%	0.12%	1.74%	2.01%	1.59%	0.03%	0.04%	0.45%	1.22%	0.62%	-0.26%	-0.67%	0.49%
1961	0.18%	0.51%	0.49%	1.26%	1.03%	0.03%	0.04%	0.08%	0.21%	0.24%	-0.04%	0.12%	0.35%
1962	1.50%	1.04%	-0.40%	0.21%	0.62%	0.00%	0.06%	0.18%	0.16%	-0.56%	-1.13%	-0.41%	0.11%
1963	-0.01%	0.34%	0.32%	0.26%	0.15%	0.00%	0.00%	0.00%	0.00%	0.01%	0.04%	-1.30%	-0.02%
1964	-1.37%	-0.73%	0.38%	1.44%	1.56%	1.00%	0.83%	-0.26%	-0.82%	0.35%	0.32%	-0.32%	0.20%
1965	-0.15%	0.04%	-0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.06%	0.18%	0.61%	0.06%
1966	0.81%	2.03%	4.28%	0.97%	0.00%	0.00%	0.01%	0.06%	0.05%	-0.07%	-0.07%	-0.01%	0.67%
1967	0.02%	0.30%	0.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.90%	1.55%	0.27%
1968	1.21%	0.84%	1.05%	0.79%	0.00%	0.00%	0.00%	0.29%	0.38%	-0.32%	-0.40%	-0.16%	0.31%
1969	-0.21%	-0.29%	-0.05%	0.46%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	1.22%	0.10%
1970	1.64%	1.04%	0.66%	0.00%	0.00%	0.00%	0.00%	0.04%	0.08%	0.10%	0.22%	0.16%	0.33%
1971	0.07%	0.66%	1.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	-0.05%	0.86%	0.23%
1972	1.58%	1.08%	2.85%	5.44%	2.60%	0.06%	0.00%	-0.04%	-0.04%	-0.02%	-0.01%	0.00%	1.13%
1973	0.04%	0.44%	0.98%	0.02%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.01%	-0.02%	2.80%	0.35%
1974	6.87%	7.52%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.46%	2.68%	1.47%
1975	4.20%	2.73%	1.92%	1.36%	0.74%	0.00%	0.00%	0.00%	0.00%	0.05%	0.85%	1.98%	1.15%
1976	0.83%	-1.49%	-0.24%	0.29%	-0.55%	0.00%	2.27%	1.98%	0.84%	0.20%	-0.75%	-0.32%	0.25%
1977	-0.21%	-1.04%	-1.40%	-1.73%	-1.58%	-0.75%	-0.26%	-0.09%	-0.05%	0.05%	0.17%	0.11%	-0.56%
1978	0.14%	0.31%	0.38%	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.10%	0.91%	0.18%
1979	1.39%	-0.64%	-0.92%	0.59%	0.98%	0.00%	0.00%	0.01%	0.01%	-0.03%	-0.03%	0.81%	0.18%
1980	0.94%	0.84%	2.24%	3.60%	0.00%	0.00%	0.00%	0.00%	0.08%	0.29%	0.24%	0.91%	0.76%
1981	1.37%	0.70%	0.41%	0.70%	0.25%	0.00%	0.01%	0.33%	1.06%	0.41%	0.10%	0.15%	0.46%
1982	0.31%	0.39%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.06%	0.54%	0.12%
1983	0.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.05%
1984	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.26%	0.27%	0.00%	0.13%	0.06%
1985	0.39%	0.48%	0.13%	0.17%	0.40%	0.57%	0.45%	0.27%	0.17%	-0.14%	-0.06%	0.09%	0.24%
1986	0.20%	0.29%	0.54%	0.75%	0.09%	0.00%	0.00%	0.00%	0.09%	0.23%	0.86%	1.53%	0.38%
1987	1.24%	0.45%	0.15%	0.12%	0.46%	0.97%	0.04%	-0.04%	0.42%	0.82%	0.82%	0.71%	0.51%
1988	0.51%	0.25%	0.60%	1.10%	0.09%	0.08%	1.21%	1.66%	0.67%	0.01%	1.29%	2.21%	0.81%
1989	0.92%	-0.03%	1.25%	2.60%	2.07%	0.82%	0.00%	0.01%	0.25%	0.59%	0.52%	0.71%	0.81%
1990	1.45%	2.64%	3.26%	2.00%	0.39%	0.23%	0.44%	1.86%	2.00%	0.27%	-0.22%	0.20%	1.21%
1991	-0.04%	-1.01%	-1.19%	-0.02%	0.77%	0.74%	0.03%	0.73%	1.62%	0.78%	2.18%	3.94%	0.71%
AVG:	0.73%	0.68%	0.72%	0.57%	0.23%	0.09%	0.08%	0.14%	0.16%	0.09%	0.20%	0.61%	0.36%
MIN:	-1.39%	-2.23%	-1.41%	-2.01%	-3.81%	-4.70%	-3.24%	-1.28%	-0.82%	-0.56%	-1.13%	-1.66%	-0.95%
MAX:	6.87%	7.52%	6.40%	5.44%	4.21%	2.67%	2.27%	2.29%	2.00%	1.09%	3.23%	6.19%	1.47%

Table 4.4.5-81 Difference in simulated monthly average chloride concentration (%) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.20%	0.70%	0.37%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.18%	1.30%	0.20%
1923	2.31%	1.33%	0.21%	0.00%	0.00%	0.04%	0.03%	0.00%	0.04%	0.02%	-0.01%	1.17%	0.43%
1924	1.99%	0.72%	-0.41%	-0.36%	-0.48%	-0.15%	0.24%	0.26%	-0.01%	0.03%	0.28%	0.20%	0.19%
1925	-0.65%	-1.27%	-1.48%	-1.82%	-1.40%	0.00%	0.00%	0.02%	0.17%	0.07%	0.04%	0.63%	-0.48%
1926	0.47%	0.07%	0.07%	0.09%	-0.04%	0.00%	0.00%	0.02%	0.20%	0.10%	-1.59%	-2.83%	-0.29%
1927	-1.28%	-0.13%	0.61%	0.66%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.76%	3.22%	3.62%	0.62%
1928	3.21%	4.42%	6.44%	3.66%	0.46%	0.01%	0.00%	0.00%	0.00%	-0.02%	-0.03%	-0.07%	1.51%
1929	0.01%	0.75%	0.96%	-0.19%	0.40%	1.78%	0.70%	0.19%	0.03%	0.00%	0.57%	1.03%	0.52%
1930	0.53%	0.35%	0.94%	1.33%	0.11%	0.02%	0.00%	0.04%	0.12%	0.10%	0.08%	0.08%	0.31%
1931	0.12%	0.38%	0.65%	0.51%	-0.09%	-0.52%	-0.20%	-0.11%	-0.21%	-0.07%	0.17%	0.13%	0.06%
1932	-0.07%	-0.21%	-0.14%	0.17%	0.01%	0.03%	0.04%	0.08%	0.11%	0.08%	0.24%	0.33%	0.06%
1933	0.23%	0.40%	0.81%	1.63%	2.47%	1.60%	0.57%	0.14%	0.04%	0.01%	0.05%	0.09%	0.67%
1934	0.04%	0.04%	0.05%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.68%	0.10%
1935	0.29%	0.03%	0.09%	0.07%	0.01%	0.00%	0.00%	0.00%	0.05%	1.36%	1.40%	0.63%	0.33%
1936	1.43%	0.62%	-2.09%	-2.55%	0.01%	0.00%	0.00%	-0.01%	-0.22%	-0.23%	-0.08%	0.70%	-0.20%
1937	0.20%	-1.08%	-1.61%	-0.45%	0.29%	0.00%	0.00%	0.00%	-0.06%	0.02%	0.05%	0.02%	-0.22%
1938	0.01%	-1.32%	-3.97%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.13%	3.35%	-0.17%
1939	6.34%	7.63%	5.06%	3.97%	3.51%	1.70%	0.33%	0.13%	0.05%	-0.15%	0.05%	0.34%	2.41%
1940	-0.19%	-0.23%	0.10%	0.04%	0.00%	0.00%	0.00%	0.00%	0.05%	0.73%	0.69%	1.40%	0.22%
1941	1.92%	0.09%	-1.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.34%	3.14%	0.26%
1942	12.54%	17.45%	13.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.23%	-0.58%	3.42%	3.82%
1943	6.74%	19.02%	20.16%	0.30%	0.00%	0.00%	0.00%	0.00%	-0.03%	1.40%	4.15%	3.79%	4.63%
1944	2.95%	1.32%	0.44%	0.37%	-0.11%	-0.11%	0.01%	0.12%	0.39%	0.57%	0.33%	0.35%	0.55%
1945	0.39%	1.02%	1.68%	1.08%	0.23%	0.00%	0.01%	0.06%	0.17%	0.17%	0.08%	0.40%	0.44%
1946	0.62%	2.01%	3.12%	0.00%	0.00%	0.00%	0.02%	-0.25%	-0.85%	-0.78%	-0.34%	-0.45%	0.26%
1947	-0.25%	0.39%	0.72%	0.28%	0.34%	0.42%	-0.02%	-0.03%	-0.15%	-0.30%	-0.38%	-0.12%	0.08%
1948	0.49%	0.42%	0.89%	1.53%	0.74%	-0.08%	-0.03%	0.00%	0.00%	0.03%	0.03%	0.33%	0.36%
1949	-0.25%	-1.21%	-1.75%	-1.59%	-0.95%	-0.37%	0.00%	0.02%	0.02%	0.01%	2.37%	4.09%	0.03%
1950	2.10%	1.11%	2.60%	3.08%	0.51%	0.01%	0.02%	0.14%	0.78%	0.75%	0.29%	1.73%	1.09%
1951	0.59%	-0.52%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.02%	0.83%	0.97%	1.06%	0.25%
1952	1.18%	0.41%	-0.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.12%	1.76%	0.23%
1953	2.58%	1.25%	0.73%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.08%	0.22%	1.24%	0.51%
1954	2.08%	5.21%	7.51%	5.82%	0.04%	0.00%	0.00%	0.00%	-0.01%	-0.04%	-0.06%	-0.03%	1.71%
1955	-0.53%	-0.74%	-0.18%	0.68%	0.08%	-0.17%	-0.08%	0.21%	0.32%	0.18%	0.20%	0.25%	0.02%
1956	0.18%	0.14%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.43%	-0.69%	2.33%	0.14%
1957	-0.96%	-9.59%	-6.80%	-2.53%	-0.23%	0.00%	0.00%	0.01%	0.05%	0.41%	0.96%	-2.56%	-1.77%
1958	-1.84%	3.06%	3.37%	0.29%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.23%	3.36%	0.66%
1959	5.12%	2.51%	1.21%	0.67%	-0.01%	0.00%	0.00%	-0.08%	-0.05%	-0.28%	-0.68%	-0.44%	0.66%
1960	-0.17%	-0.20%	-0.33%	-0.37%	-0.31%	0.00%	0.00%	0.07%	0.26%	0.17%	0.05%	0.00%	-0.07%
1961	0.13%	0.15%	0.27%	0.63%	0.44%	0.00%	0.01%	0.07%	0.11%	0.03%	-0.03%	0.28%	0.18%
1962	0.35%	-0.64%	-1.59%	-0.89%	-0.25%	0.00%	0.00%	0.01%	0.02%	0.00%	-0.01%	0.01%	-0.25%
1963	0.03%	0.19%	0.18%	0.13%	0.07%	0.00%	0.00%	0.00%	0.02%	0.02%	0.04%	-1.29%	-0.05%
1964	-1.41%	-0.79%	0.34%	4.04%	4.78%	2.04%	0.76%	-0.33%	-0.41%	-0.10%	0.16%	-0.49%	0.72%
1965	-0.64%	-0.28%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.12%	0.59%	2.75%	3.23%	0.45%
1966	2.88%	2.54%	1.30%	0.30%	0.00%	0.00%	0.01%	0.05%	0.05%	-0.06%	-0.06%	0.01%	0.58%
1967	0.04%	0.05%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.85%	4.58%	0.55%
1968	3.96%	1.51%	1.32%	0.91%	0.01%	0.00%	0.00%	0.06%	0.07%	-0.08%	-0.10%	-0.04%	0.64%
1969	-0.24%	-0.34%	-0.16%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%	-0.19%	4.81%	0.34%
1970	6.43%	1.50%	0.59%	0.00%	0.00%	0.00%	0.00%	0.05%	0.10%	0.15%	0.35%	0.25%	0.79%
1971	0.12%	0.64%	1.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.05%	0.03%	1.06%	0.25%
1972	1.82%	1.20%	3.04%	5.77%	2.74%	0.06%	0.00%	-0.04%	-0.04%	-0.02%	-0.01%	0.00%	1.21%
1973	-0.61%	-1.64%	-2.21%	-0.06%	0.00%	0.00%	0.00%	-0.02%	-0.09%	0.00%	0.06%	4.01%	-0.05%
1974	9.93%	10.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.37%	2.78%	9.86%	2.82%
1975	13.23%	6.63%	3.53%	2.06%	1.00%	0.00%	0.00%	0.00%	0.00%	-0.16%	1.99%	5.43%	2.81%
1976	4.76%	0.67%	0.83%	0.73%	-1.68%	-2.36%	0.73%	0.88%	0.39%	0.18%	0.67%	0.67%	0.54%
1977	-0.51%	-1.50%	-1.17%	-0.07%	0.03%	-0.10%	-0.02%	-0.05%	-0.04%	0.15%	0.34%	0.21%	-0.23%
1978	0.10%	0.13%	0.14%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.06%	0.91%	0.12%
1979	1.41%	0.89%	0.48%	0.50%	0.24%	0.00%	0.00%	-0.02%	-0.06%	0.02%	0.05%	0.19%	0.31%
1980	0.09%	-0.18%	0.00%	0.58%	0.00%	0.00%	0.00%	0.01%	0.31%	1.05%	0.85%	1.75%	0.37%
1981	2.43%	1.04%	0.36%	0.96%	0.57%	0.00%	0.00%	0.08%	0.22%	0.07%	0.01%	0.03%	0.48%
1982	0.00%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.14%	-0.37%	1.37%	0.07%
1983	1.97%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.05%	0.17%
1984	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.12%	0.29%	0.60%	0.67%	0.14%
1985	0.77%	0.75%	0.14%	0.18%	0.40%	0.54%	0.41%	0.27%	0.20%	-0.17%	-0.08%	0.11%	0.29%
1986	0.23%	0.31%	0.58%	0.78%	0.10%	0.00%	0.00%	-0.01%	-0.33%	-0.72%	1.42%	4.43%	0.56%
1987	4.12%	1.47%	0.41%	0.41%	0.71%	1.48%	0.02%	-0.06%	1.13%	2.18%	2.03%	1.65%	1.30%
1988	0.76%	-0.33%	-0.25%	0.48%	0.02%	0.02%	0.19%	0.26%	0.11%	0.00%	0.44%	0.76%	0.21%
1989	0.26%	-0.41%	-0.54%	-0.27%	-0.07%	-0.01%	0.00%	0.00%	0.01%	0.05%	-0.02%	-0.28%	-0.11%
1990	-0.19%	0.62%	1.44%	1.02%	0.25%	-0.08%	-0.16%	0.18%	0.32%	-0.01%	-0.45%	-0.61%	0.19%
1991	-0.11%	0.20%	0.12%	0.30%	0.37%	0.21%	0.00%	-0.25%	-0.64%	-0.37%	-0.32%	-0.41%	-0.08%
AVG:	1.47%	1.16%	0.88%	0.51%	0.22%	0.09%	0.05%	0.03%	0.04%	0.12%	0.38%	1.14%	0.51%
MIN:	-1.84%	-9.59%	-6.80%	-2.55%	-1.68%	-2.36%	-0.20%	-0.33%	-0.85%	-0.78%	-1.59%	-2.83%	-1.77%
MAX:	13.23%	19.02%	20.16%	5.82%	4.78%	2.04%	0.76%	0.88%	1.13%	2.18%	4.15%	9.86%	4.63%

Table 4.4.5-82 Simulated monthly average electrical conductivity (µS/cm) at Jersey Point, ANN results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1343	1913	1108	978	343	287	272	268	281	262	356	1265	479
1923	1664	2895	618	285	276	298	273	271	293	517	1168	1937	875
1924	2539	2289	2462	2297	1019	506	594	1067	1661	1143	1517	2278	1614
1925	2460	2358	1859	1518	371	269	272	274	304	520	1333	2451	1166
1926	2314	2458	2173	1075	337	291	282	290	440	933	1330	2004	1160
1927	2665	1050	686	401	274	280	275	272	266	312	766	1981	769
1928	2639	1535	1505	791	454	284	276	266	301	436	1091	2141	977
1929	2578	2228	1908	2290	1097	546	570	655	977	1268	1594	2064	1481
1930	2712	2117	1585	581	347	338	289	321	597	1040	1443	2088	1122
1931	2640	2190	1516	1720	950	829	979	1101	1536	1156	1638	2250	1542
1932	2573	2247	601	328	312	334	325	332	356	520	901	2283	926
1933	2717	2179	1387	1043	619	594	489	542	940	1307	1382	1833	1253
1934	2973	1961	1905	856	394	382	394	545	831	1169	1680	2345	1286
1935	2563	2209	2153	629	331	321	269	267	271	336	860	2299	1042
1936	2743	2089	2335	714	273	280	272	261	292	486	1207	2298	1104
1937	2792	1981	2364	2330	354	272	272	268	271	402	1039	2273	1218
1938	2643	1161	316	278	275	278	279	278	277	256	312	582	578
1939	355	973	1267	933	754	573	424	416	677	1193	1754	2395	976
1940	2347	2342	2288	585	278	277	277	274	263	381	920	1960	1016
1941	2665	2191	551	275	277	278	278	276	268	271	554	1218	759
1942	1137	2283	533	271	278	278	272	272	284	275	505	930	610
1943	808	1155	653	281	277	276	275	266	262	309	783	2050	616
1944	2503	2320	2435	2320	510	353	301	324	463	889	1780	2625	1402
1945	2202	2434	1591	1139	387	286	269	279	336	579	1143	2189	1069
1946	2452	2065	437	283	274	277	278	294	369	610	1271	2185	900
1947	2573	2256	1678	1473	763	475	356	366	569	1170	1782	2541	1334
1948	2289	2498	2317	1705	771	518	326	273	272	390	980	2055	1200
1949	2592	2292	1927	1501	1045	386	277	285	421	800	1197	2248	1248
1950	2574	2262	1715	607	357	306	285	283	326	594	1279	2137	1060
1951	3057	544	273	278	278	276	262	261	294	417	1000	2030	747
1952	2642	2205	531	273	279	278	275	277	279	265	329	430	672
1953	327	884	432	275	277	274	260	271	333	310	586	862	424
1954	1437	1853	2566	819	295	281	273	268	276	411	1026	1948	954
1955	2688	2199	1022	537	400	495	430	393	527	848	1382	2421	1112
1956	2317	2446	436	273	279	278	258	258	266	299	646	859	718
1957	772	1635	2477	2292	507	284	273	269	306	440	942	1989	1015
1958	1400	1787	710	313	272	279	278	278	279	260	365	536	563
1959	392	1018	2144	755	273	272	276	342	503	738	1315	1835	822
1960	2661	1936	2014	2183	545	336	295	340	581	1137	1519	2198	1312
1961	2443	2333	1825	1207	488	323	326	407	636	1346	1783	2091	1267
1962	2601	2232	1822	1383	379	297	275	296	474	738	1372	2135	1167
1963	841	458	425	393	300	281	272	275	266	292	746	1906	538
1964	2104	911	706	496	358	413	421	416	557	1116	1781	2293	964
1965	2482	2330	485	274	281	273	264	270	267	323	749	1751	812
1966	2728	1002	613	423	296	306	270	305	418	663	1267	2278	881
1967	2264	2435	616	272	283	279	273	274	279	266	302	376	660
1968	356	1010	1867	681	274	282	266	296	465	734	1304	2306	820
1969	2404	2342	874	287	275	279	276	275	271	256	353	546	703
1970	318	643	378	268	279	278	262	262	370	418	779	1736	499
1971	2502	1771	449	284	275	279	272	261	275	314	601	1003	690
1972	1704	2483	1788	1296	481	344	289	362	438	607	1183	2156	1094
1973	2535	1246	502	274	278	279	272	263	290	417	915	1953	769
1974	2735	533	276	277	280	277	277	276	268	294	640	773	575
1975	574	1289	2046	1818	383	277	273	271	269	296	589	838	744
1976	549	931	1757	2335	1346	736	482	783	1708	2092	2116	2504	1445
1977	2276	2484	1510	1715	1280	1150	1052	1049	1466	1192	1570	2252	1583
1978	2635	2217	1893	418	280	279	271	270	267	285	677	1776	939
1979	1898	2880	2074	606	277	280	272	269	305	463	1033	2275	1053
1980	2535	2358	1141	315	275	279	272	256	267	355	947	1767	897
1981	1894	2779	2095	680	308	293	269	299	561	1248	1767	2283	1206
1982	2354	701	282	277	278	278	278	278	272	254	451	482	515
1983	267	283	271	275	277	279	279	279	278	273	248	282	274
1984	227	269	268	278	277	269	258	267	332	401	816	1829	458
1985	2646	844	356	527	542	435	365	374	581	1176	1783	2153	982
1986	2395	2352	1400	671	276	278	278	264	258	367	773	1565	906
1987	2084	2645	2218	2470	717	325	313	357	638	1143	1734	2821	1455
1988	1980	2030	917	537	380	414	579	708	875	1140	1658	2187	1117
1989	2519	2302	2223	1802	940	380	282	285	465	1063	1756	1974	1332
1990	2853	1848	2267	1908	600	543	485	604	1362	1470	1663	2670	1523
1991	2265	2508	1551	1773	1379	493	292	338	939	1562	1636	2108	1404
AVG:	2067	1841	1334	910	454	356	331	358	488	674	1109	1844	977
MIN:	227	269	268	268	272	269	258	256	258	254	248	282	274
MAX:	3057	2895	2566	2470	1379	1150	1052	1101	1708	2092	2116	2821	1614

Table 4.4.5-83 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, ANN results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.08%	0.35%	0.89%	0.20%	0.05%	0.00%	-0.01%	0.00%	0.00%	0.13%	0.27%	0.31%
1923	0.43%	-0.22%	-0.11%	0.15%	0.01%	0.11%	0.05%	0.03%	0.10%	0.37%	0.04%	0.18%	0.07%
1924	0.61%	-0.54%	0.40%	-0.32%	-0.25%	0.57%	1.45%	2.02%	-1.08%	1.50%	0.96%	-0.68%	0.18%
1925	-1.16%	-0.66%	-0.87%	-0.18%	-0.01%	-0.03%	0.01%	0.02%	0.02%	0.02%	-1.35%	-1.32%	-0.81%
1926	1.29%	-0.89%	0.20%	0.25%	-0.36%	-0.32%	0.00%	0.33%	0.63%	0.24%	-0.75%	-1.35%	-0.13%
1927	0.30%	2.52%	5.28%	2.83%	0.07%	0.00%	-0.01%	0.02%	0.02%	-0.19%	-0.07%	0.48%	0.98%
1928	0.26%	1.56%	2.02%	1.26%	0.37%	0.02%	0.00%	-0.01%	0.03%	0.00%	0.09%	0.12%	0.65%
1929	-0.11%	0.26%	-0.06%	-0.14%	1.14%	0.13%	0.50%	0.09%	1.06%	-0.58%	1.51%	0.37%	0.28%
1930	-0.73%	0.16%	0.86%	0.23%	0.19%	0.28%	0.12%	0.46%	-0.21%	-2.07%	4.56%	3.67%	0.91%
1931	-2.80%	1.70%	0.21%	-1.87%	-4.01%	-3.98%	-1.88%	-0.69%	0.11%	-0.08%	0.02%	-0.53%	-0.94%
1932	0.37%	-0.36%	1.18%	1.40%	-0.10%	1.24%	0.21%	0.12%	0.29%	0.12%	0.16%	0.24%	0.24%
1933	0.04%	-0.04%	-0.02%	6.14%	4.03%	1.57%	1.03%	0.08%	-0.01%	-0.11%	0.48%	0.27%	0.76%
1934	-0.61%	0.15%	-0.23%	-2.74%	-0.70%	-0.99%	-0.16%	0.12%	-0.95%	0.84%	0.85%	-0.40%	-0.28%
1935	0.01%	-0.13%	-0.37%	1.50%	0.46%	1.01%	-0.08%	-0.13%	-0.01%	-0.50%	1.57%	-2.38%	-0.32%
1936	0.67%	-4.66%	-1.39%	1.38%	0.44%	-0.04%	-0.28%	0.22%	0.10%	1.14%	0.20%	-0.04%	-0.70%
1937	0.81%	-0.77%	-1.14%	0.85%	0.69%	0.01%	-0.07%	0.06%	0.08%	2.92%	-2.78%	-1.19%	-0.28%
1938	1.43%	0.62%	-0.03%	0.05%	0.04%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.09%	1.14%	0.75%
1939	1.18%	2.01%	1.55%	1.21%	0.54%	0.49%	0.16%	0.04%	-0.23%	-0.07%	0.00%	0.20%	0.55%
1940	-0.55%	0.54%	-0.82%	-0.01%	0.08%	-0.01%	0.00%	0.00%	0.00%	-0.28%	-0.45%	0.14%	-0.17%
1941	-0.11%	-1.35%	-0.64%	0.02%	0.00%	0.00%	0.00%	-0.02%	-0.03%	0.03%	0.33%	1.58%	-0.16%
1942	4.09%	3.16%	1.19%	0.00%	-0.01%	0.00%	0.00%	-0.01%	0.01%	0.01%	0.28%	1.44%	1.91%
1943	2.15%	4.93%	2.47%	0.08%	0.00%	0.00%	0.00%	-0.01%	0.02%	0.08%	0.13%	0.12%	1.28%
1944	0.22%	-0.21%	0.13%	-0.11%	0.04%	0.18%	0.20%	0.29%	0.56%	0.57%	0.30%	0.05%	0.11%
1945	-0.03%	1.50%	1.44%	0.81%	0.31%	0.00%	0.04%	0.11%	0.18%	0.20%	0.24%	0.19%	0.61%
1946	-0.13%	0.80%	0.31%	0.00%	-0.02%	0.00%	0.02%	0.16%	0.43%	0.34%	0.07%	0.32%	0.25%
1947	-1.06%	0.92%	1.14%	-0.53%	0.61%	0.59%	-0.39%	-0.20%	-0.09%	-0.26%	0.01%	0.14%	0.06%
1948	-0.12%	0.08%	-0.11%	0.11%	0.28%	-0.06%	0.16%	0.02%	0.04%	0.33%	0.37%	0.32%	0.08%
1949	-0.12%	-0.13%	0.23%	0.36%	0.46%	0.53%	-0.05%	-0.17%	0.08%	-0.60%	0.80%	0.71%	0.20%
1950	0.79%	0.60%	0.28%	1.41%	1.02%	0.29%	0.15%	0.73%	2.16%	2.70%	0.41%	0.29%	0.70%
1951	-1.01%	-1.14%	-0.10%	-0.03%	0.00%	0.11%	-0.11%	-0.13%	0.26%	0.85%	0.57%	0.12%	-0.28%
1952	0.36%	-0.33%	-0.11%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	-0.03%	-0.20%	0.64%	0.04%
1953	0.74%	1.15%	0.54%	-0.01%	-0.01%	0.01%	0.01%	0.01%	0.26%	0.08%	0.37%	1.46%	0.60%
1954	1.29%	5.78%	4.09%	1.51%	0.05%	0.00%	0.00%	0.00%	0.01%	-0.03%	-0.01%	0.00%	2.12%
1955	-0.01%	-0.01%	1.59%	1.73%	0.66%	0.32%	-0.01%	0.11%	0.23%	-0.09%	-0.23%	-0.07%	0.19%
1956	0.55%	0.09%	0.00%	-0.01%	0.00%	0.00%	-0.02%	-0.02%	-0.02%	0.12%	0.32%	1.18%	0.32%
1957	2.10%	1.51%	-0.44%	0.36%	0.14%	0.19%	-0.01%	-0.04%	0.16%	0.21%	0.10%	0.03%	0.35%
1958	2.94%	3.16%	1.50%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%	0.15%	2.47%	1.81%
1959	1.93%	1.92%	0.63%	0.16%	-0.01%	-0.06%	0.01%	-0.02%	-0.16%	0.23%	-0.54%	-0.73%	0.22%
1960	-0.65%	0.92%	0.82%	1.38%	1.00%	0.42%	0.24%	0.89%	0.47%	0.38%	-0.47%	-1.58%	0.15%
1961	1.01%	-0.71%	0.44%	1.36%	1.02%	0.73%	0.47%	0.03%	0.41%	-0.05%	0.00%	-0.16%	0.26%
1962	1.29%	-1.65%	0.86%	0.58%	0.25%	-0.06%	0.05%	0.08%	0.35%	0.04%	-0.96%	-0.50%	0.00%
1963	1.56%	2.74%	1.65%	1.23%	0.14%	-0.01%	0.01%	0.00%	-0.02%	0.21%	0.15%	-0.32%	0.52%
1964	-0.17%	0.34%	0.91%	3.95%	3.25%	2.32%	1.15%	-0.82%	-0.38%	0.17%	0.00%	-0.20%	0.37%
1965	0.25%	-0.67%	-0.26%	0.00%	0.00%	0.03%	-0.02%	-0.03%	0.02%	0.22%	0.14%	0.13%	-0.07%
1966	0.35%	3.70%	3.40%	1.23%	0.12%	0.04%	0.04%	0.12%	0.13%	0.01%	-0.16%	0.00%	0.68%
1967	-0.07%	0.50%	0.67%	0.01%	0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	0.53%	1.29%	0.27%
1968	0.92%	1.12%	1.04%	0.20%	-0.03%	0.02%	-0.02%	0.34%	0.27%	0.07%	-0.43%	-0.10%	0.31%
1969	-0.38%	-0.20%	0.78%	0.15%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.03%	0.18%	1.79%	0.05%
1970	1.01%	2.42%	0.93%	-0.01%	0.00%	0.00%	0.00%	0.03%	0.07%	-0.05%	0.17%	0.29%	0.48%
1971	-0.27%	1.18%	0.73%	0.00%	0.00%	0.02%	-0.01%	-0.01%	0.04%	0.26%	0.13%	1.07%	0.36%
1972	1.36%	1.15%	4.15%	4.08%	1.49%	0.19%	0.06%	0.03%	-0.03%	0.10%	-0.44%	-0.05%	1.38%
1973	0.07%	0.97%	0.89%	0.04%	0.00%	0.00%	-0.01%	0.00%	1.00%	-6.32%	-1.48%	4.47%	0.74%
1974	2.61%	2.37%	0.09%	0.00%	0.00%	0.01%	0.00%	-0.02%	0.02%	0.18%	0.53%	3.61%	1.68%
1975	4.04%	2.70%	1.38%	0.72%	0.09%	-0.16%	0.02%	0.10%	-0.07%	0.11%	1.35%	2.12%	1.41%
1976	-1.08%	-1.15%	-0.28%	0.27%	-1.50%	0.55%	2.30%	1.85%	0.46%	0.12%	-0.75%	0.52%	0.01%
1977	-2.07%	-0.16%	-0.98%	-0.82%	-0.70%	-0.25%	0.09%	-0.07%	-0.01%	-0.06%	-1.94%	-0.36%	-0.69%
1978	0.38%	-0.33%	0.27%	-0.04%	0.01%	0.00%	-0.02%	-0.02%	0.00%	3.33%	-0.10%	-3.73%	-0.45%
1979	3.88%	-1.95%	2.07%	6.59%	0.20%	0.01%	0.04%	0.06%	0.19%	0.07%	0.10%	0.59%	0.92%
1980	-0.42%	0.39%	3.82%	1.09%	-0.01%	0.01%	0.00%	-0.04%	0.10%	0.35%	0.35%	1.17%	0.66%
1981	1.14%	-0.54%	0.67%	1.64%	0.23%	0.19%	0.08%	0.60%	1.53%	0.63%	-0.01%	0.13%	0.37%
1982	-0.17%	1.82%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.03%	0.24%	0.84%	0.23%
1983	0.19%	0.05%	-0.02%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.02%	0.27%	0.04%
1984	0.07%	-0.01%	-0.01%	0.00%	0.00%	-0.01%	-0.01%	0.04%	0.41%	0.32%	0.09%	-0.07%	0.04%
1985	0.26%	1.18%	0.81%	0.80%	0.68%	0.67%	0.54%	0.41%	0.17%	-0.04%	-0.01%	0.14%	0.32%
1986	0.10%	0.55%	0.86%	-11.70%	0.03%	-0.26%	0.02%	-0.02%	0.04%	0.08%	1.27%	1.14%	-0.22%
1987	0.61%	-0.42%	0.31%	-0.22%	2.80%	1.42%	0.35%	0.21%	0.51%	0.91%	-0.07%	0.03%	0.25%
1988	-0.37%	-0.82%	0.99%	1.93%	0.95%	0.12%	1.54%	-2.83%	-2.24%	-0.70%	0.77%	2.17%	0.16%
1989	-1.24%	1.00%	0.58%	1.37%	2.45%	0.08%	-0.05%	0.02%	0.35%	-0.96%	-0.09%	0.39%	0.31%
1990	-1.10%	1.84%	1.98%	0.52%	0.62%	0.47%	0.53%	2.68%	0.51%	-0.40%	-0.59%	0.35%	0.45%
1991	0.95%	-2.17%	0.46%	1.08%	0.55%	0.76%	0.32%	1.05%	2.92%	-0.79%	2.85%	7.00%	1.30%
AVG:	0.43%	0.57%	0.73%	0.52%	0.29%	0.14%	0.12%	0.12%	0.16%	0.09%	0.14%	0.46%	0.35%
MIN:	-2.80%	-4.66%	-1.39%	-11.70%	-4.01%	-3.98%	-1.88%	-2.83%	-2.24%	-6.32%	-2.78%	-3.73%	-0.94%
MAX:	4.09%	5.78%	5.28%	6.59%	4.03%	2.32%	2.30%	2.68%	2.92%	3.33%	4.56%	7.00%	2.12%

Table 4.4.5-84 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, ANN results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.06%	0.31%	0.80%	0.20%	0.04%	0.00%	-0.01%	-0.03%	-0.13%	-0.88%	0.42%	0.05%
1923	1.29%	-0.60%	-0.47%	0.58%	0.02%	0.19%	0.12%	0.06%	0.12%	0.61%	0.07%	0.48%	0.21%
1924	1.65%	-1.42%	1.03%	-0.81%	-0.89%	0.57%	0.18%	0.23%	-0.10%	0.28%	0.16%	0.12%	0.08%
1925	-1.67%	-0.32%	-0.89%	-0.86%	-0.04%	0.00%	0.01%	0.04%	0.30%	0.35%	0.05%	0.50%	-0.21%
1926	-0.49%	0.34%	-0.12%	-0.09%	0.40%	0.02%	0.05%	0.12%	0.20%	0.36%	-2.67%	-2.51%	-0.37%
1927	1.00%	0.95%	2.93%	1.89%	-0.09%	0.01%	0.03%	-0.05%	-0.02%	0.99%	2.76%	2.71%	1.09%
1928	2.01%	5.13%	4.32%	2.31%	0.47%	0.02%	0.00%	-0.01%	0.03%	0.42%	-0.08%	-0.25%	1.20%
1929	0.20%	1.59%	-0.52%	-0.67%	1.02%	0.79%	0.61%	0.05%	0.65%	-0.40%	0.91%	0.81%	0.42%
1930	-0.46%	0.41%	1.38%	0.52%	0.40%	0.24%	0.08%	0.10%	0.06%	0.28%	0.01%	-0.37%	0.22%
1931	0.16%	0.03%	0.09%	0.79%	-1.00%	-0.21%	-0.08%	-0.41%	-0.40%	0.40%	0.77%	0.18%	0.03%
1932	-0.16%	0.13%	0.20%	0.23%	0.02%	0.22%	-0.40%	0.12%	0.20%	0.12%	0.12%	0.22%	0.09%
1933	-0.12%	0.61%	0.72%	2.61%	2.17%	1.07%	0.51%	0.04%	-0.01%	-0.03%	0.13%	0.07%	0.65%
1934	-0.02%	0.02%	0.01%	-0.32%	-0.01%	-0.07%	-0.02%	0.03%	-0.01%	-0.01%	0.60%	0.57%	0.06%
1935	-0.51%	0.46%	-0.14%	-0.16%	0.11%	-0.20%	-0.03%	-0.01%	-0.14%	-0.48%	2.07%	-1.71%	-0.06%
1936	1.43%	-4.87%	-3.03%	2.23%	0.52%	-0.01%	-0.29%	0.19%	-0.27%	1.19%	0.36%	-0.15%	-0.23%
1937	1.17%	-1.05%	-1.64%	1.23%	0.75%	0.15%	-0.09%	0.02%	-0.08%	3.91%	-0.55%	-1.43%	0.20%
1938	1.64%	-7.30%	-2.55%	0.17%	0.05%	0.00%	0.00%	0.00%	0.01%	0.04%	-0.60%	3.91%	-0.39%
1939	4.61%	8.71%	4.54%	5.47%	2.53%	0.58%	0.08%	-0.04%	-0.05%	-0.26%	-0.02%	0.40%	2.21%
1940	-0.77%	0.95%	-0.42%	-0.61%	0.02%	0.00%	0.00%	0.01%	-0.01%	0.30%	0.85%	0.75%	0.09%
1941	1.81%	-3.72%	-2.48%	0.07%	0.00%	0.01%	0.00%	-0.03%	0.23%	-0.23%	-0.97%	6.24%	0.08%
1942	15.94%	12.11%	2.53%	-0.01%	0.01%	-0.01%	-0.02%	-0.01%	-0.07%	1.82%	-2.43%	3.51%	2.78%
1943	6.99%	31.82%	15.96%	0.13%	0.00%	0.03%	-0.02%	0.08%	-0.09%	0.84%	2.26%	2.39%	5.03%
1944	1.73%	-1.46%	1.03%	-0.82%	-1.45%	-0.24%	-0.17%	0.17%	0.54%	0.56%	0.30%	0.10%	0.02%
1945	-0.36%	1.57%	1.41%	0.60%	0.41%	0.01%	0.05%	0.18%	0.43%	0.43%	1.83%	0.36%	0.57%
1946	-0.41%	3.45%	1.30%	0.00%	0.12%	-0.04%	-0.05%	-0.50%	-1.75%	-1.50%	-0.32%	-0.21%	0.01%
1947	-0.70%	0.60%	0.84%	-0.87%	0.60%	0.55%	-0.08%	-0.13%	-0.87%	-0.40%	0.00%	-0.49%	-0.08%
1948	0.01%	-0.57%	-6.86%	-1.93%	2.70%	-0.91%	1.08%	0.00%	0.00%	0.06%	0.07%	0.14%	-0.52%
1949	-1.30%	-0.08%	-0.83%	-0.94%	0.10%	-0.34%	0.04%	0.00%	0.50%	-0.54%	4.79%	3.65%	0.42%
1950	-1.25%	2.39%	2.73%	1.23%	1.00%	0.25%	0.25%	0.83%	2.20%	2.64%	0.35%	1.04%	1.14%
1951	-1.93%	-1.56%	-0.01%	0.02%	0.00%	-0.03%	0.02%	0.04%	-0.12%	0.98%	1.27%	0.15%	-0.10%
1952	0.82%	-0.74%	-0.39%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.07%	-1.81%	1.73%	-0.04%
1953	1.99%	1.93%	0.94%	0.00%	0.00%	-0.01%	0.00%	0.01%	0.29%	0.13%	0.52%	1.73%	0.63%
1954	1.48%	6.78%	4.80%	1.74%	0.06%	0.00%	0.00%	0.00%	0.01%	0.03%	-0.04%	-0.05%	1.23%
1955	-1.19%	0.04%	1.34%	0.67%	0.50%	-0.28%	-0.02%	0.32%	0.39%	-0.19%	-0.17%	0.01%	0.12%
1956	-0.01%	0.01%	0.13%	-0.02%	0.00%	0.00%	-0.02%	-0.02%	0.16%	-4.49%	-2.11%	8.28%	0.16%
1957	-8.38%	-9.95%	-2.49%	2.00%	-0.33%	0.57%	0.05%	-0.13%	-0.17%	0.22%	-0.49%	-1.26%	-1.70%
1958	1.43%	1.84%	2.34%	-0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.07%	-1.01%	3.99%	0.71%
1959	3.09%	2.95%	0.85%	-0.85%	-0.07%	0.03%	-0.02%	-0.01%	0.00%	0.20%	-0.46%	-0.42%	0.44%
1960	0.17%	-0.13%	-0.11%	-0.16%	-0.11%	0.03%	0.00%	0.13%	0.04%	0.02%	0.04%	-0.28%	-0.03%
1961	0.19%	-0.14%	0.19%	0.50%	0.23%	0.07%	0.09%	-0.07%	0.09%	-0.03%	-0.01%	0.09%	0.10%
1962	0.99%	-1.75%	-0.31%	0.34%	0.07%	0.02%	0.00%	-0.07%	0.06%	-0.01%	-0.04%	0.02%	-0.06%
1963	0.73%	1.55%	0.95%	0.62%	0.14%	0.00%	-0.01%	-0.01%	-0.05%	1.79%	0.08%	-1.79%	0.33%
1964	0.88%	-0.48%	0.91%	10.81%	8.67%	5.07%	1.10%	-0.45%	-0.25%	-0.05%	-0.01%	-0.01%	2.18%
1965	0.19%	-0.62%	-0.05%	0.00%	0.01%	0.04%	-0.01%	-0.03%	0.00%	0.42%	2.15%	2.65%	0.40%
1966	1.46%	1.63%	0.97%	0.71%	0.08%	0.04%	0.04%	0.11%	0.13%	0.02%	-0.15%	0.00%	0.42%
1967	-0.02%	0.00%	0.28%	0.01%	0.01%	0.00%	-0.01%	-0.01%	0.00%	0.01%	1.00%	3.76%	0.42%
1968	2.35%	2.24%	1.23%	0.30%	-0.02%	0.01%	-0.01%	0.08%	0.05%	0.02%	-0.10%	-0.03%	0.51%
1969	-0.46%	-0.14%	0.35%	0.07%	-0.01%	0.00%	0.00%	0.00%	0.01%	0.05%	-1.10%	6.30%	0.42%
1970	3.32%	2.36%	0.35%	0.01%	0.00%	0.00%	0.00%	0.04%	0.09%	0.01%	0.30%	0.41%	0.57%
1971	-0.28%	1.08%	0.68%	0.00%	0.00%	0.02%	-0.01%	-0.01%	0.05%	0.32%	0.25%	1.30%	0.28%
1972	1.58%	1.26%	4.39%	4.29%	1.55%	0.19%	0.06%	0.03%	-0.02%	0.13%	0.54%	0.04%	1.17%
1973	-1.24%	-2.43%	-2.42%	-0.16%	0.00%	0.00%	-0.02%	0.01%	0.70%	-6.69%	-1.38%	4.96%	-0.72%
1974	4.71%	4.11%	0.12%	0.00%	0.00%	0.02%	0.00%	-0.02%	0.05%	0.83%	2.03%	11.73%	1.96%
1975	11.33%	6.50%	2.09%	0.87%	0.09%	-0.39%	0.06%	0.29%	-0.07%	-0.30%	2.15%	5.93%	2.38%
1976	1.93%	0.92%	0.52%	0.43%	-4.42%	-1.02%	1.21%	0.91%	0.25%	1.00%	1.58%	-0.93%	0.20%
1977	-0.79%	-1.04%	0.07%	0.70%	0.04%	-0.37%	0.08%	-0.13%	-0.01%	-0.14%	0.58%	0.20%	-0.07%
1978	-0.24%	0.22%	-0.09%	-0.10%	0.01%	0.00%	-0.01%	-0.01%	0.00%	0.05%	0.18%	1.49%	0.12%
1979	0.99%	-0.34%	0.36%	1.87%	0.08%	-0.01%	0.02%	-0.02%	-0.10%	-0.16%	0.09%	0.18%	0.25%
1980	-0.24%	0.18%	0.77%	0.17%	0.00%	-0.01%	-0.05%	-0.05%	0.37%	1.27%	1.24%	1.16%	0.40%
1981	1.84%	-1.10%	1.08%	3.36%	0.52%	0.25%	0.06%	0.22%	0.40%	0.15%	-0.01%	0.03%	0.57%
1982	0.00%	-0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.12%	-1.15%	2.13%	0.07%
1983	0.59%	0.10%	-0.07%	-0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.04%	0.78%	0.12%
1984	0.19%	-0.02%	-0.03%	0.00%	0.00%	-0.01%	-0.01%	0.04%	0.16%	0.46%	0.63%	0.43%	0.15%
1985	0.46%	1.35%	0.85%	0.84%	0.69%	0.61%	0.49%	0.43%	0.19%	-0.06%	0.00%	0.17%	0.50%
1986	0.08%	0.61%	0.91%	-11.68%	0.03%	-0.26%	0.02%	0.05%	-0.13%	-1.62%	2.18%	3.36%	-0.54%
1987	2.36%	-1.50%	1.22%	-0.83%	4.22%	2.15%	0.14%	0.26%	1.45%	1.81%	-0.09%	0.05%	0.94%
1988	-0.38%	-1.20%	1.11%	0.80%	0.15%	-0.75%	0.19%	-1.75%	-0.86%	-0.22%	-0.17%	0.52%	-0.21%
1989	-0.28%	0.23%	-0.20%	0.04%	0.07%	0.05%	0.01%	0.03%	0.06%	0.09%	-0.01%	-0.31%	-0.02%
1990	-0.74%	1.63%	1.24%	-0.09%	0.53%	-0.20%	-0.17%	0.34%	0.15%	-0.13%	-1.14%	-0.57%	0.07%
1991	0.61%	-0.37%	0.23%	0.45%	0.08%	0.29%	0.01%	-0.27%	0.26%	-0.45%	-0.44%	0.47%	0.07%
AVG:	0.90%	0.94%	0.66%	0.43%	0.33%	0.13%	0.07%	0.02%	0.07%	0.10%	0.21%	1.14%	0.42%
MIN:	-8.38%	-9.95%	-6.86%	-11.68%	-4.42%	-1.02%	-0.40%	-1.75%	-1.75%	-6.69%	-2.67%	-2.51%	-1.70%
MAX:	15.94%	31.82%	15.96%	10.81%	8.67%	5.07%	1.21%	0.91%	2.20%	3.91%	4.79%	11.73%	5.03%

Table 4.4.5-85 Simulated monthly average electrical conductivity (µS/cm) at Rock Slough Entrance at Old River, ANN results for Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	541	690	619	481	344	244	233	231	233	231	246	430	297
1923	632	920	664	283	234	237	235	231	235	281	434	670	421
1924	891	928	926	919	656	380	325	426	604	590	588	783	668
1925	924	930	822	688	425	245	231	232	238	283	466	790	523
1926	921	929	895	649	356	244	236	236	266	379	523	705	528
1927	924	713	418	314	250	233	233	232	230	238	330	622	395
1928	916	801	640	502	338	259	234	231	236	266	408	698	461
1929	927	922	813	840	669	399	326	345	418	517	620	754	629
1930	941	920	737	474	289	254	244	243	299	421	559	737	510
1931	931	924	734	678	562	431	443	486	585	575	612	795	646
1932	941	925	570	288	247	249	250	250	256	290	385	698	446
1933	973	932	708	533	405	341	317	313	395	520	585	680	558
1934	958	927	775	570	336	269	270	300	375	478	622	819	558
1935	953	917	856	562	293	249	238	230	231	243	351	695	485
1936	980	919	874	604	294	233	233	229	234	274	437	743	505
1937	989	906	864	912	535	243	231	231	231	256	394	715	542
1938	958	731	364	239	233	233	234	234	233	229	237	295	352
1939	291	375	517	495	415	356	302	280	328	461	639	838	441
1940	919	911	900	573	276	233	233	233	230	251	369	640	481
1941	918	927	553	271	233	233	233	233	231	231	284	449	400
1942	527	731	562	268	232	233	232	232	234	234	276	388	346
1943	424	473	427	286	234	233	233	231	229	237	333	637	331
1944	900	929	925	920	563	280	248	245	275	374	601	885	595
1945	924	908	782	579	375	250	233	232	244	298	438	714	498
1946	910	874	514	257	233	233	233	236	253	309	467	731	437
1947	932	927	774	654	492	338	276	261	300	442	641	870	576
1948	929	932	928	787	526	348	276	239	232	254	381	666	541
1949	917	936	826	694	549	361	248	235	261	352	479	733	549
1950	941	928	782	497	294	250	239	235	243	300	466	723	491
1951	1016	673	270	233	233	233	230	228	234	262	389	664	389
1952	923	927	551	268	233	234	233	233	233	231	241	269	381
1953	264	354	347	254	233	233	230	230	243	247	296	386	276
1954	533	692	884	656	312	236	233	231	232	258	393	652	443
1955	920	932	642	386	293	291	292	276	296	376	521	791	502
1956	917	927	567	255	233	234	230	227	228	236	306	394	396
1957	408	558	837	920	559	267	233	231	237	268	381	648	462
1958	684	674	526	301	237	233	234	233	234	230	247	294	344
1959	291	389	688	585	299	232	232	245	285	351	493	672	397
1960	900	879	792	835	551	282	245	247	299	437	587	768	569
1961	909	923	812	625	403	271	249	264	319	484	666	785	559
1962	924	926	797	657	407	251	236	236	273	347	503	736	525
1963	599	346	286	276	254	237	233	232	231	234	323	605	321
1964	805	608	403	334	279	270	279	279	305	430	633	823	454
1965	930	928	560	262	234	233	230	230	230	240	328	576	415
1966	900	713	398	308	257	241	236	238	264	326	473	748	425
1967	887	917	599	280	234	234	233	232	233	231	236	255	381
1968	262	382	635	532	289	234	232	235	271	345	490	758	389
1969	917	919	635	319	234	233	233	233	232	228	244	294	394
1970	279	308	303	246	232	234	231	228	248	273	347	578	292
1971	856	826	475	258	234	233	233	229	231	240	299	415	377
1972	603	848	826	636	414	274	245	251	275	318	450	713	488
1973	921	732	411	264	233	234	232	230	234	261	373	638	397
1974	930	626	269	233	234	234	233	233	231	235	304	377	345
1975	359	465	707	771	469	248	232	232	231	236	295	382	385
1976	363	394	603	827	722	469	336	357	573	775	833	909	597
1977	921	928	774	676	623	538	501	487	565	572	604	786	665
1978	953	928	809	486	253	234	232	231	230	233	309	571	456
1979	748	950	936	547	279	234	233	231	237	272	401	715	482
1980	938	941	687	361	238	233	232	228	228	246	370	607	443
1981	746	930	925	564	295	241	234	236	290	456	649	819	532
1982	905	604	293	234	233	233	233	234	232	228	263	296	332
1983	260	233	233	232	233	233	234	234	234	233	227	230	235
1984	224	225	230	232	233	232	228	229	242	264	352	600	274
1985	896	672	327	291	318	300	272	264	304	445	642	797	461
1986	894	920	735	465	288	233	234	231	228	247	339	545	446
1987	753	932	930	917	623	304	247	253	312	447	628	915	605
1988	910	801	599	372	289	273	309	356	406	479	614	786	516
1989	922	928	883	792	571	345	248	235	270	407	621	759	582
1990	955	889	827	818	522	328	310	324	483	609	661	877	634
1991	942	931	785	693	650	428	266	247	366	567	669	768	609
AVG:	787	778	651	500	355	273	254	256	284	337	445	644	463
MIN:	224	225	230	232	232	232	228	227	228	228	227	230	235
MAX:	1016	950	936	920	722	538	501	487	604	775	833	915	668

Table 4.4.5-86 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, ANN results for Alternatives 2-5 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.04%	0.09%	0.46%	0.40%	0.05%	0.01%	0.00%	0.00%	0.00%	0.04%	0.16%	0.17%
1923	0.29%	-0.02%	-0.16%	-0.01%	0.03%	0.03%	0.03%	0.02%	0.03%	0.14%	0.08%	0.10%	0.05%
1924	0.38%	-0.01%	0.01%	0.00%	-0.23%	0.05%	0.62%	1.23%	-0.06%	0.12%	0.88%	-0.11%	0.17%
1925	-0.81%	-0.74%	-0.64%	-0.40%	-0.09%	-0.01%	0.00%	0.01%	0.01%	0.01%	-0.72%	-1.09%	-0.55%
1926	0.12%	0.01%	-0.25%	0.17%	0.04%	-0.14%	-0.06%	0.08%	0.24%	0.21%	-0.30%	-0.92%	-0.11%
1927	-0.25%	0.86%	2.51%	2.30%	0.65%	0.01%	0.00%	0.00%	0.01%	-0.04%	-0.05%	0.27%	0.52%
1928	0.28%	0.68%	1.42%	1.22%	0.51%	0.09%	0.00%	0.00%	0.00%	0.00%	0.05%	0.09%	0.47%
1929	-0.02%	0.07%	0.07%	-0.09%	0.28%	0.47%	0.20%	0.14%	0.49%	0.01%	0.56%	0.64%	0.21%
1930	-0.28%	-0.23%	0.42%	0.46%	0.10%	0.11%	0.08%	0.14%	-0.01%	-1.00%	1.68%	3.21%	0.50%
1931	-0.34%	-0.36%	0.79%	-0.82%	-2.08%	-2.68%	-1.83%	-0.82%	-0.13%	0.01%	-0.01%	-0.28%	-0.57%
1932	0.01%	-0.02%	0.04%	0.65%	0.23%	0.30%	0.28%	0.07%	0.10%	0.09%	0.09%	0.18%	0.12%
1933	0.10%	0.00%	-0.02%	2.26%	3.38%	1.54%	0.71%	0.25%	0.01%	-0.06%	0.18%	0.27%	0.56%
1934	-0.28%	-0.22%	-0.05%	-0.88%	-1.13%	-0.40%	-0.24%	0.01%	-0.37%	0.16%	0.65%	0.03%	-0.18%
1935	-0.13%	-0.06%	-0.22%	0.12%	0.55%	0.33%	0.17%	-0.04%	-0.03%	-0.14%	0.66%	-1.20%	-0.12%
1936	-0.43%	-1.71%	-2.26%	-0.45%	0.55%	0.06%	-0.07%	0.00%	0.06%	0.39%	0.28%	0.02%	-0.63%
1937	0.42%	0.03%	-0.83%	0.00%	0.61%	0.14%	-0.01%	0.00%	0.03%	0.88%	-0.96%	-1.28%	-0.15%
1938	0.34%	0.91%	0.27%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.44%	0.29%
1939	0.59%	1.13%	1.24%	0.98%	0.56%	0.31%	0.17%	0.05%	-0.09%	-0.08%	-0.02%	0.11%	0.41%
1940	-0.19%	0.06%	-0.19%	-0.46%	0.01%	0.01%	0.00%	0.00%	0.00%	-0.08%	-0.25%	-0.01%	-0.12%
1941	-0.02%	-0.64%	-0.87%	-0.18%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.12%	0.86%	-0.15%
1942	2.17%	2.75%	2.01%	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.70%	1.12%
1943	1.21%	2.78%	2.58%	0.80%	0.01%	0.00%	0.00%	0.00%	0.00%	0.03%	0.07%	0.10%	0.82%
1944	0.15%	-0.02%	-0.01%	0.00%	-0.06%	0.05%	0.08%	0.11%	0.23%	0.35%	0.28%	0.11%	0.08%
1945	0.01%	0.74%	1.20%	0.85%	0.41%	0.07%	0.01%	0.03%	0.07%	0.10%	0.16%	0.16%	0.42%
1946	0.00%	0.31%	0.50%	0.07%	0.00%	0.00%	0.00%	0.04%	0.14%	0.20%	0.10%	0.20%	0.16%
1947	-0.45%	0.01%	0.84%	0.18%	-0.04%	0.35%	0.05%	-0.13%	-0.06%	-0.14%	-0.06%	0.08%	0.06%
1948	0.00%	0.00%	-0.02%	0.00%	0.12%	0.07%	0.02%	0.04%	0.01%	0.10%	0.23%	0.26%	0.06%
1949	0.03%	-0.11%	0.05%	0.23%	0.30%	0.29%	0.11%	-0.05%	0.00%	-0.24%	0.24%	0.59%	0.13%
1950	0.64%	0.59%	0.36%	0.46%	0.65%	0.28%	0.09%	0.19%	0.67%	1.34%	0.69%	0.26%	0.52%
1951	-0.49%	-0.82%	-0.34%	-0.03%	0.00%	0.02%	-0.01%	-0.05%	0.04%	0.29%	0.41%	0.19%	-0.17%
1952	0.23%	0.00%	-0.20%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.06%	0.16%	0.02%
1953	0.32%	0.64%	0.54%	0.13%	0.00%	0.00%	0.00%	0.00%	0.07%	0.06%	0.15%	0.69%	0.26%
1954	0.98%	3.29%	3.93%	2.60%	0.56%	0.01%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	1.53%
1955	0.00%	-0.01%	0.47%	1.04%	0.62%	0.23%	0.07%	0.03%	0.10%	0.01%	-0.13%	-0.09%	0.14%
1956	0.23%	0.24%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.14%	0.56%	0.15%
1957	1.09%	1.24%	0.17%	0.00%	0.23%	0.08%	0.03%	-0.01%	0.03%	0.09%	0.08%	0.04%	0.28%
1958	1.14%	2.43%	1.89%	0.53%	0.03%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.04%	0.87%	0.93%
1959	1.13%	1.22%	0.77%	0.36%	0.06%	-0.01%	0.00%	0.00%	-0.06%	0.06%	-0.22%	-0.52%	0.23%
1960	-0.57%	0.10%	0.70%	0.96%	0.95%	0.37%	0.13%	0.27%	0.31%	0.27%	-0.13%	-0.98%	0.15%
1961	-0.03%	0.04%	-0.10%	0.67%	0.80%	0.42%	0.25%	0.09%	0.16%	0.05%	-0.02%	-0.08%	0.13%
1962	0.63%	-0.24%	-0.28%	0.56%	0.32%	0.04%	0.00%	0.03%	0.13%	0.08%	-0.49%	-0.52%	0.01%
1963	0.17%	1.21%	1.08%	0.69%	0.30%	0.03%	0.00%	0.00%	0.00%	0.05%	0.09%	-0.17%	0.27%
1964	-0.19%	0.01%	0.40%	1.37%	1.77%	1.27%	0.81%	0.01%	-0.29%	0.01%	0.04%	-0.11%	0.26%
1965	0.05%	-0.23%	-0.43%	-0.07%	0.00%	0.01%	0.00%	-0.01%	0.00%	0.06%	0.09%	0.10%	-0.06%
1966	0.24%	1.17%	2.29%	1.27%	0.31%	0.03%	0.02%	0.04%	0.06%	0.03%	-0.08%	-0.04%	0.47%
1967	-0.03%	0.22%	0.41%	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.44%	0.14%
1968	0.50%	0.68%	0.83%	0.56%	0.06%	0.00%	0.00%	0.08%	0.14%	0.08%	-0.20%	-0.16%	0.23%
1969	-0.22%	-0.23%	0.10%	0.32%	0.03%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.04%	0.66%	-0.01%
1970	0.71%	1.10%	0.94%	0.20%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.06%	0.19%	0.29%
1971	-0.07%	0.36%	0.75%	0.18%	0.00%	0.00%	0.00%	0.00%	0.01%	0.07%	0.09%	0.51%	0.20%
1972	0.97%	1.02%	2.17%	3.19%	2.12%	0.41%	0.05%	0.02%	0.00%	0.03%	-0.20%	-0.13%	1.04%
1973	0.02%	0.34%	0.62%	0.25%	0.01%	0.00%	0.00%	0.00%	0.24%	-1.74%	-1.67%	2.28%	0.21%
1974	2.76%	1.98%	0.68%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.04%	0.23%	1.52%	1.12%
1975	2.31%	2.11%	1.44%	0.83%	0.41%	-0.01%	-0.02%	0.03%	0.00%	0.02%	0.52%	1.17%	0.92%
1976	0.38%	-0.72%	-0.40%	0.06%	-0.41%	-0.44%	0.79%	1.20%	0.61%	0.21%	-0.31%	0.03%	0.02%
1977	-0.76%	-0.79%	-0.43%	-0.70%	-0.58%	-0.33%	-0.05%	0.00%	-0.02%	-0.03%	-0.97%	-0.74%	-0.50%
1978	0.08%	0.00%	-0.01%	0.14%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.76%	0.39%	-2.20%	-0.15%
1979	0.61%	-0.03%	0.02%	2.47%	2.04%	0.03%	0.01%	0.02%	0.06%	0.05%	0.06%	0.38%	0.47%
1980	-0.01%	0.03%	1.38%	1.87%	0.20%	0.00%	0.00%	-0.01%	0.01%	0.11%	0.22%	0.71%	0.42%
1981	0.93%	0.02%	0.06%	0.72%	0.57%	0.08%	0.05%	0.16%	0.65%	0.59%	0.17%	0.06%	0.32%
1982	-0.04%	0.30%	0.65%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.31%	0.11%
1983	0.26%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.03%
1984	0.06%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.11%	0.16%	0.09%	-0.02%	0.03%
1985	0.13%	0.43%	0.59%	0.41%	0.40%	0.35%	0.29%	0.22%	0.13%	0.01%	-0.01%	0.07%	0.21%
1986	0.10%	0.30%	0.55%	-2.82%	-3.81%	-0.06%	-0.04%	0.00%	0.00%	0.03%	0.55%	0.87%	-0.18%
1987	0.65%	-0.03%	-0.03%	0.00%	0.48%	1.21%	0.34%	0.11%	0.23%	0.54%	0.20%	0.00%	0.23%
1988	-0.14%	-0.52%	-0.10%	0.87%	0.74%	0.22%	0.57%	-0.71%	-1.60%	-0.88%	0.21%	1.37%	0.01%
1989	0.09%	0.00%	0.64%	0.81%	1.36%	0.95%	0.01%	0.00%	0.11%	-0.42%	-0.28%	0.16%	0.32%
1990	-0.50%	0.22%	1.59%	1.00%	0.40%	0.30%	0.27%	1.05%	0.74%	-0.02%	-0.40%	0.04%	0.36%
1991	0.57%	-0.77%	-0.80%	0.66%	0.63%	0.41%	0.26%	0.32%	1.54%	0.27%	1.05%	4.46%	0.72%
AVG:	0.25%	0.33%	0.45%	0.42%	0.23%	0.10%	0.06%	0.06%	0.07%	0.05%	0.07%	0.23%	0.22%
MIN:	-0.81%	-1.71%	-2.26%	-2.82%	-3.81%	-2.68%	-1.83%	-0.82%	-1.60%	-1.74%	-1.67%	-2.20%	-0.63%
MAX:	2.76%	3.29%	3.93%	3.19%	3.38%	1.54%	0.81%	1.23%	1.54%	1.34%	1.68%	4.46%	1.53%

Table 4.4.5-87 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, ANN results for Alternative 6 vs. Alternative 1, 2001 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.03%	0.08%	0.41%	0.35%	0.05%	0.01%	0.00%	-0.01%	-0.03%	-0.26%	0.13%	0.06%
1923	0.76%	-0.03%	-0.45%	-0.03%	0.10%	0.05%	0.06%	0.03%	0.04%	0.23%	0.14%	0.28%	0.10%
1924	1.03%	-0.03%	0.02%	0.01%	-0.65%	-0.19%	0.19%	0.14%	0.00%	0.06%	0.15%	0.11%	0.07%
1925	-0.80%	-0.77%	-0.51%	-0.69%	-0.44%	-0.01%	0.00%	0.01%	0.08%	0.17%	0.08%	0.31%	-0.21%
1926	-0.05%	0.00%	0.07%	-0.09%	0.03%	0.08%	0.02%	0.04%	0.08%	0.20%	-1.19%	-2.05%	-0.24%
1927	-0.22%	0.79%	1.23%	1.35%	0.41%	-0.01%	0.01%	-0.01%	-0.01%	0.24%	1.33%	2.10%	0.60%
1928	1.91%	2.78%	3.63%	2.50%	0.87%	0.12%	0.00%	0.00%	0.00%	0.14%	0.02%	-0.16%	0.98%
1929	0.02%	0.80%	0.38%	-0.51%	-0.01%	0.59%	0.39%	0.16%	0.29%	-0.01%	0.32%	0.68%	0.26%
1930	0.00%	-0.01%	0.73%	0.77%	0.24%	0.13%	0.06%	0.04%	0.04%	0.14%	0.08%	-0.19%	0.17%
1931	-0.03%	0.08%	0.05%	0.40%	0.02%	-0.39%	-0.09%	-0.20%	-0.30%	0.00%	0.49%	0.32%	0.03%
1932	-0.02%	0.00%	0.11%	0.11%	0.05%	0.06%	-0.06%	-0.04%	0.07%	0.07%	0.08%	0.16%	0.05%
1933	0.01%	0.22%	0.53%	1.23%	1.57%	0.90%	0.43%	0.12%	0.01%	-0.02%	0.05%	0.07%	0.43%
1934	0.01%	0.00%	0.01%	-0.09%	-0.12%	-0.02%	-0.02%	0.01%	0.00%	0.00%	0.30%	0.48%	0.05%
1935	-0.06%	0.01%	0.10%	-0.11%	-0.03%	-0.03%	-0.05%	-0.01%	-0.03%	-0.15%	0.89%	-0.71%	-0.01%
1936	0.19%	-1.48%	-3.15%	-1.15%	0.85%	0.08%	-0.07%	-0.01%	-0.03%	0.35%	0.37%	-0.01%	-0.34%
1937	0.57%	0.07%	-1.18%	0.00%	0.85%	0.19%	0.00%	-0.01%	-0.01%	1.15%	0.29%	-0.97%	0.08%
1938	0.38%	-1.35%	-3.68%	-0.44%	0.04%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.14%	1.36%	-0.32%
1939	2.16%	4.87%	4.39%	3.56%	2.59%	0.93%	0.17%	0.00%	-0.03%	-0.14%	-0.08%	0.21%	1.55%
1940	-0.22%	0.18%	0.14%	-0.35%	-0.18%	0.00%	0.00%	0.00%	0.00%	0.08%	0.44%	0.61%	0.06%
1941	1.21%	-0.93%	-2.53%	-0.69%	0.01%	0.00%	0.00%	-0.01%	0.04%	-0.02%	-0.39%	3.02%	-0.02%
1942	8.49%	10.59%	7.34%	0.70%	0.00%	0.00%	-0.01%	0.00%	-0.02%	0.39%	-0.58%	1.14%	2.34%
1943	3.58%	16.30%	16.65%	5.12%	0.02%	0.00%	0.00%	0.01%	-0.01%	0.19%	1.11%	1.84%	3.73%
1944	1.67%	-0.03%	0.00%	-0.01%	-0.72%	-0.43%	-0.08%	0.01%	0.20%	0.34%	0.28%	0.14%	0.11%
1945	-0.12%	0.67%	1.22%	0.76%	0.33%	0.09%	0.01%	0.05%	0.14%	0.22%	0.97%	0.62%	0.41%
1946	-0.08%	1.37%	2.15%	0.31%	0.03%	0.01%	-0.02%	-0.13%	-0.56%	-0.85%	-0.44%	-0.20%	0.13%
1947	-0.43%	0.00%	0.59%	-0.07%	-0.19%	0.33%	0.11%	-0.05%	-0.33%	-0.36%	-0.10%	-0.27%	-0.06%
1948	-0.18%	-0.28%	-3.44%	-3.62%	-0.13%	0.58%	0.00%	0.21%	0.00%	0.02%	0.04%	0.10%	-0.56%
1949	-0.65%	-0.54%	-0.40%	-0.71%	-0.32%	-0.03%	-0.06%	0.01%	0.15%	-0.14%	2.12%	3.20%	0.22%
1950	0.58%	0.61%	2.10%	1.60%	0.58%	0.26%	0.10%	0.23%	0.69%	1.32%	0.65%	0.66%	0.78%
1951	-0.79%	-1.47%	-0.44%	0.00%	0.00%	-0.01%	0.00%	0.01%	-0.02%	0.28%	0.76%	0.35%	-0.11%
1952	0.49%	0.00%	-0.48%	-0.11%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.48%	0.21%	-0.03%
1953	0.86%	1.16%	0.91%	0.22%	0.00%	0.00%	0.00%	0.00%	0.08%	0.08%	0.21%	0.83%	0.36%
1954	1.14%	3.84%	4.61%	3.04%	0.65%	0.01%	0.00%	0.00%	0.00%	0.01%	-0.02%	-0.04%	1.10%
1955	-0.66%	-0.46%	0.42%	0.67%	0.30%	0.00%	-0.07%	0.08%	0.19%	-0.01%	-0.13%	-0.03%	0.03%
1956	0.00%	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.04%	-1.04%	-1.45%	2.91%	0.04%
1957	-0.54%	-7.11%	-4.11%	0.00%	1.10%	0.03%	0.11%	-0.02%	-0.06%	0.04%	-0.19%	-0.83%	-0.97%
1958	0.04%	1.33%	1.47%	0.77%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.29%	1.19%	0.37%
1959	1.81%	1.89%	1.11%	0.23%	-0.31%	0.00%	0.00%	-0.01%	0.00%	0.08%	-0.19%	-0.34%	0.36%
1960	-0.03%	0.02%	-0.10%	-0.12%	-0.11%	-0.02%	0.00%	0.03%	0.04%	0.02%	0.02%	-0.14%	-0.03%
1961	0.00%	0.01%	0.03%	0.26%	0.26%	0.07%	0.04%	0.00%	0.03%	0.00%	-0.01%	0.04%	0.06%
1962	0.55%	-0.40%	-0.82%	0.02%	0.18%	0.02%	0.00%	-0.02%	0.01%	0.01%	-0.02%	0.00%	-0.04%
1963	0.20%	0.63%	0.61%	0.37%	0.17%	0.03%	0.00%	0.00%	-0.01%	0.41%	0.26%	-1.05%	0.13%
1964	-0.16%	0.29%	0.15%	3.28%	4.78%	3.06%	1.36%	0.11%	-0.17%	-0.07%	-0.02%	-0.01%	1.05%
1965	0.09%	-0.22%	-0.37%	-0.02%	0.00%	0.01%	0.00%	-0.01%	0.00%	0.10%	0.98%	1.91%	0.21%
1966	1.55%	1.21%	0.86%	0.46%	0.18%	0.02%	0.01%	0.03%	0.06%	0.03%	-0.07%	-0.03%	0.36%
1967	-0.01%	0.00%	0.06%	0.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.25%	1.20%	0.13%
1968	1.36%	1.42%	1.18%	0.68%	0.10%	0.00%	0.00%	0.02%	0.03%	0.02%	-0.04%	-0.04%	0.39%
1969	-0.24%	-0.24%	0.02%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.29%	2.01%	0.12%
1970	2.44%	1.41%	0.78%	0.08%	0.00%	0.00%	0.00%	0.01%	0.03%	0.02%	0.13%	0.29%	0.43%
1971	-0.04%	0.32%	0.69%	0.17%	0.00%	0.00%	0.00%	0.00%	0.01%	0.09%	0.14%	0.64%	0.17%
1972	1.14%	1.14%	2.32%	3.37%	2.22%	0.43%	0.05%	0.02%	0.00%	0.04%	0.29%	0.15%	0.93%
1973	-0.63%	-1.38%	-1.59%	-0.68%	-0.03%	0.00%	0.00%	0.00%	0.17%	-1.90%	-1.69%	2.58%	-0.43%
1974	4.06%	3.54%	1.17%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.01%	0.20%	0.92%	5.00%	1.24%
1975	6.95%	5.35%	2.79%	1.16%	0.49%	-0.06%	-0.05%	0.07%	0.03%	-0.08%	0.76%	2.91%	1.69%
1976	2.47%	0.79%	0.48%	0.38%	-1.35%	-2.08%	0.01%	0.61%	0.32%	0.59%	1.11%	0.03%	0.28%
1977	-0.72%	-0.80%	-0.44%	0.35%	0.28%	-0.14%	-0.09%	-0.03%	-0.04%	-0.06%	0.25%	0.27%	-0.10%
1978	-0.06%	0.01%	0.04%	-0.07%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.01%	0.08%	0.90%	0.07%
1979	0.97%	0.09%	0.01%	0.58%	0.58%	0.01%	0.00%	0.00%	-0.03%	-0.06%	0.02%	0.13%	0.19%
1980	-0.06%	-0.01%	0.33%	0.37%	0.03%	0.00%	-0.01%	-0.02%	0.07%	0.40%	0.77%	0.90%	0.23%
1981	1.26%	-0.09%	0.00%	1.33%	1.18%	0.15%	0.05%	0.06%	0.18%	0.14%	0.04%	0.01%	0.36%
1982	0.01%	-0.01%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.39%	0.41%	0.00%
1983	0.67%	0.12%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.19%	0.08%
1984	0.17%	0.02%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.05%	0.16%	0.35%	0.37%	0.09%
1985	0.38%	0.57%	0.66%	0.43%	0.42%	0.34%	0.26%	0.21%	0.14%	0.00%	-0.02%	0.09%	0.29%
1986	0.10%	0.32%	0.60%	-2.79%	-3.81%	-0.06%	-0.04%	0.02%	-0.02%	-0.47%	0.69%	2.25%	-0.27%
1987	2.20%	-0.06%	-0.05%	-0.01%	0.45%	1.83%	0.43%	0.09%	0.60%	1.16%	0.41%	0.00%	0.59%
1988	-0.13%	-0.70%	-0.25%	0.60%	0.25%	-0.18%	-0.07%	-0.61%	-0.77%	-0.32%	-0.14%	0.22%	-0.18%
1989	0.03%	0.00%	-0.01%	-0.06%	0.04%	0.04%	0.01%	0.01%	0.03%	0.05%	0.02%	-0.16%	0.00%
1990	-0.51%	0.30%	1.15%	0.44%	0.07%	0.07%	-0.10%	0.08%	0.14%	-0.01%	-0.58%	-0.63%	0.04%
1991	0.05%	0.02%	-0.08%	0.29%	0.20%	0.10%	0.08%	-0.07%	0.09%	-0.18%	-0.35%	0.11%	0.02%
AVG:	0.66%	0.67%	0.57%	0.37%	0.21%	0.10%	0.04%	0.02%	0.02%	0.05%	0.13%	0.54%	0.28%
MIN:	-0.80%	-7.11%	-4.11%	-3.62%	-3.81%	-2.08%	-0.10%	-0.61%	-0.77%	-1.90%	-1.69%	-2.05%	-0.97%
MAX:	8.49%	16.30%	16.65%	5.12%	4.78%	3.06%	1.36%	0.61%	0.69%	1.32%	2.12%	5.00%	3.73%

Table 4.4.5-88 Simulated X2 position (km), Alternative 1, 2001 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	66.89	65.68	66.28	60.77	61.57
1923	69.75	74.14	68.78	70.26	76.17
1924	78.18	77.15	80.24	84.74	84.47
1925	63.76	64.83	66.94	70.82	76.04
1926	66.77	74.00	69.99	73.91	81.00
1927	54.60	59.17	59.15	64.26	72.71
1928	71.65	57.31	62.95	68.44	78.25
1929	78.19	77.59	79.84	81.00	82.02
1930	72.67	68.10	73.78	75.87	80.57
1931	79.48	81.19	81.19	84.25	84.54
1932	70.49	73.90	74.96	74.56	75.90
1933	77.78	77.30	76.91	81.10	82.05
1934	74.58	75.04	76.20	81.00	81.00
1935	74.06	70.06	61.70	64.35	71.61
1936	59.08	63.20	65.83	69.13	75.90
1937	67.03	61.60	64.27	67.87	74.12
1938	51.98	47.08	51.43	53.04	57.86
1939	79.12	76.61	76.70	76.91	81.89
1940	60.90	53.64	54.52	65.04	74.22
1941	51.01	51.51	53.04	57.58	67.47
1942	50.31	60.77	59.18	60.93	66.02
1943	57.38	53.75	61.02	65.59	73.76
1944	72.61	71.83	74.09	75.58	78.15
1945	66.31	67.71	71.28	72.18	75.97
1946	64.80	69.09	72.50	73.16	76.62
1947	76.39	73.70	74.89	76.88	79.73
1948	76.85	76.23	69.50	66.94	72.28
1949	80.11	66.81	72.35	74.23	78.09
1950	68.03	71.13	70.53	71.24	75.90
1951	54.93	62.06	68.42	68.72	75.47
1952	55.14	55.52	54.73	54.43	58.71
1953	63.62	69.08	69.66	68.01	70.50
1954	62.44	60.87	61.07	65.72	76.89
1955	75.06	78.06	75.67	76.46	79.33
1956	52.03	59.58	65.97	62.73	69.18
1957	70.35	63.67	67.63	70.23	75.49
1958	51.39	51.31	50.94	55.40	60.80
1959	62.08	66.44	74.29	76.76	77.80
1960	71.50	71.83	74.14	75.59	80.79
1961	70.23	72.73	75.32	77.27	80.61
1962	66.70	68.15	73.05	74.21	79.19
1963	62.01	64.54	56.24	61.20	71.14
1964	75.05	77.26	75.79	76.72	79.59
1965	61.22	66.88	62.13	65.54	75.29
1966	68.52	68.66	71.49	74.26	77.22
1967	60.00	58.01	57.62	57.25	58.80
1968	61.32	62.92	69.77	75.85	77.82
1969	50.64	54.60	55.72	55.02	60.03
1970	51.43	58.67	67.59	73.20	77.63
1971	64.60	62.41	66.56	65.60	71.85
1972	72.48	68.21	74.00	77.77	76.23
1973	54.18	56.32	65.96	69.16	74.26
1974	58.94	52.55	53.84	62.41	69.44
1975	64.17	56.21	62.58	63.88	68.44
1976	80.70	77.36	77.83	84.13	86.20
1977	82.13	82.29	81.20	84.58	84.47
1978	60.10	57.13	58.73	63.62	69.60
1979	63.51	63.91	68.80	70.89	74.43
1980	51.39	55.64	64.26	68.02	74.94
1981	69.51	66.70	69.66	75.60	81.00
1982	52.05	52.63	48.45	55.56	64.03
1983	46.49	42.04	48.64	51.60	52.27
1984	58.64	61.46	67.86	72.36	76.59
1985	77.02	76.08	74.98	75.95	80.76
1986	52.20	48.12	60.39	68.32	74.46
1987	75.39	70.60	74.14	77.63	80.46
1988	74.27	77.78	79.78	81.00	81.00
1989	80.23	67.12	69.46	74.13	80.32
1990	76.57	77.31	77.07	81.61	85.19
1991	81.89	70.91	73.52	78.08	84.22
AVG:	66.04	65.63	67.64	70.40	74.98
MIN:	46.49	42.04	48.45	51.60	52.27
MAX:	82.13	82.29	81.20	84.74	86.20

Table 4.4.5-89 Simulated X2 position (km), Alternatives 2-5 minus Alternative 1, 2001 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	0.04	0.03	0.02	0.03	0.03
1923	0.04	0.02	0.02	0.03	0.00
1924	0.02	0.01	0.17	0.11	-0.16
1925	0.04	0.01	0.02	0.02	0.00
1926	0.00	0.00	0.06	0.09	0.00
1927	0.06	0.02	-0.02	-0.04	-0.10
1928	0.03	0.02	0.02	0.01	0.00
1929	0.13	0.04	0.01	0.00	0.00
1930	0.07	0.06	-0.01	0.11	-0.06
1931	-0.26	-0.18	-0.04	-0.01	-0.01
1932	0.26	0.09	0.03	0.04	0.01
1933	0.16	0.10	0.03	0.01	0.00
1934	-0.04	-0.01	0.00	0.00	0.00
1935	0.03	0.08	0.11	0.00	0.26
1936	0.11	0.32	0.13	0.05	0.00
1937	0.08	0.06	0.04	0.03	0.00
1938	0.01	0.01	0.01	0.01	0.02
1939	0.02	0.08	0.03	-0.03	0.01
1940	0.09	-0.03	0.00	0.02	-0.08
1941	0.01	0.03	0.02	0.02	0.00
1942	0.01	0.02	0.02	0.03	0.04
1943	0.02	0.01	0.02	0.02	0.00
1944	0.02	0.06	0.04	0.04	0.05
1945	0.08	0.06	0.03	0.04	0.01
1946	0.00	0.01	0.01	0.06	0.02
1947	0.06	-0.07	-0.02	0.01	-0.04
1948	0.00	0.01	0.02	0.04	0.04
1949	0.06	-0.04	0.00	0.00	0.00
1950	0.11	0.04	0.03	0.47	0.11
1951	0.00	0.10	0.04	0.04	0.06
1952	0.01	0.01	0.07	0.03	0.03
1953	0.01	0.01	0.03	0.03	0.06
1954	0.03	0.02	0.02	0.00	0.00
1955	0.03	0.02	-0.01	0.03	0.01
1956	0.01	0.02	0.01	0.03	0.04
1957	0.01	0.05	0.02	0.04	0.00
1958	0.02	0.01	0.01	0.02	0.02
1959	0.01	0.00	0.00	-0.01	-0.01
1960	0.09	0.07	0.02	0.16	0.01
1961	0.14	0.05	0.02	0.02	0.02
1962	-0.02	0.04	0.12	0.04	0.01
1963	-0.06	0.00	-0.01	0.04	0.01
1964	0.14	0.16	0.05	-0.16	0.07
1965	0.02	0.00	0.03	0.00	0.00
1966	0.03	0.02	0.04	0.03	-0.01
1967	0.05	0.02	0.02	0.02	0.02
1968	0.01	0.05	0.02	0.16	-0.04
1969	0.01	0.01	0.01	0.02	0.03
1970	0.01	0.02	0.00	0.04	-0.02
1971	0.00	0.07	0.00	0.05	0.05
1972	0.07	0.04	0.00	0.00	0.00
1973	0.02	0.04	0.02	0.02	0.00
1974	0.01	0.02	0.02	0.02	0.03
1975	0.02	-0.04	0.00	0.04	0.04
1976	-0.09	0.19	0.13	0.04	-0.02
1977	-0.02	0.00	0.00	0.00	0.00
1978	0.01	0.02	0.05	0.04	0.04
1979	0.13	0.10	0.06	0.03	0.00
1980	-0.02	0.02	0.02	0.03	0.06
1981	0.05	0.09	0.13	0.19	0.00
1982	0.01	0.01	0.01	0.02	0.04
1983	0.01	0.00	0.01	0.01	0.01
1984	0.02	0.02	0.00	0.04	0.06
1985	0.04	0.08	0.04	0.04	-0.02
1986	0.04	0.02	0.02	0.04	0.04
1987	0.14	0.13	0.00	0.01	0.07
1988	0.03	0.01	0.18	0.00	0.00
1989	0.02	0.00	0.02	0.00	0.06
1990	0.00	0.07	0.02	0.32	-0.13
1991	0.05	0.05	0.12	0.15	0.05
AVG:	0.03	0.04	0.03	0.04	0.01
MIN:	-0.26	-0.18	-0.04	-0.16	-0.16
MAX:	0.26	0.32	0.18	0.47	0.26

Table 4.4.5-90 Simulated X2 position (km), Alternative 6 minus Alternative 1, 2001 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	0.03	0.03	0.02	0.03	-0.15
1923	0.07	0.03	0.02	0.04	0.00
1924	0.01	0.00	0.03	-0.01	-0.01
1925	-0.01	0.00	0.01	0.10	0.01
1926	0.06	0.00	0.01	0.04	0.00
1927	0.05	0.02	0.02	0.08	-0.10
1928	0.05	0.02	0.02	0.01	0.00
1929	0.12	0.04	0.01	0.00	0.00
1930	0.06	0.04	0.01	0.02	0.01
1931	-0.04	0.00	0.00	-0.02	-0.01
1932	0.05	0.02	0.01	0.03	0.01
1933	0.12	0.05	0.02	0.00	0.00
1934	0.00	0.00	0.00	0.00	0.00
1935	0.00	0.00	0.01	0.00	0.31
1936	0.38	0.40	0.22	-0.10	-0.01
1937	0.09	0.10	0.05	-0.09	0.00
1938	0.00	0.00	0.01	0.01	-0.13
1939	0.08	0.03	0.01	0.02	-0.02
1940	0.01	0.02	0.03	-0.10	0.14
1941	0.01	0.04	0.02	-0.01	0.00
1942	0.02	0.02	0.02	0.03	-0.27
1943	0.06	0.02	0.03	-0.06	-0.01
1944	-0.09	-0.03	0.01	0.03	0.05
1945	0.09	0.05	0.05	0.08	0.02
1946	0.00	0.01	0.03	-0.25	-0.08
1947	0.06	-0.01	0.00	0.00	-0.03
1948	0.00	-0.01	-0.01	0.00	0.01
1949	-0.02	0.04	0.03	0.01	0.00
1950	0.12	0.08	0.09	0.47	0.11
1951	0.02	0.01	0.02	-0.12	0.15
1952	0.01	0.01	-0.02	0.00	-0.12
1953	0.01	0.01	0.03	0.03	0.06
1954	0.03	0.02	0.02	0.00	0.00
1955	0.01	-0.05	0.02	0.03	0.01
1956	0.01	0.02	0.02	0.03	-0.24
1957	-0.02	0.10	0.03	0.05	0.00
1958	0.04	0.02	0.01	0.02	-0.17
1959	-0.01	0.00	0.00	-0.02	0.01
1960	0.00	-0.01	0.00	0.03	0.01
1961	0.02	0.01	0.00	0.02	0.00
1962	0.00	-0.02	0.01	0.00	0.00
1963	0.08	0.00	0.02	0.21	0.04
1964	0.36	0.20	-0.02	-0.04	0.00
1965	0.03	0.00	0.03	0.00	-0.22
1966	0.03	0.02	0.04	0.02	-0.01
1967	0.05	0.02	0.02	0.02	-0.04
1968	0.01	0.02	0.00	0.03	-0.01
1969	0.02	0.01	0.01	0.01	-0.16
1970	0.01	0.02	0.00	0.05	-0.02
1971	0.00	0.07	0.00	0.05	0.05
1972	0.07	0.04	0.00	0.00	0.00
1973	0.00	0.05	0.02	-0.11	0.00
1974	0.02	0.04	0.02	-0.05	-0.11
1975	0.02	-0.13	-0.03	0.03	-0.10
1976	-0.26	0.11	0.04	0.01	0.00
1977	-0.01	0.00	0.00	-0.01	0.00
1978	0.01	0.01	0.03	0.03	0.03
1979	0.04	0.03	0.00	-0.06	0.00
1980	0.09	0.08	0.10	0.16	0.21
1981	0.08	0.08	0.05	0.05	0.00
1982	0.02	0.01	0.01	0.02	-0.18
1983	0.01	0.00	0.01	0.01	0.01
1984	0.02	0.02	0.00	0.05	0.00
1985	0.04	0.07	0.04	0.05	-0.03
1986	0.05	0.02	0.02	-0.16	-0.13
1987	0.22	0.10	0.00	0.01	0.19
1988	0.01	0.00	0.03	0.00	0.00
1989	0.00	0.01	0.02	0.00	0.01
1990	0.00	-0.02	-0.01	0.05	-0.02
1991	0.01	0.02	-0.03	-0.06	-0.02
AVG:	0.04	0.03	0.02	0.01	-0.01
MIN:	-0.26	-0.13	-0.03	-0.25	-0.27
MAX:	0.38	0.40	0.22	0.47	0.31

4.4.6 Monthly results at 2020 LOD

This section contains tables of the results for each of the 2020 Level-of-Development water quality modeling studies. Results are included for four models, in the following order: FDM, G model, ANN and X2. The presented results are for key locations within the Delta.

Simulated salinity is presented for each month in the Alternative 1 studies. For all the models other than X2, the results for the Alternatives 2-5 and Alternative 6 studies are displayed in the tables as percent change from Alternative 1 (No-Action). Percent change is the value for the alternative minus the value for Alternative 1, divided by the Alternative 1 value, expressed as a percentage. This method of presentation facilitates comparison of the results from the various models, which have output in differing units. For X2, the simulations for the action alternatives are shown as absolute change from the Alternative 1 values.

Table 4.4.6-1 Simulated monthly average chloride concentration (mg/L) at Martinez/Benicia, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	8154	8202	6074	4485	1519	1782	2122	825	1286	3891	6356	7803	4375
1923	8361	7451	2657	1776	3039	3668	2350	2777	4489	5653	6958	7809	4749
1924	8196	7741	7463	6935	5311	4782	5486	6791	7507	7160	7655	8714	6978
1925	8950	8430	6903	5983	683	1351	2154	3109	4693	6345	7234	8084	5327
1926	8604	8298	7868	5829	1465	3208	2702	3565	5527	6827	7709	8597	5850
1927	8650	5479	3968	2571	78	750	886	1818	3470	4963	6562	8010	3934
1928	8336	7117	6080	4469	3218	205	1270	2631	4218	5546	6808	8172	4839
1929	8397	7589	7031	6869	5615	4745	5343	6047	6476	7385	8008	8591	6841
1930	9054	8552	5914	3302	3266	2224	3379	4417	5610	6736	7635	8544	5719
1931	8582	8161	7335	6157	5620	5876	6148	6762	7426	7094	7850	8861	7156
1932	9020	8429	4818	3102	2566	3640	4005	4273	4635	5883	6880	7924	5431
1933	8561	8230	7227	5941	5071	4904	4870	5721	6584	7409	7912	8447	6740
1934	9192	8485	6662	4811	3901	4079	4575	5705	6282	7135	8214	8876	6493
1935	9003	8087	7248	2896	3322	2574	796	1485	3301	5133	6812	8192	4904
1936	7994	7270	7043	1691	136	905	1159	1632	3535	4732	6102	7436	4136
1937	8031	7756	7480	6594	1803	861	1606	2264	3968	5298	6850	8207	5060
1938	8661	5872	433	1184	48	20	131	134	659	3499	6243	6734	2802
1939	5511	6080	6069	5666	5130	4105	4236	4816	5757	6700	7611	8516	5850
1940	8230	7936	7934	2604	576	70	157	1910	4171	5522	6835	8107	4504
1941	8275	6846	1256	70	30	59	90	347	1690	3736	5739	6024	2847
1942	6597	7378	1386	165	28	1212	752	1036	2096	4386	6506	6796	3195
1943	6727	6210	3325	223	503	116	1056	2152	3966	5312	6631	8064	3690
1944	8627	8069	7622	6665	3417	2919	3670	4409	5138	6349	7625	8641	6096
1945	8190	7132	6054	5877	1692	2162	3153	3430	4486	5553	6925	8211	5239
1946	8607	7230	676	670	1714	2918	3613	3766	4831	5708	7004	7925	4555
1947	8110	7542	6125	6068	4898	3649	3850	4824	5572	6480	7400	8331	6071
1948	8179	7839	7694	6717	5222	4134	2276	1790	3283	5045	6779	7948	5575
1949	8025	7620	6735	6759	6386	1615	2598	3676	4718	6160	7495	8417	5850
1950	8419	8086	7515	4506	1876	2793	2739	2950	3908	5289	6868	8126	5256
1951	8362	2055	105	191	170	1474	2743	2843	4532	5267	6453	7727	3493
1952	8234	7175	2068	158	154	408	171	215	809	3576	6229	5849	2920
1953	4787	5814	1791	120	1525	2832	3096	2303	3233	4661	6390	6534	3591
1954	7044	7062	7092	2743	738	751	949	2093	4236	5639	6867	7821	4419
1955	8081	7289	4770	3781	4102	4981	4553	4399	5217	6479	7735	8649	5836
1956	8107	7376	501	19	73	548	1194	533	1743	3752	5749	5982	2965
1957	6006	6881	7356	6763	2682	988	2079	2694	4343	5471	6702	8045	5001
1958	6731	6225	3983	863	31	54	50	243	858	3279	5667	5820	2817
1959	5194	6133	7180	2650	759	1850	3882	5043	5602	5812	6939	7976	4918
1960	8233	7670	7102	6410	3435	3154	3858	4231	5484	6748	7437	8333	6008
1961	8512	7606	6211	5633	3186	3024	4062	4760	5650	6592	7269	8183	5891
1962	8256	7734	6337	5959	1525	1942	3420	3835	4860	5755	7006	8004	5386
1963	3842	4291	3297	3774	420	1415	120	1020	3230	4510	6177	7700	3316
1964	8191	5036	5326	4583	4077	4989	3987	4176	5386	6561	7281	7950	5628
1965	8335	7388	623	57	1026	2307	1003	1895	3875	4762	6203	7767	3770
1966	8409	6151	4728	2622	2258	2332	3439	4144	5189	5899	7054	8281	5042
1967	7998	7105	2305	848	808	593	594	582	804	3463	6171	5806	3090
1968	4282	5102	5366	1947	258	591	1933	3686	4642	4973	6094	7403	3856
1969	7327	6720	3495	95	26	201	210	128	512	3124	5608	6902	2862
1970	5765	5940	1286	24	96	905	2559	3788	4867	4800	6094	7726	3654
1971	8281	6830	1043	762	1597	1211	2219	1831	3459	4073	5894	6636	3653
1972	7179	7704	6517	5678	3631	2073	3558	4783	4792	5342	6875	8213	5529
1973	8147	6119	3310	260	95	537	2139	2986	4020	5291	6760	7990	3971
1974	8349	1804	472	46	799	90	145	1539	3242	5007	6680	6491	2888
1975	6528	7226	6678	6260	1064	108	1473	1726	2783	4686	6586	6694	4318
1976	5724	6342	6719	6857	6181	4971	5061	6467	7811	8291	8566	9014	6834
1977	9014	8691	7540	7082	6893	6624	6436	6931	7532	7241	7986	8917	7574
1978	8675	7905	6397	505	241	120	326	989	1928	3842	5721	7041	3641
1979	7924	8014	6952	3911	1217	1298	2401	3211	4137	5296	6867	8219	4954
1980	8291	7519	5628	292	37	518	1952	2527	4310	5593	6376	7387	4202
1981	8151	8153	7158	4527	2558	1896	2823	4469	5957	6881	7488	8110	5681
1982	8159	3801	193	131	93	98	23	503	1884	4174	6269	6289	2635
1983	3489	1219	169	72	20	12	82	139	110	1318	3614	3130	1114
1984	2580	233	18	167	841	1220	2499	3663	4693	4803	6222	7699	2886
1985	8171	3997	2848	4569	4939	4240	4129	4579	5747	6762	7452	7854	5441
1986	7763	7248	5638	2758	64	22	960	1613	3204	4478	5623	6723	3841
1987	7662	7980	7700	6834	4623	2654	3735	4823	5768	6791	7830	8776	6265
1988	8188	7656	5490	2712	3587	4761	5373	5947	6299	7131	8199	8835	6182
1989	8954	8305	7596	6533	5757	1619	2346	3876	5411	6580	7420	7921	6026
1990	8034	7463	7345	5795	4516	4713	4875	5475	6927	7748	8073	8700	6639
1991	9301	8696	7879	7852	7093	2840	3095	4632	6535	7797	8251	8713	6890
AVG:	7707	6840	4983	3478	2305	2118	2525	3148	4299	5531	6873	7742	4796
MIN:	2580	233	18	19	20	12	23	128	110	1318	3614	3130	1114
MAX:	9301	8696	7934	7852	7093	6624	6436	6931	7811	8291	8566	9014	7574

Table 4.4.6-2 Difference in simulated monthly average chloride concentration (%) at Martinez/Benicia, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.01%	-0.01%	0.27%	0.41%	0.48%	0.29%	0.24%	0.24%	0.33%	0.08%	0.03%	0.14%	0.21%
1923	0.14%	0.06%	0.25%	0.45%	0.13%	0.10%	0.20%	0.13%	-3.18%	-1.56%	0.08%	-0.02%	-0.27%
1924	-0.04%	-0.06%	-0.06%	-0.14%	0.06%	0.12%	0.54%	0.49%	-0.16%	0.30%	0.21%	0.13%	0.12%
1925	0.26%	-0.21%	-0.82%	-0.51%	-1.99%	-0.05%	0.30%	-0.04%	-0.02%	0.02%	-0.10%	-0.28%	-0.29%
1926	-0.08%	-0.05%	-0.11%	-0.06%	0.04%	0.20%	1.36%	4.08%	2.03%	0.98%	0.13%	-0.26%	0.69%
1927	-0.18%	0.57%	4.75%	2.59%	0.66%	0.67%	-12.57%	-1.06%	-0.30%	0.59%	0.52%	0.24%	-0.29%
1928	-0.17%	-0.46%	-0.40%	-0.02%	0.07%	-0.02%	0.17%	0.04%	0.02%	-0.01%	-0.01%	0.00%	-0.07%
1929	0.11%	0.03%	0.00%	-0.01%	0.19%	-1.53%	-1.03%	-0.22%	0.37%	-0.28%	-0.20%	-0.12%	-0.22%
1930	1.37%	0.51%	0.17%	0.42%	0.24%	0.85%	1.20%	1.09%	0.04%	-0.26%	0.23%	0.33%	0.51%
1931	0.04%	-0.16%	1.12%	0.56%	-1.24%	-0.95%	-0.25%	0.07%	0.04%	-0.24%	-0.12%	0.06%	-0.09%
1932	0.12%	-0.09%	-0.03%	0.33%	2.80%	-0.56%	-0.31%	-0.05%	0.06%	0.03%	0.09%	0.05%	0.20%
1933	0.02%	-0.15%	-0.30%	-0.27%	-0.19%	0.40%	0.32%	0.27%	0.12%	0.05%	0.01%	-0.01%	0.02%
1934	-0.07%	-0.04%	-0.14%	-0.64%	-0.47%	-0.12%	-0.04%	0.01%	0.01%	0.00%	-1.49%	-1.70%	-0.39%
1935	0.29%	-0.88%	-0.10%	2.14%	-1.86%	-1.35%	-0.92%	0.10%	0.21%	0.10%	0.04%	0.09%	-0.18%
1936	0.16%	-0.01%	0.06%	0.42%	-3.82%	-0.43%	0.43%	2.23%	-0.03%	-0.02%	-0.01%	-0.03%	-0.09%
1937	-0.42%	0.20%	0.19%	0.00%	-11.60%	-2.75%	0.16%	0.92%	0.14%	-0.02%	0.00%	0.00%	-1.10%
1938	0.68%	0.70%	74.76%	4.28%	0.38%	0.10%	0.18%	0.21%	0.24%	0.06%	0.01%	-0.38%	6.77%
1939	0.44%	0.51%	0.43%	0.47%	0.49%	1.33%	1.38%	1.21%	0.20%	-0.11%	0.11%	0.12%	0.55%
1940	-0.13%	-0.28%	-0.02%	1.20%	2.05%	11.73%	-1.20%	-0.23%	-0.80%	-0.42%	-0.08%	-3.84%	0.66%
1941	-4.58%	-0.48%	4.36%	1.91%	5.80%	-1.65%	2.23%	-0.40%	0.05%	-0.23%	-0.66%	-0.58%	0.48%
1942	0.18%	0.10%	0.76%	0.32%	0.00%	0.23%	0.28%	-8.83%	-0.19%	0.11%	0.03%	0.35%	-0.56%
1943	0.73%	1.26%	1.14%	4.30%	0.60%	0.41%	0.42%	0.00%	0.04%	-0.08%	-0.04%	0.06%	0.74%
1944	0.08%	0.00%	0.05%	0.05%	0.20%	-0.20%	1.20%	0.42%	0.17%	0.03%	0.02%	0.03%	0.17%
1945	0.02%	0.36%	0.71%	0.35%	1.21%	-0.76%	0.13%	0.27%	0.11%	0.03%	0.02%	0.07%	0.21%
1946	0.01%	0.19%	0.61%	0.45%	-0.05%	-2.11%	-0.27%	0.26%	0.11%	0.03%	0.02%	0.01%	-0.06%
1947	0.04%	-0.02%	6.40%	3.86%	1.39%	0.22%	0.12%	0.06%	-0.04%	-0.03%	0.11%	0.12%	1.02%
1948	-0.02%	0.03%	-0.18%	0.67%	0.27%	0.09%	-0.17%	0.29%	0.29%	0.11%	0.02%	1.73%	0.26%
1949	1.23%	0.36%	0.21%	0.22%	0.51%	0.57%	0.16%	3.53%	1.86%	0.34%	0.11%	0.19%	0.77%
1950	0.01%	-0.09%	0.02%	-0.19%	0.28%	0.09%	0.14%	-0.51%	0.33%	0.14%	0.04%	0.03%	0.02%
1951	0.04%	0.48%	0.20%	1.05%	0.16%	0.25%	0.18%	0.25%	0.07%	-0.03%	-0.03%	0.02%	0.22%
1952	0.00%	0.01%	1.08%	0.81%	1.38%	1.97%	31.12%	0.67%	0.24%	0.05%	0.01%	-0.04%	3.11%
1953	-0.71%	0.73%	0.61%	0.16%	-0.02%	0.01%	0.09%	0.27%	0.40%	-0.02%	-0.05%	0.64%	0.18%
1954	0.62%	0.82%	-0.08%	-0.14%	0.39%	0.22%	0.18%	-0.02%	0.24%	0.13%	0.04%	0.02%	0.20%
1955	0.06%	0.05%	0.80%	0.58%	0.16%	0.60%	0.08%	0.10%	0.13%	0.04%	0.03%	0.00%	0.22%
1956	0.01%	-0.01%	0.45%	-0.08%	0.66%	0.01%	0.66%	-0.09%	0.58%	0.59%	-0.13%	0.26%	0.24%
1957	0.80%	0.49%	-0.48%	-0.16%	3.53%	2.14%	0.11%	0.38%	0.08%	0.14%	0.08%	0.12%	0.60%
1958	0.58%	0.49%	0.85%	0.56%	7.12%	0.10%	0.18%	0.45%	0.90%	0.19%	0.64%	0.56%	1.05%
1959	-0.32%	0.47%	0.15%	0.18%	0.17%	0.00%	0.83%	0.06%	-0.57%	0.00%	0.05%	0.10%	0.09%
1960	-1.06%	0.20%	0.90%	1.36%	1.45%	0.14%	0.25%	1.01%	0.41%	0.10%	-0.41%	-0.32%	0.34%
1961	0.41%	-0.19%	0.15%	0.72%	3.32%	0.72%	-0.11%	0.04%	-0.18%	-0.27%	-0.12%	-0.07%	0.37%
1962	0.06%	-0.06%	-0.35%	-0.25%	0.41%	1.43%	4.49%	9.06%	-0.99%	-1.24%	-0.29%	0.01%	1.02%
1963	2.25%	2.82%	2.20%	1.32%	-2.26%	0.17%	-0.76%	-0.32%	-0.01%	-0.15%	-0.06%	0.05%	0.44%
1964	0.13%	0.53%	0.21%	1.22%	0.64%	-6.45%	-4.57%	0.89%	0.92%	0.88%	0.91%	0.62%	-0.34%
1965	0.21%	0.07%	0.76%	0.21%	0.21%	0.00%	0.42%	0.00%	-0.02%	0.00%	0.00%	0.09%	0.16%
1966	0.11%	0.88%	1.28%	0.51%	0.29%	0.15%	-6.99%	-2.82%	-0.16%	-0.05%	-0.01%	-0.01%	-0.57%
1967	-0.01%	0.60%	1.03%	0.31%	0.81%	0.95%	0.24%	1.03%	0.68%	-0.82%	-0.28%	0.25%	0.40%
1968	0.87%	0.41%	0.27%	0.03%	-1.66%	1.34%	-0.49%	0.47%	0.35%	0.70%	0.63%	0.36%	0.27%
1969	0.15%	-0.02%	2.13%	1.69%	-1.18%	-0.17%	0.29%	-13.78%	0.15%	-0.22%	0.13%	0.60%	-0.85%
1970	0.75%	0.55%	0.72%	0.32%	0.11%	0.19%	0.01%	0.22%	0.00%	0.02%	0.02%	-1.25%	0.14%
1971	-0.32%	0.78%	0.62%	0.22%	-0.08%	0.65%	0.16%	0.51%	0.65%	0.39%	0.00%	0.38%	0.33%
1972	0.35%	0.14%	0.31%	1.33%	1.35%	0.47%	-0.02%	-0.04%	-0.01%	0.01%	0.00%	0.00%	0.32%
1973	0.03%	0.48%	1.37%	2.63%	0.31%	0.17%	0.15%	0.25%	0.03%	-0.01%	0.00%	0.15%	0.46%
1974	0.19%	0.49%	0.06%	0.11%	0.18%	0.19%	-0.19%	0.20%	0.21%	0.08%	0.02%	0.38%	0.16%
1975	1.27%	1.00%	0.69%	0.41%	0.25%	0.13%	0.13%	0.31%	0.13%	0.01%	0.00%	0.50%	0.40%
1976	1.05%	0.62%	0.35%	-0.36%	-0.22%	0.54%	0.72%	1.86%	0.55%	0.03%	0.00%	0.03%	0.43%
1977	-0.17%	-0.32%	-0.04%	0.01%	-0.04%	-0.01%	0.01%	0.02%	0.00%	0.16%	0.09%	0.05%	-0.02%
1978	0.13%	0.08%	-0.02%	-0.02%	10.03%	7.57%	0.83%	0.48%	0.66%	0.84%	0.39%	0.29%	1.77%
1979	0.61%	-0.30%	-0.63%	-0.06%	1.16%	0.79%	0.65%	0.35%	0.08%	0.09%	0.01%	0.01%	0.23%
1980	-0.23%	0.04%	0.55%	-10.64%	-3.83%	0.09%	1.06%	0.28%	0.31%	0.15%	0.02%	0.24%	-1.00%
1981	-0.48%	-0.37%	-0.07%	0.26%	0.80%	1.01%	0.94%	-1.77%	0.12%	-0.46%	0.39%	2.44%	0.23%
1982	0.88%	1.68%	3.47%	0.16%	-0.12%	-0.62%	0.44%	-0.21%	0.32%	0.10%	-0.15%	0.38%	0.53%
1983	1.85%	0.06%	-2.55%	0.10%	0.09%	0.09%	0.17%	0.21%	0.23%	0.34%	0.42%	0.71%	0.14%
1984	0.85%	0.60%	0.15%	0.05%	0.12%	0.16%	0.01%	0.18%	0.29%	0.03%	-0.05%	0.10%	0.21%
1985	0.01%	0.52%	0.51%	0.04%	0.28%	0.51%	0.09%	0.02%	0.01%	0.00%	0.00%	-0.01%	0.17%
1986	0.07%	0.17%	0.90%	0.50%	1.18%	0.67%	0.58%	-0.30%	-0.53%	-0.04%	0.13%	0.20%	0.29%
1987	-0.39%	-0.40%	-0.22%	0.37%	0.43%	2.37%	-2.65%	-0.25%	-0.11%	-0.11%	-0.04%	-0.02%	-0.08%
1988	0.13%	0.17%	0.44%	0.70%	0.03%	-0.05%	-1.83%	-2.06%	-1.52%	-0.29%	-0.14%	0.13%	-0.36%
1989	-0.05%	-0.02%	0.00%	0.00%	0.02%	4.36%	1.28%	1.87%	-0.08%	-0.02%	0.09%	-0.12%	0.61%
1990	-0.19%	0.36%	0.47%	0.84%	0.31%	0.59%	0.37%	1.09%	0.78%	-0.01%	-0.37%	0.26%	0.38%
1991	-2.36%	-1.63%	-0.71%	-0.04%	-0.19%	-1.22%	0.35%	0.90%	0.42%	0.17%	0.15%	0.15%	-0.33%
AVG:	0.12%	0.22%	1.61%	0.44%	0.35%	0.39%	0.34%	0.09%	0.11%	0.02%	0.02%	0.07%	0.31%
MIN:	-4.58%	-1.63%	-2.55%	-10.64%	-11.60%	-6.45%	-12.57%	-13.78%	-3.18%	-1.56%	-1.49%	-3.84%	-1.10%
MAX:	2.25%	2.82%	74.76%	4.30%	10.03%	11.73%	31.12%	9.06%	2.03%	0.98%	0.91%	2.44%	6.77%

Table 4.4.6-3 Difference in simulated monthly average chloride concentration (%) at Martinez/Benicia, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.01%	0.00%	0.21%	0.38%	0.45%	0.28%	0.23%	0.22%	-5.30%	-1.57%	-0.28%	0.99%	-0.37%
1923	0.98%	-0.11%	1.91%	1.10%	0.46%	0.15%	0.21%	-1.29%	-3.25%	-1.57%	0.07%	0.09%	-0.10%
1924	-0.08%	-0.42%	-0.56%	-0.34%	-0.02%	0.11%	0.02%	0.01%	-0.01%	0.04%	-0.41%	-0.44%	-0.18%
1925	0.02%	-0.15%	-0.61%	-0.42%	-2.00%	-0.06%	0.14%	0.68%	0.17%	-0.07%	0.11%	0.16%	-0.17%
1926	0.01%	0.05%	0.12%	0.01%	0.18%	0.12%	1.57%	3.48%	1.78%	0.93%	0.20%	-0.15%	0.69%
1927	-0.08%	0.67%	2.24%	1.31%	0.33%	0.17%	0.18%	1.14%	0.72%	0.19%	0.28%	0.58%	0.64%
1928	-0.38%	-5.27%	-1.32%	0.78%	0.20%	-24.37%	0.56%	0.15%	1.06%	1.26%	0.39%	0.15%	-2.23%
1929	-0.02%	0.24%	-0.28%	0.19%	0.55%	-0.08%	-0.13%	-0.01%	0.32%	-0.29%	-0.28%	-0.24%	0.00%
1930	1.31%	0.57%	0.23%	0.42%	0.12%	0.18%	0.19%	0.19%	0.01%	-0.07%	0.42%	0.47%	0.34%
1931	-0.12%	-0.08%	0.24%	0.08%	-1.29%	-0.97%	-0.26%	0.08%	0.06%	0.04%	-0.01%	0.02%	-0.18%
1932	-0.35%	-0.23%	0.17%	0.31%	1.20%	0.35%	0.23%	0.34%	0.16%	0.03%	0.07%	0.06%	0.20%
1933	0.02%	0.03%	0.01%	0.17%	0.50%	0.34%	0.10%	0.17%	0.11%	0.04%	0.02%	0.02%	0.13%
1934	0.02%	0.01%	0.01%	0.06%	0.02%	0.00%	0.00%	0.01%	0.01%	0.01%	-0.31%	-0.40%	-0.05%
1935	0.20%	-0.59%	-0.32%	0.05%	-0.41%	-1.76%	-0.01%	0.15%	0.20%	0.11%	0.03%	0.02%	-0.19%
1936	0.55%	0.25%	0.15%	0.97%	1.91%	3.41%	2.51%	0.93%	-0.08%	-0.09%	-0.13%	-0.14%	0.85%
1937	-0.43%	0.33%	0.25%	0.06%	1.51%	0.45%	0.19%	-1.24%	-0.52%	-0.13%	-0.04%	-0.02%	0.03%
1938	0.66%	0.68%	73.71%	4.21%	0.37%	0.09%	0.18%	0.23%	3.86%	-0.01%	-0.05%	3.04%	7.25%
1939	5.28%	2.45%	1.16%	0.76%	0.63%	0.64%	0.23%	0.34%	0.28%	0.19%	0.06%	0.02%	1.00%
1940	0.02%	0.00%	0.09%	0.27%	0.27%	0.00%	-0.71%	-1.75%	-0.67%	-0.88%	-0.42%	-3.98%	-0.65%
1941	-4.63%	-0.51%	4.98%	-2.93%	5.89%	-0.23%	0.14%	-1.32%	-0.33%	0.59%	-0.32%	0.95%	0.19%
1942	1.30%	0.55%	1.05%	0.28%	-0.01%	0.23%	0.28%	-8.82%	-3.81%	-1.45%	-0.17%	1.45%	-0.76%
1943	1.93%	3.51%	3.10%	4.97%	0.64%	0.40%	0.41%	0.01%	0.15%	2.25%	1.43%	0.81%	1.63%
1944	0.60%	0.07%	0.40%	0.17%	-0.07%	-0.51%	1.07%	0.40%	0.17%	0.03%	0.01%	-0.02%	0.19%
1945	-0.07%	1.52%	1.22%	-0.05%	0.01%	-0.15%	0.55%	-1.93%	-0.12%	-0.04%	0.00%	0.35%	0.11%
1946	0.02%	0.34%	1.29%	20.64%	-1.10%	0.99%	0.92%	-2.15%	-1.07%	-0.20%	-0.05%	-0.02%	1.63%
1947	-0.29%	0.38%	0.95%	0.41%	0.40%	-0.43%	-0.13%	0.07%	0.24%	0.06%	0.08%	0.07%	0.15%
1948	0.10%	0.13%	0.13%	0.00%	-0.07%	-0.07%	-0.27%	0.24%	0.26%	0.09%	0.03%	1.74%	0.19%
1949	0.56%	0.25%	0.46%	0.15%	0.31%	0.35%	0.17%	3.53%	1.85%	0.38%	-0.59%	-0.56%	0.57%
1950	0.28%	0.28%	0.05%	0.01%	0.37%	0.96%	1.17%	0.21%	-0.09%	-0.15%	-0.04%	0.45%	0.29%
1951	0.27%	0.45%	0.79%	0.82%	0.15%	0.25%	0.18%	-1.77%	-0.62%	-0.57%	-0.24%	0.11%	-0.02%
1952	0.14%	-0.43%	3.11%	2.05%	1.38%	1.96%	-0.57%	0.20%	-3.09%	-0.68%	-0.14%	1.90%	0.49%
1953	0.93%	1.01%	-1.20%	-23.18%	0.28%	-0.23%	0.32%	0.34%	0.36%	-0.03%	-0.06%	0.71%	-1.73%
1954	0.68%	0.84%	-0.09%	0.10%	0.40%	0.23%	0.18%	-0.02%	0.24%	0.13%	0.04%	0.02%	0.23%
1955	-0.20%	-0.02%	0.63%	0.02%	-0.15%	-0.02%	-0.01%	0.22%	0.14%	0.04%	0.01%	-0.01%	0.05%
1956	-0.06%	-0.11%	1.00%	-0.34%	-0.07%	0.27%	0.48%	-0.13%	-3.50%	-0.29%	1.16%	3.52%	0.16%
1957	3.55%	1.32%	-0.34%	0.20%	4.35%	1.12%	0.06%	0.44%	0.10%	0.21%	0.12%	0.15%	0.94%
1958	1.26%	1.18%	1.08%	1.06%	6.59%	-0.12%	2.04%	-0.39%	-20.00%	-2.49%	-0.05%	3.28%	-0.55%
1959	4.76%	2.91%	1.17%	0.32%	0.96%	0.25%	0.69%	0.19%	-0.28%	-1.53%	-0.79%	-0.53%	0.68%
1960	-0.09%	-0.07%	-0.25%	-0.09%	0.21%	0.15%	0.04%	0.19%	0.10%	0.04%	-0.38%	-0.36%	-0.04%
1961	0.46%	0.01%	1.07%	2.23%	1.22%	0.15%	-0.11%	0.62%	-0.67%	0.40%	0.70%	0.13%	0.52%
1962	0.05%	-0.54%	-0.24%	0.15%	-0.38%	-0.26%	0.06%	0.05%	0.18%	0.14%	0.05%	-0.06%	-0.07%
1963	0.53%	1.69%	1.22%	0.37%	0.90%	-0.18%	1.23%	1.98%	0.70%	-0.94%	-0.19%	1.98%	0.77%
1964	1.43%	1.08%	0.28%	1.24%	0.63%	-6.07%	-4.66%	-0.13%	0.86%	1.04%	0.94%	0.87%	-0.21%
1965	0.40%	-0.06%	3.88%	0.61%	0.21%	-0.03%	0.27%	0.00%	-0.85%	0.47%	0.55%	-0.96%	0.37%
1966	-0.39%	-0.47%	0.55%	0.26%	0.17%	0.13%	-7.04%	-2.88%	-0.14%	-0.03%	-0.01%	-0.01%	-0.82%
1967	0.00%	0.20%	0.53%	0.34%	1.03%	0.98%	0.20%	1.04%	-0.12%	-0.14%	-0.07%	0.60%	0.38%
1968	0.28%	0.40%	0.24%	0.00%	-1.61%	0.62%	-0.55%	-0.17%	0.24%	0.11%	0.78%	0.24%	0.05%
1969	0.10%	0.33%	1.64%	2.29%	-0.83%	0.30%	0.33%	-0.62%	-2.68%	-0.47%	1.21%	1.62%	0.27%
1970	3.00%	1.83%	1.56%	0.52%	0.12%	0.19%	0.01%	0.30%	0.01%	0.09%	0.06%	-1.21%	0.54%
1971	-0.29%	0.68%	0.58%	0.23%	-0.08%	0.65%	0.16%	0.90%	1.04%	0.53%	0.04%	0.45%	0.41%
1972	0.41%	0.17%	0.29%	1.40%	1.43%	0.47%	-0.03%	-0.04%	-0.01%	0.00%	0.00%	0.00%	0.34%
1973	-0.24%	-0.33%	0.58%	2.43%	1.94%	0.20%	0.14%	-1.29%	-0.25%	0.06%	-0.09%	-0.76%	0.20%
1974	-0.03%	0.09%	0.37%	0.10%	0.17%	0.17%	-0.20%	-0.80%	-1.13%	-0.57%	-0.32%	1.21%	-0.08%
1975	3.25%	2.44%	1.04%	0.36%	-1.65%	-0.43%	0.13%	0.35%	-1.32%	-2.08%	-0.66%	1.59%	0.25%
1976	2.27%	1.08%	1.10%	-1.07%	-0.79%	0.10%	0.17%	0.29%	0.13%	0.04%	0.02%	-0.01%	0.28%
1977	-0.30%	-0.30%	-0.23%	-0.32%	-0.16%	-0.07%	0.02%	0.00%	-0.08%	0.21%	0.29%	0.13%	-0.07%
1978	0.10%	0.26%	-0.07%	-0.45%	0.23%	-2.62%	0.26%	0.20%	0.90%	0.49%	1.49%	0.70%	0.12%
1979	0.32%	0.06%	0.07%	0.25%	0.25%	0.45%	-0.09%	-0.66%	-0.14%	0.07%	0.02%	0.00%	0.05%
1980	0.07%	0.07%	0.29%	0.43%	-2.80%	2.28%	1.94%	1.94%	1.63%	0.78%	0.04%	1.73%	0.70%
1981	1.47%	0.00%	0.33%	0.95%	2.30%	0.92%	0.12%	0.22%	0.08%	0.00%	0.01%	1.74%	0.68%
1982	0.74%	0.38%	6.18%	-5.36%	1.25%	-0.64%	0.44%	-0.18%	-2.71%	2.51%	2.00%	2.43%	0.59%
1983	3.80%	0.47%	-2.43%	0.10%	0.09%	0.09%	0.17%	0.23%	0.26%	-2.00%	3.37%	3.62%	0.65%
1984	1.45%	0.65%	0.13%	0.05%	0.09%	0.15%	0.01%	0.25%	0.02%	0.29%	0.17%	1.08%	0.36%
1985	0.56%	0.61%	0.52%	0.05%	0.29%	0.46%	0.08%	0.01%	0.01%	-0.01%	0.00%	0.00%	0.22%
1986	0.09%	0.10%	0.61%	0.07%	0.29%	0.59%	0.15%	-2.29%	0.32%	1.64%	0.78%	1.01%	0.28%
1987	0.58%	0.00%	0.06%	0.38%	0.92%	2.24%	-2.96%	-1.84%	-0.28%	-0.33%	-0.47%	-0.21%	-0.16%
1988	-0.09%	0.17%	0.41%	0.21%	0.05%	0.00%	0.89%	0.33%	0.08%	0.05%	0.00%	0.10%	0.18%
1989	0.04%	0.02%	0.28%	0.22%	0.00%	1.05%	0.36%	-1.97%	-1.06%	-0.24%	-0.04%	0.11%	-0.10%
1990	-0.21%	0.15%	0.43%	-0.01%	-0.13%	0.02%	0.02%	0.22%	0.21%	0.20%	-0.24%	0.10%	0.06%
1991	-1.43%	-0.45%	-0.22%	-0.46%	-0.34%	-0.15%	0.30%	0.50%	0.27%	0.10%	0.04%	0.01%	-0.15%
AVG:	0.53%	0.33%	1.69%	0.32%	0.43%	-0.20%	0.07%	-0.14%	-0.50%	-0.04%	0.15%	0.46%	0.26%
MIN:	-4.63%	-5.27%	-2.43%	-23.18%	-2.80%	-24.37%	-7.04%	-8.82%	-20.00%	-2.49%	-0.79%	-3.98%	-2.23%
MAX:	5.28%	3.51%	73.71%	20.64%	6.59%	3.41%	2.51%	3.53%	3.86%	2.51%	3.37%	3.62%	7.25%

Table 4.4.6-4 Simulated monthly average chloride concentration (mg/L) at Chipps Island, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	3047	3152	1271	461	40	16	18	10	10	313	1497	2711	1046
1923	3270	2461	201	22	133	231	38	60	420	1015	1972	2731	1046
1924	3135	2741	2443	2003	833	560	968	1882	2447	2166	2676	3742	2133
1925	3961	3361	1972	1335	55	14	21	102	441	1388	2149	2945	1479
1926	3527	3184	2809	1062	35	202	59	206	1007	1841	2610	3532	1673
1927	3576	909	316	55	11	10	9	14	170	532	1600	2902	842
1928	3236	1882	1371	449	114	9	11	48	438	840	1795	3075	1106
1929	3354	2589	2109	1974	969	553	883	1316	1571	2298	2876	3534	2002
1930	4063	3487	1092	154	140	29	173	399	1026	1756	2567	3484	1531
1931	3507	3072	2394	1484	1177	1268	1421	1882	2337	2073	2737	3885	2270
1932	4004	3364	685	121	58	198	286	349	461	1137	1905	2842	1284
1933	3501	3140	2278	1130	668	563	567	1092	1636	2316	2758	3363	1918
1934	4136	3416	1794	576	265	300	439	1081	1445	2100	3085	3876	1876
1935	3978	3023	2300	217	194	50	11	14	165	768	1844	3100	1305
1936	3251	2765	2587	207	17	15	16	43	353	929	1809	2958	1246
1937	3183	2746	2482	1734	99	19	19	29	280	867	1892	3128	1373
1938	3625	1092	18	12	17	12	10	9	9	260	1433	1846	695
1939	926	1324	1392	1158	726	354	364	523	1096	1749	2501	3432	1296
1940	3191	2878	2892	243	17	11	9	27	315	757	1788	2988	1260
1941	3515	2411	113	11	13	10	10	11	50	403	1478	1754	815
1942	1984	2396	120	12	9	12	11	11	23	389	1565	1883	701
1943	1895	1495	191	12	10	10	12	21	276	699	1661	2962	770
1944	3534	3019	2589	1828	238	92	186	385	765	1464	2561	3566	1686
1945	3118	2159	1206	1207	88	24	92	127	393	965	1947	3119	1204
1946	3576	2260	58	8	11	66	169	207	483	1034	1992	2849	1059
1947	3023	2544	1457	1423	630	195	246	517	985	1591	2290	3223	1510
1948	3136	2807	2679	1592	736	356	41	15	160	738	1818	2942	1418
1949	2979	2580	1901	1869	1441	59	88	195	584	1385	2383	3304	1564
1950	3299	2969	2480	512	25	85	56	70	254	827	1886	3022	1290
1951	3288	190	10	11	10	11	53	56	560	704	1555	2664	759
1952	3188	2236	118	14	9	10	10	9	9	278	1430	1070	698
1953	526	1153	105	9	14	59	79	25	112	438	1489	1682	474
1954	2095	2131	2156	236	8	8	9	18	465	886	1828	2735	1048
1955	2989	2333	591	266	317	563	449	406	811	1560	2614	3578	1373
1956	3422	2887	88	13	10	8	19	11	53	409	1486	1726	844
1957	1520	1950	2307	1872	163	9	27	50	354	721	1698	2934	1134
1958	2156	1936	684	28	12	12	12	11	11	305	1409	1388	664
1959	779	1360	2167	220	11	21	276	588	801	1084	1942	2897	1012
1960	3132	2633	2181	1654	224	123	254	344	967	1771	2336	3256	1573
1961	3415	2599	1523	1174	162	101	300	521	1005	1653	2200	3075	1477
1962	3181	2700	1606	1375	83	25	173	230	504	1054	1988	2946	1322
1963	445	604	195	249	18	12	10	11	163	410	1376	2622	509
1964	3130	740	995	492	320	606	258	348	922	1644	2198	2916	1214
1965	3283	2427	71	9	10	28	10	16	359	516	1392	2685	901
1966	3317	1208	542	70	24	30	147	283	649	1139	2039	3194	1054
1967	2937	2173	166	18	11	9	12	11	10	245	1380	1038	668
1968	538	1135	1331	153	9	9	67	390	870	1108	1816	2923	862
1969	2912	2326	546	15	15	11	10	9	10	271	1383	2355	822
1970	1046	1218	81	12	9	9	52	232	644	519	1338	2635	650
1971	3235	1710	41	9	10	9	19	15	189	300	1235	1762	711
1972	2185	2632	1710	1169	262	23	231	643	534	879	1899	3127	1274
1973	3110	1249	171	15	13	10	31	71	286	696	1746	2880	856
1974	3293	180	9	9	8	8	9	13	116	568	1673	1408	608
1975	1586	2197	1812	1539	75	10	14	13	58	449	1612	1519	907
1976	953	1456	1818	1913	1296	622	633	1554	2674	3170	3470	3975	1961
1977	3984	3650	2578	2159	1989	1764	1602	2008	2447	2199	2885	3940	2601
1978	4002	3358	1851	56	15	12	13	16	68	444	1471	2569	1156
1979	3102	2966	1999	354	22	14	38	116	297	842	1884	3128	1230
1980	3243	2512	1006	20	13	11	19	38	355	781	1459	2355	984
1981	3058	3050	2167	504	49	16	73	410	1205	1870	2377	3102	1490
1982	3119	389	9	14	10	13	9	9	21	364	1424	1300	557
1983	177	12	10	16	14	13	11	9	8	12	237	83	50
1984	39	11	10	8	8	9	41	176	488	531	1416	2632	447
1985	3106	451	101	621	617	370	278	428	1078	1786	2319	2752	1159
1986	3051	2714	1287	255	15	11	15	43	255	672	1406	2248	998
1987	2829	2910	2663	1943	544	58	235	638	1153	1778	2770	3731	1771
1988	3127	2607	898	69	226	615	778	1208	1462	2086	3069	3814	1663
1989	3940	3252	2593	1739	1235	64	44	255	917	1660	2274	2832	1734
1990	2947	2416	2327	1096	476	512	573	967	1931	2627	2951	3702	1877
1991	4263	3591	2832	2806	2168	172	159	595	1644	2662	3128	3650	2306
AVG:	2860	2207	1294	672	275	162	190	335	658	1110	1981	2793	1211
MIN:	39	11	9	8	8	8	9	9	8	12	237	83	50
MAX:	4263	3650	2892	2806	2168	1764	1602	2008	2674	3170	3470	3975	2601

Table 4.4.6-5 Difference in simulated monthly average chloride concentration (%) at Chipps Island, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.02%	0.00%	0.60%	0.89%	1.17%	0.96%	1.62%	1.32%	1.82%	0.20%	0.08%	0.44%	0.76%
1923	0.45%	0.15%	0.48%	1.50%	0.42%	0.38%	0.93%	1.14%	-3.14%	-2.62%	-0.39%	-0.16%	-0.07%
1924	-0.12%	-0.14%	-0.05%	-0.37%	0.10%	0.36%	1.80%	1.42%	-0.51%	-0.02%	0.47%	-0.07%	0.24%
1925	0.76%	-0.60%	-2.17%	-1.48%	-1.43%	0.29%	1.34%	1.91%	0.01%	0.07%	-0.24%	-0.65%	-0.18%
1926	-0.15%	-0.11%	-0.30%	-0.17%	0.18%	0.76%	3.29%	3.85%	0.86%	0.14%	0.40%	0.00%	0.73%
1927	0.00%	1.21%	11.12%	10.67%	0.81%	0.63%	0.87%	-0.97%	-4.77%	3.17%	1.43%	0.72%	2.07%
1928	-0.49%	-1.29%	-1.11%	-0.31%	0.15%	0.30%	1.18%	0.49%	0.06%	0.07%	0.00%	0.02%	-0.08%
1929	0.34%	0.07%	0.00%	-0.04%	0.50%	-4.19%	-2.85%	-0.53%	1.14%	-0.69%	-0.58%	-0.26%	-0.59%
1930	1.06%	0.66%	1.00%	1.80%	0.81%	2.83%	4.09%	4.11%	0.17%	-0.73%	0.70%	1.00%	1.46%
1931	0.10%	-0.45%	1.60%	0.59%	-3.13%	-2.60%	-0.77%	0.31%	0.18%	-0.70%	-0.30%	-0.09%	-0.44%
1932	0.38%	-0.24%	-0.29%	1.11%	7.59%	1.66%	-0.55%	0.21%	0.28%	0.12%	0.30%	-0.29%	0.86%
1933	0.03%	-0.42%	-0.81%	-0.80%	-0.61%	1.40%	1.06%	0.94%	0.36%	0.16%	0.04%	-0.02%	0.11%
1934	-0.20%	-0.52%	-0.62%	-1.80%	-1.59%	-0.34%	-0.12%	0.04%	0.04%	0.02%	-2.91%	-4.75%	-1.06%
1935	1.14%	-1.01%	-0.82%	5.48%	1.39%	-1.98%	0.95%	1.34%	1.70%	0.30%	-0.38%	0.35%	0.71%
1936	0.42%	-0.15%	0.44%	1.68%	0.56%	-0.21%	1.21%	2.11%	0.44%	0.09%	0.03%	-0.02%	0.55%
1937	0.00%	0.16%	0.11%	-0.01%	-0.60%	0.56%	1.21%	3.60%	0.27%	-0.02%	0.08%	0.02%	0.45%
1938	0.36%	1.42%	2.81%	1.28%	0.14%	0.12%	0.52%	0.82%	1.40%	0.06%	0.03%	-1.07%	0.66%
1939	0.90%	1.32%	1.08%	1.36%	1.61%	4.31%	4.66%	4.97%	0.40%	-0.22%	0.35%	0.32%	1.75%
1940	-0.34%	-1.03%	-0.63%	1.30%	0.80%	0.39%	0.22%	-0.30%	-2.58%	-1.34%	-0.23%	-9.60%	-1.11%
1941	-10.48%	-0.14%	11.35%	0.34%	1.17%	0.42%	0.56%	1.06%	0.47%	-0.18%	-3.23%	-1.38%	0.00%
1942	0.30%	0.26%	0.78%	0.28%	0.17%	0.66%	0.87%	1.19%	1.02%	0.10%	0.04%	0.99%	0.55%
1943	1.11%	3.55%	4.62%	0.92%	0.60%	0.28%	0.96%	1.08%	0.47%	-0.22%	-0.12%	0.21%	1.12%
1944	0.22%	-0.02%	0.21%	0.18%	0.56%	2.23%	1.52%	1.33%	0.55%	0.12%	0.07%	0.09%	0.59%
1945	0.08%	1.22%	2.06%	1.02%	1.03%	0.48%	0.53%	1.24%	0.40%	0.12%	0.07%	0.23%	0.71%
1946	0.04%	0.53%	1.25%	0.52%	0.30%	5.00%	1.40%	1.22%	0.40%	0.08%	0.06%	0.01%	0.90%
1947	0.09%	-0.09%	1.64%	5.48%	3.98%	1.53%	0.75%	0.29%	-0.06%	0.02%	0.44%	0.34%	1.20%
1948	-0.08%	0.04%	-0.49%	-1.11%	0.02%	0.19%	0.66%	1.36%	1.12%	0.31%	0.07%	1.06%	0.26%
1949	2.36%	0.92%	0.59%	0.60%	1.49%	2.83%	0.74%	3.43%	3.39%	0.94%	0.60%	0.59%	1.54%
1950	0.04%	-0.24%	0.06%	0.83%	1.53%	0.41%	0.80%	1.43%	1.27%	0.43%	0.11%	0.09%	0.56%
1951	0.11%	0.66%	0.30%	0.39%	0.40%	0.83%	0.89%	1.37%	0.19%	-0.06%	-0.04%	0.01%	0.42%
1952	0.00%	0.05%	0.99%	0.24%	0.30%	0.35%	0.63%	0.81%	1.42%	0.09%	0.03%	1.48%	0.53%
1953	2.25%	1.43%	1.58%	0.28%	0.34%	0.22%	0.65%	1.58%	0.90%	-0.09%	-0.12%	1.64%	0.89%
1954	1.64%	1.85%	0.07%	-1.58%	0.47%	0.51%	1.06%	0.82%	0.88%	0.43%	0.14%	0.05%	0.53%
1955	0.19%	0.13%	1.79%	1.87%	0.60%	3.00%	0.19%	0.28%	0.40%	0.16%	0.14%	0.05%	0.73%
1956	0.04%	0.00%	0.59%	0.11%	0.27%	0.71%	1.24%	1.33%	1.52%	0.55%	-0.08%	1.44%	0.64%
1957	2.58%	1.46%	-1.33%	-0.50%	3.44%	0.98%	0.83%	1.81%	0.22%	0.55%	0.21%	0.34%	0.88%
1958	1.37%	1.22%	1.71%	3.03%	0.13%	0.32%	0.52%	0.88%	1.29%	0.14%	0.14%	1.71%	1.04%
1959	2.59%	0.72%	0.30%	0.45%	0.45%	0.44%	3.13%	2.20%	-1.48%	-0.02%	0.11%	3.21%	1.01%
1960	-2.63%	0.10%	1.29%	1.21%	4.03%	3.97%	1.31%	4.05%	1.38%	0.38%	-1.28%	-0.33%	1.12%
1961	1.52%	-0.46%	-0.35%	1.37%	5.47%	0.63%	-0.39%	0.20%	-0.49%	-0.67%	-0.33%	-0.17%	0.53%
1962	0.07%	-0.21%	-0.92%	-0.71%	-0.09%	2.15%	4.61%	6.16%	3.92%	-0.40%	-0.25%	-0.06%	1.19%
1963	2.20%	5.00%	6.88%	4.73%	2.21%	0.55%	0.47%	1.08%	0.14%	-0.66%	-0.12%	0.19%	1.89%
1964	0.39%	1.23%	0.51%	2.80%	1.99%	0.54%	-8.59%	2.27%	2.57%	1.88%	1.99%	2.10%	0.81%
1965	0.61%	0.19%	0.84%	0.15%	0.64%	0.18%	1.00%	0.97%	-0.01%	0.03%	0.01%	0.31%	0.41%
1966	0.29%	3.26%	3.84%	2.82%	1.34%	1.31%	-1.34%	-2.18%	-0.93%	-0.23%	-0.05%	-0.03%	0.67%
1967	-0.01%	1.14%	2.86%	0.36%	0.41%	0.35%	0.63%	0.89%	1.39%	2.25%	0.28%	0.89%	0.95%
1968	2.43%	1.00%	0.93%	1.55%	0.59%	0.73%	-1.07%	2.36%	0.25%	1.35%	1.09%	0.53%	0.98%
1969	0.27%	0.77%	2.19%	0.39%	-0.35%	0.28%	0.73%	1.02%	1.47%	-0.07%	0.15%	1.64%	0.71%
1970	3.00%	1.44%	1.31%	0.08%	0.29%	0.60%	0.17%	0.91%	0.16%	0.15%	0.07%	-0.23%	0.66%
1971	-1.13%	0.27%	1.50%	0.50%	0.36%	0.78%	0.77%	1.87%	2.17%	0.96%	0.02%	1.09%	0.76%
1972	0.94%	0.38%	0.85%	4.17%	5.21%	2.68%	0.12%	-0.05%	0.02%	0.07%	0.03%	0.02%	1.20%
1973	0.10%	1.25%	4.17%	0.82%	0.23%	0.48%	0.87%	1.30%	0.10%	0.01%	0.03%	0.39%	0.81%
1974	0.52%	1.17%	0.40%	0.21%	0.54%	0.26%	0.65%	1.37%	1.00%	0.28%	0.08%	1.05%	0.63%
1975	4.48%	2.84%	1.94%	1.19%	0.88%	0.29%	0.99%	2.00%	0.72%	0.05%	0.01%	1.54%	1.41%
1976	2.89%	1.93%	1.00%	-0.38%	-0.39%	1.58%	2.33%	3.93%	1.42%	0.02%	-0.01%	0.36%	1.22%
1977	-0.51%	-0.86%	-0.09%	-0.03%	-0.11%	-0.03%	0.11%	0.05%	0.02%	0.47%	0.24%	0.15%	-0.05%
1978	0.23%	0.12%	0.00%	0.28%	1.96%	0.90%	1.06%	1.47%	1.52%	0.97%	0.45%	0.64%	0.80%
1979	0.99%	0.66%	0.53%	0.58%	1.02%	1.25%	3.31%	1.43%	0.31%	0.28%	0.04%	0.02%	0.87%
1980	-0.74%	0.13%	1.53%	1.82%	-0.15%	-0.29%	1.01%	1.49%	1.17%	0.52%	0.08%	0.78%	0.61%
1981	0.32%	-0.52%	-0.09%	0.95%	2.50%	3.87%	3.80%	0.64%	-1.91%	-1.36%	-0.74%	2.05%	0.79%
1982	0.85%	-0.74%	0.58%	0.06%	0.13%	0.21%	0.38%	-0.06%	1.23%	0.29%	-0.51%	0.37%	0.23%
1983	3.12%	0.68%	0.37%	0.18%	0.10%	0.08%	0.47%	0.77%	0.86%	1.61%	1.66%	2.61%	1.04%
1984	3.20%	0.50%	0.14%	0.37%	0.58%	0.65%	0.26%	0.87%	1.01%	0.19%	-0.10%	0.30%	0.66%
1985	-0.01%	0.75%	1.34%	0.05%	0.73%	1.02%	0.41%	0.13%	0.06%	0.00%	0.02%	-0.01%	0.37%
1986	0.20%	0.11%	0.58%	1.57%	0.36%	0.20%	0.85%	0.79%	-0.26%	-0.06%	0.27%	0.43%	0.42%
1987	0.40%	-0.48%	-1.16%	-1.12%	0.14%	7.32%	-1.07%	-1.26%	-0.34%	-0.33%	-0.10%	-0.09%	0.16%
1988	0.43%	0.49%	1.22%	1.53%	-0.46%	-0.18%	14.46%	0.98%	-3.35%	-0.72%	-0.39%	0.00%	1.17%
1989	-0.13%	-0.04%	0.01%	0.01%	0.06%	4.34%	4.21%	0.69%	-0.25%	0.04%	0.27%	-0.43%	0.73%
1990	-0.51%	1.00%	1.39%	1.36%	0.98%	3.23%	1.25%	3.31%	2.08%	-0.03%	-0.68%	0.06%	1.12%
1991	-2.33%	-2.52%	-2.15%	-0.88%	1.09%	1.36%	2.29%	2.92%	1.19%	0.54%	0.44%	0.47%	0.20%
AVG:	0.44%	0.47%	1.06%	0.92%	0.83%	0.98%	1.07%	1.34%	0.44%	0.13%	0.00%	0.21%	0.66%
MIN:	-10.48%	-2.52%	-2.17%	-1.80%	-3.13%	-4.19%	-8.59%	-2.18%	-4.77%	-2.62%	-3.23%	-9.60%	-1.11%
MAX:	4.48%	5.00%	11.35%	10.67%	7.59%	7.32%	14.46%	6.16%	3.92%	3.17%	1.99%	3.21%	2.07%

Table 4.4.6-6 Difference in simulated monthly average chloride concentration (%) at Chipps Island, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.02%	0.01%	0.53%	0.82%	1.10%	0.94%	1.59%	1.32%	-0.35%	0.39%	-0.68%	2.66%	0.69%
1923	2.61%	-0.26%	-0.69%	2.36%	1.92%	0.75%	1.02%	0.44%	-3.51%	-2.67%	-0.45%	0.03%	0.13%
1924	-0.04%	-1.21%	-1.53%	-0.93%	-0.18%	0.27%	0.06%	0.04%	-0.02%	0.13%	-1.19%	-1.18%	-0.48%
1925	0.16%	-0.40%	-1.61%	-1.21%	-1.28%	0.98%	1.28%	2.36%	0.56%	-0.14%	0.34%	0.48%	0.13%
1926	-0.24%	0.09%	0.32%	0.08%	0.36%	0.35%	3.65%	1.59%	0.24%	-0.01%	0.58%	0.27%	0.61%
1927	0.27%	1.55%	2.41%	2.56%	0.52%	0.67%	0.94%	2.66%	-1.03%	3.78%	0.89%	1.68%	1.41%
1928	-0.99%	-0.54%	1.53%	3.15%	1.08%	0.45%	1.46%	-0.20%	0.16%	0.55%	0.50%	0.31%	0.62%
1929	-0.12%	0.66%	-0.18%	0.11%	1.58%	0.17%	-0.27%	0.02%	1.18%	-0.66%	-0.80%	-0.65%	0.09%
1930	0.88%	0.64%	0.53%	1.47%	0.31%	0.72%	0.73%	0.74%	0.02%	-0.19%	1.32%	1.28%	0.70%
1931	-0.39%	-0.19%	0.73%	0.24%	-3.25%	-2.67%	-0.80%	0.27%	0.17%	-0.19%	-0.03%	0.06%	-0.51%
1932	-0.43%	-0.71%	0.34%	0.92%	3.03%	0.91%	0.85%	1.24%	0.62%	0.14%	0.25%	0.15%	0.61%
1933	0.06%	0.09%	0.03%	0.49%	1.32%	1.07%	0.39%	0.56%	0.35%	0.12%	0.07%	0.06%	0.38%
1934	0.05%	0.04%	0.02%	0.26%	0.13%	0.06%	0.01%	0.02%	0.01%	0.01%	-0.77%	-1.06%	-0.10%
1935	0.48%	-0.23%	-0.65%	0.57%	-1.31%	-4.01%	0.95%	1.44%	1.71%	0.32%	0.10%	0.08%	-0.05%
1936	0.70%	0.18%	0.34%	1.88%	0.79%	3.48%	4.53%	2.54%	0.07%	-0.17%	-0.05%	-0.23%	1.17%
1937	0.01%	0.52%	0.28%	0.10%	1.94%	0.36%	0.87%	-2.45%	-1.34%	-0.07%	-0.62%	-0.12%	-0.04%
1938	0.31%	1.39%	1.84%	0.56%	0.13%	0.11%	0.55%	0.83%	0.91%	0.92%	-0.09%	7.38%	1.24%
1939	14.75%	6.94%	3.21%	2.27%	2.09%	2.34%	0.68%	1.18%	0.89%	0.52%	0.19%	0.08%	2.93%
1940	0.07%	0.01%	0.27%	0.76%	0.36%	0.28%	0.66%	-5.36%	4.00%	1.58%	-0.23%	-9.81%	-0.62%
1941	-10.60%	-0.13%	12.01%	0.37%	1.19%	0.35%	0.61%	0.98%	-0.56%	0.72%	-3.46%	1.82%	0.28%
1942	3.35%	1.50%	1.68%	0.26%	0.16%	0.70%	0.86%	1.22%	-11.51%	-4.33%	-0.95%	4.09%	-0.25%
1943	4.44%	10.80%	14.06%	1.20%	0.46%	0.30%	0.97%	-0.38%	0.65%	7.54%	3.18%	2.37%	3.80%
1944	1.61%	0.22%	0.47%	0.27%	-0.76%	0.66%	1.18%	1.30%	0.54%	0.14%	-0.01%	-0.09%	0.46%
1945	0.06%	4.66%	3.77%	-0.01%	0.30%	-0.12%	1.89%	4.79%	0.65%	-0.01%	-0.07%	1.13%	1.42%
1946	-0.11%	1.06%	2.34%	0.60%	-0.45%	8.65%	3.51%	-5.60%	-2.99%	-0.62%	-0.24%	-0.14%	0.50%
1947	-0.98%	1.05%	2.69%	1.36%	1.10%	-1.60%	-0.16%	0.27%	0.86%	0.31%	0.33%	0.20%	0.45%
1948	0.31%	0.37%	0.38%	0.01%	-0.18%	-0.20%	0.26%	1.12%	1.03%	0.28%	0.08%	1.07%	0.38%
1949	0.23%	0.65%	1.34%	0.44%	0.95%	1.72%	0.81%	3.44%	3.37%	1.15%	-1.82%	-1.62%	0.89%
1950	0.80%	0.74%	0.01%	1.28%	1.74%	4.32%	4.61%	4.03%	-0.41%	-0.38%	-0.15%	1.26%	1.49%
1951	0.49%	-0.19%	0.27%	0.38%	0.42%	0.85%	0.89%	-5.64%	-1.24%	-0.36%	-0.66%	0.31%	-0.37%
1952	0.38%	-1.56%	0.72%	0.33%	0.32%	0.34%	0.61%	0.81%	1.05%	-0.15%	-0.03%	6.81%	0.80%
1953	7.88%	2.35%	0.96%	0.42%	0.59%	0.12%	0.88%	1.86%	1.39%	-0.16%	-0.13%	1.82%	1.50%
1954	1.79%	1.89%	0.04%	-1.50%	0.42%	0.51%	1.06%	0.82%	0.88%	0.43%	0.13%	0.05%	0.54%
1955	-0.60%	-0.01%	1.39%	0.15%	-0.30%	-0.08%	-0.02%	0.60%	0.43%	0.12%	0.08%	0.02%	0.15%
1956	-0.19%	-0.27%	0.05%	0.23%	0.28%	0.65%	0.92%	1.35%	-9.08%	-0.30%	-0.24%	8.59%	0.17%
1957	9.46%	3.77%	-0.97%	0.42%	5.72%	0.96%	0.87%	2.15%	0.26%	0.79%	0.33%	0.47%	2.02%
1958	4.02%	2.93%	2.66%	3.53%	0.13%	0.20%	0.43%	0.92%	-2.15%	-6.52%	-0.61%	8.20%	1.15%
1959	17.87%	7.06%	2.40%	2.28%	0.50%	0.76%	1.74%	0.69%	2.02%	-0.64%	-1.26%	-1.35%	2.67%
1960	-0.15%	-0.32%	-0.67%	-0.25%	0.35%	0.26%	0.17%	0.88%	0.36%	0.21%	-1.20%	-0.14%	-0.04%
1961	1.32%	-1.20%	-0.60%	2.18%	2.68%	0.75%	0.61%	2.09%	1.65%	0.86%	1.42%	0.91%	1.06%
1962	0.18%	-1.54%	-1.32%	-0.22%	-0.71%	-0.30%	0.37%	0.31%	0.71%	0.43%	0.21%	-0.25%	-0.18%
1963	0.83%	2.38%	3.04%	1.20%	0.89%	0.20%	0.56%	2.59%	1.83%	-3.65%	-0.49%	2.15%	0.96%
1964	2.95%	2.98%	0.87%	2.95%	1.99%	1.88%	-8.47%	-1.13%	2.72%	2.48%	2.00%	2.95%	1.18%
1965	1.12%	-0.19%	0.88%	0.27%	0.65%	0.09%	0.98%	1.01%	-3.13%	5.27%	1.97%	0.84%	0.81%
1966	-0.18%	-0.94%	1.71%	2.40%	0.66%	1.04%	-1.57%	-2.37%	-0.83%	-0.14%	-0.03%	-0.04%	-0.02%
1967	-0.03%	0.56%	1.65%	0.30%	0.20%	0.45%	0.66%	0.89%	1.16%	-0.60%	-0.12%	4.04%	0.76%
1968	5.69%	1.35%	0.95%	1.55%	0.60%	0.51%	-0.60%	0.42%	0.03%	0.28%	0.40%	0.35%	0.96%
1969	0.13%	0.18%	1.04%	0.45%	0.16%	0.39%	0.71%	0.93%	0.28%	1.42%	0.18%	4.02%	0.83%
1970	10.11%	4.77%	3.39%	0.03%	0.37%	0.57%	0.16%	1.20%	0.18%	0.35%	0.18%	-0.11%	1.76%
1971	-1.03%	0.30%	1.41%	0.51%	0.35%	0.78%	0.76%	2.10%	2.86%	1.42%	0.14%	1.71%	0.94%
1972	1.12%	0.47%	0.83%	4.36%	5.56%	2.68%	0.13%	-0.05%	0.02%	0.05%	0.02%	0.01%	1.27%
1973	-0.68%	-0.87%	1.42%	0.50%	0.23%	0.59%	0.85%	-4.71%	-0.34%	0.19%	-0.01%	1.20%	-0.14%
1974	0.71%	0.67%	0.39%	0.21%	0.53%	0.29%	0.63%	0.07%	-3.69%	-1.23%	-0.51%	3.34%	0.12%
1975	10.60%	6.90%	2.89%	1.10%	-0.02%	0.78%	1.01%	2.06%	-6.92%	-1.74%	-0.85%	4.82%	1.72%
1976	6.71%	3.39%	3.16%	-0.77%	-2.07%	0.10%	0.51%	0.91%	0.34%	0.13%	0.09%	0.25%	1.06%
1977	-0.87%	-0.75%	-0.64%	-0.87%	-0.43%	-0.20%	-0.21%	0.01%	-0.23%	0.71%	0.77%	0.36%	-0.20%
1978	0.14%	0.32%	0.15%	-0.37%	0.41%	0.24%	0.73%	1.52%	1.81%	0.11%	1.24%	1.20%	0.62%
1979	0.79%	0.18%	0.21%	0.86%	0.78%	0.73%	0.29%	-2.33%	-0.32%	0.20%	0.10%	0.01%	0.12%
1980	0.21%	0.20%	0.80%	0.95%	0.51%	1.73%	3.33%	7.77%	9.14%	2.60%	0.08%	3.56%	2.57%
1981	3.59%	-0.14%	0.84%	3.36%	8.35%	4.01%	0.02%	0.73%	0.21%	0.01%	0.04%	1.24%	1.85%
1982	0.87%	-0.06%	0.43%	0.21%	0.46%	0.19%	0.39%	-0.05%	-7.40%	0.94%	3.54%	5.93%	0.45%
1983	11.14%	2.24%	0.34%	0.18%	0.09%	0.06%	0.45%	0.76%	0.87%	-0.58%	7.90%	12.98%	3.04%
1984	6.01%	0.56%	0.13%	0.36%	0.61%	0.68%	0.26%	1.17%	0.20%	0.91%	0.50%	1.32%	1.06%
1985	0.90%	1.05%	1.72%	0.12%	0.76%	0.98%	0.38%	0.12%	0.04%	-0.01%	0.02%	0.00%	0.51%
1986	0.24%	-0.15%	-0.21%	0.38%	0.22%	0.17%	0.88%	-3.20%	1.14%	2.37%	2.34%	3.13%	0.61%
1987	1.81%	-0.49%	-0.71%	-1.14%	1.77%	7.88%	-0.81%	-1.92%	0.13%	0.90%	0.04%	-0.25%	0.60%
1988	0.17%	0.98%	0.90%	0.87%	0.23%	0.03%	0.75%	0.71%	0.26%	0.21%	0.00%	-0.08%	0.42%
1989	0.15%	-0.05%	0.11%	0.15%	-0.03%	1.26%	1.18%	-2.28%	-1.74%	-0.58%	-0.08%	0.36%	-0.13%
1990	-0.57%	0.44%	1.19%	0.11%	-0.36%	0.05%	0.08%	0.71%	0.50%	0.71%	-0.39%	-0.29%	0.18%
1991	-1.34%	-0.24%	-1.22%	-1.76%	-0.96%	-0.66%	0.84%	1.66%	0.78%	0.29%	0.10%	0.04%	-0.21%
AVG:	1.73%	0.98%	1.13%	0.70%	0.69%	0.78%	0.67%	0.52%	-0.11%	0.24%	0.19%	1.31%	0.74%
MIN:	-10.60%	-1.56%	-1.61%	-1.76%	-3.25%	-4.01%	-8.47%	-5.64%	-11.51%	-6.52%	-3.46%	-9.81%	-0.62%
MAX:	17.87%	10.80%	14.06%	4.36%	8.35%	8.65%	4.61%	7.77%	9.14%	7.54%	7.90%	12.98%	3.80%

Table 4.4.6-7 Simulated monthly average chloride concentration (mg/L) at Collinsville, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1765	1840	574	159	23	12	11	9	8	85	646	1469	550
1923	1923	1293	87	17	42	62	17	21	125	378	941	1483	532
1924	1814	1539	1288	992	331	200	386	944	1340	1115	1483	2333	1147
1925	2532	2025	979	586	25	12	13	25	129	608	1124	1667	810
1926	2152	1887	1589	459	19	60	22	56	406	874	1440	2127	924
1927	2201	395	105	20	9	9	9	9	38	163	703	1622	440
1928	1877	904	591	160	35	8	10	14	130	303	850	1749	552
1929	2008	1388	1063	962	399	195	343	578	746	1218	1646	2134	1057
1930	2587	2131	473	56	43	13	45	114	412	815	1377	2092	847
1931	2145	1794	1298	670	513	567	652	952	1263	1024	1521	2430	1236
1932	2537	2032	302	46	28	59	82	104	143	463	947	1586	694
1933	2135	1848	1218	479	245	189	190	451	784	1228	1560	2015	1029
1934	2646	2067	848	214	81	90	135	443	658	1086	1811	2420	1042
1935	2524	1723	1218	92	68	19	10	12	39	268	855	1775	717
1936	1913	1589	1440	91	14	12	12	16	103	360	878	1717	679
1937	1916	1557	1327	830	47	17	16	15	72	316	893	1794	733
1938	2220	481	11	11	11	9	9	8	9	72	615	877	361
1939	379	576	621	490	285	113	116	175	438	786	1296	2022	608
1940	1871	1643	1646	109	15	9	8	11	84	250	817	1684	679
1941	2112	1315	46	10	10	9	9	10	16	118	666	839	430
1942	1021	1265	48	11	8	10	10	10	10	110	685	894	340
1943	936	678	71	10	9	9	11	13	73	230	745	1671	371
1944	2143	1746	1390	879	97	34	54	115	271	625	1349	2121	902
1945	1807	1076	517	499	38	13	26	34	113	355	928	1789	600
1946	2178	1160	23	8	8	17	43	55	148	387	948	1549	544
1947	1724	1367	661	641	235	60	68	166	381	694	1141	1843	748
1948	1852	1587	1491	716	276	114	18	11	41	248	836	1646	736
1949	1705	1396	925	910	650	25	25	50	189	584	1284	1919	805
1950	1973	1707	1361	211	13	29	19	20	62	291	883	1713	690
1951	1933	83	9	10	9	9	16	18	183	237	679	1428	384
1952	1859	1137	48	12	8	10	9	8	9	77	628	427	353
1953	176	477	44	8	9	15	21	12	26	122	641	766	193
1954	1062	1054	1111	101	8	8	9	10	141	312	840	1454	509
1955	1696	1198	228	85	95	185	148	124	292	726	1441	2147	697
1956	2056	1633	34	10	8	8	12	10	15	119	669	828	450
1957	714	979	1182	914	66	9	12	18	100	242	760	1644	553
1958	1096	971	287	17	9	10	9	10	9	83	625	613	312
1959	293	601	1101	93	10	12	74	192	282	411	914	1640	469
1960	1807	1450	1133	769	87	42	72	99	376	795	1170	1920	810
1961	2066	1398	690	508	58	34	86	166	401	719	1074	1755	746
1962	1855	1497	733	625	38	14	44	61	155	397	956	1638	668
1963	191	233	64	73	11	10	9	10	38	112	582	1415	229
1964	1796	307	422	179	98	198	78	104	353	724	1076	1615	579
1965	1977	1268	28	8	8	10	9	10	103	161	594	1468	470
1966	1987	542	191	26	13	13	37	76	210	443	994	1845	531
1967	1647	1078	70	17	9	9	11	10	9	65	581	413	327
1968	185	484	598	63	8	9	19	118	340	461	881	1677	403
1969	1693	1253	228	11	11	10	9	8	9	77	608	1243	430
1970	469	513	32	9	8	9	16	59	216	161	561	1412	289
1971	1892	804	19	9	8	8	10	11	45	74	509	815	350
1972	1113	1411	805	486	95	12	68	223	179	323	903	1807	619
1973	1819	551	57	13	11	9	13	19	71	224	789	1589	431
1974	1935	75	8	8	8	8	8	11	26	172	745	606	301
1975	725	1107	847	688	31	9	11	10	15	131	714	679	414
1976	369	632	835	915	577	223	230	728	1479	1799	2069	2482	1028
1977	2533	2257	1431	1126	1016	856	750	1040	1321	1110	1605	2491	1461
1978	2560	2066	914	28	13	11	12	13	21	136	654	1415	653
1979	1864	1713	977	145	18	12	15	28	76	302	891	1793	653
1980	1912	1330	422	11	10	10	12	15	102	269	621	1225	495
1981	1772	1774	1083	198	20	10	23	123	496	847	1196	1762	775
1982	1822	161	8	12	9	11	8	9	11	103	614	567	278
1983	66	10	9	13	10	9	9	8	8	10	57	25	19
1984	15	9	8	8	8	9	13	44	151	157	605	1403	203
1985	1764	192	39	215	219	116	78	127	435	802	1151	1471	551
1986	1755	1527	577	92	10	8	13	18	72	223	622	1191	509
1987	1629	1675	1455	936	213	24	70	223	475	833	1523	2263	943
1988	1806	1454	385	27	68	214	292	509	669	1066	1788	2378	888
1989	2498	1914	1414	827	567	27	15	64	343	735	1131	1571	926
1990	1654	1300	1208	467	167	169	193	386	978	1456	1676	2280	994
1991	2748	2203	1624	1615	1148	69	55	206	790	1467	1823	2234	1332
AVG:	1677	1205	651	310	120	63	71	134	275	482	983	1577	629
MIN:	15	9	8	8	8	8	8	8	8	10	57	25	19
MAX:	2748	2257	1646	1615	1148	856	750	1040	1479	1799	2069	2491	1461

Table 4.4.6-8 Difference in simulated monthly average chloride concentration (%) at Collinsville, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.03%	0.02%	0.67%	1.36%	1.00%	0.89%	1.75%	1.42%	1.93%	0.42%	0.13%	0.82%	0.86%
1923	0.63%	0.27%	0.69%	1.35%	0.61%	0.56%	1.33%	1.80%	-2.25%	-2.91%	-0.64%	-0.18%	0.10%
1924	-0.15%	-0.14%	-0.46%	-0.49%	-0.02%	0.45%	2.46%	1.88%	-0.70%	1.03%	0.68%	0.02%	0.38%
1925	1.13%	-0.77%	-2.82%	-1.91%	0.55%	0.31%	0.77%	0.96%	0.20%	0.11%	-0.31%	-0.86%	-0.22%
1926	-0.17%	-0.12%	-0.38%	-0.22%	0.32%	0.94%	2.06%	4.61%	1.23%	0.20%	0.24%	-0.01%	0.73%
1927	-0.19%	1.07%	11.36%	8.82%	0.77%	0.61%	0.97%	1.51%	-5.10%	3.36%	1.93%	1.00%	2.18%
1928	-0.69%	-1.70%	-1.42%	-0.35%	0.13%	0.30%	1.35%	1.65%	0.40%	0.29%	0.05%	0.07%	0.01%
1929	0.48%	0.07%	-0.02%	-0.05%	0.56%	-4.48%	-3.50%	-0.60%	1.76%	-0.86%	-0.79%	-0.27%	-0.64%
1930	1.20%	0.16%	0.67%	0.61%	0.83%	3.86%	4.62%	5.54%	-0.26%	-1.02%	0.88%	1.55%	1.55%
1931	0.04%	-0.61%	1.04%	0.31%	-4.22%	-3.32%	-1.00%	0.49%	0.28%	-0.91%	-0.36%	-0.16%	-0.70%
1932	0.58%	-0.27%	-0.59%	0.74%	3.79%	1.98%	-0.08%	0.76%	0.64%	0.25%	0.41%	0.14%	0.69%
1933	0.07%	-0.53%	-1.06%	-0.99%	-0.67%	1.85%	1.29%	0.77%	0.55%	0.24%	0.07%	0.00%	0.13%
1934	-0.27%	-0.31%	-0.64%	-1.86%	-1.65%	-0.82%	-0.03%	0.10%	0.09%	0.05%	-3.74%	-5.74%	-1.24%
1935	1.20%	-1.99%	-1.82%	5.59%	0.65%	-0.06%	1.06%	1.60%	1.68%	0.45%	0.37%	0.80%	0.79%
1936	0.50%	-0.27%	0.39%	1.80%	0.16%	0.35%	1.56%	2.23%	0.59%	0.28%	0.08%	-0.06%	0.63%
1937	0.05%	0.08%	-0.04%	-0.03%	0.01%	0.53%	1.19%	2.45%	0.57%	0.10%	0.29%	0.02%	0.44%
1938	0.17%	0.96%	1.70%	0.86%	0.18%	0.15%	0.68%	1.06%	1.64%	0.27%	0.05%	-1.43%	0.52%
1939	0.89%	1.66%	1.53%	1.85%	2.16%	3.55%	6.34%	5.52%	0.82%	-0.16%	0.54%	0.41%	2.09%
1940	-0.54%	-0.98%	-0.13%	1.80%	0.92%	0.36%	0.57%	1.41%	-3.49%	-2.03%	-0.30%	-13.38%	-1.32%
1941	-13.13%	-0.26%	12.86%	0.35%	1.51%	0.46%	0.75%	1.20%	1.38%	0.04%	-4.31%	-1.90%	-0.09%
1942	0.39%	0.36%	1.24%	0.30%	0.18%	0.62%	1.00%	1.45%	2.17%	0.14%	0.05%	1.32%	0.77%
1943	2.60%	4.77%	4.84%	0.68%	0.60%	0.33%	1.19%	1.86%	0.82%	-0.14%	-0.38%	0.32%	1.46%
1944	0.34%	-0.03%	0.37%	0.24%	0.65%	2.28%	1.52%	1.78%	0.81%	0.22%	0.12%	0.14%	0.70%
1945	0.13%	1.52%	2.53%	1.35%	0.96%	0.88%	1.32%	1.88%	0.71%	0.20%	0.10%	0.36%	0.99%
1946	0.04%	0.72%	1.10%	0.55%	0.63%	3.23%	2.21%	1.88%	0.67%	-0.02%	0.11%	0.02%	0.93%
1947	0.13%	-0.12%	0.49%	5.21%	4.69%	2.40%	1.19%	0.52%	-0.21%	0.21%	1.02%	0.48%	1.33%
1948	-0.07%	0.00%	-0.38%	-1.16%	-0.25%	0.24%	0.98%	1.55%	1.79%	0.47%	0.12%	0.88%	0.35%
1949	2.76%	1.18%	0.70%	0.79%	1.81%	2.61%	1.14%	1.87%	3.80%	1.28%	0.82%	0.85%	1.63%
1950	0.09%	-0.33%	0.08%	0.67%	5.26%	0.75%	1.26%	1.92%	1.85%	0.65%	0.15%	0.13%	1.04%
1951	0.17%	0.71%	0.32%	0.39%	0.43%	0.74%	1.40%	2.01%	0.33%	0.02%	0.08%	0.05%	0.55%
1952	0.01%	0.08%	1.34%	0.25%	0.35%	0.40%	0.77%	1.03%	1.64%	0.31%	-0.07%	1.86%	0.67%
1953	3.21%	1.51%	1.41%	0.28%	0.70%	0.68%	1.12%	1.92%	1.63%	0.00%	-0.13%	1.98%	1.19%
1954	2.09%	2.31%	-0.45%	-2.22%	0.50%	0.53%	1.14%	1.81%	1.29%	0.62%	0.21%	0.07%	0.66%
1955	0.28%	0.18%	1.71%	1.98%	0.83%	1.59%	0.30%	0.88%	0.56%	0.26%	0.20%	0.14%	0.74%
1956	0.02%	0.00%	0.40%	0.17%	0.36%	0.73%	1.32%	1.54%	2.50%	1.11%	-0.08%	1.85%	0.83%
1957	3.43%	1.98%	-2.25%	-0.74%	3.41%	0.76%	1.50%	2.08%	0.46%	0.88%	0.29%	0.57%	1.03%
1958	1.72%	1.49%	2.42%	1.75%	0.15%	0.57%	0.72%	1.07%	1.88%	0.39%	0.08%	2.19%	1.20%
1959	3.28%	1.03%	0.42%	0.50%	0.46%	0.93%	4.14%	1.03%	-1.84%	0.01%	0.18%	5.42%	1.30%
1960	-4.11%	0.75%	2.30%	1.59%	2.88%	2.19%	1.74%	5.04%	1.85%	0.59%	-1.70%	-0.62%	1.04%
1961	1.58%	-0.45%	-0.76%	1.63%	6.24%	0.06%	-0.35%	0.40%	-0.57%	-0.86%	-0.41%	-0.22%	0.52%
1962	0.34%	-0.36%	-1.04%	-0.93%	0.01%	1.37%	4.60%	8.62%	5.82%	0.51%	-1.47%	0.01%	1.46%
1963	4.98%	5.20%	8.98%	5.52%	1.32%	0.26%	0.61%	1.39%	0.70%	-0.67%	-0.26%	0.24%	2.36%
1964	0.55%	1.95%	0.61%	3.76%	2.43%	4.69%	-5.54%	2.18%	2.33%	1.77%	2.15%	2.61%	1.62%
1965	0.76%	0.15%	1.39%	0.23%	0.61%	0.75%	1.16%	1.76%	0.15%	0.17%	0.04%	0.48%	0.64%
1966	0.41%	3.18%	4.61%	2.76%	0.55%	1.56%	0.12%	-2.29%	-1.14%	-0.28%	-0.03%	-0.06%	0.78%
1967	0.00%	1.34%	3.07%	0.34%	0.50%	0.36%	0.77%	1.12%	1.59%	3.04%	0.56%	1.12%	1.15%
1968	2.85%	1.28%	1.25%	2.44%	0.37%	0.71%	0.09%	3.99%	0.23%	1.77%	1.38%	0.57%	1.41%
1969	0.30%	1.06%	2.27%	0.70%	0.01%	0.36%	0.85%	1.26%	1.83%	0.95%	0.03%	2.92%	1.04%
1970	3.82%	1.89%	1.29%	0.14%	0.35%	0.65%	0.95%	1.44%	-0.01%	0.32%	0.09%	0.24%	0.93%
1971	-0.89%	0.25%	1.71%	0.52%	0.68%	0.69%	1.42%	1.97%	2.60%	1.34%	0.08%	1.48%	0.99%
1972	1.21%	0.54%	1.07%	5.03%	6.06%	2.15%	0.70%	0.05%	0.14%	0.16%	0.09%	0.03%	1.44%
1973	0.14%	1.50%	4.68%	0.64%	0.26%	0.53%	1.37%	2.02%	0.38%	0.09%	0.09%	0.74%	1.04%
1974	0.59%	1.40%	0.42%	0.20%	0.58%	0.29%	0.77%	1.63%	1.69%	0.46%	0.13%	1.27%	0.79%
1975	4.99%	3.78%	2.55%	1.56%	0.96%	0.31%	1.25%	1.94%	1.79%	0.22%	0.03%	2.01%	1.78%
1976	3.86%	2.64%	1.30%	-0.37%	-0.39%	1.89%	2.95%	5.50%	1.79%	-0.18%	-0.08%	0.21%	1.59%
1977	-0.71%	-1.14%	-0.03%	-0.08%	-0.06%	0.01%	0.42%	0.07%	-0.02%	0.66%	0.32%	0.24%	-0.03%
1978	0.29%	0.13%	-0.01%	0.44%	2.47%	0.99%	1.25%	1.57%	1.79%	1.85%	0.51%	0.65%	0.99%
1979	0.96%	0.45%	0.46%	0.47%	1.14%	0.93%	3.00%	2.43%	0.76%	0.21%	0.17%	0.04%	0.92%
1980	-1.23%	0.26%	1.75%	2.14%	0.09%	0.01%	1.24%	1.85%	1.61%	0.79%	0.12%	1.18%	0.82%
1981	1.06%	-0.37%	0.01%	1.47%	2.16%	5.44%	5.02%	2.63%	-1.72%	-1.51%	-0.83%	2.79%	1.35%
1982	0.20%	-1.55%	0.48%	0.18%	0.20%	0.28%	0.50%	0.37%	1.12%	0.52%	-0.61%	0.63%	0.19%
1983	3.28%	0.63%	0.40%	0.21%	0.16%	0.12%	0.66%	0.99%	1.15%	1.82%	2.39%	2.81%	1.22%
1984	6.86%	0.52%	0.18%	0.43%	0.63%	0.68%	1.18%	1.42%	1.48%	0.00%	-0.09%	0.31%	1.13%
1985	0.31%	0.61%	0.89%	-0.04%	1.03%	1.23%	0.72%	0.35%	0.12%	0.03%	0.04%	-0.02%	0.44%
1986	0.28%	0.13%	0.57%	1.46%	0.06%	0.19%	0.89%	1.57%	0.02%	0.11%	-0.73%	0.33%	0.41%
1987	0.48%	-0.18%	-1.04%	-1.24%	-0.63%	5.10%	-1.53%	-1.42%	-0.34%	-0.45%	-0.11%	0.16%	-0.10%
1988	0.81%	0.62%	1.23%	3.00%	-1.33%	-0.20%	21.61%	3.10%	-3.78%	-0.92%	-0.47%	0.01%	1.97%
1989	-0.16%	-0.10%	0.02%	0.01%	0.09%	2.16%	6.25%	1.37%	0.17%	0.24%	0.43%	-0.74%	0.81%
1990	-0.60%	1.40%	1.95%	1.97%	1.33%	2.95%	1.68%	3.91%	2.70%	-0.05%	-0.76%	-0.43%	1.34%
1991	-2.48%	-2.74%	-3.10%	-2.21%	0.72%	1.80%	3.49%	3.77%	1.61%	0.83%	0.58%	0.60%	0.24%
AVG:	0.62%	0.55%	1.10%	0.92%	0.87%	0.99%	1.55%	1.81%	0.72%	0.28%	0.00%	0.30%	0.81%
MIN:	-13.13%	-2.74%	-3.10%	-2.22%	-4.22%	-4.48%	-5.54%	-2.29%	-5.10%	-2.91%	-4.31%	-13.38%	-1.32%
MAX:	6.86%	5.20%	12.86%	8.82%	6.24%	5.44%	21.61%	8.62%	5.82%	3.36%	2.39%	5.42%	2.36%

Table 4.4.6-9 Difference in simulated monthly average chloride concentration (%) at Collinsville, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.02%	0.04%	0.60%	1.25%	0.96%	0.86%	1.72%	1.42%	1.68%	-2.99%	-0.74%	4.52%	0.77%
1923	3.42%	-0.24%	-1.39%	1.99%	2.90%	1.19%	1.36%	1.69%	-2.48%	-3.17%	-0.78%	0.10%	0.38%
1924	-0.24%	-1.82%	-2.81%	-1.15%	-0.35%	0.32%	0.11%	0.07%	-0.02%	0.27%	-1.57%	-1.60%	-0.73%
1925	0.40%	-0.46%	-2.11%	-1.57%	0.67%	1.07%	1.62%	2.87%	0.90%	-0.08%	0.54%	0.65%	0.38%
1926	0.03%	0.18%	0.42%	0.15%	0.28%	0.47%	2.42%	1.86%	0.46%	-0.05%	0.47%	0.35%	0.59%
1927	0.15%	1.46%	2.75%	2.03%	0.31%	0.64%	1.05%	2.03%	-1.46%	0.95%	0.98%	2.38%	1.11%
1928	-1.62%	0.04%	3.90%	4.21%	1.44%	0.58%	1.39%	2.05%	-0.66%	0.61%	0.59%	0.41%	1.08%
1929	-0.20%	1.10%	-0.07%	-0.05%	1.92%	0.50%	-0.26%	0.07%	1.86%	-0.78%	-1.05%	-0.86%	0.18%
1930	0.96%	0.36%	0.35%	0.15%	0.35%	2.63%	1.05%	1.12%	0.09%	-0.34%	1.79%	1.73%	0.85%
1931	-0.63%	-0.31%	0.97%	0.33%	-4.31%	-3.39%	-1.04%	0.40%	0.15%	-0.32%	-0.01%	0.08%	-0.67%
1932	0.10%	-0.90%	0.19%	0.35%	2.08%	1.00%	1.25%	1.77%	1.01%	0.27%	0.33%	0.19%	0.64%
1933	0.08%	0.11%	0.04%	0.65%	1.60%	1.35%	0.60%	0.86%	0.51%	0.18%	0.10%	0.09%	0.51%
1934	0.08%	0.03%	0.02%	0.51%	0.24%	0.22%	0.13%	0.07%	0.05%	0.02%	-0.96%	-1.35%	-0.08%
1935	0.11%	-1.33%	-1.29%	0.38%	-1.24%	-1.28%	1.09%	1.73%	1.72%	0.48%	0.15%	0.15%	0.06%
1936	0.81%	0.04%	0.39%	2.70%	0.72%	2.10%	2.30%	2.89%	0.31%	0.17%	-0.61%	-0.41%	0.95%
1937	0.12%	0.57%	-0.07%	0.02%	1.60%	0.39%	1.03%	0.66%	-1.52%	-0.38%	-0.08%	-0.21%	0.18%
1938	0.09%	0.91%	1.22%	0.31%	0.23%	0.17%	0.74%	1.07%	1.12%	0.33%	-0.61%	8.96%	1.21%
1939	20.94%	9.00%	4.29%	3.01%	2.80%	2.83%	1.07%	1.39%	1.29%	0.65%	0.29%	0.09%	3.97%
1940	0.08%	0.01%	0.35%	0.96%	0.40%	0.28%	0.79%	0.15%	5.86%	2.06%	-0.16%	-13.74%	-0.25%
1941	-13.25%	-0.28%	13.71%	0.37%	1.51%	0.42%	0.81%	1.11%	0.33%	0.65%	-4.62%	2.17%	0.24%
1942	4.40%	1.95%	2.22%	0.30%	0.18%	0.68%	0.99%	1.47%	-0.62%	-4.14%	-0.20%	5.66%	1.07%
1943	7.06%	13.62%	15.29%	0.81%	0.47%	0.36%	1.20%	-0.61%	0.47%	10.48%	4.83%	2.96%	4.74%
1944	2.14%	0.20%	0.81%	0.37%	-0.76%	0.25%	1.22%	1.75%	0.79%	0.02%	-0.19%	-0.14%	0.54%
1945	-0.16%	6.10%	5.09%	0.04%	0.31%	0.54%	1.92%	4.37%	1.89%	-0.62%	-0.47%	1.28%	1.69%
1946	-0.55%	1.74%	1.71%	0.61%	0.06%	6.12%	4.41%	-6.85%	-3.77%	-1.06%	-0.30%	-0.28%	0.15%
1947	-1.33%	1.33%	3.41%	1.36%	1.24%	-0.82%	0.04%	0.45%	1.12%	0.63%	0.72%	0.25%	0.70%
1948	0.47%	0.56%	0.50%	0.06%	-0.22%	-0.16%	0.78%	1.39%	1.77%	0.43%	0.12%	0.89%	0.55%
1949	-1.23%	0.81%	1.91%	0.59%	1.17%	1.59%	1.20%	1.89%	3.76%	1.59%	-2.58%	-2.15%	0.71%
1950	1.07%	1.08%	-0.04%	1.17%	5.32%	3.94%	3.56%	3.45%	0.10%	-0.39%	-0.30%	1.82%	1.73%
1951	0.90%	-0.16%	0.28%	0.39%	0.46%	0.76%	1.41%	-1.63%	-1.38%	-3.93%	-0.44%	0.55%	-0.23%
1952	0.50%	-1.21%	1.53%	0.28%	0.35%	0.39%	0.72%	1.03%	1.08%	0.20%	0.13%	10.41%	1.28%
1953	10.53%	2.80%	1.03%	0.31%	0.74%	0.64%	1.22%	2.11%	2.01%	-0.09%	-0.16%	2.21%	1.94%
1954	2.29%	2.37%	-0.49%	-2.18%	0.45%	0.53%	1.14%	1.81%	1.29%	0.63%	0.19%	0.06%	0.68%
1955	-0.76%	0.08%	1.30%	0.22%	-0.21%	-0.02%	-0.02%	1.18%	0.62%	0.19%	0.11%	0.09%	0.23%
1956	-0.28%	-0.36%	0.18%	0.19%	0.40%	0.65%	1.31%	1.53%	-4.56%	-2.34%	-0.66%	10.84%	0.58%
1957	12.31%	5.04%	-1.43%	0.37%	5.64%	0.79%	1.61%	2.50%	0.50%	1.21%	0.46%	0.76%	2.48%
1958	4.03%	3.54%	3.41%	2.14%	0.12%	0.04%	0.57%	1.11%	1.59%	-4.52%	-1.14%	10.98%	1.82%
1959	23.04%	9.29%	3.20%	2.54%	0.49%	0.75%	1.70%	0.72%	2.70%	-0.04%	-1.35%	-1.84%	3.43%
1960	0.21%	-0.32%	-0.91%	-0.32%	-0.79%	0.14%	0.37%	1.26%	0.50%	0.36%	-1.60%	-0.31%	-0.12%
1961	1.62%	-1.17%	-1.22%	2.26%	4.68%	1.04%	0.68%	1.88%	1.78%	0.76%	1.38%	1.12%	1.23%
1962	0.45%	-2.09%	-1.75%	-0.47%	-0.65%	0.52%	0.62%	3.07%	1.08%	0.69%	0.43%	-0.50%	0.12%
1963	0.64%	2.46%	3.03%	1.78%	0.62%	0.53%	0.69%	1.78%	1.09%	-7.23%	-0.76%	2.99%	0.64%
1964	3.46%	4.02%	1.19%	3.98%	2.46%	6.17%	-5.40%	-1.79%	2.66%	2.87%	2.07%	3.93%	2.14%
1965	1.43%	-0.31%	1.85%	0.25%	0.61%	0.78%	1.15%	1.79%	-3.59%	4.73%	2.45%	1.46%	1.05%
1966	0.24%	-0.95%	2.09%	2.36%	0.07%	1.28%	-0.15%	-2.53%	-1.00%	-0.15%	-0.01%	-0.07%	0.10%
1967	-0.08%	0.80%	1.85%	0.31%	0.46%	0.44%	0.79%	1.12%	1.36%	-0.79%	-0.13%	4.54%	0.89%
1968	6.72%	1.83%	1.31%	2.56%	0.37%	0.62%	0.36%	0.94%	0.00%	0.50%	0.39%	0.34%	1.33%
1969	0.14%	0.07%	0.83%	0.89%	0.09%	0.48%	0.95%	1.19%	0.65%	-0.58%	-0.40%	5.44%	0.81%
1970	11.95%	6.02%	3.30%	0.14%	0.42%	0.60%	0.92%	1.76%	0.00%	0.55%	0.23%	0.41%	2.19%
1971	-0.77%	0.23%	1.68%	0.53%	0.68%	0.69%	1.42%	1.98%	3.28%	1.88%	0.23%	1.78%	1.13%
1972	1.46%	0.66%	1.05%	5.31%	6.47%	2.04%	0.73%	0.06%	0.14%	0.13%	0.05%	0.03%	1.51%
1973	-0.85%	-1.05%	1.85%	0.49%	0.43%	0.62%	1.37%	-1.79%	-0.06%	0.68%	0.31%	3.02%	0.42%
1974	1.32%	0.90%	0.41%	0.20%	0.56%	0.30%	0.76%	1.38%	-3.15%	-1.61%	-0.53%	4.24%	0.40%
1975	14.56%	9.28%	3.83%	1.46%	0.22%	0.50%	1.27%	1.95%	-2.21%	-2.00%	-0.99%	6.15%	2.84%
1976	8.94%	4.80%	4.11%	-0.64%	-2.56%	-0.06%	0.62%	1.34%	0.45%	0.19%	0.10%	-0.04%	1.44%
1977	-1.18%	-0.97%	-0.80%	-1.17%	-0.44%	-0.22%	0.57%	0.05%	-0.35%	0.97%	1.00%	0.49%	-0.17%
1978	0.20%	0.36%	0.18%	0.17%	0.39%	0.27%	0.90%	1.48%	2.04%	0.27%	1.37%	1.29%	0.74%
1979	0.99%	0.17%	0.26%	0.80%	0.60%	0.66%	1.40%	-1.17%	-0.07%	0.05%	0.19%	0.03%	0.32%
1980	0.31%	0.32%	0.82%	0.56%	0.15%	1.47%	2.02%	4.75%	9.04%	3.56%	0.14%	5.73%	2.41%
1981	4.51%	0.19%	1.05%	4.40%	7.14%	3.78%	-0.41%	1.01%	0.29%	0.03%	0.07%	1.32%	1.95%
1982	0.47%	-1.31%	0.47%	0.32%	0.37%	0.29%	0.50%	0.38%	-0.94%	0.58%	3.86%	7.70%	1.06%
1983	12.45%	1.23%	0.39%	0.21%	0.15%	0.12%	0.65%	0.99%	1.16%	1.09%	10.93%	11.53%	3.41%
1984	10.01%	0.52%	0.18%	0.40%	0.67%	0.69%	1.15%	1.76%	0.37%	1.25%	0.53%	1.38%	1.57%
1985	1.17%	0.90%	1.42%	0.09%	1.06%	1.21%	0.69%	0.33%	0.10%	0.01%	0.03%	0.00%	0.59%
1986	0.33%	-0.37%	-0.35%	0.33%	0.05%	0.20%	0.93%	-0.67%	0.39%	2.86%	3.25%	4.19%	0.93%
1987	2.50%	-0.32%	-0.50%	-0.93%	0.41%	5.21%	-1.17%	-1.85%	-0.14%	0.99%	0.25%	-0.21%	0.35%
1988	0.21%	0.81%	0.93%	0.92%	0.45%	0.12%	0.84%	0.78%	0.37%	0.34%	0.02%	-0.10%	0.47%
1989	0.22%	0.01%	0.05%	0.22%	-0.02%	1.16%	2.34%	-1.52%	-1.89%	-0.67%	-0.07%	0.51%	0.03%
1990	-0.82%	0.58%	1.53%	0.31%	-0.32%	0.14%	0.14%	1.13%	0.64%	1.10%	-0.53%	-0.83%	0.25%
1991	-1.50%	-0.03%	-1.52%	-2.56%	-1.27%	-0.68%	0.82%	2.13%	1.05%	0.41%	0.13%	0.01%	-0.25%
AVG:	2.24%	1.21%	1.29%	0.73%	0.77%	0.86%	0.90%	0.97%	0.51%	0.15%	0.25%	1.65%	0.96%
MIN:	-13.25%	-2.09%	-2.81%	-2.56%	-4.31%	-3.39%	-5.40%	-6.85%	-4.56%	-7.23%	-4.62%	-13.74%	-0.73%
MAX:	23.04%	13.62%	15.29%	5.31%	7.14%	6.17%	4.41%	4.75%	9.04%	10.48%	10.93%	11.53%	4.74%

Table 4.4.6-10 Simulated monthly average chloride concentration (mg/L) at Jersey Point, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	444	479	160	39	26	15	12	12	10	21	171	458	154
1923	555	369	59	19	15	13	15	17	19	98	303	500	165
1924	543	336	373	324	119	30	45	164	230	158	321	627	272
1925	665	457	237	145	28	17	17	15	19	81	160	433	190
1926	554	407	347	118	19	16	15	17	49	196	317	570	219
1927	534	119	23	17	15	12	11	11	12	29	192	500	123
1928	581	290	197	76	19	10	12	13	19	52	187	532	166
1929	531	341	310	323	161	33	37	70	91	217	297	513	244
1930	679	471	112	20	17	13	13	17	47	214	383	626	218
1931	519	371	235	166	115	78	86	150	208	194	352	662	261
1932	632	428	80	18	22	21	19	21	19	89	169	401	160
1933	545	390	209	94	40	28	24	50	96	219	271	458	202
1934	709	453	219	67	23	20	21	52	77	176	348	615	231
1935	621	427	287	58	17	14	15	17	16	49	267	578	197
1936	510	331	371	83	23	16	14	16	19	75	273	551	190
1937	524	317	357	271	41	26	21	17	16	53	265	572	207
1938	644	170	14	13	28	18	11	9	11	17	152	260	112
1939	57	112	161	124	59	21	24	31	63	266	456	690	172
1940	453	330	381	67	24	15	11	12	16	61	237	526	178
1941	597	290	37	16	20	13	13	14	13	26	171	270	123
1942	258	388	59	16	12	13	15	14	11	20	171	278	104
1943	206	177	57	16	12	12	14	17	17	29	190	511	105
1944	595	382	377	296	62	16	17	24	36	180	454	757	266
1945	443	297	165	151	35	14	18	20	21	93	296	578	177
1946	623	318	25	9	9	12	15	17	21	103	311	553	168
1947	515	349	186	152	82	20	15	21	44	225	422	660	224
1948	460	364	340	224	94	29	14	13	12	64	277	553	204
1949	476	331	245	276	196	20	14	17	28	166	283	587	220
1950	460	371	273	51	13	11	12	13	14	70	281	543	176
1951	560	47	12	14	12	11	14	15	25	60	199	484	121
1952	566	339	44	20	11	13	12	12	11	17	139	123	109
1953	20	101	39	12	10	11	14	14	12	23	169	259	57
1954	297	372	360	88	9	9	11	12	20	84	255	526	170
1955	514	357	99	29	23	25	22	20	39	122	273	606	177
1956	480	449	44	21	12	9	14	14	12	26	175	252	126
1957	159	230	417	297	55	10	12	17	20	47	216	521	167
1958	351	300	123	20	18	17	16	13	11	17	150	181	102
1959	46	113	325	85	14	14	18	28	44	123	314	491	135
1960	496	293	197	194	69	16	16	21	54	272	437	573	220
1961	487	319	200	124	45	13	15	22	46	256	417	583	211
1962	497	324	226	129	32	17	14	18	26	115	313	577	191
1963	198	57	55	24	14	12	14	13	12	20	146	429	83
1964	570	236	108	79	21	26	19	16	45	239	420	576	196
1965	506	351	31	11	10	10	12	13	16	28	150	440	132
1966	500	146	34	19	12	10	13	17	29	120	309	606	151
1967	429	320	63	25	14	11	17	14	12	14	146	124	99
1968	24	111	192	49	11	10	13	20	44	115	286	570	120
1969	464	330	86	21	23	14	11	9	10	15	148	394	127
1970	99	117	34	19	12	11	14	18	29	38	154	459	84
1971	585	246	22	10	9	9	11	15	15	40	133	267	114
1972	333	469	325	192	68	11	13	29	26	72	276	562	198
1973	485	151	36	20	19	12	13	15	16	52	230	517	131
1974	599	67	10	10	9	9	12	14	12	27	197	199	97
1975	163	339	346	282	42	14	14	13	11	27	184	213	137
1976	72	167	333	351	182	49	28	99	268	493	571	751	280
1977	632	514	268	212	172	124	107	157	233	222	443	717	317
1978	641	447	242	36	21	17	17	16	15	21	179	461	176
1979	481	418	289	61	24	17	14	15	16	66	268	581	187
1980	537	351	133	17	20	14	14	17	17	48	159	345	139
1981	447	401	312	74	12	11	13	20	73	307	455	600	227
1982	500	118	10	20	13	18	11	11	11	20	149	133	85
1983	17	12	12	23	20	19	13	9	9	11	15	13	14
1984	11	14	14	9	9	11	13	17	20	32	159	464	64
1985	581	159	13	52	64	23	17	20	61	285	446	542	188
1986	481	381	162	36	21	15	16	18	18	40	159	342	141
1987	443	378	357	308	106	16	15	27	69	212	444	749	260
1988	424	277	87	18	16	23	37	69	79	192	360	577	180
1989	603	443	327	211	94	17	11	14	48	239	411	503	243
1990	511	278	350	196	51	29	25	44	137	245	361	575	233
1991	735	487	304	337	223	38	16	26	101	299	376	554	291
AVG:	450	298	179	100	42	19	18	27	43	113	268	483	170
MIN:	11	12	10	9	9	9	11	9	9	11	15	13	14
MAX:	735	514	417	351	223	124	107	164	268	493	571	757	317

Table 4.4.6-11 Difference in simulated monthly average chloride concentration (%) at Jersey Point, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.04%	-0.25%	0.40%	1.58%	0.53%	0.56%	1.01%	0.90%	1.47%	1.18%	0.31%	0.53%	0.68%
1923	0.58%	0.07%	-0.08%	0.38%	0.61%	1.06%	1.07%	1.38%	1.11%	-2.74%	-0.94%	0.23%	0.23%
1924	0.09%	-0.19%	0.73%	-0.23%	-0.55%	0.74%	3.09%	2.85%	-0.99%	0.99%	-2.01%	-1.55%	0.25%
1925	0.42%	-1.54%	-4.56%	-2.75%	-1.42%	-0.34%	0.08%	1.60%	1.54%	0.32%	-0.42%	-1.04%	-0.68%
1926	-0.10%	-0.24%	-0.59%	-0.17%	0.36%	0.71%	1.70%	2.78%	2.07%	-0.06%	-0.39%	0.13%	0.52%
1927	-0.33%	0.24%	8.98%	7.75%	1.07%	0.54%	0.33%	0.56%	-0.03%	2.07%	2.56%	0.77%	2.04%
1928	-1.24%	-2.54%	-1.74%	-0.88%	0.71%	0.35%	0.94%	1.65%	1.22%	-0.54%	-0.71%	-0.35%	-0.26%
1929	0.01%	-0.05%	0.19%	-0.04%	0.17%	-3.70%	-0.97%	0.61%	2.37%	-1.47%	-0.74%	-1.05%	-0.39%
1930	1.23%	-1.60%	0.21%	0.99%	0.92%	1.00%	2.11%	4.31%	0.19%	0.47%	2.65%	0.82%	1.11%
1931	-0.44%	-1.15%	0.46%	-1.41%	-3.14%	-4.42%	-1.12%	0.53%	0.46%	-0.93%	-0.41%	1.19%	-0.87%
1932	1.94%	-0.08%	-1.24%	0.82%	1.74%	1.89%	1.73%	2.33%	2.46%	-0.23%	0.43%	1.41%	1.10%
1933	0.54%	-0.87%	-3.05%	-2.13%	-1.44%	0.87%	1.88%	2.08%	1.55%	0.36%	0.19%	-0.01%	0.00%
1934	-0.37%	-0.33%	-1.00%	-3.28%	-1.29%	0.64%	1.67%	0.93%	1.33%	0.44%	-7.32%	-10.21%	-1.57%
1935	4.29%	-5.43%	-3.94%	5.20%	1.15%	0.69%	0.88%	0.91%	1.83%	0.70%	-0.23%	-2.04%	0.33%
1936	0.58%	-0.33%	1.53%	1.21%	-0.47%	-0.27%	1.22%	1.69%	1.93%	-0.03%	0.13%	0.05%	0.60%
1937	-0.35%	0.16%	-0.22%	-0.13%	0.30%	0.46%	0.80%	1.41%	2.06%	-0.06%	-0.98%	-0.14%	0.28%
1938	-0.89%	0.25%	2.13%	0.99%	0.09%	0.10%	0.27%	0.44%	0.85%	1.22%	0.23%	-1.60%	0.34%
1939	-0.18%	1.82%	1.58%	2.36%	2.67%	2.82%	2.59%	3.38%	1.17%	-1.04%	0.33%	0.55%	1.50%
1940	0.90%	-0.96%	0.04%	1.24%	0.49%	-1.41%	-0.54%	1.23%	-0.01%	-0.85%	-0.22%	-6.01%	-0.51%
1941	-13.69%	0.55%	13.82%	0.27%	0.46%	0.30%	0.32%	0.64%	1.65%	0.79%	-4.86%	-2.51%	-0.19%
1942	0.21%	0.09%	0.38%	0.19%	0.19%	0.48%	0.58%	0.84%	1.52%	0.97%	0.15%	1.49%	0.59%
1943	4.35%	6.49%	6.05%	0.96%	0.51%	0.16%	0.69%	1.37%	1.97%	1.00%	-0.69%	-0.05%	1.90%
1944	0.17%	-0.15%	0.20%	0.11%	-0.05%	0.96%	1.46%	1.91%	1.68%	0.13%	-0.01%	0.16%	0.55%
1945	0.00%	1.95%	3.22%	1.85%	1.14%	0.55%	1.07%	1.55%	1.80%	0.50%	0.22%	0.35%	1.18%
1946	0.05%	-0.16%	0.21%	0.45%	0.33%	0.72%	1.55%	2.00%	1.92%	0.38%	0.23%	0.08%	0.65%
1947	0.17%	-0.07%	-0.17%	3.36%	4.23%	2.62%	1.67%	2.17%	0.10%	-0.23%	0.92%	0.70%	1.29%
1948	-0.10%	0.55%	0.22%	-0.96%	-0.43%	0.35%	1.12%	1.43%	2.18%	0.89%	0.22%	0.42%	0.49%
1949	1.60%	-0.14%	0.10%	1.06%	2.16%	2.30%	1.17%	2.09%	4.06%	1.37%	1.46%	1.05%	1.52%
1950	-0.04%	-0.49%	0.23%	0.82%	0.77%	0.91%	1.45%	2.04%	2.58%	0.66%	0.23%	0.16%	0.78%
1951	0.18%	0.59%	0.22%	0.35%	0.32%	0.66%	1.23%	1.74%	1.42%	0.61%	-0.07%	0.03%	0.61%
1952	0.06%	-0.03%	0.59%	0.17%	0.23%	0.24%	0.43%	0.48%	0.96%	1.27%	0.39%	2.00%	0.57%
1953	4.22%	1.27%	0.66%	0.27%	0.59%	0.87%	1.28%	1.56%	2.19%	1.24%	-0.04%	1.98%	1.34%
1954	2.62%	2.65%	-1.29%	-3.18%	0.34%	0.45%	0.83%	1.45%	2.04%	1.40%	0.34%	0.15%	0.65%
1955	0.16%	0.00%	0.80%	2.02%	1.14%	1.68%	1.49%	1.91%	1.49%	0.02%	-0.45%	-0.46%	0.82%
1956	-0.20%	-0.01%	-0.02%	0.07%	0.29%	0.61%	0.93%	1.06%	1.85%	1.85%	0.41%	2.36%	0.77%
1957	5.06%	2.63%	-1.23%	-0.13%	3.25%	0.79%	1.13%	1.42%	1.57%	-0.13%	0.26%	0.25%	1.24%
1958	1.82%	2.03%	2.05%	1.16%	0.09%	0.22%	0.33%	0.48%	1.29%	1.48%	0.24%	2.32%	1.13%
1959	4.83%	1.19%	0.47%	0.51%	0.38%	0.96%	2.68%	1.05%	-2.56%	-0.44%	0.12%	3.16%	1.03%
1960	-1.36%	-0.92%	2.30%	0.85%	2.28%	1.81%	1.69%	3.09%	2.87%	0.40%	-0.50%	-3.44%	0.76%
1961	2.14%	-1.44%	-1.14%	2.82%	4.54%	1.93%	1.32%	1.98%	-1.88%	-0.84%	-0.36%	-0.27%	0.73%
1962	0.46%	-0.05%	-1.53%	-1.56%	-0.03%	0.72%	2.11%	2.99%	5.44%	0.17%	1.36%	0.25%	0.86%
1963	2.18%	6.62%	6.51%	2.89%	-1.91%	-0.81%	0.09%	0.56%	1.87%	1.80%	0.16%	0.04%	1.67%
1964	0.41%	1.16%	0.85%	2.32%	3.02%	5.03%	1.85%	2.12%	3.47%	3.09%	2.46%	2.79%	2.38%
1965	0.92%	0.21%	-0.81%	0.01%	0.45%	0.76%	0.76%	1.28%	1.69%	1.24%	0.14%	0.35%	0.58%
1966	0.45%	2.80%	5.68%	2.37%	0.75%	0.84%	1.42%	1.54%	0.28%	-0.39%	-0.22%	0.04%	1.30%
1967	0.06%	1.70%	2.60%	0.24%	0.37%	0.33%	0.37%	0.47%	0.88%	2.42%	0.60%	1.01%	0.92%
1968	3.65%	1.16%	1.01%	0.97%	0.44%	0.54%	1.13%	3.02%	0.95%	-0.87%	2.01%	0.99%	1.25%
1969	-0.22%	0.49%	2.16%	-1.83%	-0.61%	0.20%	0.47%	0.54%	1.07%	1.85%	0.83%	1.68%	0.55%
1970	2.48%	1.98%	1.43%	0.09%	0.19%	0.45%	1.05%	1.83%	1.16%	0.53%	0.24%	0.25%	0.98%
1971	-0.68%	0.12%	1.18%	0.44%	0.56%	0.57%	1.14%	1.17%	2.27%	1.98%	0.27%	1.64%	0.89%
1972	1.78%	0.50%	0.93%	4.99%	6.71%	2.02%	1.31%	1.15%	1.43%	0.24%	-0.04%	0.03%	1.75%
1973	0.09%	1.56%	3.50%	0.33%	0.16%	0.36%	1.13%	1.77%	1.80%	0.49%	-0.03%	0.29%	0.96%
1974	0.93%	1.54%	0.35%	0.20%	0.47%	0.31%	0.43%	1.09%	2.02%	1.47%	0.28%	1.36%	0.87%
1975	7.19%	5.20%	3.02%	2.02%	1.01%	0.23%	0.84%	1.31%	2.11%	1.10%	0.16%	2.02%	2.18%
1976	4.79%	2.40%	1.48%	-0.87%	-1.57%	-0.02%	2.48%	8.02%	4.03%	0.57%	0.59%	-0.25%	1.80%
1977	-1.22%	-2.06%	-1.26%	-0.36%	-1.34%	-1.16%	-1.54%	-0.37%	0.40%	0.42%	0.24%	-0.03%	-0.69%
1978	0.38%	-0.20%	-0.21%	0.40%	1.58%	0.81%	0.61%	0.92%	1.68%	2.43%	1.20%	0.42%	0.83%
1979	0.72%	0.45%	0.57%	0.30%	0.46%	0.43%	1.21%	1.69%	1.48%	-0.79%	0.12%	0.06%	0.56%
1980	-0.09%	0.26%	2.42%	0.84%	-1.22%	-1.00%	0.72%	1.15%	2.60%	1.67%	0.41%	0.64%	0.70%
1981	1.28%	-0.02%	0.31%	1.81%	1.35%	0.81%	1.60%	3.39%	-0.68%	-1.64%	-0.90%	0.65%	0.66%
1982	-0.39%	-1.42%	-0.68%	-0.32%	-0.02%	0.13%	0.25%	-1.56%	0.48%	1.58%	-0.84%	0.27%	-0.21%
1983	1.86%	0.74%	0.26%	0.07%	0.06%	0.06%	0.25%	0.39%	0.38%	1.33%	2.48%	2.54%	0.87%
1984	1.17%	0.26%	0.09%	0.25%	0.44%	0.52%	1.07%	1.68%	2.46%	1.45%	0.02%	0.52%	0.83%
1985	0.59%	0.78%	1.36%	0.20%	0.71%	1.36%	1.43%	1.68%	0.70%	0.10%	0.08%	0.02%	0.75%
1986	0.46%	-0.19%	0.41%	1.54%	0.14%	0.20%	0.56%	1.20%	1.86%	0.46%	0.29%	0.49%	0.62%
1987	0.31%	-0.15%	-0.72%	-1.16%	-0.90%	1.21%	1.20%	0.29%	-1.25%	-0.30%	-0.08%	0.31%	-0.10%
1988	0.12%	0.72%	0.86%	1.20%	0.17%	0.25%	17.28%	9.21%	-3.64%	-0.51%	-0.79%	0.27%	2.10%
1989	-0.16%	0.03%	0.13%	0.12%	0.34%	2.62%	1.59%	2.15%	0.61%	-0.94%	0.25%	0.01%	0.56%
1990	-1.33%	0.95%	-0.34%	-0.22%	0.68%	0.61%	1.68%	5.43%	4.64%	-0.72%	-1.32%	2.95%	1.08%
1991	-2.70%	-2.64%	-5.56%	-5.61%	-0.78%	0.00%	1.37%	3.62%	2.56%	-0.91%	0.35%	0.39%	-0.83%
AVG:	0.63%	0.41%	0.76%	0.52%	0.53%	0.58%	1.27%	1.76%	1.40%	0.46%	0.01%	0.19%	0.71%
MIN:	-13.69%	-5.43%	-5.56%	-5.61%	-3.14%	-4.42%	-1.54%	-1.56%	-3.64%	-2.74%	-7.32%	-10.21%	-1.57%
MAX:	7.19%	6.62%	13.82%	7.75%	6.71%	5.03%	17.28%	9.21%	5.44%	3.09%	2.65%	3.16%	2.38%

Table 4.4.6-12 Difference in simulated monthly average chloride concentration (%) at Jersey Point, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	-0.04%	-0.20%	0.31%	1.43%	0.52%	0.55%	1.02%	0.89%	0.02%	-0.52%	0.38%	3.18%	0.63%
1923	4.32%	-1.60%	-3.95%	0.11%	0.19%	1.10%	1.07%	1.38%	0.16%	-2.13%	-0.57%	0.81%	0.07%
1924	1.63%	-1.60%	0.72%	0.27%	-0.81%	0.64%	0.65%	0.36%	0.20%	0.00%	-4.44%	-2.79%	-0.43%
1925	-0.39%	-0.97%	-3.39%	-2.28%	-1.28%	0.88%	1.21%	1.89%	1.18%	-1.11%	0.49%	0.90%	-0.24%
1926	-0.10%	0.63%	0.79%	0.36%	0.41%	0.68%	1.62%	2.19%	1.22%	0.23%	0.47%	0.77%	0.77%
1927	0.25%	1.17%	2.79%	1.86%	0.82%	0.75%	0.70%	1.62%	1.36%	12.07%	3.41%	3.44%	2.52%
1928	-3.43%	-1.73%	5.81%	5.47%	2.25%	0.50%	0.97%	1.50%	1.92%	3.09%	0.69%	0.11%	1.43%
1929	-0.22%	1.94%	0.04%	0.41%	2.36%	1.27%	0.61%	0.78%	2.26%	-1.92%	-1.58%	-1.13%	0.40%
1930	1.01%	-0.97%	0.27%	0.96%	0.83%	0.74%	1.48%	2.50%	0.97%	1.49%	3.58%	2.93%	1.32%
1931	-1.00%	-0.24%	1.72%	0.43%	-2.87%	-4.42%	-1.10%	0.55%	0.53%	-0.25%	0.02%	0.22%	-0.53%
1932	0.36%	-1.77%	-0.23%	0.75%	0.86%	1.07%	1.47%	2.16%	2.52%	-0.10%	0.36%	0.31%	0.65%
1933	0.16%	0.24%	0.18%	0.76%	1.56%	1.57%	1.39%	1.62%	1.24%	0.41%	0.32%	0.20%	0.80%
1934	0.18%	0.17%	0.19%	0.16%	0.51%	0.81%	1.24%	0.81%	0.75%	0.31%	-2.43%	-2.75%	-0.01%
1935	0.57%	-2.98%	-2.97%	-0.71%	0.04%	0.05%	0.84%	1.13%	1.85%	0.76%	0.12%	-0.11%	-0.12%
1936	1.70%	-1.93%	1.72%	3.23%	2.78%	3.23%	2.45%	2.40%	1.01%	-1.04%	1.07%	1.01%	1.47%
1937	0.05%	0.95%	-0.73%	-0.16%	1.05%	0.15%	0.60%	0.21%	0.56%	-1.20%	-0.36%	0.99%	0.18%
1938	-0.69%	0.03%	-0.10%	-0.17%	0.06%	0.05%	0.30%	0.45%	-0.49%	1.75%	2.32%	11.96%	1.29%
1939	26.51%	10.68%	5.15%	3.65%	3.56%	2.33%	0.02%	0.40%	1.94%	0.50%	-0.08%	0.08%	4.56%
1940	0.17%	0.17%	0.78%	0.94%	0.28%	0.22%	0.60%	0.72%	4.39%	5.47%	1.31%	-5.18%	0.82%
1941	-13.58%	2.69%	16.58%	0.27%	0.44%	0.22%	0.36%	0.31%	-0.17%	1.50%	-4.25%	2.44%	0.57%
1942	6.79%	2.40%	1.65%	0.19%	0.14%	0.49%	0.56%	0.87%	0.15%	9.93%	4.34%	8.87%	3.03%
1943	12.25%	17.47%	18.77%	0.81%	0.36%	0.17%	0.74%	-3.36%	-2.01%	8.54%	7.76%	4.24%	5.48%
1944	3.00%	-0.57%	1.53%	0.04%	-2.14%	0.54%	1.30%	1.87%	1.72%	1.05%	0.64%	0.13%	0.76%
1945	-0.56%	7.74%	7.78%	1.26%	1.22%	0.44%	1.22%	2.25%	-0.61%	0.78%	0.48%	1.87%	1.99%
1946	1.48%	-2.45%	-1.55%	0.48%	-0.88%	-0.13%	1.99%	-0.35%	-0.93%	-0.31%	0.80%	0.98%	-0.07%
1947	-2.30%	1.08%	4.63%	0.83%	0.01%	0.81%	1.06%	2.05%	0.68%	-1.58%	-0.06%	0.21%	0.62%
1948	0.19%	0.28%	0.40%	0.09%	-0.71%	-0.26%	0.89%	1.39%	2.16%	0.84%	0.23%	0.45%	0.50%
1949	0.94%	1.99%	2.43%	0.63%	1.07%	1.29%	1.16%	2.11%	4.07%	0.23%	-3.60%	-3.11%	0.77%
1950	2.36%	0.66%	-0.67%	0.96%	0.81%	1.43%	2.08%	2.66%	0.59%	-2.37%	-0.46%	2.75%	0.90%
1951	1.09%	-0.68%	0.18%	0.35%	0.30%	0.65%	1.23%	0.64%	-0.20%	4.27%	-0.08%	0.32%	0.67%
1952	0.72%	-2.28%	-1.04%	0.23%	0.25%	0.23%	0.37%	0.49%	-0.37%	1.20%	-0.35%	8.44%	0.66%
1953	14.50%	2.65%	-1.16%	0.60%	0.56%	0.82%	1.29%	1.58%	2.31%	1.60%	0.04%	2.30%	2.26%
1954	2.93%	2.80%	-1.36%	-3.20%	0.35%	0.45%	0.83%	1.44%	2.04%	1.23%	0.30%	0.14%	0.66%
1955	-1.46%	-1.24%	-0.19%	-0.37%	-0.33%	-0.22%	0.64%	1.94%	1.54%	0.40%	-0.47%	-0.56%	-0.03%
1956	-0.54%	-0.45%	1.09%	0.30%	0.29%	0.55%	0.95%	1.05%	-0.23%	0.41%	1.60%	14.82%	1.65%
1957	19.70%	6.80%	-2.24%	1.13%	6.01%	0.87%	1.15%	1.43%	1.66%	0.10%	0.42%	0.40%	3.12%
1958	4.23%	5.14%	3.61%	1.39%	0.10%	0.13%	0.26%	0.55%	-0.05%	-0.96%	1.08%	14.27%	2.48%
1959	37.00%	12.03%	4.27%	2.80%	0.42%	0.59%	1.37%	1.60%	3.42%	0.90%	-0.82%	-1.54%	5.17%
1960	0.37%	0.72%	-1.56%	-0.27%	0.09%	0.75%	1.36%	2.04%	1.28%	-0.03%	-0.35%	-3.47%	0.08%
1961	2.49%	-2.05%	-1.67%	3.30%	2.49%	1.14%	1.50%	2.43%	0.45%	0.46%	1.18%	1.34%	1.09%
1962	1.29%	-2.42%	-2.03%	-0.35%	-0.61%	0.21%	1.08%	1.95%	1.94%	0.40%	-0.29%	0.18%	0.11%
1963	0.87%	3.02%	3.28%	1.25%	0.45%	0.38%	0.38%	2.10%	3.39%	13.12%	2.83%	2.35%	2.79%
1964	3.71%	3.53%	1.61%	2.65%	3.09%	7.81%	3.13%	0.84%	3.94%	0.57%	1.77%	2.60%	2.94%
1965	1.21%	-0.72%	1.52%	0.27%	0.48%	0.81%	0.75%	1.33%	-1.06%	3.31%	4.57%	2.91%	1.28%
1966	1.64%	-0.57%	1.86%	2.17%	0.70%	0.81%	1.34%	1.43%	0.37%	-0.22%	-0.22%	0.02%	0.78%
1967	0.31%	0.80%	1.18%	0.20%	0.57%	0.48%	0.36%	0.49%	0.08%	0.85%	-1.46%	4.28%	0.68%
1968	9.20%	1.81%	1.18%	1.03%	0.44%	0.49%	1.15%	1.87%	0.98%	-0.41%	0.43%	0.52%	1.56%
1969	-0.13%	0.21%	0.97%	0.39%	0.13%	0.20%	0.40%	0.45%	-0.40%	1.47%	2.33%	4.88%	0.91%
1970	11.59%	6.60%	4.11%	-0.03%	0.34%	0.42%	1.02%	1.86%	1.26%	0.76%	0.48%	0.42%	2.40%
1971	-0.52%	0.09%	1.08%	0.44%	0.54%	0.55%	1.14%	1.19%	2.46%	2.62%	0.57%	2.07%	1.02%
1972	2.17%	0.68%	0.87%	5.18%	7.18%	2.11%	1.37%	1.17%	1.43%	0.25%	-0.01%	0.04%	1.87%
1973	-1.60%	-2.59%	-0.93%	0.19%	0.42%	0.62%	1.14%	1.11%	0.67%	2.42%	1.11%	1.78%	0.36%
1974	2.07%	1.22%	0.33%	0.19%	0.46%	0.31%	0.42%	0.52%	0.40%	0.26%	0.78%	5.49%	1.04%
1975	19.69%	12.55%	4.84%	1.89%	-0.97%	1.11%	0.88%	1.34%	0.95%	-0.11%	0.18%	7.57%	4.16%
1976	13.31%	4.38%	4.56%	-1.59%	-5.22%	-0.91%	1.09%	2.23%	1.69%	0.24%	0.05%	-0.02%	1.65%
1977	-1.80%	-1.67%	-1.32%	-1.96%	-2.08%	-1.46%	-1.79%	-0.31%	0.17%	-0.33%	1.23%	0.48%	-0.90%
1978	0.14%	0.53%	-0.13%	0.45%	0.27%	0.27%	0.44%	0.83%	1.77%	2.49%	2.62%	0.91%	0.88%
1979	1.03%	0.05%	0.26%	0.74%	0.33%	0.28%	0.88%	1.20%	1.12%	-0.36%	-0.38%	-0.04%	0.43%
1980	0.04%	0.34%	0.81%	0.45%	1.57%	3.30%	1.84%	3.03%	7.49%	7.31%	1.86%	2.63%	2.56%
1981	5.45%	-1.52%	2.38%	6.26%	2.41%	0.84%	1.27%	1.97%	0.83%	0.11%	0.13%	0.34%	1.70%
1982	0.06%	-0.89%	0.20%	0.55%	0.65%	0.08%	0.27%	-1.55%	-0.47%	1.50%	5.41%	10.49%	1.36%
1983	7.10%	0.68%	0.20%	0.05%	0.05%	0.05%	0.24%	0.39%	0.39%	0.38%	7.10%	9.58%	2.18%
1984	1.68%	0.28%	0.05%	0.24%	0.47%	0.53%	1.08%	1.73%	1.63%	2.03%	1.43%	1.37%	1.04%
1985	1.79%	1.26%	1.42%	0.31%	0.76%	1.37%	1.43%	1.67%	0.65%	0.08%	0.08%	0.04%	0.91%
1986	0.68%	-1.02%	-0.58%	0.05%	0.49%	0.19%	0.58%	-0.14%	0.23%	2.33%	5.95%	4.27%	1.09%
1987	3.37%	-1.17%	0.58%	-1.43%	0.70%	2.91%	1.08%	0.21%	0.19%	1.02%	0.43%	-0.02%	0.65%
1988	-0.22%	0.64%	0.67%	0.57%	0.77%	0.64%	1.22%	1.32%	1.03%	0.01%	-0.11%	0.29%	0.57%
1989	0.64%	0.47%	0.16%	0.11%	-0.06%	0.92%	1.30%	1.58%	-0.97%	-1.15%	-0.27%	0.40%	0.26%
1990	-1.49%	0.18%	0.62%	-0.82%	-1.57%	-0.76%	0.52%	1.77%	1.49%	1.25%	-0.70%	1.54%	0.17%
1991	-1.99%	0.66%	-2.51%	-4.78%	-2.10%	-0.75%	1.20%	2.85%	1.87%	0.58%	0.26%	0.10%	-0.38%
AVG:	2.91%	1.20%	1.25%	0.63%	0.49%	0.67%	0.95%	1.21%	1.09%	1.27%	0.74%	1.97%	1.20%
MIN:	-13.58%	-2.98%	-3.95%	-4.78%	-5.22%	-4.42%	-1.79%	-3.36%	-2.01%	-2.37%	-4.44%	-5.18%	-0.90%
MAX:	37.00%	17.47%	18.77%	6.26%	7.18%	7.81%	3.13%	3.03%	7.49%	13.12%	7.76%	14.82%	5.48%

Table 4.4.6-13 Simulated monthly average chloride concentration (mg/L) at Prisoners Point, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	47	58	39	23	45	25	28	29	17	11	17	45	32
1923	62	48	43	32	25	17	38	40	19	14	30	54	35
1924	61	49	46	55	34	35	47	40	44	38	35	75	47
1925	97	74	43	28	33	42	38	33	17	16	27	42	41
1926	67	58	53	32	23	19	31	35	22	23	36	61	38
1927	73	28	12	13	36	18	27	25	14	12	19	50	27
1928	68	39	31	22	13	14	28	26	15	13	20	53	28
1929	68	45	44	51	42	25	42	48	35	29	42	64	45
1930	94	77	33	19	18	13	20	27	18	22	40	69	38
1931	73	52	45	30	30	28	38	41	41	30	35	78	43
1932	90	73	43	23	37	30	37	35	25	16	23	38	39
1933	66	57	46	30	28	21	35	37	32	29	42	56	40
1934	92	81	40	21	23	30	33	36	31	26	45	75	44
1935	89	63	48	37	25	19	35	37	17	13	26	63	39
1936	72	50	56	32	37	23	26	31	16	14	30	66	38
1937	70	45	47	50	34	46	32	26	19	14	25	61	39
1938	79	31	27	24	27	15	12	10	12	12	17	27	24
1939	25	15	24	22	27	29	55	47	21	27	50	79	35
1940	68	41	53	49	53	36	26	29	15	12	23	54	38
1941	77	48	23	32	32	23	25	24	22	13	19	31	31
1942	28	42	30	32	25	31	36	31	19	12	18	29	28
1943	25	23	20	23	19	16	26	34	18	14	19	51	24
1944	71	54	49	49	38	19	44	46	20	19	47	89	45
1945	69	35	32	23	30	30	37	41	18	14	29	61	35
1946	76	42	24	12	19	20	35	37	17	14	31	60	32
1947	61	45	31	24	23	14	21	34	22	24	47	76	35
1948	71	44	53	35	27	18	29	29	14	12	28	62	35
1949	61	39	38	41	47	21	35	35	16	19	34	59	37
1950	66	46	49	29	14	12	22	26	13	13	28	58	31
1951	67	24	25	26	22	18	31	34	18	13	20	51	29
1952	66	45	23	43	20	25	22	17	19	13	16	17	27
1953	18	15	21	27	19	12	32	32	13	11	17	28	21
1954	29	42	55	31	10	10	24	25	15	14	25	56	28
1955	61	44	24	20	21	17	31	28	15	18	31	64	31
1956	73	58	35	25	12	13	28	27	19	12	20	30	29
1957	21	24	53	56	23	14	26	43	19	13	21	55	31
1958	47	34	31	23	44	39	21	18	20	13	18	23	28
1959	16	14	37	31	35	28	37	31	15	16	33	59	29
1960	58	40	34	31	25	14	36	36	18	28	49	68	37
1961	68	44	32	30	19	12	25	32	21	27	49	68	35
1962	67	44	35	29	49	24	30	38	17	16	32	64	37
1963	46	13	17	21	22	15	39	30	14	11	16	42	24
1964	64	50	18	22	16	15	19	30	19	25	47	67	33
1965	70	46	26	23	15	15	29	29	17	12	16	42	28
1966	60	30	18	17	19	11	26	27	15	16	32	67	28
1967	59	38	34	49	20	21	25	18	17	19	17	18	28
1968	14	15	29	25	18	13	26	27	18	17	32	71	26
1969	68	44	26	31	19	15	12	9	9	13	18	42	26
1970	31	15	22	24	19	23	31	37	19	12	17	47	25
1971	67	39	22	13	12	10	24	39	16	14	18	28	25
1972	33	52	54	34	24	10	19	25	16	13	28	63	31
1973	66	28	15	39	45	27	28	33	15	12	23	54	32
1974	70	24	14	21	13	20	24	29	15	12	19	24	24
1975	18	34	54	48	34	34	30	29	19	12	18	24	30
1976	15	17	45	58	52	23	38	42	41	55	67	88	45
1977	93	74	61	36	43	43	47	50	42	31	43	95	55
1978	107	86	48	55	37	32	23	21	21	15	20	53	43
1979	61	55	44	33	37	28	28	31	15	13	26	62	36
1980	70	43	29	26	20	19	26	31	24	14	17	32	29
1981	48	48	44	26	15	14	29	30	18	31	52	69	35
1982	66	30	14	44	19	28	10	15	22	13	16	20	25
1983	24	30	12	19	16	16	13	10	8	14	11	16	16
1984	21	19	14	8	16	21	31	38	21	12	17	46	22
1985	70	41	13	12	19	19	30	31	18	29	51	62	33
1986	63	55	33	19	34	15	20	28	25	14	19	38	30
1987	49	48	48	47	36	20	24	32	20	23	45	87	40
1988	69	38	28	17	14	22	30	28	29	26	44	70	35
1989	86	64	53	37	30	15	13	14	14	25	46	59	38
1990	60	41	42	40	23	17	27	33	32	40	43	65	39
1991	97	84	63	55	58	28	32	32	28	36	47	63	52
AVG:	60	43	35	31	27	21	29	31	20	19	30	54	33
MIN:	14	13	12	8	10	10	10	9	8	11	11	16	16
MAX:	107	86	63	58	58	46	55	50	44	55	67	95	55

Table 4.4.6-14 Difference in simulated monthly average chloride concentration (%) at Prisoners Point, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.39%	0.10%	0.29%	0.73%	0.11%	0.23%	0.07%	-0.38%	-0.24%	2.06%	1.96%	1.11%	0.53%
1923	1.12%	0.47%	0.07%	-0.10%	-0.09%	0.23%	0.15%	0.24%	1.52%	1.61%	-0.04%	0.26%	0.45%
1924	0.51%	0.31%	0.99%	1.09%	-0.22%	0.28%	0.61%	2.45%	1.77%	1.17%	1.86%	-0.22%	0.88%
1925	1.67%	0.42%	-4.19%	-2.77%	-0.80%	-1.52%	-0.37%	0.48%	1.01%	2.17%	1.03%	-0.66%	-0.29%
1926	-0.10%	0.53%	-0.29%	0.10%	0.28%	1.79%	1.29%	0.72%	2.23%	1.90%	0.80%	0.64%	0.82%
1927	0.40%	0.21%	1.67%	1.70%	1.63%	0.89%	-0.28%	-0.42%	0.52%	2.53%	3.44%	2.21%	1.21%
1928	-0.61%	-2.26%	-1.27%	-0.37%	0.66%	0.27%	0.18%	0.56%	2.38%	2.70%	1.58%	0.11%	0.33%
1929	0.39%	0.50%	0.30%	0.37%	0.19%	7.93%	4.51%	1.49%	10.83%	6.50%	0.48%	-0.03%	2.79%
1930	1.15%	2.34%	-1.68%	0.64%	0.69%	0.87%	1.35%	1.83%	2.54%	1.72%	4.19%	3.00%	1.55%
1931	0.23%	-0.90%	1.67%	1.03%	-1.30%	-2.01%	-0.36%	0.81%	2.56%	1.72%	0.75%	5.97%	0.85%
1932	5.72%	2.06%	0.31%	0.45%	0.29%	0.83%	0.88%	0.92%	2.06%	2.87%	1.93%	2.18%	1.71%
1933	1.89%	0.43%	-1.31%	-0.59%	0.98%	1.36%	0.64%	3.41%	3.58%	2.54%	1.85%	1.39%	1.35%
1934	0.08%	-0.66%	-0.45%	-0.71%	-0.02%	2.10%	1.67%	1.14%	1.70%	2.38%	-0.81%	-3.07%	0.28%
1935	3.84%	1.12%	-9.70%	0.62%	2.70%	4.30%	-0.48%	-0.32%	1.56%	2.90%	0.92%	-1.13%	0.53%
1936	-0.47%	-0.37%	0.16%	1.14%	-0.72%	-0.26%	0.47%	0.43%	1.84%	2.50%	1.11%	0.59%	0.54%
1937	0.37%	0.60%	0.17%	0.07%	-0.41%	-0.07%	0.18%	0.13%	1.54%	2.90%	0.36%	-0.07%	0.48%
1938	-0.05%	0.27%	2.64%	0.72%	0.01%	0.00%	0.00%	-0.02%	0.03%	1.88%	2.04%	-0.03%	0.62%
1939	0.12%	1.84%	1.60%	2.09%	1.41%	1.05%	0.38%	0.86%	1.95%	0.21%	0.64%	1.41%	1.13%
1940	0.06%	-0.19%	1.00%	0.56%	-0.02%	-2.28%	-0.64%	0.16%	1.04%	1.89%	1.22%	-5.93%	-0.26%
1941	-15.30%	-5.65%	4.03%	0.07%	0.04%	-0.04%	0.03%	0.22%	0.24%	2.23%	-1.54%	-3.30%	-1.58%
1942	0.68%	0.44%	0.15%	0.04%	0.07%	0.12%	0.10%	0.14%	0.78%	2.38%	1.90%	1.97%	0.73%
1943	3.44%	5.11%	3.95%	0.05%	0.07%	0.04%	-0.03%	0.17%	1.67%	2.37%	1.47%	0.55%	1.57%
1944	0.57%	0.30%	0.41%	0.59%	0.26%	1.04%	0.30%	0.43%	1.88%	1.86%	0.64%	0.46%	0.73%
1945	0.50%	1.84%	3.01%	2.17%	0.61%	0.20%	0.15%	0.22%	1.50%	2.28%	1.24%	0.89%	1.22%
1946	0.45%	0.46%	0.29%	0.28%	-1.18%	0.73%	0.41%	0.40%	1.78%	2.22%	1.19%	0.59%	0.63%
1947	0.49%	0.38%	0.05%	1.03%	2.50%	1.28%	0.91%	1.05%	2.69%	0.62%	1.05%	1.38%	1.12%
1948	0.38%	0.76%	1.15%	0.05%	-0.06%	0.63%	0.43%	0.34%	1.83%	2.51%	1.25%	0.56%	0.82%
1949	1.49%	1.04%	-0.19%	1.30%	1.28%	0.96%	0.26%	2.10%	2.84%	2.58%	2.27%	1.92%	1.49%
1950	0.71%	-0.04%	0.32%	0.48%	0.56%	0.80%	0.67%	0.77%	2.17%	2.49%	1.21%	0.68%	0.90%
1951	0.58%	0.48%	0.07%	0.22%	0.07%	0.41%	0.18%	0.15%	1.57%	2.42%	1.31%	0.47%	0.66%
1952	0.42%	0.37%	0.45%	0.05%	0.10%	0.02%	0.06%	0.04%	0.09%	1.77%	2.61%	2.59%	0.71%
1953	1.01%	1.38%	0.91%	0.39%	0.27%	0.62%	0.38%	0.41%	1.81%	2.58%	1.78%	2.49%	1.17%
1954	3.44%	3.03%	0.72%	-2.52%	0.33%	0.38%	0.26%	0.50%	2.14%	2.66%	1.58%	0.92%	1.12%
1955	0.79%	0.50%	0.73%	0.81%	0.66%	0.98%	0.83%	1.26%	2.63%	2.62%	2.00%	0.37%	1.18%
1956	-0.13%	0.39%	0.11%	0.02%	-0.02%	0.36%	0.26%	0.26%	0.64%	2.34%	2.12%	2.46%	0.73%
1957	4.00%	3.38%	-0.58%	-0.51%	2.33%	0.57%	0.31%	0.21%	1.47%	2.88%	1.65%	0.82%	1.38%
1958	1.68%	2.59%	1.75%	0.56%	-0.08%	0.02%	0.07%	0.09%	0.32%	2.02%	1.85%	2.28%	1.10%
1959	1.03%	1.58%	0.77%	0.54%	0.20%	1.50%	1.04%	-0.15%	1.48%	1.53%	0.96%	4.42%	1.24%
1960	0.84%	-1.54%	5.96%	2.01%	1.46%	1.17%	0.52%	1.28%	2.85%	1.58%	0.09%	-1.81%	1.20%
1961	0.63%	1.62%	-2.18%	2.20%	2.39%	2.21%	1.67%	1.30%	4.07%	0.29%	0.29%	0.11%	1.22%
1962	0.71%	0.39%	-0.67%	-1.04%	0.03%	0.71%	0.65%	1.55%	3.36%	2.35%	2.81%	1.83%	1.06%
1963	1.81%	2.98%	4.32%	0.91%	-3.09%	-2.54%	-0.24%	-0.33%	1.61%	2.39%	1.95%	1.04%	0.90%
1964	0.73%	1.19%	1.40%	1.37%	1.40%	2.01%	0.37%	-0.36%	2.05%	3.75%	3.00%	3.53%	1.70%
1965	2.68%	0.12%	-0.14%	-0.18%	0.18%	0.51%	-0.13%	0.22%	1.93%	2.64%	2.12%	1.53%	0.96%
1966	0.64%	1.73%	1.31%	0.72%	0.37%	0.74%	0.54%	1.00%	2.27%	1.83%	0.75%	0.44%	1.03%
1967	0.53%	1.62%	1.60%	0.12%	0.25%	0.16%	0.07%	0.04%	0.03%	0.85%	2.49%	1.78%	0.80%
1968	1.25%	1.54%	1.24%	0.93%	0.38%	0.56%	0.35%	1.71%	2.71%	1.89%	2.19%	1.84%	1.38%
1969	0.49%	0.98%	1.25%	-1.67%	-0.67%	0.01%	-0.08%	-0.11%	-0.02%	1.88%	2.75%	2.56%	0.61%
1970	1.63%	1.93%	0.10%	-0.06%	0.06%	0.08%	0.15%	0.36%	1.67%	2.45%	1.87%	0.93%	0.93%
1971	0.28%	0.30%	0.43%	0.33%	-0.21%	0.35%	0.33%	0.22%	1.37%	2.46%	1.88%	2.13%	0.82%
1972	2.55%	1.00%	0.88%	3.75%	5.14%	1.24%	0.62%	1.24%	2.19%	2.42%	1.07%	0.50%	1.88%
1973	0.51%	1.18%	1.93%	0.13%	0.06%	0.11%	0.21%	0.31%	1.68%	2.41%	1.28%	0.61%	0.87%
1974	1.28%	1.18%	0.24%	0.08%	0.29%	0.07%	0.07%	0.08%	1.48%	2.60%	1.88%	1.76%	0.92%
1975	5.54%	6.67%	3.51%	2.57%	1.08%	0.06%	0.13%	0.25%	1.45%	2.54%	1.80%	2.25%	2.32%
1976	2.89%	2.45%	1.72%	0.25%	-1.68%	0.99%	1.08%	2.35%	4.07%	1.04%	1.63%	0.53%	1.44%
1977	-1.69%	-2.35%	-2.16%	-1.23%	-1.47%	-0.47%	0.92%	0.80%	1.37%	2.13%	1.26%	1.01%	-0.16%
1978	1.02%	0.75%	0.41%	0.11%	0.59%	0.33%	0.14%	0.10%	0.53%	2.26%	2.10%	1.19%	0.79%
1979	0.19%	0.33%	0.48%	0.50%	0.06%	0.04%	0.22%	-0.03%	0.74%	2.12%	0.96%	0.48%	0.51%
1980	0.20%	0.42%	1.41%	0.18%	0.03%	-0.71%	-0.53%	-0.06%	1.05%	2.74%	2.11%	0.85%	0.64%
1981	2.31%	1.26%	0.35%	1.17%	0.77%	0.51%	1.05%	1.89%	2.62%	-0.24%	-0.29%	0.78%	1.02%
1982	-0.64%	-2.22%	-0.86%	-0.52%	-0.16%	0.01%	0.00%	-5.37%	-0.66%	2.06%	1.53%	0.93%	-0.49%
1983	0.18%	0.28%	0.05%	-0.01%	-0.04%	-0.02%	-0.02%	0.01%	0.01%	0.12%	2.08%	1.04%	0.31%
1984	0.13%	0.07%	0.00%	0.09%	0.06%	0.15%	0.18%	0.33%	1.61%	2.60%	1.81%	1.38%	0.70%
1985	1.35%	0.71%	0.92%	0.98%	0.78%	0.80%	0.56%	0.82%	2.17%	1.22%	0.66%	0.45%	0.95%
1986	0.96%	0.57%	0.38%	0.88%	0.05%	-0.06%	0.00%	0.12%	0.81%	2.47%	1.81%	1.13%	0.76%
1987	0.88%	0.13%	0.04%	-0.46%	-0.49%	0.56%	0.45%	0.95%	2.71%	1.50%	0.84%	0.31%	0.62%
1988	1.26%	2.63%	1.57%	0.85%	0.70%	1.19%	5.88%	6.63%	-1.27%	0.03%	0.60%	0.33%	1.70%
1989	0.44%	0.38%	0.86%	0.61%	0.52%	1.08%	1.16%	1.77%	2.71%	0.90%	0.68%	0.75%	0.99%
1990	-1.10%	-0.19%	-0.21%	-1.81%	-0.06%	-0.22%	0.04%	1.57%	2.70%	2.84%	1.13%	2.50%	0.60%
1991	-1.48%	-3.99%	-3.44%	-7.34%	-5.04%	-1.65%	-0.12%	0.76%	1.85%	2.34%	1.91%	1.10%	-1.26%
AVG:	0.74%	0.70%	0.47%	0.27%	0.24%	0.52%	0.47%	0.64%	1.77%	2.10%	1.44%	0.94%	0.86%
MIN:	-15.30%	-5.65%	-9.70%	-7.34%	-5.04%	-2.54%	-0.64%	-5.37%	-1.27%	-0.24%	-1.54%	-5.93%	-1.58%
MAX:	5.72%	6.67%	5.96%	3.75%	5.14%	7.93%	5.88%	6.63%	10.83%	6.50%	4.19%	5.97%	2.79%

Table 4.4.6-15 Difference in simulated monthly average chloride concentration (%) at Prisoners Point, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.35%	0.09%	0.25%	0.66%	0.11%	0.22%	0.09%	-0.39%	-0.40%	1.79%	3.22%	5.54%	0.96%
1923	5.90%	0.49%	-1.03%	-1.83%	-0.55%	0.55%	0.21%	0.27%	1.07%	1.80%	0.99%	1.67%	0.80%
1924	2.26%	-0.10%	0.85%	3.32%	-0.09%	0.32%	0.41%	1.22%	1.41%	1.58%	-0.96%	-2.79%	0.62%
1925	-0.29%	0.04%	-3.38%	-2.34%	-0.74%	0.71%	0.46%	0.64%	4.23%	3.50%	2.65%	2.28%	0.65%
1926	0.51%	0.23%	1.15%	0.86%	0.23%	0.85%	1.03%	0.91%	1.97%	1.96%	1.41%	1.51%	1.05%
1927	1.12%	0.91%	1.31%	0.86%	1.62%	0.89%	0.15%	0.73%	1.20%	2.36%	6.14%	6.24%	1.96%
1928	-0.35%	-3.26%	5.88%	4.31%	1.50%	0.17%	0.18%	-0.07%	-0.04%	2.48%	2.29%	0.73%	1.15%
1929	0.10%	1.85%	1.87%	-0.35%	2.11%	2.16%	1.04%	0.88%	11.62%	6.88%	-0.18%	-0.59%	2.28%
1930	0.82%	2.12%	-0.79%	0.65%	0.58%	0.76%	0.70%	1.23%	2.49%	2.74%	4.91%	5.04%	1.77%
1931	0.87%	-1.04%	2.15%	1.35%	-0.13%	-0.66%	0.24%	1.01%	2.05%	1.61%	1.17%	1.17%	0.82%
1932	3.52%	1.28%	0.26%	0.44%	0.02%	0.56%	0.32%	0.57%	2.02%	2.87%	1.90%	1.45%	1.27%
1933	0.67%	0.64%	0.60%	0.77%	1.09%	1.17%	0.62%	1.47%	2.07%	2.19%	1.56%	1.30%	1.18%
1934	0.70%	0.55%	0.63%	0.77%	0.42%	0.68%	0.79%	1.03%	1.71%	2.24%	1.63%	-1.79%	0.78%
1935	-0.65%	-1.80%	-5.25%	-1.06%	-0.66%	4.78%	0.32%	0.18%	1.58%	2.90%	1.38%	0.27%	0.17%
1936	1.74%	0.90%	0.52%	2.64%	1.19%	3.19%	1.44%	1.05%	1.27%	2.86%	3.25%	3.67%	1.98%
1937	1.80%	1.22%	0.15%	-0.46%	0.12%	0.06%	0.06%	-0.63%	0.17%	3.44%	1.91%	2.45%	0.86%
1938	1.41%	0.57%	-2.90%	-0.47%	-0.06%	-0.01%	0.04%	-0.01%	0.27%	1.85%	3.87%	12.30%	1.40%
1939	5.78%	5.50%	5.84%	3.37%	1.77%	0.73%	-1.16%	-0.46%	2.05%	1.68%	0.46%	0.30%	2.16%
1940	0.50%	1.01%	0.99%	0.60%	0.08%	0.04%	0.33%	-0.77%	0.74%	4.39%	3.67%	-3.47%	0.67%
1941	-14.56%	-4.56%	4.95%	0.07%	0.00%	-0.04%	0.00%	-0.10%	-2.78%	1.36%	0.16%	3.41%	-1.01%
1942	8.27%	3.32%	1.22%	0.04%	0.04%	0.10%	0.09%	0.16%	-0.06%	-1.94%	5.58%	10.00%	2.23%
1943	11.19%	11.78%	11.11%	0.17%	0.08%	0.01%	0.06%	-3.06%	-1.62%	5.15%	7.93%	7.72%	4.21%
1944	4.88%	1.14%	0.79%	1.60%	-0.57%	0.71%	0.23%	0.41%	1.91%	2.43%	1.84%	1.09%	1.37%
1945	0.33%	6.01%	7.70%	1.82%	0.29%	0.04%	0.81%	0.76%	0.67%	2.43%	3.06%	4.42%	2.36%
1946	2.25%	-1.07%	-0.26%	0.28%	-6.99%	-0.15%	0.71%	-1.20%	-0.48%	2.67%	2.54%	2.42%	0.06%
1947	-0.81%	0.13%	4.23%	2.20%	0.32%	0.40%	0.69%	1.32%	5.57%	-0.26%	-0.54%	0.51%	1.15%
1948	0.77%	0.92%	0.26%	0.07%	-0.39%	0.23%	0.19%	0.33%	1.81%	2.51%	1.25%	0.60%	0.71%
1949	-0.40%	0.96%	3.07%	1.02%	0.96%	0.65%	0.29%	2.18%	2.88%	1.95%	-1.73%	-3.58%	0.69%
1950	0.42%	2.18%	-0.54%	0.53%	0.57%	1.41%	1.62%	1.50%	1.34%	2.12%	1.93%	3.98%	1.42%
1951	3.48%	-0.11%	0.09%	0.24%	0.02%	0.37%	0.19%	-0.82%	0.32%	2.56%	2.63%	1.11%	0.84%
1952	1.37%	-0.84%	-0.74%	0.09%	0.11%	0.03%	0.04%	0.04%	-1.36%	1.55%	3.20%	6.00%	0.79%
1953	1.73%	1.80%	5.34%	1.18%	-0.07%	0.56%	0.42%	0.43%	1.91%	2.65%	1.90%	2.84%	1.72%
1954	3.84%	3.17%	0.69%	-2.57%	0.35%	0.38%	0.24%	0.50%	2.14%	2.64%	1.58%	0.89%	1.15%
1955	-0.99%	-1.85%	-0.63%	0.21%	-0.44%	-0.26%	-0.07%	0.99%	2.59%	2.59%	1.90%	0.14%	0.35%
1956	-0.62%	-0.37%	0.71%	0.15%	-0.06%	0.39%	0.29%	0.15%	-2.83%	1.31%	3.72%	13.63%	1.37%
1957	16.71%	7.74%	-1.41%	-1.90%	4.88%	1.18%	0.34%	0.25%	1.53%	2.91%	1.82%	1.04%	2.92%
1958	3.51%	5.99%	3.31%	0.62%	0.08%	-0.06%	0.03%	0.11%	-0.37%	1.64%	3.30%	11.46%	2.47%
1959	1.24%	6.21%	5.20%	2.65%	-0.05%	0.44%	0.47%	0.81%	2.68%	2.38%	0.13%	-1.21%	1.74%
1960	-0.52%	1.78%	-0.87%	0.19%	0.37%	0.74%	0.40%	0.89%	2.45%	1.20%	0.14%	-1.66%	0.42%
1961	1.01%	1.73%	-2.74%	2.31%	1.68%	1.41%	3.13%	1.56%	3.38%	1.36%	1.33%	1.61%	1.48%
1962	1.49%	-1.48%	-3.27%	-0.87%	-0.40%	-0.30%	0.00%	0.57%	2.11%	2.03%	0.51%	0.41%	0.07%
1963	1.48%	1.87%	2.40%	0.66%	0.01%	0.27%	0.02%	1.22%	6.49%	0.87%	4.73%	5.25%	2.11%
1964	4.53%	3.26%	2.14%	1.63%	1.43%	2.18%	0.29%	-0.59%	2.37%	1.83%	1.36%	3.56%	2.00%
1965	3.25%	-0.75%	0.11%	0.12%	0.20%	0.59%	0.13%	0.28%	0.14%	3.06%	5.45%	6.10%	1.56%
1966	2.99%	0.32%	0.38%	0.65%	0.34%	0.74%	0.26%	1.23%	2.39%	1.91%	0.78%	0.37%	1.03%
1967	0.46%	1.33%	0.65%	0.11%	0.53%	0.32%	0.03%	0.09%	-0.36%	0.54%	2.24%	3.07%	0.75%
1968	2.67%	1.90%	1.45%	0.96%	0.36%	0.25%	0.46%	1.21%	2.53%	2.02%	1.20%	1.10%	1.34%
1969	0.22%	0.16%	0.69%	0.22%	0.05%	-0.05%	-0.01%	-0.10%	-0.17%	2.01%	3.94%	7.95%	1.24%
1970	5.39%	3.97%	-0.14%	-0.15%	0.21%	0.08%	0.07%	0.39%	1.73%	2.53%	2.08%	1.27%	1.45%
1971	0.46%	0.31%	0.37%	0.32%	-0.47%	0.27%	0.30%	0.30%	1.49%	2.75%	2.19%	2.62%	0.91%
1972	3.05%	1.23%	0.85%	3.78%	5.45%	1.28%	0.63%	1.24%	2.19%	2.42%	1.08%	0.53%	1.98%
1973	-1.06%	-1.74%	-0.53%	0.18%	0.35%	0.36%	0.20%	-0.53%	0.51%	2.93%	3.17%	3.84%	0.64%
1974	3.48%	1.35%	0.21%	0.08%	0.28%	0.08%	0.05%	-0.47%	-0.16%	2.66%	3.19%	5.82%	1.38%
1975	13.98%	15.39%	6.18%	2.55%	6.89%	0.67%	0.15%	0.26%	-1.21%	1.92%	2.66%	6.82%	4.69%
1976	7.06%	3.84%	4.60%	0.78%	-5.13%	-1.03%	0.46%	1.25%	1.92%	1.13%	0.81%	0.48%	1.35%
1977	-1.54%	-2.66%	-1.86%	-2.25%	-1.92%	-0.52%	2.68%	2.17%	1.59%	2.11%	2.16%	1.71%	0.14%
1978	0.85%	0.67%	0.99%	0.06%	0.05%	0.16%	0.06%	0.10%	0.50%	2.66%	2.98%	1.56%	0.89%
1979	0.44%	0.44%	0.15%	0.43%	0.06%	0.02%	0.03%	-0.26%	0.74%	2.18%	0.72%	0.17%	0.43%
1980	0.73%	0.81%	0.63%	0.13%	1.24%	1.08%	0.80%	1.49%	3.68%	4.76%	4.00%	5.04%	2.03%
1981	6.21%	0.86%	0.04%	4.47%	1.08%	0.55%	0.43%	0.95%	2.30%	1.12%	0.69%	0.76%	1.62%
1982	-0.37%	-1.15%	0.04%	0.37%	0.41%	-0.01%	0.02%	-5.39%	-1.50%	1.76%	5.31%	7.05%	0.55%
1983	0.56%	0.27%	-0.03%	0.00%	0.01%	0.03%	0.01%	0.01%	0.00%	-0.55%	2.51%	2.20%	0.42%
1984	0.95%	0.13%	-0.06%	0.03%	0.10%	0.15%	0.19%	0.39%	1.37%	2.61%	2.80%	2.73%	0.95%
1985	2.53%	1.13%	0.92%	0.99%	0.82%	0.80%	0.56%	0.81%	2.16%	1.19%	0.66%	0.46%	1.09%
1986	0.93%	-0.02%	-0.94%	0.26%	0.21%	-0.01%	-0.03%	-0.84%	-0.36%	3.28%	6.13%	7.77%	1.36%
1987	5.06%	0.29%	-0.20%	0.33%	-2.12%	0.19%	0.42%	0.94%	2.25%	2.14%	1.37%	0.45%	0.93%
1988	0.56%	1.08%	0.89%	0.55%	0.71%	1.17%	1.22%	1.72%	1.90%	2.44%	1.44%	2.49%	1.35%
1989	1.85%	1.57%	0.47%	0.60%	0.34%	0.61%	1.08%	1.89%	2.64%	0.61%	0.23%	0.89%	1.07%
1990	-1.09%	-1.81%	0.73%	-1.28%	-1.18%	-0.59%	-0.15%	1.02%	1.97%	3.27%	2.25%	0.57%	0.31%
1991	-1.12%	-1.14%	1.26%	-3.50%	-2.06%	-0.22%	0.39%	1.05%	2.27%	2.23%	1.37%	1.11%	0.14%
AVG:	1.94%	1.27%	1.00%	0.53%	0.25%	0.50%	0.40%	0.41%	1.47%	2.21%	2.21%	2.68%	1.24%
MIN:	-14.56%	-4.56%	-5.25%	-3.50%	-6.99%	-1.03%	-1.16%	-5.39%	-2.83%	-1.94%	-1.73%	-3.58%	-1.01%
MAX:	16.71%	15.39%	11.11%	4.47%	6.89%	4.78%	3.13%	2.18%	11.62%	6.88%	7.93%	13.63%	4.69%

Table 4.4.6-16 Simulated monthly average chloride concentration (mg/L) at Rock Slough Entrance at Old River, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	156	184	98	32	45	28	27	32	21	16	48	146	69
1923	201	150	68	35	26	20	40	42	27	33	92	173	76
1924	194	162	125	144	72	41	52	76	122	109	107	240	120
1925	303	235	115	62	45	39	44	36	25	33	71	133	95
1926	223	193	151	79	32	25	39	39	37	64	115	198	100
1927	241	81	17	17	37	24	29	27	20	19	54	162	61
1928	217	121	77	46	19	19	28	30	23	26	55	170	69
1929	225	141	117	127	94	39	45	60	67	81	139	193	111
1930	299	280	86	28	23	18	23	31	32	65	129	218	103
1931	247	170	130	71	63	51	64	80	109	90	112	251	120
1932	306	239	86	27	38	34	36	42	36	34	66	121	89
1933	218	192	125	59	37	30	36	47	63	84	137	173	100
1934	295	300	105	45	29	33	36	46	60	70	149	241	117
1935	299	196	127	61	28	25	39	46	26	23	79	195	95
1936	217	145	140	71	47	29	34	39	26	29	82	187	87
1937	221	148	129	121	59	53	55	47	28	26	77	191	96
1938	252	100	32	26	68	35	20	9	27	18	44	89	60
1939	41	31	63	50	46	35	60	59	38	82	157	244	76
1940	225	133	153	84	55	39	29	29	23	25	69	174	86
1941	227	146	44	35	44	30	47	46	27	20	49	93	67
1942	86	126	67	33	27	29	44	36	23	19	48	96	53
1943	71	64	39	33	22	35	34	45	27	23	53	164	51
1944	231	179	136	126	66	26	36	48	32	54	147	269	113
1945	225	104	82	52	45	30	39	47	28	32	90	195	81
1946	240	138	40	14	18	23	35	38	25	34	96	191	74
1947	196	139	81	57	48	23	26	37	37	69	147	231	91
1948	227	138	151	93	57	31	35	34	20	25	85	190	90
1949	196	127	104	99	107	35	34	40	26	50	105	189	93
1950	226	150	141	56	19	16	26	31	20	26	85	185	82
1951	219	61	28	28	25	20	30	36	27	27	57	161	60
1952	208	141	46	42	23	27	35	31	26	19	40	51	58
1953	21	30	42	28	19	17	32	36	19	18	47	93	33
1954	92	130	143	74	14	14	26	28	23	32	75	178	69
1955	194	137	61	27	27	24	38	35	26	43	99	207	76
1956	236	159	83	80	25	14	34	34	25	19	50	89	71
1957	58	69	143	143	48	19	28	45	29	24	61	172	70
1958	146	91	78	30	52	46	48	34	25	19	43	68	57
1959	27	31	103	72	35	32	38	38	27	42	99	180	60
1960	188	139	92	76	50	20	36	43	32	84	155	210	94
1961	230	136	84	61	34	18	30	35	36	80	151	205	92
1962	219	137	92	66	55	30	29	40	27	38	99	200	86
1963	120	23	34	26	27	21	44	34	21	18	41	136	45
1964	204	129	38	47	22	22	28	33	32	73	148	204	82
1965	224	140	49	23	16	17	33	31	24	20	42	139	63
1966	196	88	26	21	20	14	26	33	24	39	96	206	66
1967	195	110	70	50	26	22	45	22	27	23	42	54	57
1968	19	31	72	48	22	19	29	33	31	41	88	195	52
1969	201	121	63	43	70	33	21	10	13	20	43	125	64
1970	67	32	42	59	29	23	32	39	29	23	44	149	47
1971	213	118	33	15	13	14	25	40	25	24	43	91	55
1972	106	159	146	81	49	14	25	33	27	27	84	192	79
1973	209	79	27	43	47	29	29	34	23	23	67	172	65
1974	221	70	18	21	15	21	34	34	21	19	55	77	51
1975	51	103	143	117	57	36	33	32	24	18	52	79	62
1976	34	44	122	143	114	41	45	60	112	174	219	276	115
1977	295	236	180	89	105	82	82	88	115	96	136	291	150
1978	318	242	122	71	46	38	37	27	29	23	51	151	96
1979	187	173	118	57	45	31	30	33	23	26	80	194	83
1980	223	134	74	33	51	27	33	40	30	24	47	106	68
1981	155	165	122	59	19	20	29	34	34	96	163	212	92
1982	210	77	20	43	29	43	25	16	23	18	43	56	50
1983	28	31	27	40	31	36	22	9	8	21	16	19	24
1984	22	30	22	16	16	21	30	38	30	21	45	148	37
1985	213	104	18	19	37	27	34	36	33	88	158	194	80
1986	187	152	82	31	57	54	47	44	32	24	48	109	72
1987	156	161	139	123	77	30	30	36	37	66	143	268	105
1988	231	114	70	24	18	25	45	45	57	71	150	229	90
1989	290	206	145	93	64	27	19	21	24	74	143	182	107
1990	191	134	114	103	42	26	37	43	67	121	137	212	102
1991	318	308	175	151	147	52	32	39	52	110	162	206	146
AVG:	189	133	88	60	43	29	35	38	35	45	89	168	79
MIN:	19	23	17	14	13	14	19	9	8	16	16	19	24
MAX:	318	308	180	151	147	82	82	88	122	174	219	291	150

Table 4.4.6-17 Difference in simulated monthly average chloride concentration (%) at Rock Slough Entrance at Old River, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.05%	-0.04%	0.13%	0.83%	0.23%	0.24%	0.22%	0.20%	0.49%	1.30%	0.89%	0.64%	0.43%
1923	0.83%	0.39%	-0.07%	0.01%	0.17%	0.55%	0.22%	0.34%	0.95%	-0.86%	-0.97%	0.03%	0.13%
1924	0.24%	0.05%	0.60%	0.71%	-0.55%	0.31%	0.59%	2.33%	0.90%	-0.36%	0.73%	-1.19%	0.36%
1925	1.20%	0.81%	-4.26%	-3.20%	-1.11%	-0.79%	-0.66%	0.34%	0.50%	0.88%	0.02%	-0.96%	-0.60%
1926	-0.50%	0.30%	-0.57%	-0.21%	0.21%	1.24%	1.47%	0.87%	1.41%	0.74%	-0.10%	0.02%	0.41%
1927	-0.02%	-0.18%	2.62%	3.43%	1.32%	0.61%	0.03%	-0.18%	0.50%	1.61%	2.96%	1.70%	1.20%
1928	-0.47%	-2.70%	-1.69%	-0.94%	0.50%	0.24%	0.19%	0.43%	1.39%	1.19%	0.10%	-0.23%	-0.17%
1929	-0.07%	0.15%	0.04%	0.21%	-0.01%	4.07%	3.51%	1.49%	4.17%	2.55%	-0.75%	-0.90%	1.20%
1930	0.46%	1.17%	-0.37%	0.56%	0.58%	0.62%	0.76%	1.57%	1.44%	0.55%	3.07%	2.50%	1.07%
1931	-0.05%	-1.29%	1.04%	-0.23%	-1.62%	-3.21%	-1.20%	0.15%	1.47%	0.11%	-0.31%	1.62%	-0.29%
1932	2.53%	1.94%	-0.41%	0.40%	0.90%	1.07%	1.11%	1.06%	1.53%	1.18%	0.79%	1.37%	1.12%
1933	0.77%	-0.34%	-1.58%	-1.30%	-0.33%	0.91%	1.02%	1.90%	2.69%	1.15%	0.81%	0.40%	0.51%
1934	-0.17%	-0.85%	-0.76%	-1.59%	-0.49%	0.67%	1.58%	0.96%	1.01%	0.99%	-1.54%	-7.91%	-0.67%
1935	0.33%	2.37%	-9.54%	2.19%	1.94%	2.11%	1.28%	-0.52%	0.76%	1.67%	-0.11%	-1.22%	0.10%
1936	-0.46%	0.15%	0.32%	1.64%	1.65%	0.02%	0.65%	0.68%	1.07%	1.11%	0.35%	0.30%	0.62%
1937	0.00%	0.12%	-0.16%	-0.16%	2.22%	0.73%	0.69%	0.66%	0.98%	1.37%	-0.79%	-0.36%	0.44%
1938	-0.30%	-0.13%	2.31%	1.02%	0.03%	0.05%	0.02%	0.00%	0.00%	1.03%	0.75%	-0.83%	0.33%
1939	-0.77%	1.94%	1.40%	2.20%	1.96%	1.14%	0.52%	0.90%	1.15%	-0.88%	0.08%	0.73%	0.86%
1940	-0.12%	-0.91%	0.40%	0.85%	0.10%	-1.04%	-1.05%	0.51%	0.52%	0.35%	0.14%	-5.28%	-0.46%
1941	-15.68%	-8.03%	6.95%	0.14%	0.04%	0.03%	0.12%	-0.07%	0.43%	1.29%	-3.45%	-4.11%	-1.86%
1942	0.25%	0.27%	-0.06%	0.07%	0.07%	0.10%	0.11%	0.16%	0.57%	1.48%	0.67%	1.27%	0.41%
1943	4.08%	5.99%	4.99%	2.35%	0.76%	0.04%	0.02%	-1.32%	0.80%	1.28%	-0.06%	-0.02%	1.58%
1944	0.53%	0.04%	0.22%	0.33%	0.09%	0.75%	0.56%	0.53%	1.14%	0.61%	0.06%	0.20%	0.42%
1945	0.23%	1.62%	3.13%	2.20%	0.89%	0.20%	0.22%	0.39%	0.98%	1.09%	0.46%	0.43%	0.99%
1946	0.30%	0.18%	0.21%	0.24%	-0.38%	0.18%	0.58%	0.56%	1.20%	0.95%	0.46%	0.22%	0.39%
1947	0.22%	0.17%	-0.27%	1.73%	3.23%	1.41%	0.68%	0.26%	1.51%	-0.34%	0.82%	1.09%	0.88%
1948	0.25%	0.21%	0.95%	-0.50%	-0.42%	0.31%	0.38%	0.39%	1.16%	1.45%	0.49%	0.33%	0.42%
1949	1.77%	1.44%	-0.50%	1.18%	1.33%	1.39%	0.28%	1.73%	1.21%	1.77%	1.55%	1.49%	1.22%
1950	0.49%	-0.49%	0.04%	0.54%	0.45%	0.58%	0.54%	0.62%	1.45%	1.36%	0.53%	0.29%	0.53%
1951	0.29%	0.40%	0.11%	0.38%	0.25%	0.22%	0.27%	0.41%	1.04%	1.12%	0.21%	0.09%	0.40%
1952	0.15%	0.08%	0.24%	0.08%	0.09%	0.04%	0.09%	0.03%	0.15%	1.14%	1.53%	2.00%	0.47%
1953	1.89%	1.21%	0.79%	0.22%	0.26%	0.50%	0.35%	0.44%	1.00%	1.50%	0.49%	1.85%	0.87%
1954	3.16%	2.65%	0.57%	-3.10%	0.14%	0.27%	0.22%	0.39%	1.28%	1.71%	0.72%	0.36%	0.70%
1955	0.35%	0.30%	0.38%	1.10%	0.67%	0.82%	0.74%	0.95%	1.66%	0.97%	0.50%	-0.21%	0.69%
1956	-0.40%	0.22%	-0.02%	0.14%	0.00%	0.27%	0.24%	0.24%	0.79%	1.57%	1.09%	2.04%	0.52%
1957	4.82%	3.63%	-0.60%	-1.13%	2.40%	0.65%	0.27%	0.28%	0.88%	1.36%	0.66%	0.37%	1.13%
1958	1.44%	2.45%	1.71%	0.66%	0.00%	0.05%	0.00%	-0.08%	0.27%	1.35%	0.66%	1.91%	0.87%
1959	2.91%	1.53%	0.56%	0.47%	0.26%	0.93%	1.76%	0.68%	0.52%	0.13%	0.26%	3.16%	1.10%
1960	0.68%	-4.12%	5.97%	1.62%	1.61%	1.23%	0.55%	0.89%	2.16%	0.75%	-0.26%	-2.05%	0.75%
1961	-0.06%	1.72%	-3.23%	2.75%	2.71%	2.38%	1.04%	1.29%	2.47%	-0.64%	-0.14%	-0.27%	0.84%
1962	0.31%	0.04%	-0.93%	-1.72%	-0.13%	1.00%	1.87%	0.71%	3.00%	1.23%	1.93%	0.96%	0.69%
1963	1.54%	4.45%	5.35%	1.15%	-1.60%	-2.01%	-0.09%	-0.13%	0.91%	1.50%	0.61%	0.08%	0.98%
1964	0.41%	1.03%	1.21%	1.42%	1.87%	1.82%	0.07%	-0.07%	1.78%	3.33%	2.68%	3.21%	1.56%
1965	2.14%	-0.28%	0.09%	-0.18%	0.19%	0.25%	0.15%	0.32%	0.91%	1.62%	0.72%	0.48%	0.53%
1966	0.75%	1.67%	2.75%	1.16%	0.37%	0.57%	0.46%	0.76%	1.19%	0.29%	-0.07%	0.10%	0.84%
1967	0.22%	1.34%	2.07%	0.14%	0.19%	0.14%	0.03%	0.00%	0.05%	0.75%	1.33%	0.96%	0.60%
1968	1.79%	1.37%	1.06%	0.94%	0.32%	0.24%	0.32%	1.31%	1.78%	0.30%	1.84%	1.45%	1.06%
1969	0.56%	0.98%	1.27%	-0.73%	-0.25%	-0.20%	0.12%	-0.13%	0.05%	0.97%	1.50%	1.81%	0.50%
1970	2.77%	2.11%	0.59%	-0.10%	0.03%	0.11%	0.17%	0.44%	1.03%	1.29%	0.72%	0.48%	0.80%
1971	-0.08%	-0.09%	0.72%	0.28%	-0.04%	0.09%	0.31%	0.27%	1.06%	1.94%	0.79%	1.55%	0.57%
1972	2.29%	0.84%	0.69%	3.91%	5.98%	1.52%	0.42%	0.79%	1.28%	1.06%	0.22%	0.11%	1.59%
1973	0.17%	0.94%	2.34%	0.19%	0.06%	0.12%	0.23%	0.45%	1.10%	1.20%	0.32%	0.02%	0.59%
1974	1.08%	1.26%	0.19%	0.08%	0.23%	0.11%	0.06%	0.20%	0.99%	1.61%	0.72%	1.22%	0.65%
1975	6.46%	6.64%	3.30%	2.54%	1.25%	0.14%	0.15%	0.27%	1.00%	1.64%	0.60%	1.74%	2.14%
1976	3.62%	2.68%	1.58%	-0.08%	-1.88%	0.40%	0.87%	3.18%	4.80%	0.76%	0.64%	0.17%	1.39%
1977	-1.10%	-2.10%	-1.79%	-0.64%	-1.04%	-0.79%	-0.65%	-0.44%	0.49%	0.91%	0.46%	0.41%	-0.52%
1978	0.52%	0.61%	0.08%	0.12%	0.42%	0.39%	0.05%	-0.02%	0.33%	1.51%	1.38%	0.75%	0.51%
1979	0.44%	0.20%	0.47%	0.41%	-0.05%	0.06%	0.36%	0.48%	0.47%	0.38%	0.30%	0.17%	0.31%
1980	-0.55%	-0.12%	1.35%	0.38%	-0.07%	-0.61%	-0.20%	0.12%	0.93%	1.95%	0.92%	0.74%	0.40%
1981	1.21%	0.64%	-0.05%	1.29%	0.78%	0.40%	0.54%	1.36%	1.24%	-1.33%	-0.82%	0.27%	0.46%
1982	-0.17%	-2.48%	-0.20%	-0.37%	-0.16%	0.06%	-0.14%	-4.34%	-1.05%	1.35%	-0.11%	0.03%	-0.63%
1983	0.63%	0.32%	0.04%	-0.09%	-0.01%	0.06%	0.09%	0.02%	-0.02%	0.14%	1.40%	1.17%	0.31%
1984	0.11%	0.11%	0.02%	0.12%	0.14%	0.20%	0.22%	0.76%	1.13%	1.74%	0.58%	0.90%	0.50%
1985	1.03%	0.48%	0.84%	0.58%	0.54%	0.78%	0.53%	0.69%	1.12%	0.40%	0.22%	0.14%	0.61%
1986	0.45%	0.33%	0.09%	1.17%	0.07%	0.05%	0.21%	0.11%	0.63%	1.40%	0.67%	0.58%	0.48%
1987	0.24%	-0.13%	-0.36%	-0.81%	-0.82%	0.42%	0.36%	0.48%	1.16%	-0.06%	0.18%	0.05%	0.06%
1988	1.02%	1.72%	1.29%	0.82%	0.50%	0.45%	4.90%	8.83%	-0.98%	-0.97%	-0.49%	0.22%	1.44%
1989	0.12%	0.01%	0.32%	0.24%	0.37%	0.87%	0.74%	1.09%	1.36%	-0.81%	0.17%	0.27%	0.39%
1990	-1.21%	-0.19%	0.68%	-1.19%	0.01%	0.18%	0.44%	1.52%	3.69%	2.47%	-1.14%	1.77%	0.59%
1991	-1.03%	-5.76%	-2.53%	-7.17%	-4.02%	-1.21%	0.03%	0.89%	2.18%	1.20%	0.91%	1.37%	-1.26%
AVG:	0.53%	0.47%	0.49%	0.31%	0.36%	0.39%	0.47%	0.61%	1.13%	0.96%	0.46%	0.34%	0.54%
MIN:	-15.68%	-8.03%	-9.54%	-7.17%	-4.02%	-3.21%	-1.20%	-4.34%	-1.05%	-1.33%	-3.45%	-7.91%	-1.86%
MAX:	6.46%	6.64%	6.95%	3.91%	5.98%	4.07%	4.90%	8.83%	4.80%	3.33%	3.07%	3.21%	2.14%

Table 4.4.6-18 Difference in simulated monthly average chloride concentration (%) at Rock Slough Entrance at Old River, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.04%	-0.06%	0.11%	0.73%	0.22%	0.23%	0.24%	0.20%	-0.04%	0.63%	1.38%	3.22%	0.57%
1923	5.24%	0.60%	-2.70%	-1.19%	-0.51%	0.48%	0.24%	0.34%	0.83%	-0.49%	-0.30%	0.85%	0.28%
1924	1.80%	-0.32%	0.00%	2.29%	-0.66%	0.24%	0.34%	0.54%	0.44%	0.31%	-2.62%	-3.90%	-0.13%
1925	-0.50%	0.35%	-3.29%	-2.66%	-0.99%	0.68%	0.56%	0.46%	3.36%	1.07%	0.76%	1.41%	0.10%
1926	0.32%	-0.08%	0.95%	0.62%	0.29%	0.56%	1.11%	0.89%	1.13%	0.85%	0.52%	0.94%	0.68%
1927	0.62%	0.61%	1.48%	1.08%	1.18%	0.92%	0.17%	0.51%	0.84%	2.47%	5.20%	3.74%	1.57%
1928	-0.64%	-4.06%	5.83%	5.29%	1.74%	0.34%	0.19%	0.37%	-0.41%	2.02%	1.33%	0.37%	1.03%
1929	-0.17%	1.08%	1.64%	-0.60%	2.12%	1.49%	0.89%	0.72%	4.43%	2.74%	-0.94%	-1.41%	1.00%
1930	0.20%	1.14%	-0.16%	0.56%	0.50%	0.51%	0.51%	1.03%	1.31%	1.73%	3.93%	4.18%	1.29%
1931	0.62%	-1.50%	2.42%	0.97%	-0.77%	-2.66%	-0.91%	0.34%	1.02%	0.29%	0.17%	0.36%	0.03%
1932	0.15%	-0.79%	-0.31%	0.38%	0.31%	0.57%	0.56%	0.61%	1.47%	1.23%	0.75%	0.69%	0.47%
1933	0.30%	0.24%	0.29%	0.52%	0.96%	0.99%	0.69%	1.06%	1.42%	0.90%	0.50%	0.46%	0.69%
1934	0.29%	0.25%	0.32%	0.44%	0.36%	0.47%	0.63%	0.70%	0.80%	0.75%	0.03%	-2.57%	0.21%
1935	-0.70%	-1.19%	-4.89%	-1.00%	-0.29%	1.45%	0.94%	-0.22%	0.81%	1.69%	0.29%	0.08%	-0.25%
1936	0.78%	0.07%	0.00%	2.74%	0.75%	2.22%	0.82%	1.13%	0.96%	0.89%	1.82%	2.07%	1.19%
1937	0.84%	0.78%	-0.22%	-0.70%	-0.04%	-0.02%	0.20%	0.06%	-0.07%	1.47%	0.20%	1.22%	0.31%
1938	0.73%	0.00%	-2.25%	-0.95%	-0.02%	0.01%	-0.07%	-0.01%	-0.08%	0.80%	2.39%	10.68%	0.94%
1939	16.25%	9.33%	5.77%	3.67%	2.68%	1.01%	-1.38%	-1.01%	1.25%	0.78%	-0.11%	0.07%	3.19%
1940	0.20%	0.36%	0.66%	0.78%	0.09%	0.06%	0.16%	0.17%	0.51%	4.66%	2.32%	-3.86%	0.51%
1941	-15.17%	-7.52%	8.51%	0.10%	0.04%	0.01%	-0.03%	0.09%	-2.22%	0.70%	-2.07%	1.32%	-1.35%
1942	8.47%	3.15%	1.50%	0.07%	0.05%	0.08%	0.10%	0.16%	-0.03%	-2.43%	4.86%	8.44%	2.04%
1943	13.58%	14.63%	15.28%	1.18%	0.37%	0.05%	0.13%	-3.60%	-3.37%	4.20%	8.34%	5.57%	4.70%
1944	4.26%	1.25%	0.42%	1.46%	-1.29%	0.45%	0.42%	0.50%	1.19%	1.52%	1.30%	0.62%	1.01%
1945	0.04%	5.83%	9.01%	1.83%	0.90%	0.06%	0.23%	0.75%	0.78%	1.47%	1.53%	2.46%	2.07%
1946	1.27%	-1.50%	-1.34%	0.26%	-3.99%	-0.64%	1.06%	0.15%	-0.69%	0.91%	1.29%	1.18%	-0.17%
1947	-1.20%	-0.31%	4.63%	2.13%	-0.09%	0.28%	0.34%	0.17%	4.09%	-1.49%	-0.48%	0.28%	0.69%
1948	0.48%	0.85%	0.25%	0.22%	-0.57%	-0.08%	0.17%	0.35%	1.14%	1.42%	0.50%	0.35%	0.42%
1949	-0.28%	0.33%	3.13%	0.79%	0.85%	0.83%	0.26%	1.78%	1.26%	0.82%	-2.50%	-3.61%	0.31%
1950	0.32%	2.83%	-0.96%	0.44%	0.49%	1.13%	1.07%	1.09%	1.06%	-0.50%	0.21%	2.23%	0.79%
1951	2.27%	-0.53%	0.10%	0.40%	0.22%	0.19%	0.27%	0.10%	-0.28%	2.83%	1.05%	0.46%	0.59%
1952	0.94%	-1.14%	-1.99%	0.14%	0.09%	0.06%	0.04%	0.03%	-0.37%	1.26%	1.10%	5.65%	0.48%
1953	6.38%	2.20%	2.88%	1.54%	0.10%	0.39%	0.35%	0.44%	1.08%	1.31%	0.59%	2.16%	1.62%
1954	3.57%	2.79%	0.54%	-3.15%	0.17%	0.27%	0.22%	0.39%	1.28%	1.61%	0.65%	0.34%	0.72%
1955	-1.01%	-1.69%	-0.55%	0.05%	-0.30%	-0.31%	0.18%	0.68%	1.60%	1.08%	0.45%	-0.38%	-0.02%
1956	-0.76%	-0.40%	0.15%	0.17%	0.12%	0.29%	0.63%	0.28%	-1.77%	0.25%	2.31%	12.38%	1.14%
1957	21.30%	8.92%	-1.14%	-2.40%	5.77%	1.10%	0.32%	0.30%	0.92%	1.51%	0.84%	0.49%	3.16%
1958	3.15%	6.26%	3.42%	0.84%	0.07%	0.00%	-0.13%	0.02%	0.11%	0.83%	1.47%	11.11%	2.26%
1959	19.40%	11.44%	5.04%	3.06%	0.22%	0.28%	0.45%	0.78%	2.31%	1.56%	-0.68%	-1.47%	3.53%
1960	-0.77%	1.46%	-1.58%	-0.25%	0.07%	0.52%	0.32%	0.67%	1.44%	0.25%	-0.18%	-1.67%	0.03%
1961	0.32%	1.75%	-3.97%	2.97%	1.95%	1.31%	0.74%	1.16%	2.14%	0.59%	1.08%	1.41%	0.95%
1962	1.30%	-1.43%	-3.19%	-0.46%	-0.46%	0.02%	0.07%	0.91%	1.46%	0.81%	-0.23%	0.31%	-0.07%
1963	1.08%	2.17%	2.75%	0.68%	0.13%	0.16%	0.07%	0.29%	4.67%	0.16%	3.88%	2.88%	1.58%
1964	3.99%	3.36%	2.17%	1.76%	1.93%	2.36%	0.43%	-0.16%	2.02%	1.12%	1.31%	3.43%	1.98%
1965	2.96%	-0.94%	0.35%	0.19%	0.19%	0.44%	0.20%	0.37%	0.03%	2.15%	5.13%	3.96%	1.25%
1966	2.60%	0.19%	0.39%	1.02%	0.35%	0.55%	0.30%	0.77%	1.31%	0.43%	-0.04%	0.06%	0.66%
1967	0.38%	1.23%	0.91%	0.10%	0.39%	0.28%	0.04%	0.02%	-0.14%	0.42%	-0.34%	2.59%	0.49%
1968	5.06%	1.93%	1.33%	1.01%	0.34%	0.18%	0.29%	0.77%	1.37%	0.71%	0.57%	0.76%	1.19%
1969	0.19%	0.00%	0.61%	0.23%	-0.01%	0.11%	0.00%	-0.01%	0.01%	0.80%	2.50%	5.53%	0.83%
1970	9.02%	6.06%	1.61%	-0.22%	0.13%	0.11%	0.16%	0.42%	1.05%	1.40%	0.95%	0.75%	1.79%
1971	0.13%	-0.05%	0.64%	0.27%	-0.17%	0.04%	0.30%	0.26%	1.13%	2.35%	1.14%	2.00%	0.67%
1972	2.78%	1.06%	0.68%	3.97%	6.34%	1.58%	0.41%	0.81%	1.28%	1.05%	0.26%	0.13%	1.70%
1973	-1.02%	-2.42%	-1.05%	0.08%	0.33%	0.38%	0.25%	0.22%	0.28%	2.17%	1.70%	1.88%	0.23%
1974	2.84%	1.46%	0.06%	0.11%	0.20%	0.12%	0.05%	-0.04%	-0.26%	1.28%	1.61%	4.91%	1.03%
1975	17.70%	16.06%	6.03%	2.46%	4.86%	1.64%	0.22%	0.28%	-0.61%	0.72%	0.93%	6.40%	4.73%
1976	11.20%	4.56%	4.52%	0.60%	-5.56%	-1.77%	0.19%	1.12%	1.65%	0.55%	0.05%	0.12%	1.44%
1977	-1.07%	-2.46%	-1.15%	-2.08%	-1.69%	-1.08%	-0.64%	0.09%	0.62%	0.74%	1.43%	0.93%	-0.53%
1978	0.33%	0.22%	0.90%	-0.03%	0.09%	0.22%	0.09%	-0.03%	0.16%	1.87%	2.42%	1.12%	0.61%
1979	0.78%	0.37%	0.10%	0.48%	-0.07%	0.01%	0.11%	0.16%	0.42%	0.60%	-0.23%	-0.09%	0.22%
1980	0.32%	0.51%	0.52%	0.27%	0.51%	1.95%	0.45%	1.02%	2.96%	5.17%	2.85%	3.53%	1.67%
1981	6.19%	1.00%	-0.25%	5.48%	1.36%	0.45%	0.33%	0.73%	1.26%	0.37%	0.25%	0.32%	1.46%
1982	-0.17%	-1.18%	0.02%	0.21%	0.46%	0.02%	-0.08%	-4.35%	-1.27%	0.91%	5.33%	8.62%	0.71%
1983	2.88%	0.24%	0.03%	-0.02%	0.01%	0.06%	-0.01%	-0.01%	-0.02%	-0.14%	1.83%	2.73%	0.63%
1984	0.64%	0.14%	0.01%	0.06%	0.10%	0.17%	0.23%	0.79%	0.90%	1.74%	1.88%	1.93%	0.72%
1985	2.21%	0.99%	0.87%	0.64%	0.59%	0.79%	0.52%	0.68%	1.08%	0.37%	0.21%	0.14%	0.76%
1986	0.46%	-0.05%	-1.34%	0.01%	0.10%	-0.03%	0.20%	0.26%	-0.26%	2.39%	5.65%	6.37%	1.15%
1987	4.13%	0.36%	-0.60%	0.45%	-2.27%	0.40%	0.26%	0.46%	0.88%	1.15%	0.77%	0.13%	0.51%
1988	0.26%	0.66%	0.75%	0.45%	0.52%	0.64%	0.70%	1.13%	1.02%	0.89%	0.49%	0.62%	0.68%
1989	0.69%	1.03%	0.16%	0.38%	-0.02%	0.45%	0.61%	1.12%	0.90%	-1.19%	-0.31%	0.43%	0.36%
1990	-1.10%	-1.73%	1.47%	-0.84%	-1.46%	-0.64%	-0.10%	0.63%	1.43%	2.75%	-0.02%	0.07%	0.04%
1991	-1.04%	-3.23%	1.90%	-4.81%	-2.57%	-0.65%	0.18%	0.71%	1.72%	1.07%	0.56%	0.48%	-0.47%
AVG:	2.41%	1.25%	1.00%	0.53%	0.25%	0.35%	0.27%	0.34%	0.84%	1.13%	1.17%	1.87%	0.95%
MIN:	-15.17%	-7.52%	-4.89%	-4.81%	-5.56%	-2.66%	-1.38%	-4.35%	-3.37%	-2.43%	-2.62%	-3.90%	-1.35%
MAX:	21.30%	16.06%	15.28%	5.48%	6.34%	2.36%	1.11%	1.78%	4.67%	5.17%	8.34%	12.38%	4.73%

Table 4.4.6-19 Simulated monthly average chloride concentration (mg/L) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	114	136	87	40	56	34	34	43	30	19	37	103	61
1923	146	118	72	46	34	29	49	58	36	30	66	123	67
1924	141	126	94	113	65	67	90	83	107	111	85	167	104
1925	222	182	99	56	56	66	60	52	34	34	62	97	85
1926	160	148	119	72	43	38	49	64	50	53	85	140	85
1927	179	75	23	22	51	32	35	37	26	22	40	114	55
1928	158	96	63	43	23	25	36	44	30	27	43	119	59
1929	165	112	92	98	81	47	72	91	85	70	104	139	96
1930	216	219	81	34	32	24	30	51	42	51	94	153	86
1931	185	135	109	64	58	57	75	87	99	79	82	174	100
1932	219	187	88	37	46	40	47	58	53	34	55	88	79
1933	156	143	106	61	48	40	59	71	75	73	104	129	89
1934	210	234	93	43	37	52	65	79	80	66	103	172	103
1935	215	156	105	65	37	34	48	42	32	25	57	137	79
1936	164	115	108	68	58	34	37	50	33	29	61	134	74
1937	165	116	100	99	59	62	48	34	36	29	57	135	78
1938	183	84	39	34	57	23	11	7	16	21	36	67	48
1939	41	28	52	44	48	48	66	78	45	61	113	174	67
1940	173	104	116	85	74	48	35	39	29	25	51	123	75
1941	167	120	49	50	50	32	36	38	34	23	39	70	59
1942	67	93	64	42	32	36	49	46	32	24	39	71	50
1943	59	54	40	37	25	23	34	41	33	28	42	116	44
1944	168	141	106	100	69	36	50	66	41	43	104	191	93
1945	176	85	71	44	48	39	45	58	36	30	65	138	69
1946	177	111	44	20	23	30	44	51	33	31	69	134	64
1947	145	110	69	48	45	27	35	67	50	52	105	164	77
1948	174	108	116	74	50	35	46	51	27	23	61	135	75
1949	147	98	84	78	89	43	52	63	34	40	81	133	78
1950	171	118	114	61	28	21	34	49	27	24	61	131	70
1951	161	63	35	35	29	24	37	48	35	27	43	113	54
1952	151	112	50	56	28	31	32	22	26	23	35	44	51
1953	26	28	44	36	25	22	40	50	26	21	37	69	35
1954	68	95	108	68	20	20	34	41	30	29	55	124	58
1955	142	106	54	35	35	34	49	53	32	38	75	147	67
1956	179	123	76	55	25	18	38	45	33	22	39	69	60
1957	50	52	102	114	47	26	36	62	38	25	45	122	60
1958	112	67	67	41	72	57	35	24	28	23	36	54	51
1959	31	26	73	65	45	45	53	54	32	35	70	132	55
1960	140	109	79	65	51	25	59	71	39	62	112	151	80
1961	172	111	70	56	37	21	43	63	50	60	109	147	78
1962	163	109	76	57	69	39	37	62	34	32	70	141	74
1963	100	24	31	34	39	29	55	47	27	22	33	96	45
1964	147	106	35	44	28	30	38	60	41	54	106	146	70
1965	165	112	52	32	20	22	37	42	31	24	34	98	56
1966	142	79	31	27	27	20	35	49	31	33	70	146	57
1967	150	87	71	68	36	29	35	17	24	27	35	45	52
1968	24	27	55	48	31	25	39	47	38	36	65	140	48
1969	154	97	60	52	34	25	11	7	12	23	37	90	50
1970	61	28	43	51	31	27	40	52	36	26	35	105	45
1971	154	99	43	22	19	20	33	62	32	24	35	67	51
1972	77	114	113	65	45	16	28	47	35	26	61	136	64
1973	159	71	30	62	62	35	34	45	29	23	49	122	60
1974	161	66	27	30	19	25	35	41	28	23	42	61	46
1975	42	74	107	89	57	42	38	41	32	22	40	61	54
1976	35	35	87	107	97	47	67	80	95	129	161	197	95
1977	210	171	147	79	84	87	98	100	103	80	97	205	122
1978	234	192	106	87	58	44	27	22	30	26	41	108	81
1979	137	131	94	58	53	35	34	42	28	25	58	137	69
1980	167	105	66	39	42	27	32	42	38	28	38	76	58
1981	113	123	96	57	27	28	40	50	39	69	117	152	76
1982	159	72	29	57	31	46	9	14	27	23	35	51	46
1983	31	38	18	27	18	20	11	7	6	20	18	27	20
1984	26	25	13	9	17	26	38	53	41	25	36	104	34
1985	155	93	26	21	36	35	47	54	38	64	113	138	68
1986	140	122	73	37	66	25	24	34	38	27	39	80	59
1987	115	122	106	95	71	41	43	61	44	52	103	189	87
1988	181	95	67	32	25	38	58	60	70	63	109	164	80
1989	210	163	117	78	59	33	26	30	28	54	103	134	86
1990	140	108	85	82	42	33	52	67	72	100	106	149	86
1991	226	240	150	120	121	60	58	66	61	86	123	151	122
AVG:	141	105	75	57	46	35	43	50	41	40	67	121	68
MIN:	24	24	13	9	17	16	9	7	6	19	18	27	20
MAX:	234	240	150	120	121	87	98	100	107	129	161	205	122

Table 4.4.6-20 Difference in simulated monthly average chloride concentration (%) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.10%	0.03%	0.12%	0.52%	0.14%	0.15%	0.04%	0.07%	0.25%	1.01%	0.89%	0.89%	0.35%
1923	0.86%	0.53%	0.03%	-0.01%	0.17%	0.32%	0.16%	0.08%	0.57%	-0.15%	-0.76%	0.02%	0.15%
1924	0.38%	0.09%	0.36%	0.89%	-0.39%	0.09%	0.10%	1.04%	1.30%	-0.32%	1.45%	-1.48%	0.29%
1925	0.47%	1.35%	-3.31%	-2.87%	-0.88%	-1.91%	-0.83%	0.07%	0.01%	0.56%	0.16%	-0.86%	-0.67%
1926	-0.51%	0.32%	-0.41%	-0.16%	0.13%	1.27%	1.12%	0.68%	0.80%	0.83%	0.10%	0.17%	0.36%
1927	0.11%	-0.10%	1.38%	2.06%	0.47%	0.48%	-0.02%	-0.39%	0.50%	1.19%	2.74%	1.80%	0.85%
1928	-0.17%	-2.35%	-1.43%	-0.76%	0.34%	0.16%	0.09%	0.16%	1.15%	1.58%	0.39%	-0.17%	-0.08%
1929	-0.02%	0.24%	0.02%	0.26%	0.00%	7.37%	3.68%	1.31%	6.18%	6.16%	-0.14%	-0.95%	2.01%
1930	0.37%	-2.70%	-0.09%	0.39%	0.39%	0.50%	0.69%	0.96%	1.05%	0.56%	2.83%	2.69%	0.64%
1931	0.23%	-1.00%	-0.09%	-0.27%	-1.25%	-2.12%	-1.08%	-0.23%	1.21%	0.60%	-0.17%	0.89%	-0.27%
1932	3.05%	2.38%	0.01%	0.17%	0.82%	0.81%	0.35%	0.55%	1.25%	1.44%	0.86%	1.38%	1.09%
1933	0.89%	-0.09%	-1.05%	-0.87%	0.07%	0.82%	0.53%	2.86%	2.43%	1.28%	1.02%	0.59%	0.71%
1934	0.01%	-0.64%	-0.70%	-1.30%	-0.15%	1.22%	1.22%	0.53%	0.47%	0.86%	2.14%	-7.48%	-0.32%
1935	0.61%	3.79%	-9.27%	0.63%	1.64%	1.53%	0.28%	-0.57%	0.53%	1.48%	0.20%	-0.86%	0.00%
1936	-0.52%	0.27%	0.04%	1.24%	1.45%	0.24%	0.44%	0.30%	0.69%	1.15%	0.51%	0.34%	0.51%
1937	0.04%	0.15%	-0.03%	-0.14%	2.54%	0.80%	0.03%	0.22%	0.65%	1.42%	-0.37%	-0.33%	0.41%
1938	-0.22%	-0.10%	2.02%	0.91%	0.00%	0.05%	-0.05%	0.00%	0.07%	0.76%	0.85%	-0.51%	0.32%
1939	-0.51%	1.52%	1.25%	1.78%	1.36%	0.71%	0.23%	0.38%	0.77%	-0.43%	0.08%	0.77%	0.66%
1940	0.21%	-0.85%	0.36%	0.71%	0.11%	-0.99%	-0.98%	0.03%	0.25%	0.32%	0.33%	-5.92%	-0.53%
1941	-14.85%	-9.35%	3.78%	0.03%	0.04%	-0.03%	-0.11%	0.07%	0.21%	1.05%	-2.20%	-3.82%	-2.10%
1942	0.23%	0.31%	0.11%	0.03%	0.06%	0.04%	0.05%	0.06%	0.33%	1.04%	0.79%	1.27%	0.36%
1943	3.15%	4.76%	3.77%	1.90%	0.78%	0.03%	0.02%	-0.70%	0.49%	1.02%	0.22%	0.07%	1.29%
1944	0.56%	0.06%	0.30%	0.37%	0.12%	0.51%	0.33%	0.23%	0.81%	0.88%	0.21%	0.24%	0.39%
1945	0.30%	1.28%	2.70%	1.95%	0.66%	0.20%	0.09%	0.03%	0.62%	1.08%	0.57%	0.39%	0.82%
1946	0.36%	0.35%	0.28%	0.18%	-0.35%	0.13%	0.38%	0.27%	0.77%	0.98%	0.56%	0.29%	0.35%
1947	0.24%	0.23%	-0.17%	1.31%	2.51%	0.87%	0.34%	0.99%	1.52%	0.10%	0.76%	1.18%	0.82%
1948	0.40%	0.18%	0.92%	-0.29%	-0.35%	0.24%	0.27%	0.18%	0.72%	1.42%	0.63%	0.40%	0.39%
1949	1.77%	1.81%	-0.40%	1.09%	1.11%	0.91%	0.17%	-0.31%	0.41%	1.82%	1.38%	1.52%	0.94%
1950	0.63%	-0.36%	-0.02%	0.40%	0.30%	0.32%	0.36%	0.31%	1.04%	1.51%	0.59%	0.36%	0.45%
1951	0.34%	0.35%	0.09%	0.25%	0.21%	0.14%	0.13%	0.18%	0.57%	0.95%	0.42%	0.16%	0.32%
1952	0.19%	0.17%	0.20%	0.04%	-0.09%	0.04%	0.11%	0.00%	0.06%	0.86%	1.48%	1.74%	0.40%
1953	1.14%	1.05%	0.64%	0.18%	0.17%	0.31%	0.19%	0.23%	0.86%	1.20%	0.67%	1.69%	0.70%
1954	3.12%	2.54%	1.10%	-2.64%	0.02%	0.17%	0.15%	0.17%	0.93%	1.55%	0.85%	0.45%	0.70%
1955	0.42%	0.43%	0.32%	0.68%	0.43%	0.46%	0.51%	0.55%	1.17%	1.31%	0.61%	0.00%	0.57%
1956	-0.32%	0.21%	0.05%	-0.08%	-0.03%	0.14%	0.11%	0.12%	0.66%	1.17%	1.12%	1.82%	0.41%
1957	3.66%	3.39%	-0.40%	-1.44%	2.21%	0.53%	0.14%	0.06%	0.56%	1.29%	0.78%	0.47%	0.94%
1958	1.31%	2.39%	1.57%	0.46%	0.04%	0.01%	0.01%	-0.09%	0.15%	0.93%	0.78%	1.65%	0.77%
1959	1.58%	1.18%	0.58%	0.46%	0.21%	0.85%	1.26%	1.63%	0.84%	0.39%	0.36%	2.90%	1.02%
1960	1.44%	-5.51%	4.35%	2.07%	1.24%	1.51%	0.34%	0.72%	1.47%	0.93%	-0.24%	-2.01%	0.53%
1961	-0.26%	2.06%	-2.91%	2.09%	1.98%	2.46%	1.63%	0.84%	2.95%	-0.17%	-0.09%	-0.17%	0.87%
1962	0.26%	0.16%	-0.74%	-1.41%	-0.13%	0.50%	-0.39%	-0.07%	2.69%	1.64%	1.50%	1.33%	0.45%
1963	1.35%	2.97%	4.54%	0.74%	-1.63%	-1.99%	-0.12%	-0.15%	0.70%	0.95%	0.73%	0.21%	0.69%
1964	0.46%	0.95%	1.13%	1.13%	1.21%	1.16%	0.49%	-0.54%	1.22%	3.08%	2.67%	3.34%	1.36%
1965	2.38%	-0.08%	0.02%	-0.18%	0.13%	0.18%	0.07%	0.17%	0.57%	1.28%	0.92%	0.59%	0.50%
1966	0.80%	1.35%	1.66%	0.71%	0.25%	0.39%	0.30%	0.39%	0.89%	0.59%	0.17%	0.15%	0.64%
1967	0.31%	1.11%	1.64%	0.10%	0.12%	0.10%	0.01%	0.00%	0.02%	0.41%	1.37%	0.92%	0.51%
1968	1.06%	1.17%	0.98%	0.83%	0.26%	0.19%	0.14%	0.73%	1.40%	0.88%	1.76%	1.50%	0.91%
1969	0.59%	0.95%	1.08%	-0.38%	-0.01%	0.17%	0.63%	-0.01%	0.00%	0.70%	1.50%	1.84%	0.59%
1970	2.22%	1.66%	0.35%	-0.04%	-0.04%	0.07%	0.04%	0.17%	0.64%	1.39%	0.88%	0.60%	0.66%
1971	0.13%	-0.11%	0.45%	0.17%	0.17%	-0.08%	0.15%	0.14%	1.21%	1.74%	0.91%	1.46%	0.53%
1972	2.24%	0.91%	0.65%	3.26%	5.21%	1.38%	0.24%	0.38%	0.90%	1.19%	0.39%	0.18%	1.41%
1973	0.25%	0.77%	1.67%	0.13%	0.04%	0.09%	0.12%	0.20%	0.75%	1.19%	0.55%	0.17%	0.49%
1974	1.01%	1.10%	0.15%	0.04%	0.15%	0.07%	0.03%	0.05%	0.62%	1.23%	0.84%	1.12%	0.53%
1975	4.78%	6.46%	3.26%	2.46%	0.99%	0.14%	0.08%	0.12%	0.66%	1.29%	0.74%	1.55%	1.88%
1976	2.53%	2.58%	1.63%	0.30%	-1.70%	0.84%	0.84%	1.10%	3.64%	0.77%	0.85%	0.22%	1.13%
1977	-0.53%	-1.90%	-1.78%	-0.77%	-1.04%	-0.60%	0.14%	0.13%	0.40%	1.41%	0.66%	0.17%	-0.31%
1978	0.57%	0.63%	0.15%	0.09%	0.28%	0.31%	-0.15%	-0.07%	0.18%	1.07%	1.36%	0.89%	0.44%
1979	0.40%	-0.06%	0.32%	0.34%	-0.09%	-0.02%	0.18%	0.19%	-0.02%	0.58%	0.33%	0.24%	0.20%
1980	-0.40%	-0.46%	1.13%	0.28%	-0.01%	-0.37%	-0.03%	-0.05%	0.56%	1.40%	1.01%	0.85%	0.32%
1981	0.89%	0.63%	0.15%	1.00%	0.50%	0.27%	0.29%	0.91%	1.13%	-1.01%	-0.72%	0.28%	0.36%
1982	0.11%	-2.11%	-0.34%	-0.34%	-0.18%	0.05%	-0.21%	-6.00%	-1.16%	0.94%	0.26%	0.08%	-0.74%
1983	0.42%	0.19%	0.04%	-0.08%	-0.08%	0.01%	0.28%	0.01%	0.00%	0.07%	1.07%	0.69%	0.22%
1984	0.06%	0.11%	0.01%	0.01%	0.05%	0.10%	0.08%	0.25%	0.71%	1.33%	0.70%	0.87%	0.36%
1985	1.14%	0.44%	0.58%	0.53%	0.48%	0.54%	0.30%	0.32%	0.85%	0.54%	0.29%	0.20%	0.52%
1986	0.46%	0.47%	0.09%	0.66%	0.04%	-0.03%	0.00%	-0.11%	0.35%	1.24%	0.86%	0.69%	0.39%
1987	0.35%	-0.09%	-0.26%	-0.65%	-0.71%	0.28%	-0.07%	0.19%	0.83%	0.21%	0.29%	0.11%	0.04%
1988	0.75%	1.97%	1.52%	0.80%	0.31%	0.59%	4.75%	5.24%	-0.96%	-1.78%	-0.55%	0.21%	1.07%
1989	0.18%	0.05%	0.34%	0.18%	0.30%	0.48%	0.55%	0.63%	1.04%	0.03%	0.18%	0.23%	0.35%
1990	-1.08%	-0.52%	0.82%	-1.25%	-0.15%	0.09%	0.14%	0.52%	1.38%	3.88%	-0.38%	2.16%	0.47%
1991	-0.75%	-5.40%	-2.83%	-6.06%	-4.30%	-1.51%	-0.22%	0.07%	0.91%	1.07%	1.00%	1.35%	-1.39%
AVG:	0.48%	0.38%	0.35%	0.21%	0.27%	0.35%	0.30%	0.26%	0.85%	1.01%	0.65%	0.37%	0.46%
MIN:	-14.85%	-9.35%	-9.27%	-6.06%	-4.30%	-2.12%	-1.08%	-6.00%	-1.16%	-1.78%	-2.20%	-7.48%	-2.10%
MAX:	4.78%	6.46%	4.54%	3.26%	5.21%	7.37%	4.75%	5.24%	6.18%	6.16%	2.83%	3.34%	2.01%

Table 4.4.6-21 Difference in simulated monthly average chloride concentration (%) at Old River at CCWD's Los Vaqueros intake, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.09%	0.01%	0.10%	0.46%	0.13%	0.14%	0.07%	0.07%	-0.23%	0.45%	1.51%	3.75%	0.55%
1923	5.15%	1.22%	-1.76%	-0.86%	-0.56%	0.25%	0.17%	0.08%	0.44%	0.04%	-0.09%	0.89%	0.41%
1924	1.91%	0.13%	-0.74%	2.57%	-0.33%	0.06%	0.09%	0.31%	0.43%	0.36%	-1.35%	-3.58%	-0.01%
1925	-1.13%	0.68%	-2.59%	-2.42%	-0.76%	1.63%	0.67%	0.27%	3.32%	2.04%	0.87%	1.44%	0.33%
1926	0.50%	-0.17%	0.83%	0.63%	0.22%	0.60%	0.63%	0.51%	0.69%	0.84%	0.59%	1.00%	0.57%
1927	0.70%	0.58%	0.94%	0.72%	0.57%	0.64%	0.11%	0.36%	0.24%	-1.03%	4.52%	3.48%	0.99%
1928	0.52%	-3.86%	4.93%	4.43%	1.31%	0.24%	0.09%	-0.22%	-1.22%	0.95%	1.11%	0.42%	0.72%
1929	-0.14%	0.84%	2.00%	-0.57%	1.84%	2.05%	0.72%	0.32%	6.95%	6.85%	-0.29%	-1.14%	1.62%
1930	0.07%	-1.76%	0.08%	0.40%	0.34%	0.39%	0.25%	0.45%	0.87%	1.57%	3.66%	4.38%	0.89%
1931	1.04%	-1.44%	2.02%	1.04%	-0.28%	-1.29%	-0.63%	-0.03%	0.78%	0.50%	0.29%	0.45%	0.20%
1932	-1.23%	-1.08%	-0.18%	0.13%	0.16%	0.15%	0.22%	0.21%	1.17%	1.44%	0.84%	0.81%	0.22%
1933	0.36%	0.30%	0.29%	0.43%	0.61%	0.71%	0.30%	0.66%	0.90%	0.91%	0.60%	0.56%	0.55%
1934	0.36%	0.27%	0.32%	0.32%	0.29%	0.43%	0.34%	0.26%	0.41%	0.73%	0.17%	-2.09%	0.15%
1935	-0.76%	-0.75%	-4.74%	-1.12%	-0.52%	0.83%	0.59%	-0.14%	0.59%	1.50%	0.64%	0.19%	-0.31%
1936	0.68%	0.69%	-0.18%	2.24%	0.59%	1.94%	0.86%	0.47%	0.61%	1.62%	1.95%	2.25%	1.14%
1937	1.11%	0.76%	0.05%	-0.71%	-0.27%	-0.11%	-0.08%	0.31%	-0.19%	1.74%	0.62%	1.30%	0.38%
1938	0.86%	0.07%	-2.39%	-0.92%	-0.01%	0.09%	0.00%	0.00%	-0.08%	0.58%	2.23%	9.05%	0.79%
1939	11.21%	6.74%	5.13%	3.08%	1.87%	0.62%	0.60%	0.19%	0.90%	1.05%	0.05%	0.09%	2.63%
1940	0.24%	0.37%	0.62%	0.57%	0.08%	0.08%	0.16%	-0.19%	0.07%	3.61%	2.40%	-4.40%	0.30%
1941	-14.23%	-9.20%	4.72%	0.03%	0.03%	-0.04%	-0.08%	0.09%	-2.28%	0.11%	-0.98%	0.99%	-1.74%
1942	7.42%	3.13%	1.28%	0.05%	0.05%	0.02%	0.05%	0.06%	-0.24%	-5.17%	3.57%	7.65%	1.49%
1943	11.03%	11.33%	11.31%	1.09%	0.33%	0.02%	0.09%	6.23%	-1.99%	3.19%	7.00%	5.65%	4.61%
1944	4.35%	1.51%	0.16%	1.68%	-0.83%	0.23%	0.22%	0.19%	0.84%	1.39%	1.26%	0.73%	0.98%
1945	0.74%	4.40%	7.98%	1.60%	0.61%	0.01%	0.10%	0.10%	0.44%	1.20%	1.63%	2.50%	1.78%
1946	1.33%	-1.21%	-0.37%	0.24%	-3.48%	-0.20%	0.88%	-0.18%	-0.81%	1.06%	1.36%	1.36%	0.00%
1947	-0.67%	-0.59%	3.89%	2.32%	0.25%	0.23%	-0.06%	0.89%	4.66%	-0.28%	-0.53%	0.32%	0.87%
1948	0.51%	0.93%	0.25%	0.22%	-0.51%	-0.08%	0.05%	0.15%	0.72%	1.40%	0.63%	0.43%	0.39%
1949	-0.16%	-0.42%	2.91%	0.87%	0.74%	0.58%	0.15%	-0.23%	0.46%	1.15%	-1.79%	-3.61%	0.05%
1950	-0.12%	2.91%	-0.67%	0.28%	0.35%	1.22%	1.06%	0.77%	0.51%	0.50%	0.48%	1.84%	0.76%
1951	2.76%	-0.12%	0.11%	0.27%	0.18%	0.10%	0.12%	-0.21%	-0.43%	0.79%	1.14%	0.60%	0.44%
1952	0.98%	-0.60%	-1.39%	0.08%	-0.11%	0.08%	0.00%	0.01%	-0.21%	1.77%	1.92%	4.47%	0.58%
1953	3.71%	1.70%	2.57%	1.54%	-0.08%	0.22%	0.19%	0.24%	0.94%	1.09%	0.76%	1.97%	1.24%
1954	3.51%	2.68%	1.09%	-2.71%	0.03%	0.17%	0.14%	0.17%	0.92%	1.51%	0.79%	0.44%	0.73%
1955	-0.75%	-1.54%	-0.56%	0.03%	-0.45%	-0.56%	-0.23%	0.25%	1.11%	1.19%	0.61%	-0.16%	-0.09%
1956	-0.59%	-0.41%	0.18%	0.04%	0.00%	0.20%	0.17%	0.14%	-2.02%	-0.14%	2.19%	10.55%	0.86%
1957	17.02%	8.37%	-0.45%	-3.03%	4.70%	1.00%	0.21%	0.07%	0.60%	1.44%	1.00%	0.60%	2.63%
1958	2.76%	5.89%	3.24%	0.57%	0.04%	0.03%	-0.04%	-0.14%	-0.01%	0.55%	1.52%	9.12%	1.96%
1959	11.77%	9.03%	5.24%	3.06%	0.14%	0.30%	0.26%	0.33%	1.62%	1.68%	-0.46%	-1.31%	2.64%
1960	-1.08%	1.58%	-0.96%	-0.20%	0.09%	0.43%	0.12%	0.29%	1.02%	0.51%	-0.22%	-1.79%	-0.02%
1961	0.13%	2.16%	-3.43%	2.21%	1.52%	1.44%	1.24%	0.75%	1.98%	0.81%	1.08%	1.41%	0.94%
1962	1.31%	-1.29%	-3.55%	-0.55%	-0.40%	-0.65%	-0.13%	0.29%	1.12%	1.11%	0.09%	0.16%	-0.21%
1963	1.03%	1.54%	2.38%	0.48%	0.11%	0.11%	0.05%	0.23%	4.96%	-3.35%	2.62%	3.17%	1.11%
1964	3.99%	3.14%	1.98%	1.41%	1.25%	1.35%	0.60%	-0.65%	1.20%	1.39%	1.22%	3.55%	1.70%
1965	3.30%	-0.62%	0.20%	0.12%	0.10%	0.30%	0.14%	0.22%	-0.27%	1.16%	4.49%	4.01%	1.10%
1966	2.80%	0.34%	0.26%	0.61%	0.22%	0.26%	-0.01%	0.41%	1.02%	0.69%	0.20%	0.10%	0.57%
1967	0.35%	1.08%	0.74%	0.07%	0.33%	0.21%	0.01%	0.00%	-0.08%	0.19%	0.72%	2.15%	0.48%
1968	3.01%	1.65%	1.22%	0.90%	0.29%	0.16%	0.13%	0.33%	0.97%	0.94%	0.67%	0.78%	0.92%
1969	0.23%	0.02%	0.50%	0.12%	0.05%	0.14%	0.02%	-0.01%	-0.06%	0.59%	2.31%	5.70%	0.80%
1970	7.22%	4.48%	1.07%	-0.12%	0.09%	0.07%	0.04%	0.16%	0.66%	1.50%	1.07%	0.85%	1.42%
1971	0.33%	-0.06%	0.39%	0.16%	0.12%	-0.15%	0.14%	0.14%	1.27%	2.02%	1.22%	1.86%	0.62%
1972	2.71%	1.13%	0.67%	3.26%	5.54%	1.44%	0.25%	0.39%	0.91%	1.17%	0.42%	0.20%	1.51%
1973	-0.75%	-1.91%	-0.80%	0.04%	0.30%	0.33%	0.14%	-0.10%	-0.09%	1.82%	2.00%	2.34%	0.28%
1974	2.90%	1.33%	0.14%	0.06%	0.13%	0.07%	0.02%	-0.07%	-0.40%	0.99%	1.67%	4.29%	0.93%
1975	13.21%	15.57%	6.19%	2.49%	3.77%	1.75%	0.09%	0.14%	-0.68%	0.37%	1.08%	5.38%	4.11%
1976	7.79%	4.30%	4.28%	1.44%	-4.98%	-1.38%	-0.03%	0.32%	1.11%	0.59%	0.18%	0.16%	1.15%
1977	-0.70%	-2.25%	-1.20%	-1.81%	-1.69%	-0.77%	1.29%	1.53%	0.66%	1.02%	1.54%	0.80%	-0.13%
1978	0.47%	0.24%	0.82%	0.01%	0.07%	0.17%	-0.09%	-0.05%	0.12%	1.70%	2.32%	1.26%	0.59%
1979	0.70%	0.40%	0.06%	0.36%	-0.10%	-0.05%	0.00%	-0.05%	0.05%	0.79%	0.09%	-0.04%	0.18%
1980	0.37%	0.41%	0.53%	0.19%	0.12%	1.33%	0.25%	-0.05%	1.91%	3.53%	2.72%	3.95%	1.27%
1981	5.79%	1.40%	-0.45%	4.25%	0.89%	0.32%	0.18%	0.35%	0.98%	0.50%	0.32%	0.27%	1.23%
1982	0.06%	-1.02%	-0.04%	0.18%	0.35%	0.00%	-0.01%	-6.01%	-1.41%	0.58%	4.19%	6.46%	0.28%
1983	1.96%	0.18%	0.06%	-0.01%	-0.03%	-0.02%	-0.06%	0.00%	0.00%	-0.08%	1.27%	1.60%	0.41%
1984	0.49%	0.06%	0.00%	0.01%	0.05%	0.09%	0.10%	0.27%	0.56%	1.31%	1.73%	1.88%	0.55%
1985	2.20%	0.89%	0.60%	0.55%	0.51%	0.54%	0.30%	0.31%	0.84%	0.51%	0.29%	0.21%	0.65%
1986	0.44%	0.11%	-1.09%	0.00%	0.03%	0.04%	-0.02%	0.48%	-0.17%	2.27%	4.69%	6.45%	1.10%
1987	4.20%	0.68%	-0.81%	0.88%	-2.07%	-0.45%	-0.21%	0.14%	0.80%	1.24%	0.87%	0.21%	0.46%
1988	0.16%	0.71%	0.71%	0.38%	0.34%	0.69%	0.56%	0.66%	0.67%	1.19%	0.69%	0.57%	0.61%
1989	0.95%	1.03%	0.23%	0.41%	0.03%	0.33%	0.39%	0.69%	0.89%	-0.34%	-0.22%	0.48%	0.41%
1990	-0.89%	-1.93%	1.26%	-0.76%	-1.33%	-0.89%	-0.42%	0.10%	0.55%	3.62%	0.86%	0.42%	0.05%
1991	-1.07%	-3.38%	0.94%	-3.13%	-2.41%	-0.53%	0.02%	0.14%	0.82%	1.10%	0.66%	0.53%	-0.52%
AVG:	1.95%	1.05%	0.84%	0.47%	0.15%	0.28%	0.19%	0.20%	0.62%	1.02%	1.22%	1.75%	0.81%
MIN:	-14.23%	-9.20%	-4.74%	-3.13%	-4.98%	-1.38%	-0.63%	-6.01%	-2.28%	-5.17%	-1.79%	-4.40%	-1.74%
MAX:	17.02%	15.57%	11.31%	4.43%	5.54%	2.05%	1.29%	6.23%	6.95%	6.85%	7.00%	10.55%	4.61%

Table 4.4.6-22 Simulated monthly average chloride concentration (mg/L) at Tracy Pumping Plant, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	107	124	86	66	62	47	41	43	44	47	61	110	70
1923	114	114	78	57	50	66	54	50	62	55	77	123	75
1924	122	117	91	101	82	108	109	98	110	117	96	145	108
1925	175	147	100	72	81	87	62	59	65	59	81	105	91
1926	135	134	112	88	81	82	70	74	85	82	105	138	99
1927	151	88	44	48	66	55	42	47	54	47	60	115	68
1928	140	96	66	57	50	55	51	55	55	48	62	118	71
1929	139	111	92	95	91	96	96	91	99	92	108	139	104
1930	177	184	96	67	66	62	69	79	66	75	104	145	99
1931	160	128	112	78	82	106	105	101	106	93	100	156	111
1932	180	161	79	43	38	47	43	53	67	60	68	89	77
1933	123	118	98	80	79	87	81	77	86	92	110	125	96
1934	165	177	96	61	81	92	93	95	96	92	108	157	109
1935	179	139	99	62	48	59	43	39	51	59	66	124	81
1936	133	114	101	79	49	42	34	41	56	65	71	125	76
1937	136	113	94	87	34	57	30	21	55	63	70	124	74
1938	142	96	46	41	32	12	10	6	9	40	56	83	48
1939	37	61	75	68	74	76	67	70	73	71	104	156	78
1940	147	115	114	79	79	41	37	46	57	54	69	122	80
1941	135	116	68	60	32	29	29	26	41	50	63	93	62
1942	73	95	60	39	31	49	43	38	44	51	61	91	56
1943	62	72	53	23	21	18	31	33	59	52	64	116	50
1944	137	127	103	100	88	67	64	61	72	67	101	166	96
1945	149	99	85	69	55	46	41	48	64	57	78	133	77
1946	131	106	53	31	40	54	49	52	61	56	79	129	70
1947	125	105	75	60	66	64	73	86	80	66	106	156	89
1948	154	112	114	85	74	76	64	62	57	49	73	128	87
1949	131	101	91	86	102	76	68	70	67	59	83	128	88
1950	148	113	112	79	54	54	59	66	60	54	72	125	83
1951	140	65	33	35	23	38	42	46	56	50	62	112	58
1952	126	109	63	63	37	30	24	15	18	42	55	70	55
1953	33	51	63	35	38	57	53	54	55	47	59	91	53
1954	83	97	101	80	56	57	53	53	61	54	69	123	74
1955	126	108	73	66	69	83	84	76	60	75	87	142	87
1956	164	121	40	30	12	33	41	44	43	45	59	86	60
1957	58	63	92	101	74	53	48	53	60	49	64	121	70
1958	109	80	83	79	98	59	21	16	26	44	56	77	62
1959	42	48	79	77	57	66	67	66	58	54	76	131	68
1960	128	111	103	87	79	64	90	88	70	71	109	148	96
1961	153	114	79	76	67	70	98	90	77	72	107	145	96
1962	152	117	85	79	75	50	46	61	62	53	79	130	82
1963	106	54	53	62	58	64	54	45	50	45	54	101	62
1964	126	103	52	63	64	76	74	84	73	67	102	140	85
1965	145	109	58	36	23	39	37	41	53	48	57	104	63
1966	118	81	34	33	39	46	63	70	60	55	78	137	68
1967	133	99	75	88	57	49	25	15	14	29	53	71	59
1968	39	51	68	72	50	57	59	64	65	55	74	134	66
1969	138	105	78	38	19	14	9	6	6	40	58	97	51
1970	45	51	54	26	23	35	42	50	61	51	59	111	51
1971	129	104	67	49	50	59	55	59	61	51	59	91	69
1972	87	107	103	74	68	57	70	70	58	48	70	130	79
1973	142	94	60	99	71	40	36	44	59	51	67	120	74
1974	133	87	58	37	34	38	34	32	50	48	62	83	58
1975	66	82	98	86	58	43	37	40	45	46	61	84	62
1976	59	57	83	96	102	87	95	89	100	112	124	169	98
1977	127	112	108	89	116	134	123	106	106	86	105	175	116
1978	195	162	107	90	44	41	19	18	22	45	61	108	76
1979	94	116	95	61	39	32	36	38	54	51	71	128	68
1980	134	101	76	26	21	20	28	31	44	43	55	85	55
1981	79	105	93	74	62	60	57	61	62	76	106	141	81
1982	141	95	69	63	19	33	7	12	27	44	58	72	53
1983	23	32	10	20	15	16	10	7	6	12	45	48	20
1984	20	11	11	7	18	40	48	54	68	54	61	112	42
1985	131	100	53	50	66	70	74	64	66	72	103	132	82
1986	128	123	88	66	47	14	19	28	42	58	62	96	64
1987	100	109	98	92	88	90	78	79	73	76	101	167	96
1988	158	105	84	64	54	110	97	86	91	91	109	156	100
1989	178	145	111	83	89	69	62	58	57	70	103	138	97
1990	132	108	87	92	69	80	92	91	89	108	110	142	100
1991	184	189	134	111	125	83	72	75	78	96	116	135	116
AVG:	122	104	79	66	58	58	55	55	60	61	78	121	76
MIN:	20	11	10	7	12	12	7	6	6	12	45	48	20
MAX:	195	189	134	111	125	134	123	106	110	117	124	175	116

Table 4.4.6-23 Difference in simulated monthly average chloride concentration (%) at Tracy Pumping Plant, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.08%	0.05%	0.06%	0.13%	0.04%	0.05%	-0.01%	0.01%	0.06%	0.26%	0.33%	0.48%	0.13%
1923	0.51%	0.24%	0.02%	-0.05%	0.09%	0.06%	0.02%	0.00%	0.16%	0.03%	-0.33%	0.01%	0.06%
1924	0.22%	0.11%	0.34%	0.66%	-0.15%	0.02%	0.02%	0.41%	0.80%	-0.10%	1.95%	0.10%	0.36%
1925	-0.16%	1.36%	-2.05%	-1.51%	-0.74%	-1.05%	-0.27%	0.01%	-0.51%	0.19%	-0.45%	-0.41%	-0.47%
1926	-0.46%	0.28%	-0.20%	-0.07%	0.03%	0.83%	0.33%	0.13%	0.17%	0.11%	0.27%	0.48%	0.16%
1927	0.22%	-0.05%	0.39%	0.53%	1.00%	0.12%	0.00%	-0.09%	-0.04%	0.41%	1.12%	1.09%	0.39%
1928	-0.11%	-1.32%	-0.73%	-0.32%	0.08%	0.04%	0.02%	0.03%	0.36%	0.65%	0.66%	-0.03%	-0.06%
1929	0.00%	0.18%	0.06%	0.18%	-0.01%	8.57%	1.31%	0.31%	1.95%	2.59%	-0.16%	-0.30%	1.22%
1930	0.07%	-7.37%	-0.38%	0.11%	-0.03%	0.15%	0.68%	0.20%	0.52%	-0.81%	0.35%	2.28%	-0.35%
1931	0.43%	-0.61%	0.74%	0.04%	-0.82%	-0.69%	-0.69%	-0.41%	0.69%	0.47%	0.05%	0.82%	0.00%
1932	2.20%	1.69%	0.12%	-0.92%	0.14%	0.15%	-0.04%	0.03%	0.63%	0.88%	0.42%	0.92%	0.52%
1933	0.66%	-1.07%	-0.54%	-0.12%	-0.24%	0.08%	0.08%	0.41%	1.31%	0.65%	0.48%	0.54%	0.19%
1934	0.09%	0.23%	-0.44%	-0.17%	0.01%	1.30%	0.46%	0.19%	0.21%	0.22%	-0.26%	-5.10%	-0.27%
1935	0.79%	2.64%	-5.63%	0.07%	1.14%	1.18%	-1.69%	-0.41%	0.16%	0.52%	0.21%	-1.23%	-0.19%
1936	-0.45%	0.11%	-0.18%	0.59%	0.33%	0.15%	0.03%	0.01%	0.19%	-0.02%	0.20%	0.05%	0.08%
1937	-0.04%	0.10%	0.00%	-0.08%	-0.20%	0.26%	0.01%	0.01%	0.22%	0.58%	0.06%	-0.20%	0.06%
1938	-0.22%	-0.05%	0.79%	0.19%	0.01%	0.00%	-0.08%	0.00%	0.02%	0.23%	0.54%	-0.16%	0.10%
1939	-0.20%	0.13%	0.29%	0.36%	0.37%	0.18%	0.02%	0.07%	0.28%	0.25%	0.09%	0.50%	0.19%
1940	0.18%	-0.46%	0.41%	0.30%	0.03%	-0.28%	-0.23%	0.00%	0.04%	-0.25%	0.19%	-3.91%	-0.33%
1941	-9.21%	-6.25%	1.11%	0.00%	-0.01%	-0.08%	0.00%	0.04%	0.04%	0.29%	-0.63%	-1.66%	-1.36%
1942	0.08%	0.22%	0.05%	0.01%	-0.01%	0.02%	0.01%	0.01%	0.08%	0.10%	0.32%	0.55%	0.12%
1943	1.30%	1.93%	1.41%	0.33%	0.28%	0.04%	0.03%	0.00%	0.09%	0.29%	0.13%	0.07%	0.49%
1944	0.38%	0.06%	0.14%	0.22%	0.05%	0.18%	0.04%	0.03%	0.23%	0.54%	0.23%	0.18%	0.19%
1945	0.11%	0.58%	1.28%	0.71%	0.22%	0.04%	0.00%	0.00%	0.17%	0.37%	0.30%	0.33%	0.34%
1946	0.25%	0.19%	0.12%	0.05%	-0.05%	0.10%	0.08%	0.05%	0.22%	0.37%	0.31%	0.19%	0.16%
1947	0.16%	0.16%	-0.08%	0.49%	0.86%	0.38%	0.02%	0.01%	0.42%	0.86%	0.63%	0.83%	0.40%
1948	0.27%	-0.20%	0.54%	-0.09%	-0.17%	0.08%	0.07%	0.02%	0.19%	0.44%	0.35%	0.28%	0.15%
1949	1.15%	1.34%	-0.22%	0.60%	0.30%	0.26%	0.03%	-0.57%	0.09%	0.82%	0.89%	0.98%	0.47%
1950	0.68%	-0.19%	-0.03%	0.15%	0.08%	-0.15%	0.17%	0.03%	0.09%	0.84%	0.35%	0.25%	0.19%
1951	0.20%	0.16%	0.04%	0.25%	0.26%	0.02%	0.03%	0.03%	0.18%	0.44%	0.22%	0.11%	0.16%
1952	0.14%	0.09%	0.08%	0.01%	-0.01%	0.00%	0.03%	0.00%	0.01%	0.28%	0.56%	0.61%	0.15%
1953	0.31%	0.32%	0.52%	0.09%	0.04%	0.07%	0.05%	0.03%	0.24%	0.41%	0.29%	0.75%	0.26%
1954	1.43%	1.45%	0.81%	-1.33%	0.00%	0.03%	0.03%	0.03%	0.25%	0.58%	0.43%	0.29%	0.33%
1955	0.23%	0.17%	0.15%	0.20%	0.14%	0.22%	0.12%	0.29%	0.47%	0.79%	0.51%	0.13%	0.28%
1956	-0.21%	0.11%	0.04%	0.01%	-0.17%	0.03%	0.01%	0.02%	-0.30%	0.36%	0.46%	0.80%	0.10%
1957	1.47%	1.64%	-0.18%	-0.93%	0.93%	0.23%	0.03%	0.01%	0.19%	0.45%	0.40%	0.30%	0.38%
1958	0.72%	1.21%	0.67%	0.09%	0.06%	-0.01%	-0.42%	0.00%	0.04%	0.28%	0.34%	0.65%	0.30%
1959	-0.68%	0.12%	0.64%	0.13%	0.06%	0.38%	0.29%	1.66%	0.42%	0.21%	0.24%	1.07%	0.38%
1960	1.37%	0.23%	2.63%	0.78%	0.43%	0.92%	0.08%	0.17%	0.40%	0.39%	-0.24%	-1.08%	0.51%
1961	-0.53%	1.54%	-1.55%	0.88%	0.36%	2.53%	0.32%	0.24%	1.65%	-0.05%	-0.10%	-0.13%	0.43%
1962	0.17%	-0.18%	-0.47%	-0.94%	-0.13%	0.20%	-2.09%	-0.14%	0.72%	0.44%	0.35%	1.00%	-0.09%
1963	0.75%	0.79%	1.65%	0.24%	-0.52%	-0.42%	-0.01%	-0.03%	0.16%	0.42%	0.30%	0.18%	0.29%
1964	0.31%	0.59%	0.46%	0.44%	0.32%	0.37%	-0.52%	-0.10%	2.38%	1.32%	1.82%	2.17%	0.80%
1965	1.38%	-0.05%	0.01%	-0.06%	0.05%	-0.06%	0.01%	0.04%	0.16%	0.45%	0.36%	0.36%	0.22%
1966	0.77%	0.76%	0.65%	0.24%	0.07%	0.09%	0.08%	0.08%	0.30%	0.26%	0.12%	0.11%	0.29%
1967	0.18%	0.53%	0.69%	0.03%	0.05%	0.02%	0.00%	0.00%	0.00%	0.12%	0.62%	0.34%	0.21%
1968	0.30%	0.37%	0.56%	0.26%	0.01%	0.02%	-0.02%	0.28%	0.46%	0.23%	0.95%	1.00%	0.37%
1969	0.52%	0.41%	0.50%	-0.07%	-0.04%	0.27%	-0.13%	-0.02%	0.02%	0.21%	0.58%	1.04%	0.27%
1970	0.97%	0.49%	0.05%	-0.07%	0.06%	0.00%	0.01%	0.04%	0.12%	0.42%	0.35%	0.34%	0.23%
1971	-0.01%	-0.04%	0.15%	0.05%	-0.31%	-0.02%	0.03%	0.02%	-0.95%	0.51%	0.37%	0.63%	0.03%
1972	1.11%	0.62%	0.41%	1.58%	2.04%	0.26%	-0.12%	0.10%	0.37%	0.44%	0.25%	0.13%	0.60%
1973	0.18%	0.35%	0.51%	0.04%	0.01%	0.05%	0.02%	0.02%	0.10%	0.38%	0.26%	0.23%	0.18%
1974	0.64%	0.36%	0.04%	0.02%	0.04%	0.02%	0.00%	0.00%	0.17%	0.40%	0.37%	0.48%	0.21%
1975	1.51%	3.38%	2.03%	1.45%	0.43%	0.03%	0.02%	0.02%	0.24%	0.40%	0.32%	0.63%	0.87%
1976	0.77%	0.78%	0.94%	0.23%	-0.77%	1.40%	0.24%	0.21%	1.73%	0.41%	-0.03%	0.30%	0.52%
1977	0.49%	-0.36%	-0.78%	-0.73%	-0.23%	-0.11%	0.00%	0.06%	0.23%	0.87%	0.45%	0.57%	0.04%
1978	0.51%	0.50%	0.11%	0.02%	0.13%	0.08%	-0.11%	-0.01%	0.12%	0.39%	0.56%	0.55%	0.24%
1979	0.29%	0.09%	0.07%	0.15%	-0.03%	-0.03%	0.02%	0.03%	0.06%	0.19%	0.15%	0.16%	0.10%
1980	-0.32%	-0.13%	0.57%	0.07%	0.01%	-0.11%	-0.02%	0.00%	0.17%	0.48%	0.45%	0.51%	0.14%
1981	0.81%	0.69%	0.03%	0.32%	0.10%	0.05%	0.07%	0.33%	0.43%	-0.50%	-0.46%	0.22%	0.17%
1982	0.05%	-0.97%	-0.08%	-0.10%	-0.06%	0.01%	0.26%	-7.99%	-0.52%	0.28%	0.14%	0.05%	-0.74%
1983	0.11%	-0.12%	-0.01%	0.03%	0.01%	-0.02%	0.18%	0.04%	0.00%	0.01%	0.28%	0.17%	0.06%
1984	0.01%	0.04%	-0.06%	0.02%	0.01%	0.02%	0.01%	0.03%	0.14%	0.42%	0.27%	0.48%	0.11%
1985	0.70%	0.24%	0.18%	0.14%	0.15%	0.23%	0.07%	0.09%	-0.11%	0.35%	0.22%	0.15%	0.20%
1986	0.29%	0.36%	0.05%	0.21%	0.01%	-0.04%	-0.05%	0.00%	0.08%	0.67%	0.39%	0.34%	0.19%
1987	0.23%	0.00%	-0.14%	-0.35%	-0.30%	0.06%	-0.28%	0.16%	0.79%	0.10%	0.22%	0.16%	0.05%
1988	0.43%	1.69%	1.03%	0.30%	0.06%	0.11%	2.73%	1.50%	1.16%	-1.11%	-0.48%	0.19%	0.63%
1989	0.22%	0.03%	0.22%	0.08%	-0.25%	0.02%	0.16%	0.20%	1.60%	0.57%	0.54%	0.06%	0.29%
1990	-0.75%	-0.42%	0.69%	-0.66%	-0.05%	0.05%	-0.04%	0.15%	0.39%	2.28%	0.54%	0.97%	0.26%
1991	0.16%	-1.97%	-2.76%	-3.52%	-2.62%	-0.94%	-0.04%	0.00%	0.38%	2.00%	1.07%	1.35%	-0.58%
AVG:	0.23%	0.14%	0.12%	0.03%	0.04%	0.26%	0.02%	-0.03%	0.33%	0.42%	0.33%	0.23%	0.18%
MIN:	-9.21%	-7.37%	-5.63%	-3.52%	-2.62%	-1.05%	-2.09%	-7.99%	-0.95%	-1.11%	-0.63%	-5.10%	-1.36%
MAX:	2.20%	3.38%	2.63%	1.58%	2.04%	8.57%	2.73%	1.66%	2.38%	2.59%	1.95%	2.28%	1.22%

Table 4.4.6-24 Difference in simulated monthly average chloride concentration (%) at Tracy Pumping Plant, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.07%	0.05%	0.05%	0.12%	0.04%	0.04%	0.01%	0.01%	-0.07%	0.10%	0.57%	2.19%	0.27%
1923	3.15%	0.71%	-0.68%	-0.82%	-0.18%	0.04%	0.02%	-0.02%	0.12%	0.07%	0.00%	0.56%	0.25%
1924	1.21%	0.23%	-0.15%	1.84%	-0.10%	0.01%	0.02%	0.11%	0.24%	0.20%	0.12%	-2.19%	0.13%
1925	-1.40%	0.79%	-1.68%	-1.30%	-0.26%	0.75%	0.21%	0.05%	1.69%	1.91%	0.27%	0.73%	0.15%
1926	0.41%	-0.16%	0.44%	0.31%	0.08%	0.13%	0.19%	0.09%	0.14%	0.24%	0.22%	0.62%	0.23%
1927	0.44%	0.30%	0.29%	0.20%	0.88%	0.16%	0.03%	0.09%	0.14%	0.50%	1.74%	2.18%	0.58%
1928	0.20%	-2.31%	2.41%	1.88%	0.35%	0.07%	0.02%	-0.05%	-0.47%	0.48%	0.61%	0.31%	0.29%
1929	-0.05%	0.40%	1.18%	-0.41%	0.92%	1.22%	0.23%	0.07%	2.26%	3.60%	0.15%	-0.68%	0.74%
1930	-0.19%	-4.51%	-0.12%	0.12%	-0.10%	0.11%	0.01%	0.08%	0.32%	-0.60%	0.96%	2.77%	-0.10%
1931	1.22%	-0.98%	1.01%	0.63%	-0.07%	-0.09%	-0.43%	-0.31%	0.38%	0.29%	-0.16%	0.34%	0.15%
1932	-2.90%	-0.77%	-0.07%	-0.94%	-0.11%	0.12%	0.03%	0.02%	0.56%	0.80%	0.42%	0.53%	-0.19%
1933	0.29%	0.22%	0.07%	0.16%	0.25%	0.15%	0.04%	0.12%	0.44%	0.38%	0.31%	0.42%	0.24%
1934	0.30%	0.17%	0.22%	0.27%	0.08%	0.20%	0.12%	0.09%	0.18%	0.24%	-0.01%	-1.03%	0.07%
1935	-0.10%	-0.44%	-2.92%	-0.59%	-0.18%	0.95%	0.29%	-0.01%	0.24%	0.60%	0.42%	0.01%	-0.14%
1936	0.64%	0.63%	-0.29%	1.08%	0.11%	0.42%	0.15%	0.03%	0.12%	2.03%	1.13%	1.52%	0.63%
1937	0.85%	0.41%	0.09%	-0.45%	0.37%	-0.01%	-0.06%	0.03%	-0.05%	1.86%	0.59%	0.86%	0.37%
1938	0.92%	0.05%	-1.01%	-0.20%	0.02%	0.01%	-0.06%	0.00%	0.11%	0.16%	0.84%	3.79%	0.39%
1939	4.07%	-1.36%	1.33%	0.77%	0.44%	0.15%	0.06%	0.06%	0.30%	0.59%	0.11%	0.07%	0.55%
1940	0.19%	0.34%	0.22%	0.23%	0.04%	0.04%	0.04%	-0.05%	0.03%	1.02%	1.10%	-3.00%	0.02%
1941	-8.78%	-6.14%	1.46%	-0.01%	-0.03%	-0.06%	-0.04%	0.03%	-0.64%	-0.05%	-0.20%	0.38%	-1.17%
1942	3.22%	1.83%	0.64%	0.04%	0.01%	0.01%	0.01%	0.01%	-0.07%	-3.76%	1.11%	3.25%	0.52%
1943	4.67%	4.54%	4.20%	0.32%	0.11%	-0.02%	0.04%	0.15%	-0.30%	1.71%	2.60%	3.23%	1.77%
1944	2.93%	1.40%	0.05%	0.94%	-0.26%	0.10%	0.02%	0.02%	0.26%	0.13%	0.62%	0.52%	0.56%
1945	0.10%	1.96%	3.86%	0.54%	0.19%	0.00%	0.00%	-0.01%	0.12%	0.38%	0.86%	1.60%	0.80%
1946	1.29%	-0.82%	-0.03%	0.08%	-1.42%	-1.01%	0.13%	-0.02%	-0.27%	0.39%	0.71%	0.87%	-0.01%
1947	-0.43%	-0.49%	1.97%	1.05%	0.06%	0.00%	-0.07%	-0.01%	1.50%	1.03%	0.06%	0.09%	0.40%
1948	0.25%	0.47%	-0.14%	0.02%	-0.26%	-0.04%	0.02%	0.01%	0.18%	0.46%	0.35%	0.29%	0.13%
1949	-0.23%	-0.27%	1.66%	0.53%	0.35%	0.18%	0.03%	-0.56%	0.11%	0.49%	-0.92%	-2.26%	-0.07%
1950	-0.54%	2.04%	-0.27%	0.09%	0.10%	0.66%	0.49%	0.06%	-0.17%	3.16%	0.24%	1.19%	0.59%
1951	1.43%	-0.01%	0.05%	0.24%	0.25%	0.02%	0.03%	-0.02%	-0.18%	0.64%	0.47%	0.39%	0.28%
1952	0.65%	-0.33%	-0.56%	0.02%	0.04%	0.01%	-0.02%	0.00%	-0.02%	0.68%	0.79%	1.51%	0.23%
1953	1.01%	0.51%	2.45%	0.67%	-0.04%	0.05%	0.05%	0.03%	0.27%	0.42%	0.32%	0.87%	0.55%
1954	1.60%	1.53%	0.80%	-1.37%	0.00%	0.03%	0.03%	0.03%	0.25%	0.56%	0.40%	0.28%	0.35%
1955	-0.46%	-1.06%	-0.27%	0.01%	-0.16%	-0.01%	-0.08%	0.16%	0.36%	0.22%	0.53%	0.02%	-0.06%
1956	-0.36%	-0.29%	0.06%	-0.05%	-0.07%	0.02%	0.02%	0.03%	-0.80%	-0.12%	0.87%	4.42%	0.31%
1957	6.89%	4.10%	0.01%	-2.19%	2.59%	0.25%	0.06%	0.01%	0.21%	0.53%	0.49%	0.38%	1.11%
1958	1.50%	2.99%	1.39%	0.13%	0.05%	0.00%	-0.11%	-0.01%	0.01%	0.12%	0.59%	3.47%	0.84%
1959	7.26%	1.38%	-0.44%	-2.99%	-0.77%	0.10%	0.07%	0.09%	0.48%	0.75%	-0.21%	-0.72%	0.42%
1960	-0.67%	1.08%	-0.24%	-0.09%	0.04%	0.12%	0.02%	0.06%	0.31%	0.34%	-0.21%	-0.92%	-0.01%
1961	-0.27%	1.66%	-1.90%	0.92%	0.54%	1.59%	0.08%	0.20%	1.13%	0.56%	0.75%	0.91%	0.51%
1962	0.93%	-0.96%	-1.88%	-0.54%	-0.14%	-0.17%	-0.02%	0.01%	0.25%	0.39%	-0.36%	0.18%	-0.19%
1963	0.59%	0.41%	0.87%	0.16%	-0.14%	0.02%	0.01%	0.04%	1.39%	-0.81%	0.76%	1.95%	0.44%
1964	2.67%	1.96%	0.83%	0.56%	0.35%	0.40%	-0.45%	-0.11%	0.76%	1.77%	0.90%	2.12%	0.98%
1965	2.02%	-0.37%	0.07%	0.05%	0.01%	0.09%	0.03%	0.04%	-0.11%	0.31%	1.16%	2.28%	0.47%
1966	1.64%	0.13%	0.10%	0.20%	0.05%	-0.82%	-0.12%	0.11%	0.33%	0.29%	0.14%	0.08%	0.18%
1967	0.21%	0.55%	0.31%	0.01%	0.13%	0.06%	0.00%	0.00%	-0.01%	0.05%	0.33%	0.78%	0.20%
1968	0.85%	0.51%	0.69%	0.24%	0.03%	0.03%	-0.02%	0.12%	0.35%	0.44%	0.38%	0.52%	0.35%
1969	0.22%	0.01%	0.22%	-0.02%	0.01%	0.01%	0.01%	0.00%	0.00%	0.16%	0.88%	3.14%	0.39%
1970	3.22%	1.36%	0.01%	-0.15%	0.02%	0.01%	0.00%	0.03%	0.11%	0.45%	0.42%	0.46%	0.50%
1971	0.11%	-0.01%	0.13%	0.05%	-0.39%	-0.04%	0.03%	0.02%	-0.93%	0.59%	0.48%	0.80%	0.07%
1972	1.33%	0.76%	0.42%	1.57%	2.17%	0.27%	-0.12%	0.10%	0.37%	0.45%	0.26%	0.15%	0.64%
1973	-0.41%	-0.85%	-0.25%	0.01%	0.11%	0.08%	0.03%	0.00%	0.06%	0.54%	0.88%	1.62%	0.15%
1974	1.93%	0.51%	0.05%	0.03%	0.04%	0.01%	0.00%	0.02%	-0.06%	0.26%	0.71%	1.78%	0.44%
1975	4.22%	8.11%	3.93%	1.50%	1.73%	0.42%	0.05%	0.03%	-0.37%	0.08%	0.45%	2.17%	1.86%
1976	2.40%	1.38%	2.43%	1.22%	-2.26%	-0.34%	-0.01%	0.05%	0.49%	0.29%	0.14%	0.18%	0.50%
1977	0.10%	-0.20%	-0.51%	-1.22%	-0.31%	-0.14%	0.03%	0.48%	0.41%	1.13%	1.02%	0.93%	0.14%
1978	0.38%	0.27%	0.49%	0.00%	0.09%	0.00%	-0.04%	-0.01%	0.10%	-1.63%	0.97%	0.77%	0.11%
1979	0.48%	0.30%	0.00%	0.15%	-0.03%	-0.02%	0.00%	0.00%	0.03%	0.25%	0.11%	-0.01%	0.11%
1980	0.25%	0.39%	0.26%	0.06%	-0.06%	0.36%	0.00%	-0.03%	0.77%	1.22%	1.14%	2.11%	0.54%
1981	3.46%	1.63%	-0.55%	1.35%	0.18%	0.06%	0.04%	0.10%	0.37%	0.33%	0.24%	0.28%	0.62%
1982	-0.02%	-0.48%	-0.02%	0.00%	0.13%	0.00%	-0.06%	-7.99%	-0.57%	0.16%	1.38%	2.19%	-0.44%
1983	0.53%	0.06%	0.00%	0.02%	0.03%	0.01%	0.05%	0.00%	0.00%	0.00%	0.20%	0.39%	0.11%
1984	0.13%	0.01%	0.00%	0.00%	0.01%	0.02%	0.02%	0.03%	0.02%	0.40%	0.60%	1.00%	0.19%
1985	1.40%	0.49%	0.19%	0.14%	0.15%	0.23%	0.07%	0.09%	-0.09%	0.33%	0.22%	0.15%	0.28%
1986	0.29%	0.17%	-0.51%	0.00%	-0.01%	0.06%	-0.10%	0.00%	-0.03%	2.57%	1.71%	3.12%	0.61%
1987	2.54%	0.82%	-0.52%	0.47%	-2.03%	-0.23%	-0.31%	0.14%	0.37%	0.28%	0.47%	0.18%	0.18%
1988	0.21%	0.48%	0.30%	0.14%	0.11%	0.16%	0.39%	0.18%	0.31%	0.57%	0.69%	0.72%	0.35%
1989	0.74%	0.69%	0.18%	0.33%	0.00%	0.10%	0.14%	0.22%	0.34%	0.01%	-0.03%	0.15%	0.24%
1990	-0.34%	-1.64%	0.83%	-0.36%	-0.51%	-0.31%	-0.14%	0.02%	0.28%	2.05%	0.92%	0.20%	0.08%
1991	-0.67%	-0.89%	-1.22%	-1.51%	-1.11%	-0.23%	0.00%	0.02%	0.35%	0.67%	0.58%	0.49%	-0.29%
AVG:	0.88%	0.36%	0.31%	0.09%	0.03%	0.09%	0.02%	-0.08%	0.21%	0.52%	0.53%	0.87%	0.32%
MIN:	-8.78%	-6.14%	-2.92%	-2.99%	-2.26%	-1.01%	-0.45%	-7.99%	-0.93%	-3.76%	-0.92%	-3.00%	-1.17%
MAX:	7.26%	8.11%	4.20%	1.88%	2.59%	1.59%	0.49%	0.48%	2.26%	3.60%	2.60%	4.42%	1.86%

Table 4.4.6-25 Simulated monthly average chloride concentration (mg/L) at Clifton Court Forebay, FDM results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	105	127	86	47	61	39	37	44	36	22	37	92	61
1923	132	111	77	52	41	37	52	55	44	31	62	111	67
1924	128	120	88	106	67	86	104	91	106	117	84	148	104
1925	201	172	98	56	64	75	63	56	43	38	70	89	86
1926	147	140	114	74	50	46	57	72	60	56	81	125	85
1927	163	76	26	25	58	39	38	42	33	24	39	100	55
1928	143	91	60	44	26	31	42	50	37	30	42	105	58
1929	150	108	88	90	80	66	86	91	93	73	103	130	97
1930	197	196	85	42	39	28	46	66	50	49	86	136	85
1931	171	130	108	64	60	69	91	96	104	80	78	153	100
1932	197	180	92	41	46	44	45	57	63	38	56	81	78
1933	141	134	105	69	57	57	71	77	82	76	106	122	91
1934	189	199	92	45	55	66	80	90	92	71	101	156	103
1935	194	150	103	67	43	42	47	41	37	30	54	121	77
1936	150	111	103	68	59	39	37	45	39	33	58	120	72
1937	151	111	95	94	51	63	39	26	43	34	54	120	74
1938	166	81	44	39	34	13	10	6	12	24	37	65	44
1939	41	30	55	48	55	57	67	73	53	58	102	154	66
1940	161	102	110	87	80	48	37	43	36	27	49	110	74
1941	152	117	54	55	45	32	33	32	39	26	39	67	58
1942	66	85	63	44	33	41	48	43	37	28	40	68	50
1943	59	54	42	31	24	19	33	36	41	36	43	104	43
1944	152	133	100	94	76	43	56	66	49	43	95	169	90
1945	165	83	70	43	51	43	44	52	42	32	63	123	68
1946	160	104	49	23	30	38	47	53	40	32	65	121	64
1947	133	106	68	48	48	33	51	76	57	51	95	145	76
1948	162	104	110	70	53	44	53	58	33	25	57	119	74
1949	137	94	81	73	88	51	65	67	42	39	77	119	78
1950	159	114	111	69	33	26	41	57	31	26	57	116	70
1951	147	65	38	37	27	29	39	49	42	29	41	101	54
1952	137	106	53	61	32	32	29	17	23	26	35	45	50
1953	29	30	48	38	30	31	45	53	31	23	36	64	38
1954	63	86	100	70	24	25	40	47	37	31	52	112	57
1955	130	99	54	40	44	41	66	65	39	44	73	133	69
1956	168	116	65	42	21	23	40	46	39	25	39	67	57
1957	51	50	91	108	51	34	40	55	44	27	44	108	59
1958	105	62	66	50	81	61	27	19	29	26	37	54	51
1959	34	27	66	66	52	55	63	62	37	35	65	120	57
1960	129	105	81	65	54	30	67	81	47	58	102	136	80
1961	160	110	68	58	38	28	64	80	61	57	100	131	80
1962	149	107	72	58	74	43	40	61	40	32	65	124	72
1963	96	25	31	38	45	37	56	48	34	25	34	86	46
1964	131	101	35	45	34	37	46	72	49	52	97	129	69
1965	152	105	56	34	21	27	38	42	39	27	34	87	55
1966	131	78	33	29	31	25	43	56	37	33	64	129	57
1967	140	84	75	79	41	36	30	15	19	29	35	47	52
1968	29	28	53	55	39	33	45	57	45	37	61	125	51
1969	143	93	61	50	25	19	10	6	7	27	38	85	47
1970	57	29	48	29	27	32	41	52	44	28	36	94	43
1971	139	97	48	26	25	25	39	59	38	26	36	63	52
1972	71	102	106	62	46	18	44	59	42	27	56	122	63
1973	148	72	32	76	68	38	35	46	34	25	47	108	61
1974	145	67	33	33	23	30	35	37	33	26	42	59	47
1975	44	68	99	83	58	45	39	42	39	25	40	59	53
1976	39	34	79	97	95	55	83	89	97	117	144	177	92
1977	187	155	133	80	92	103	112	107	106	79	89	181	119
1978	220	183	105	96	56	45	23	19	28	31	41	98	79
1979	122	123	90	61	52	35	35	42	34	27	54	121	66
1980	153	100	66	36	31	25	30	35	42	32	38	71	55
1981	100	113	90	61	36	37	46	58	45	65	107	135	74
1982	147	73	38	63	28	41	8	12	28	28	36	54	46
1983	29	38	11	18	13	16	10	7	6	16	21	34	18
1984	24	16	10	7	18	32	42	55	49	28	37	94	34
1985	140	92	33	23	40	45	63	62	45	61	103	125	69
1986	129	118	73	41	61	18	22	30	42	31	40	75	57
1987	106	114	101	88	74	53	59	70	51	51	93	169	86
1988	169	96	72	36	33	61	74	71	80	67	102	150	84
1989	196	153	113	76	65	37	32	38	34	52	93	121	84
1990	127	104	80	77	48	39	73	78	82	104	101	133	87
1991	204	207	151	115	120	67	65	73	72	85	114	136	118
AVG:	130	100	73	57	48	41	48	53	46	42	64	109	68
MIN:	24	16	10	7	13	13	8	6	6	16	21	34	18
MAX:	220	207	151	115	120	103	112	107	106	117	144	181	119

Table 4.4.6-26 Difference in simulated monthly average chloride concentration (%) at Clifton Court Forebay, FDM results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.12%	0.08%	0.12%	0.38%	0.11%	0.11%	0.02%	0.04%	0.16%	0.83%	0.85%	0.68%	0.29%
1923	0.86%	0.57%	0.04%	-0.19%	0.10%	0.21%	0.11%	0.03%	0.39%	-0.01%	-0.66%	0.06%	0.13%
1924	0.25%	0.16%	0.25%	1.02%	-0.30%	0.05%	0.04%	0.71%	1.06%	-0.17%	1.86%	-1.07%	0.32%
1925	0.69%	1.57%	-3.09%	-2.82%	-0.78%	-1.15%	-0.67%	0.03%	-0.33%	0.12%	-0.10%	-0.88%	-0.62%
1926	-0.62%	0.38%	-0.33%	-0.16%	0.10%	1.17%	0.97%	0.33%	0.55%	0.64%	0.19%	0.12%	0.28%
1927	0.17%	-0.09%	1.05%	1.63%	1.03%	0.38%	-0.01%	-0.23%	0.37%	1.25%	2.55%	1.78%	0.82%
1928	0.00%	-2.13%	-1.29%	-0.66%	0.27%	0.13%	0.06%	0.11%	0.92%	1.59%	0.70%	-0.03%	-0.03%
1929	0.01%	0.26%	0.02%	0.31%	-0.01%	9.93%	2.94%	0.68%	6.22%	6.62%	0.03%	-0.42%	2.22%
1930	0.27%	1.92%	-0.71%	0.29%	0.71%	0.44%	0.54%	0.48%	0.75%	0.20%	2.49%	2.44%	0.82%
1931	0.38%	-0.78%	0.35%	0.12%	-0.90%	-1.59%	-0.92%	-0.37%	1.07%	0.70%	-0.09%	1.12%	-0.08%
1932	3.18%	2.32%	0.18%	0.01%	0.28%	0.48%	-0.02%	0.32%	0.76%	1.46%	0.75%	1.23%	0.91%
1933	0.89%	-0.10%	-0.87%	-0.50%	-0.01%	0.43%	0.33%	1.49%	2.07%	1.30%	0.93%	0.68%	0.55%
1934	0.06%	-0.12%	-0.62%	-0.49%	-0.07%	1.66%	1.18%	0.31%	0.28%	0.70%	2.09%	-6.03%	-0.09%
1935	1.00%	3.65%	-8.11%	0.22%	1.76%	2.25%	-0.46%	-0.65%	0.60%	1.52%	0.25%	-0.15%	0.16%
1936	-0.67%	0.22%	-0.13%	1.09%	0.29%	0.37%	0.24%	0.15%	0.46%	1.19%	0.51%	0.37%	0.34%
1937	0.19%	0.18%	-0.01%	-0.13%	-0.85%	0.43%	-0.16%	0.11%	0.49%	1.56%	-0.34%	-0.31%	0.10%
1938	-0.33%	-0.06%	1.35%	0.60%	0.00%	0.01%	-0.08%	0.00%	0.07%	0.59%	0.81%	-0.38%	0.21%
1939	-0.41%	0.93%	0.99%	1.35%	1.04%	0.51%	0.12%	0.14%	0.54%	-0.45%	0.14%	0.82%	0.48%
1940	0.12%	-0.76%	0.29%	0.58%	0.06%	-0.75%	-0.71%	0.01%	0.16%	0.27%	0.33%	-4.36%	-0.40%
1941	-14.17%	-9.30%	2.68%	0.01%	0.03%	-0.11%	-0.07%	0.05%	0.11%	0.88%	-1.71%	-3.51%	-2.09%
1942	0.17%	0.39%	0.11%	0.03%	0.05%	0.02%	0.04%	0.03%	0.22%	0.87%	0.77%	1.17%	0.32%
1943	2.57%	4.08%	3.06%	-1.25%	0.63%	0.03%	0.02%	-0.29%	0.32%	0.81%	0.27%	0.19%	0.87%
1944	0.49%	0.10%	0.26%	0.37%	0.12%	0.50%	0.22%	0.14%	0.59%	0.79%	0.28%	0.26%	0.34%
1945	0.27%	1.11%	2.41%	1.75%	0.51%	0.09%	0.05%	0.00%	0.45%	0.97%	0.57%	0.50%	0.72%
1946	0.39%	0.43%	0.25%	0.14%	-0.15%	0.09%	0.27%	0.18%	0.55%	0.93%	0.56%	0.31%	0.33%
1947	0.25%	0.24%	-0.13%	1.11%	2.04%	0.81%	0.19%	0.01%	1.27%	0.15%	0.71%	1.17%	0.65%
1948	0.40%	0.07%	0.83%	-0.20%	-0.32%	0.21%	0.19%	0.11%	0.69%	1.28%	0.65%	0.50%	0.37%
1949	1.49%	1.88%	-0.31%	1.03%	1.04%	0.68%	0.06%	2.06%	0.18%	1.59%	1.29%	1.55%	1.04%
1950	0.72%	-0.20%	-0.03%	0.31%	0.24%	0.40%	0.27%	0.18%	0.68%	1.41%	0.62%	0.39%	0.41%
1951	0.35%	0.30%	0.07%	0.21%	0.14%	0.08%	0.08%	0.12%	0.40%	1.06%	0.47%	0.17%	0.29%
1952	0.20%	0.21%	0.18%	0.03%	0.03%	0.01%	0.10%	0.00%	0.04%	0.62%	1.28%	1.52%	0.35%
1953	0.82%	0.85%	0.92%	0.12%	0.10%	0.22%	0.14%	0.13%	0.88%	1.08%	0.69%	1.60%	0.63%
1954	2.85%	2.44%	1.46%	-2.37%	0.05%	0.13%	0.10%	0.11%	0.75%	1.40%	0.84%	0.46%	0.68%
1955	0.51%	0.40%	0.32%	0.55%	0.31%	0.34%	0.20%	0.40%	0.88%	1.25%	0.83%	0.07%	0.51%
1956	-0.32%	0.20%	0.04%	-0.03%	-0.09%	0.11%	0.08%	0.08%	0.73%	0.89%	1.05%	1.66%	0.36%
1957	3.01%	3.20%	-0.27%	-1.36%	1.89%	0.41%	0.11%	0.02%	0.42%	1.54%	0.77%	0.48%	0.85%
1958	1.23%	2.28%	1.43%	0.35%	0.02%	0.03%	-0.19%	-0.06%	0.09%	0.80%	0.74%	1.45%	0.68%
1959	0.81%	0.91%	0.60%	0.41%	0.15%	0.73%	0.70%	-2.22%	0.84%	0.43%	0.40%	3.64%	0.62%
1960	2.00%	-4.67%	4.39%	1.99%	1.06%	0.97%	0.33%	0.35%	1.09%	0.92%	0.00%	-1.94%	0.54%
1961	-0.61%	2.25%	-2.90%	1.66%	1.72%	2.28%	1.21%	0.51%	3.16%	0.03%	-0.06%	-0.14%	0.76%
1962	0.25%	0.14%	-0.55%	-1.26%	-0.11%	0.40%	5.46%	-0.53%	2.34%	1.55%	2.04%	1.35%	0.92%
1963	1.25%	2.51%	4.10%	0.61%	-1.27%	-1.51%	-0.09%	-0.11%	0.36%	0.71%	0.71%	0.17%	0.62%
1964	0.49%	0.91%	1.03%	1.00%	0.98%	0.84%	-0.03%	-0.42%	1.43%	2.87%	2.62%	3.21%	1.24%
1965	2.37%	-0.18%	-0.03%	-0.15%	0.10%	-0.03%	0.04%	0.08%	0.39%	1.10%	0.89%	0.59%	0.43%
1966	0.79%	1.19%	1.26%	0.53%	0.18%	0.28%	0.20%	0.27%	0.68%	0.62%	0.18%	0.17%	0.53%
1967	0.26%	0.99%	1.35%	0.08%	0.10%	0.07%	0.01%	0.00%	0.01%	0.28%	1.26%	0.80%	0.43%
1968	0.77%	1.00%	0.93%	0.61%	0.17%	0.12%	0.08%	0.50%	1.10%	0.97%	1.69%	1.53%	0.79%
1969	0.69%	1.08%	1.01%	-0.23%	-0.03%	0.19%	0.24%	-0.02%	0.03%	0.51%	1.33%	1.45%	0.52%
1970	1.78%	1.38%	-0.03%	0.01%	0.00%	0.03%	0.03%	0.07%	0.44%	1.10%	0.86%	0.48%	0.51%
1971	0.21%	-0.07%	0.35%	0.14%	1.01%	-0.11%	0.11%	0.05%	0.84%	1.59%	0.89%	1.39%	0.53%
1972	2.12%	0.96%	0.63%	3.01%	4.75%	1.16%	0.07%	0.22%	0.70%	1.11%	0.43%	0.20%	1.28%
1973	0.28%	0.70%	1.40%	0.10%	0.03%	0.09%	0.07%	0.11%	0.56%	1.08%	0.51%	0.22%	0.43%
1974	1.00%	1.00%	0.12%	0.03%	0.11%	0.04%	0.02%	0.02%	0.51%	1.05%	0.82%	1.06%	0.48%
1975	3.85%	6.11%	3.14%	2.39%	0.89%	0.11%	0.06%	0.07%	0.56%	1.08%	0.72%	1.42%	1.70%
1976	1.97%	2.17%	1.56%	0.36%	-1.50%	0.45%	0.56%	0.62%	2.74%	0.70%	0.20%	0.21%	0.84%
1977	-0.44%	-1.63%	-1.46%	-0.80%	-0.80%	-0.38%	0.04%	0.13%	0.32%	1.07%	0.72%	0.45%	-0.23%
1978	0.51%	0.67%	0.15%	0.07%	0.23%	0.20%	-0.14%	-0.03%	0.09%	0.85%	1.25%	0.82%	0.39%
1979	0.40%	0.08%	0.27%	0.29%	-0.05%	-0.01%	0.10%	0.13%	-0.13%	0.70%	0.43%	0.26%	0.21%
1980	-0.31%	-0.14%	1.03%	0.22%	-0.03%	-0.30%	-0.03%	-0.05%	0.35%	1.10%	0.96%	0.72%	0.29%
1981	1.17%	0.73%	-0.03%	0.76%	0.34%	0.17%	0.32%	0.55%	0.90%	-0.87%	-0.67%	0.52%	0.32%
1982	0.14%	-1.90%	-0.27%	-0.24%	-0.13%	0.02%	0.06%	-7.36%	-0.88%	0.71%	0.32%	0.08%	-0.79%
1983	0.29%	0.14%	0.00%	-0.01%	-0.02%	-0.01%	0.14%	0.07%	0.00%	0.04%	0.91%	0.46%	0.17%
1984	0.08%	0.15%	0.00%	0.01%	0.02%	0.05%	0.05%	0.14%	0.49%	1.13%	0.68%	0.69%	0.29%
1985	0.95%	0.40%	0.47%	0.47%	0.38%	0.39%	0.15%	0.18%	0.60%	0.56%	0.32%	0.23%	0.43%
1986	0.40%	0.50%	0.09%	0.55%	0.02%	0.02%	-0.05%	-0.05%	0.21%	1.09%	0.80%	0.62%	0.35%
1987	0.41%	-0.06%	-0.21%	-0.56%	-0.57%	0.17%	-0.17%	0.10%	1.45%	0.39%	0.33%	0.28%	0.13%
1988	0.87%	1.78%	1.54%	0.77%	0.41%	0.64%	2.80%	3.94%	-1.36%	-1.76%	0.12%	0.42%	0.85%
1989	0.23%	0.06%	0.31%	0.27%	0.15%	0.33%	0.41%	0.42%	1.06%	0.07%	0.18%	0.15%	0.30%
1990	-0.99%	-0.61%	0.76%	-1.23%	-0.24%	-0.13%	0.08%	0.39%	0.69%	4.15%	0.23%	1.93%	0.42%
1991	-0.14%	-3.25%	-2.93%	-5.07%	-4.01%	-1.57%	-0.15%	0.01%	0.48%	1.96%	1.28%	1.27%	-1.01%
AVG:	0.45%	0.46%	0.30%	0.15%	0.19%	0.35%	0.26%	0.07%	0.68%	0.96%	0.68%	0.43%	0.41%
MIN:	-14.17%	-9.30%	-8.11%	-5.07%	-4.01%	-1.59%	-0.92%	-7.36%	-1.36%	-1.76%	-1.71%	-6.03%	-2.09%
MAX:	3.85%	6.11%	4.39%	3.01%	4.75%	9.93%	5.46%	3.94%	6.22%	6.62%	2.62%	3.64%	2.22%

Table 4.4.6-27 Difference in simulated monthly average chloride concentration (%) at Clifton Court Forebay, FDM results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.10%	0.04%	0.10%	0.33%	0.10%	0.10%	0.04%	0.04%	-0.18%	0.36%	1.43%	3.28%	0.48%
1923	4.95%	1.79%	-1.33%	-1.26%	-0.48%	0.14%	0.11%	0.02%	0.29%	0.14%	-0.01%	0.88%	0.44%
1924	1.23%	0.12%	-1.15%	2.73%	-0.20%	0.03%	0.04%	0.22%	0.32%	0.26%	-0.63%	-3.32%	-0.03%
1925	-0.96%	0.75%	-2.54%	-2.43%	-0.63%	0.56%	0.52%	0.17%	3.34%	2.78%	0.62%	1.51%	0.31%
1926	0.52%	-0.18%	0.72%	0.57%	0.19%	0.24%	0.51%	0.24%	0.49%	0.69%	0.56%	0.91%	0.46%
1927	0.67%	0.52%	0.77%	0.59%	0.93%	0.49%	0.08%	0.22%	0.05%	-0.16%	3.95%	3.65%	0.98%
1928	1.26%	-3.61%	4.37%	3.94%	1.07%	0.20%	0.05%	-0.15%	-1.33%	-0.18%	1.05%	0.52%	0.60%
1929	-0.01%	0.59%	2.07%	-0.78%	1.62%	1.77%	0.49%	0.16%	6.61%	7.62%	0.03%	-1.02%	1.60%
1930	-0.05%	2.20%	-0.35%	0.30%	0.29%	0.33%	0.19%	0.22%	0.65%	1.13%	3.32%	4.34%	1.05%
1931	1.40%	-1.34%	1.72%	1.01%	-0.12%	-0.69%	-0.52%	-0.19%	0.63%	0.52%	0.33%	0.46%	0.27%
1932	1.59%	-0.86%	-0.11%	-0.03%	-0.04%	0.31%	0.08%	0.11%	0.70%	1.46%	0.74%	0.82%	0.40%
1933	0.36%	0.29%	0.25%	0.32%	0.45%	0.40%	0.17%	0.38%	0.64%	0.83%	0.53%	0.59%	0.43%
1934	0.37%	0.26%	0.32%	0.53%	0.17%	0.47%	0.28%	0.14%	0.26%	0.62%	1.14%	-1.57%	0.25%
1935	-0.83%	-0.62%	-4.19%	-1.03%	-0.52%	1.99%	0.56%	-0.05%	0.64%	1.57%	0.65%	0.32%	-0.13%
1936	0.44%	0.95%	-0.31%	2.02%	0.43%	1.32%	0.59%	0.23%	0.36%	3.47%	1.95%	2.28%	1.14%
1937	1.31%	0.70%	0.16%	-0.70%	0.45%	-0.09%	-0.13%	0.23%	-0.12%	4.05%	0.63%	1.31%	0.65%
1938	0.82%	0.14%	-1.52%	-0.63%	0.00%	-0.01%	-0.02%	0.00%	-0.09%	0.44%	1.99%	8.01%	0.76%
1939	8.79%	3.79%	3.97%	2.34%	1.41%	0.48%	0.33%	0.17%	0.67%	0.99%	0.11%	0.13%	1.93%
1940	0.24%	0.36%	0.57%	0.46%	0.05%	0.07%	0.10%	-0.12%	0.36%	3.04%	2.26%	-2.83%	0.38%
1941	-13.52%	-9.19%	3.39%	0.03%	0.03%	-0.07%	-0.10%	0.06%	-1.84%	0.09%	-0.63%	0.89%	-1.74%
1942	6.36%	3.09%	1.10%	0.06%	0.06%	0.00%	0.03%	0.03%	-0.18%	-3.51%	2.85%	6.94%	1.40%
1943	9.17%	9.61%	9.14%	-0.11%	0.29%	0.01%	0.06%	3.77%	-1.18%	0.85%	6.03%	5.47%	3.59%
1944	4.15%	1.70%	0.25%	1.68%	-0.60%	0.30%	0.13%	0.12%	0.62%	1.31%	1.22%	0.74%	0.97%
1945	0.17%	3.80%	7.25%	1.37%	0.47%	0.02%	0.02%	0.00%	0.30%	1.02%	1.63%	2.65%	1.56%
1946	1.58%	0.12%	0.00%	0.20%	-3.76%	0.50%	0.64%	-0.13%	-0.70%	1.00%	1.33%	1.39%	0.18%
1947	-0.35%	-0.65%	3.46%	2.48%	0.18%	-0.06%	-0.10%	-0.03%	4.35%	-0.05%	-0.51%	0.31%	0.75%
1948	0.49%	0.94%	0.23%	0.19%	-0.46%	-0.09%	0.03%	0.08%	0.67%	1.28%	0.65%	0.53%	0.38%
1949	-0.47%	-0.40%	2.72%	0.89%	0.65%	0.46%	0.06%	2.09%	0.21%	0.90%	-1.32%	-3.36%	0.20%
1950	-0.43%	2.35%	-0.47%	0.21%	0.28%	0.93%	0.90%	0.50%	0.27%	0.96%	0.55%	1.99%	0.67%
1951	3.14%	0.00%	0.09%	0.23%	0.12%	0.06%	0.08%	-0.11%	-0.37%	0.54%	1.05%	0.46%	0.44%
1952	0.96%	-0.44%	-1.08%	0.06%	0.01%	0.05%	-0.01%	0.01%	-0.09%	0.80%	1.59%	3.82%	0.47%
1953	2.65%	1.35%	4.96%	1.05%	0.05%	0.16%	0.14%	0.14%	0.94%	1.02%	0.75%	1.86%	1.26%
1954	3.21%	2.57%	1.46%	-2.43%	0.04%	0.13%	0.09%	0.11%	0.74%	1.38%	0.79%	0.45%	0.71%
1955	-0.60%	-1.54%	-0.53%	0.03%	-0.05%	-0.56%	-0.15%	0.18%	0.82%	1.04%	0.75%	-0.10%	-0.06%
1956	-0.51%	-0.45%	0.13%	0.03%	0.01%	0.13%	0.10%	0.09%	-1.51%	-0.19%	2.00%	9.47%	0.77%
1957	14.02%	7.87%	-0.05%	-3.30%	4.86%	0.94%	0.17%	0.03%	0.46%	1.70%	0.94%	0.63%	2.36%
1958	2.54%	5.58%	2.98%	0.43%	0.08%	0.03%	-0.12%	-0.17%	0.01%	0.64%	1.43%	8.00%	1.79%
1959	8.68%	8.18%	5.48%	2.08%	-0.22%	0.22%	0.14%	0.18%	1.48%	1.59%	-0.38%	-1.30%	2.18%
1960	-1.03%	1.60%	-0.74%	-0.20%	0.09%	0.34%	0.09%	0.14%	0.79%	0.51%	0.02%	-1.63%	0.00%
1961	-0.27%	2.46%	-3.53%	1.73%	1.34%	1.03%	0.86%	0.50%	2.00%	0.87%	1.05%	1.39%	0.79%
1962	1.10%	-1.13%	-3.52%	-0.78%	-0.31%	-0.34%	-0.11%	0.04%	0.93%	1.07%	0.00%	0.29%	-0.23%
1963	0.99%	1.34%	2.16%	0.40%	-0.06%	0.08%	0.04%	0.15%	4.65%	-1.90%	1.99%	3.01%	1.07%
1964	3.93%	2.97%	1.82%	1.25%	1.02%	0.97%	0.00%	-0.54%	0.89%	1.18%	1.18%	3.24%	1.49%
1965	3.14%	-0.67%	0.15%	0.09%	0.07%	0.21%	0.10%	0.10%	-0.42%	1.51%	4.00%	3.99%	1.02%
1966	2.66%	0.32%	0.20%	0.46%	0.16%	0.00%	-0.09%	0.30%	0.80%	0.71%	0.21%	0.13%	0.49%
1967	0.33%	0.97%	0.62%	0.05%	0.30%	0.15%	0.01%	0.00%	-0.04%	0.12%	0.62%	1.81%	0.41%
1968	2.17%	1.40%	1.14%	0.67%	0.18%	0.11%	0.08%	0.24%	0.72%	0.92%	0.68%	0.77%	0.76%
1969	0.33%	0.06%	0.45%	0.10%	-0.01%	0.12%	-0.02%	-0.02%	0.01%	0.44%	2.05%	4.28%	0.65%
1970	5.96%	3.66%	-0.01%	-0.07%	0.06%	0.04%	0.02%	0.07%	0.43%	1.18%	1.03%	0.69%	1.09%
1971	0.41%	-0.03%	0.31%	0.12%	1.18%	-0.18%	0.10%	0.05%	0.92%	1.82%	1.16%	1.77%	0.64%
1972	2.56%	1.17%	0.64%	3.00%	5.05%	1.21%	0.08%	0.22%	0.71%	1.10%	0.46%	0.23%	1.37%
1973	-0.61%	-1.65%	-0.68%	0.02%	0.24%	0.23%	0.09%	-0.02%	0.03%	1.57%	1.77%	2.37%	0.28%
1974	2.88%	1.23%	0.13%	0.05%	0.10%	0.05%	0.02%	0.03%	-0.56%	0.81%	1.58%	3.94%	0.86%
1975	10.66%	14.68%	5.96%	2.43%	3.80%	1.25%	0.12%	0.10%	-0.84%	0.27%	1.04%	4.87%	3.69%
1976	6.03%	3.80%	4.06%	1.85%	-4.36%	-1.20%	-0.01%	0.16%	0.80%	0.61%	0.16%	0.20%	1.01%
1977	-0.51%	-1.91%	-1.02%	-1.62%	-1.19%	-0.47%	0.78%	1.14%	0.59%	0.89%	1.55%	1.04%	-0.06%
1978	0.51%	0.18%	0.80%	0.03%	0.06%	0.04%	0.02%	-0.03%	0.07%	5.06%	2.30%	1.20%	0.85%
1979	0.67%	0.38%	0.07%	0.29%	-0.06%	-0.03%	-0.01%	-0.02%	-0.09%	0.74%	0.03%	-0.02%	0.16%
1980	0.35%	0.59%	0.47%	0.14%	0.10%	0.86%	0.12%	-0.18%	1.61%	2.75%	2.48%	3.22%	1.04%
1981	5.33%	1.79%	-1.04%	3.25%	0.65%	0.22%	0.13%	0.22%	0.75%	0.53%	0.34%	0.44%	1.05%
1982	0.08%	-0.94%	-0.05%	0.12%	0.27%	0.01%	-0.09%	-7.35%	-1.02%	0.42%	3.55%	5.16%	0.01%
1983	1.49%	0.15%	0.02%	0.01%	0.00%	0.02%	0.02%	0.00%	0.00%	-0.05%	1.04%	1.06%	0.31%
1984	0.35%	0.06%	0.00%	0.00%	0.02%	0.05%	0.06%	0.15%	0.40%	1.09%	1.55%	1.52%	0.44%
1985	2.02%	0.81%	0.50%	0.48%	0.41%	0.39%	0.15%	0.17%	0.59%	0.54%	0.31%	0.23%	0.55%
1986	0.42%	0.21%	-0.96%	0.00%	0.03%	0.16%	-0.07%	0.23%	-0.07%	2.57%	4.10%	5.86%	1.04%
1987	4.09%	0.92%	-0.88%	0.93%	-2.52%	-0.45%	-0.27%	0.07%	0.70%	1.18%	0.88%	0.25%	0.41%
1988	0.29%	0.68%	0.66%	0.35%	0.28%	0.67%	0.41%	0.46%	0.41%	1.04%	0.53%	0.79%	0.55%
1989	0.97%	0.99%	0.26%	0.43%	0.04%	0.27%	0.29%	0.48%	0.74%	-0.22%	-0.20%	0.51%	0.38%
1990	-0.69%	-2.03%	1.28%	-0.71%	-1.17%	-0.76%	-0.30%	0.04%	0.26%	3.89%	1.23%	0.37%	0.12%
1991	-0.73%	-1.81%	0.09%	-2.26%	-2.08%	-0.48%	0.01%	0.07%	0.45%	1.09%	0.68%	0.51%	-0.37%
AVG:	1.70%	1.04%	0.76%	0.37%	0.16%	0.23%	0.12%	0.09%	0.52%	1.09%	1.15%	1.64%	0.74%
MIN:	-13.52%	-9.19%	-4.19%	-3.30%	-4.36%	-1.20%	-0.52%	-7.35%	-1.84%	-3.51%	-1.32%	-3.36%	-1.74%
MAX:	14.02%	14.68%	9.14%	3.94%	5.05%	1.99%	0.90%	3.77%	6.61%	7.62%	6.03%	9.47%	3.69%

Table 4.4.6-28 Simulated running annual average bromate concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			5.50	5.41
1923	5.29	5.44	5.81	6.07
1924	6.85	7.47	8.09	8.65
1925	8.18	7.54	6.69	6.43
1926	6.37	6.42	6.98	6.05
1927	5.76	5.56	4.96	5.33
1928	5.35	5.38	5.45	5.71
1929	6.50	6.94	7.63	8.20
1930	7.34	6.92	6.89	6.55
1931	7.11	7.88	8.03	8.26
1932	7.86	7.23	6.34	6.07
1933	6.20	6.35	7.05	7.56
1934	7.47	7.46	7.67	7.44
1935	7.46	7.30	6.65	6.27
1936	6.43	6.37	6.39	6.38
1937	6.75	6.89	6.87	6.38
1938	5.92	5.53	4.96	4.01
1939	4.03	4.55	5.86	7.35
1940	7.56	7.19	6.35	5.96
1941	5.64	5.84	5.41	4.93
1942	4.83	4.75	4.75	4.31
1943	4.32	4.33	4.63	6.06
1944	6.62	6.68	7.56	7.05
1945	6.68	6.66	6.10	6.09
1946	5.71	5.63	5.65	5.69
1947	6.07	6.08	6.57	6.94
1948	7.17	7.12	6.53	6.21
1949	6.47	6.53	6.73	7.05
1950	6.37	6.25	6.03	5.18
1951	5.10	5.18	4.98	5.36
1952	5.46	5.45	4.89	3.65
1953	3.50	3.48	3.68	4.86
1954	5.04	4.98	5.50	5.57
1955	5.47	5.58	5.84	6.16
1956	6.33	6.31	5.54	4.77
1957	5.15	5.20	5.58	5.78
1958	5.46	5.48	4.97	4.30
1959	4.34	4.33	5.12	6.18
1960	6.21	6.25	6.75	6.84
1961	6.69	6.65	6.60	6.60
1962	6.78	6.75	6.34	5.24
1963	4.86	4.88	4.30	5.08
1964	5.17	5.14	6.08	6.24
1965	6.06	6.03	5.12	4.71
1966	4.71	4.68	5.25	5.54
1967	5.77	5.82	4.92	3.86
1968	3.81	3.81	4.65	5.74
1969	6.03	5.75	5.19	4.21
1970	4.03	4.34	4.45	5.32
1971	4.97	4.91	4.69	4.93
1972	5.42	5.40	5.98	5.53
1973	5.44	5.44	5.27	5.23
1974	4.90	4.93	4.49	4.52
1975	5.24	5.24	5.23	4.82
1976	5.18	5.77	7.74	9.63
1977	9.57	9.86	9.33	9.21
1978	8.68	7.82	6.68	6.02
1979	5.92	5.88	6.17	5.97
1980	5.87	5.96	5.48	5.56
1981	5.48	5.46	6.63	6.02
1982	6.12	5.95	4.52	3.63
1983	3.59	3.44	3.13	3.07
1984	2.78	3.11	3.81	4.87
1985	5.04	5.06	5.99	6.39
1986	6.68	6.78	5.73	5.88
1987	6.24	6.14	7.28	7.09
1988	6.34	6.56	6.48	7.29
1989	7.84	7.42	7.25	6.57
1990	6.50	6.91	7.18	8.38
1991	9.12	9.01	9.04	

Table 4.4.6-29 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				0.32%
1923	0.31%	0.32%	0.10%	0.05%
1924	0.07%	0.21%	0.16%	0.07%
1925	-0.11%	-0.30%	-0.27%	-0.32%
1926	-0.11%	0.01%	0.08%	0.20%
1927	0.30%	0.19%	0.56%	0.08%
1928	-0.07%	-0.02%	-0.36%	0.04%
1929	0.19%	0.48%	0.42%	0.54%
1930	0.51%	0.29%	0.80%	0.60%
1931	0.34%	0.27%	-0.01%	0.47%
1932	0.71%	0.82%	0.92%	0.29%
1933	0.17%	0.27%	0.24%	0.12%
1934	0.12%	0.04%	-0.97%	-1.21%
1935	-1.00%	-1.10%	-0.30%	0.11%
1936	0.06%	0.09%	0.26%	0.27%
1937	0.23%	0.24%	0.12%	0.15%
1938	0.07%	-0.01%	0.04%	0.17%
1939	0.41%	0.49%	0.44%	0.24%
1940	0.09%	0.01%	-0.52%	-2.96%
1941	-3.14%	-3.02%	-3.09%	-0.38%
1942	-0.39%	-0.39%	0.24%	1.12%
1943	1.23%	1.16%	0.94%	0.16%
1944	0.12%	0.20%	0.21%	0.42%
1945	0.51%	0.49%	0.58%	0.33%
1946	0.22%	0.24%	0.22%	0.18%
1947	0.39%	0.39%	0.47%	0.54%
1948	0.30%	0.28%	0.21%	0.36%
1949	0.58%	0.62%	0.81%	0.56%
1950	0.46%	0.43%	0.21%	0.28%
1951	0.26%	0.25%	0.20%	0.16%
1952	0.14%	0.10%	0.24%	0.42%
1953	0.46%	0.52%	0.51%	0.84%
1954	0.60%	0.61%	0.51%	0.09%
1955	0.33%	0.38%	0.28%	0.16%
1956	0.11%	0.05%	0.22%	0.73%
1957	0.66%	0.66%	0.51%	0.53%
1958	0.58%	0.54%	0.65%	0.44%
1959	0.49%	0.61%	0.75%	0.57%
1960	0.68%	0.69%	0.13%	0.01%
1961	0.07%	0.10%	0.23%	0.26%
1962	-0.02%	-0.02%	0.31%	0.82%
1963	0.89%	0.73%	0.52%	0.21%
1964	0.41%	0.46%	1.10%	1.14%
1965	1.05%	1.04%	0.43%	0.48%
1966	0.53%	0.56%	0.41%	0.36%
1967	0.32%	0.26%	0.41%	0.37%
1968	0.43%	0.57%	0.70%	0.64%
1969	0.52%	0.45%	0.42%	0.55%
1970	0.63%	0.65%	0.47%	0.16%
1971	0.18%	0.18%	0.27%	0.62%
1972	1.07%	1.10%	0.88%	0.77%
1973	0.28%	0.25%	0.25%	0.33%
1974	0.35%	0.33%	0.48%	1.52%
1975	1.58%	1.59%	1.62%	0.93%
1976	0.43%	0.89%	0.69%	-0.03%
1977	-0.05%	-0.38%	-0.41%	0.09%
1978	0.23%	0.28%	0.33%	0.30%
1979	0.29%	0.31%	0.19%	0.09%
1980	0.07%	0.05%	0.15%	0.34%
1981	0.44%	0.51%	0.18%	-0.12%
1982	-0.21%	-0.40%	-0.33%	-0.10%
1983	-0.08%	0.08%	0.14%	0.10%
1984	0.13%	0.23%	0.33%	0.45%
1985	0.48%	0.49%	0.34%	0.24%
1986	0.22%	0.18%	0.26%	0.14%
1987	0.01%	0.04%	-0.03%	0.25%
1988	0.41%	0.75%	0.68%	0.38%
1989	0.37%	0.08%	0.14%	0.02%
1990	-0.10%	0.06%	0.31%	-0.60%
1991	-1.20%	-1.30%	-1.28%	

Table 4.4.6-30 Difference in simulated running annual average bromate concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				0.99%
1923	0.93%	0.94%	0.57%	0.22%
1924	0.38%	0.38%	-0.18%	-0.48%
1925	-0.73%	-0.77%	-0.11%	0.25%
1926	0.44%	0.42%	0.39%	0.47%
1927	0.51%	0.46%	1.04%	0.73%
1928	0.90%	0.86%	0.33%	0.60%
1929	0.44%	0.65%	0.42%	0.38%
1930	0.34%	0.18%	1.03%	1.03%
1931	0.85%	0.74%	0.12%	-0.04%
1932	0.05%	0.08%	0.14%	0.32%
1933	0.36%	0.39%	0.37%	0.35%
1934	0.33%	0.29%	-0.05%	-0.64%
1935	-0.69%	-0.74%	-0.49%	0.17%
1936	0.40%	0.44%	0.71%	0.76%
1937	0.47%	0.39%	0.25%	0.15%
1938	0.20%	0.20%	0.90%	2.63%
1939	3.06%	2.62%	1.33%	0.29%
1940	0.11%	0.19%	0.01%	-2.39%
1941	-2.57%	-2.56%	-2.55%	0.96%
1942	0.98%	1.07%	1.90%	3.53%
1943	3.58%	3.28%	3.42%	1.47%
1944	1.36%	1.59%	0.86%	1.11%
1945	1.21%	1.20%	1.45%	0.55%
1946	0.39%	0.36%	0.18%	0.30%
1947	0.45%	0.56%	0.23%	0.26%
1948	0.16%	0.08%	0.25%	0.32%
1949	0.44%	0.49%	-0.08%	-0.07%
1950	-0.17%	-0.19%	0.56%	0.70%
1951	0.68%	0.59%	0.51%	0.13%
1952	0.12%	0.11%	0.27%	0.92%
1953	1.02%	1.12%	0.89%	0.94%
1954	0.66%	0.67%	0.53%	-0.31%
1955	-0.15%	-0.12%	-0.21%	-0.05%
1956	-0.02%	-0.09%	0.77%	2.63%
1957	2.45%	2.49%	1.55%	1.08%
1958	1.14%	1.09%	1.79%	2.41%
1959	2.59%	2.73%	1.43%	0.06%
1960	-0.10%	-0.12%	-0.16%	-0.15%
1961	0.04%	0.08%	0.52%	0.42%
1962	0.18%	0.13%	-0.09%	0.32%
1963	0.42%	0.46%	0.98%	1.51%
1964	1.64%	1.60%	1.54%	1.03%
1965	0.92%	0.88%	1.02%	1.13%
1966	1.16%	1.21%	0.47%	0.31%
1967	0.28%	0.22%	0.36%	0.51%
1968	0.56%	0.67%	0.60%	0.32%
1969	0.27%	0.21%	0.69%	1.71%
1970	1.77%	1.70%	1.12%	0.23%
1971	0.25%	0.25%	0.37%	0.74%
1972	1.21%	1.24%	0.96%	0.35%
1973	-0.15%	-0.20%	0.09%	0.89%
1974	0.92%	0.89%	1.03%	3.49%
1975	3.51%	3.51%	3.57%	2.08%
1976	0.94%	1.03%	0.52%	-0.47%
1977	-0.40%	-0.49%	-0.37%	0.11%
1978	0.33%	0.36%	0.36%	0.38%
1979	0.39%	0.41%	0.15%	0.13%
1980	0.19%	0.30%	0.84%	1.40%
1981	1.64%	1.59%	0.97%	0.34%
1982	0.09%	-0.08%	0.54%	0.94%
1983	0.91%	1.12%	0.30%	0.18%
1984	0.21%	0.29%	0.55%	0.83%
1985	0.85%	0.86%	0.51%	0.13%
1986	0.08%	0.03%	0.72%	1.11%
1987	0.97%	1.02%	0.39%	0.19%
1988	0.32%	0.37%	0.40%	0.45%
1989	0.42%	0.39%	0.23%	-0.10%
1990	-0.25%	-0.20%	0.02%	-0.20%
1991	-0.56%	-0.57%	-0.59%	

Table 4.4.6-31 Simulated running annual average total trihalomethanes concentration (ug/L) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922			66.7	66.6
1923	66.0	66.9	69.9	71.6
1924	75.7	80.3	86.4	93.7
1925	91.1	86.3	77.8	73.5
1926	73.3	73.6	78.9	72.8
1927	71.6	70.4	65.3	66.7
1928	66.8	67.0	67.5	69.5
1929	73.6	76.3	82.3	90.0
1930	85.6	83.0	83.2	77.7
1931	80.4	85.6	87.4	91.5
1932	89.5	85.1	76.0	71.2
1933	71.7	72.7	79.1	86.3
1934	85.9	85.8	88.9	85.6
1935	85.7	84.7	78.4	73.3
1936	74.0	73.7	73.7	73.6
1937	75.6	76.5	76.4	73.9
1938	71.6	69.6	64.2	55.3
1939	55.3	58.1	70.8	82.6
1940	83.6	81.4	73.0	70.7
1941	69.2	70.3	66.3	60.9
1942	60.5	60.0	60.1	57.2
1943	57.3	57.3	60.2	72.1
1944	75.0	75.3	84.6	80.5
1945	78.4	78.3	71.9	72.6
1946	71.1	70.6	70.7	69.8
1947	71.3	71.4	76.4	79.6
1948	80.8	80.4	74.8	71.8
1949	73.3	73.7	75.1	78.1
1950	74.5	73.9	72.3	66.5
1951	66.2	66.6	64.7	66.9
1952	67.3	67.3	62.6	53.0
1953	52.4	52.3	53.8	61.3
1954	62.1	61.8	66.4	68.2
1955	67.7	68.3	70.8	73.8
1956	74.7	74.6	67.4	59.8
1957	62.0	62.2	65.9	67.7
1958	65.9	65.9	61.3	56.6
1959	56.7	56.7	63.5	71.6
1960	71.7	72.0	76.9	78.4
1961	77.7	77.4	76.9	76.6
1962	77.5	77.3	73.6	65.3
1963	63.6	63.7	58.4	64.6
1964	65.0	64.8	73.3	74.7
1965	74.0	73.9	65.6	62.4
1966	62.4	62.2	67.5	69.0
1967	69.9	70.2	62.1	54.1
1968	53.9	53.9	61.3	69.7
1969	71.0	69.6	64.6	57.0
1970	56.1	57.6	58.7	66.1
1971	64.7	64.4	62.2	62.3
1972	64.5	64.4	69.8	68.3
1973	67.8	67.8	66.2	66.3
1974	64.9	65.0	60.9	58.8
1975	62.2	62.2	62.2	59.6
1976	61.8	65.9	86.7	104.4
1977	104.0	106.0	100.0	99.7
1978	96.6	90.6	78.6	70.0
1979	69.5	69.3	72.2	71.2
1980	70.8	71.3	66.6	66.1
1981	65.8	65.7	76.7	73.7
1982	74.2	73.2	60.2	52.9
1983	52.7	52.0	50.2	49.9
1984	48.8	50.4	55.7	64.1
1985	64.8	64.9	73.2	75.1
1986	76.4	77.0	67.4	68.0
1987	69.9	69.4	81.1	80.8
1988	77.1	78.4	77.0	84.8
1989	87.3	84.9	82.6	74.9
1990	74.6	77.0	79.8	93.9
1991	98.6	97.9	98.2	

Table 4.4.6-32 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				0.24%
1923	0.23%	0.24%	0.09%	0.03%
1924	0.05%	0.16%	0.06%	0.14%
1925	0.05%	-0.07%	0.03%	-0.21%
1926	-0.12%	-0.06%	0.01%	0.09%
1927	0.12%	0.06%	0.31%	0.04%
1928	-0.01%	0.01%	-0.25%	0.01%
1929	0.08%	0.27%	0.20%	0.40%
1930	0.38%	0.23%	0.79%	0.54%
1931	0.43%	0.41%	0.14%	0.79%
1932	0.90%	0.95%	0.94%	0.20%
1933	0.16%	0.23%	0.23%	0.04%
1934	0.04%	-0.01%	-1.23%	-1.23%
1935	-1.15%	-1.21%	-0.19%	-0.07%
1936	-0.08%	-0.07%	0.12%	0.15%
1937	0.14%	0.14%	0.03%	0.00%
1938	-0.04%	-0.08%	-0.04%	0.04%
1939	0.13%	0.19%	0.26%	0.15%
1940	0.10%	0.05%	-0.55%	-3.05%
1941	-3.13%	-3.07%	-2.96%	-0.26%
1942	-0.26%	-0.26%	0.14%	0.53%
1943	0.56%	0.53%	0.41%	0.11%
1944	0.10%	0.15%	0.17%	0.27%
1945	0.30%	0.29%	0.35%	0.21%
1946	0.17%	0.18%	0.15%	0.12%
1947	0.21%	0.21%	0.35%	0.41%
1948	0.31%	0.30%	0.17%	0.33%
1949	0.45%	0.47%	0.68%	0.45%
1950	0.38%	0.36%	0.14%	0.17%
1951	0.16%	0.16%	0.11%	0.09%
1952	0.08%	0.06%	0.13%	0.17%
1953	0.17%	0.19%	0.22%	0.52%
1954	0.43%	0.43%	0.38%	0.10%
1955	0.20%	0.22%	0.14%	0.03%
1956	0.02%	-0.01%	0.11%	0.38%
1957	0.34%	0.34%	0.26%	0.33%
1958	0.37%	0.35%	0.39%	0.20%
1959	0.22%	0.27%	0.55%	0.44%
1960	0.49%	0.50%	-0.11%	-0.13%
1961	-0.11%	-0.09%	0.08%	0.09%
1962	-0.02%	-0.02%	0.28%	0.50%
1963	0.52%	0.45%	0.23%	0.15%
1964	0.22%	0.24%	0.93%	1.06%
1965	1.02%	1.02%	0.39%	0.28%
1966	0.29%	0.30%	0.23%	0.19%
1967	0.18%	0.16%	0.22%	0.15%
1968	0.17%	0.22%	0.44%	0.48%
1969	0.43%	0.40%	0.31%	0.31%
1970	0.34%	0.36%	0.24%	0.09%
1971	0.09%	0.09%	0.13%	0.39%
1972	0.60%	0.61%	0.49%	0.35%
1973	0.14%	0.13%	0.12%	0.24%
1974	0.24%	0.24%	0.31%	0.84%
1975	0.94%	0.94%	0.96%	0.48%
1976	0.22%	0.60%	0.55%	-0.08%
1977	-0.09%	-0.35%	-0.40%	0.20%
1978	0.28%	0.31%	0.30%	0.22%
1979	0.21%	0.22%	0.14%	0.01%
1980	0.00%	0.00%	0.04%	0.25%
1981	0.29%	0.32%	0.10%	-0.13%
1982	-0.16%	-0.24%	-0.15%	-0.03%
1983	-0.03%	0.03%	0.04%	0.03%
1984	0.04%	0.07%	0.17%	0.32%
1985	0.33%	0.33%	0.25%	0.17%
1986	0.16%	0.14%	0.17%	0.08%
1987	0.01%	0.03%	-0.01%	0.23%
1988	0.30%	0.47%	0.42%	0.20%
1989	0.20%	0.04%	0.09%	-0.04%
1990	-0.10%	0.01%	0.28%	-0.82%
1991	-1.23%	-1.30%	-1.28%	

Table 4.4.6-33 Percentage difference in simulated running annual average total trihalomethanes concentration (%) for source water from Rock Slough Entrance at Old River, based on FDM estimated salinity for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1922				0.97%
1923	0.95%	0.96%	0.68%	0.25%
1924	0.35%	0.36%	-0.34%	-0.61%
1925	-0.75%	-0.80%	-0.06%	0.23%
1926	0.30%	0.30%	0.31%	0.36%
1927	0.37%	0.34%	0.72%	0.43%
1928	0.49%	0.48%	0.05%	0.30%
1929	0.27%	0.42%	0.20%	0.26%
1930	0.23%	0.12%	1.03%	0.99%
1931	0.91%	0.86%	0.15%	0.01%
1932	0.05%	0.05%	0.06%	0.21%
1933	0.23%	0.26%	0.27%	0.28%
1934	0.27%	0.25%	-0.17%	-0.69%
1935	-0.71%	-0.74%	-0.41%	0.15%
1936	0.25%	0.27%	0.54%	0.59%
1937	0.45%	0.42%	0.27%	0.23%
1938	0.26%	0.26%	0.67%	1.28%
1939	1.43%	1.31%	0.59%	0.17%
1940	0.09%	0.14%	-0.14%	-2.65%
1941	-2.73%	-2.72%	-2.57%	0.62%
1942	0.62%	0.66%	1.22%	1.81%
1943	1.82%	1.69%	1.94%	1.41%
1944	1.38%	1.50%	0.91%	0.76%
1945	0.78%	0.78%	0.96%	0.53%
1946	0.47%	0.46%	0.28%	0.18%
1947	0.24%	0.30%	0.04%	0.17%
1948	0.13%	0.09%	0.21%	0.19%
1949	0.26%	0.29%	-0.29%	-0.21%
1950	-0.27%	-0.29%	0.48%	0.63%
1951	0.63%	0.59%	0.44%	0.13%
1952	0.13%	0.12%	0.20%	0.36%
1953	0.38%	0.41%	0.35%	0.57%
1954	0.47%	0.47%	0.40%	-0.20%
1955	-0.14%	-0.12%	-0.21%	-0.11%
1956	-0.10%	-0.14%	0.49%	1.53%
1957	1.43%	1.46%	0.83%	0.67%
1958	0.73%	0.71%	1.10%	1.14%
1959	1.22%	1.28%	0.52%	-0.09%
1960	-0.16%	-0.17%	-0.22%	-0.15%
1961	-0.07%	-0.05%	0.44%	0.39%
1962	0.30%	0.27%	0.03%	0.18%
1963	0.21%	0.22%	0.54%	1.14%
1964	1.18%	1.17%	1.33%	0.98%
1965	0.94%	0.92%	0.85%	0.84%
1966	0.84%	0.87%	0.37%	0.18%
1967	0.17%	0.14%	0.21%	0.20%
1968	0.22%	0.26%	0.31%	0.22%
1969	0.20%	0.17%	0.51%	0.97%
1970	0.98%	0.98%	0.56%	0.15%
1971	0.15%	0.15%	0.20%	0.47%
1972	0.69%	0.70%	0.55%	0.08%
1973	-0.14%	-0.16%	0.08%	0.75%
1974	0.76%	0.75%	0.76%	1.98%
1975	2.12%	2.12%	2.16%	1.10%
1976	0.54%	0.64%	0.34%	-0.43%
1977	-0.38%	-0.45%	-0.30%	0.25%
1978	0.38%	0.39%	0.29%	0.30%
1979	0.31%	0.31%	0.12%	0.09%
1980	0.11%	0.16%	0.51%	1.04%
1981	1.13%	1.10%	0.74%	0.16%
1982	0.07%	0.00%	0.28%	0.44%
1983	0.43%	0.49%	0.09%	0.06%
1984	0.06%	0.09%	0.32%	0.63%
1985	0.64%	0.65%	0.42%	0.10%
1986	0.09%	0.06%	0.55%	0.89%
1987	0.82%	0.85%	0.39%	0.17%
1988	0.23%	0.25%	0.30%	0.42%
1989	0.41%	0.39%	0.24%	-0.13%
1990	-0.20%	-0.16%	0.03%	-0.38%
1991	-0.65%	-0.65%	-0.66%	

Table 4.4.6-34 Simulated monthly average electrical conductivity (mS/cm) at Martinez/Benicia, G-model results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	29.571	29.282	24.170	20.595	8.233	10.044	11.520	5.029	8.275	17.986	25.394	28.432	18.211
1923	29.305	27.837	12.807	10.055	15.765	18.805	12.575	14.418	20.205	24.034	26.799	28.428	20.086
1924	29.010	28.039	27.754	26.756	22.592	21.096	23.541	26.730	27.749	26.706	27.859	29.800	26.469
1925	30.200	29.291	26.610	24.882	3.709	8.531	11.837	16.294	20.789	24.848	26.938	28.633	21.047
1926	29.552	28.912	28.359	23.004	7.952	16.085	13.924	17.578	23.743	26.745	28.025	29.470	22.779
1927	29.596	21.419	18.813	13.314	0.637	5.278	4.950	10.243	17.226	21.445	25.518	28.643	16.424
1928	29.179	26.428	24.895	19.993	16.083	1.344	8.239	14.379	20.576	23.361	26.075	28.930	19.957
1929	29.311	27.955	27.187	26.909	23.047	20.974	23.123	24.933	25.755	27.394	28.341	29.349	26.190
1930	30.163	29.135	22.951	16.252	16.840	12.380	17.170	20.626	23.861	26.483	27.973	29.470	22.775
1931	29.475	28.688	27.379	25.497	24.415	24.916	25.305	26.609	27.619	26.779	27.947	29.876	27.042
1932	30.021	29.059	20.018	15.852	14.147	17.849	19.542	20.067	20.829	24.295	26.574	28.425	22.223
1933	29.554	28.801	27.141	24.173	21.767	21.501	21.474	23.988	25.858	27.420	28.128	29.115	25.743
1934	30.275	29.013	26.132	20.836	18.716	19.486	20.759	23.986	25.370	26.944	28.781	29.940	25.020
1935	30.042	28.645	27.415	13.428	16.575	13.415	4.455	9.124	16.969	22.812	26.567	29.068	19.876
1936	29.171	28.203	28.084	11.175	2.314	8.601	11.329	14.431	20.182	24.061	26.805	29.137	19.458
1937	29.436	28.294	27.900	26.457	7.671	5.179	9.382	12.927	18.785	23.412	26.676	29.099	20.435
1938	29.815	22.461	3.490	8.132	0.486	0.328	1.637	2.041	5.234	16.732	25.308	26.605	11.856
1939	22.856	24.571	25.424	24.614	22.298	19.899	20.100	21.417	24.102	26.433	27.951	29.458	24.094
1940	28.922	28.253	28.435	11.846	3.415	1.004	2.318	11.445	19.481	22.751	25.965	28.709	17.712
1941	29.477	27.354	9.091	1.330	0.668	1.307	1.915	4.997	13.607	20.691	25.646	26.526	13.551
1942	26.984	28.082	5.279	2.021	0.513	7.757	4.778	6.525	12.184	19.650	25.544	26.586	13.825
1943	26.420	25.590	15.604	1.815	3.419	1.516	7.476	11.696	18.527	22.226	25.657	28.733	15.723
1944	29.601	28.595	27.934	26.462	15.610	14.901	17.905	20.337	22.836	25.606	28.085	29.737	23.967
1945	28.749	27.199	24.317	24.458	7.440	11.299	15.875	17.068	20.244	23.699	26.731	29.046	21.344
1946	29.719	27.184	3.658	4.987	10.018	15.273	18.090	18.556	20.985	23.919	26.775	28.615	18.982
1947	28.809	27.816	25.342	25.152	21.243	17.615	18.791	21.267	23.760	26.061	27.593	29.153	24.384
1948	28.970	28.379	28.063	25.512	21.799	19.719	12.306	10.361	16.680	22.637	26.537	28.850	22.484
1949	28.822	27.861	26.472	26.670	25.077	6.948	14.323	18.542	21.816	25.410	27.667	29.291	23.242
1950	29.126	28.563	27.680	19.510	10.650	14.764	14.837	15.449	18.886	23.029	26.605	28.909	21.501
1951	29.271	8.009	1.302	2.491	2.431	8.930	14.682	15.163	21.047	22.768	25.296	28.282	14.973
1952	29.153	27.228	10.313	1.630	2.108	2.753	2.440	2.334	5.687	16.935	25.321	23.613	12.460
1953	20.622	24.218	8.870	1.115	9.414	15.283	16.035	12.365	16.118	20.454	25.174	26.000	16.306
1954	26.850	27.241	27.293	12.841	4.182	5.253	6.236	11.264	19.993	23.668	26.133	28.368	18.277
1955	28.727	27.447	20.702	18.676	19.620	21.723	20.831	20.427	22.891	25.764	27.972	29.616	23.700
1956	29.189	28.477	1.762	0.335	1.525	6.728	12.034	7.228	14.018	20.761	25.672	26.438	14.514
1957	25.722	26.920	27.859	26.570	12.751	6.255	12.139	14.752	19.693	22.478	25.685	28.659	20.790
1958	26.962	26.619	21.275	9.439	0.312	1.139	1.060	3.629	8.668	18.221	25.413	25.181	13.993
1959	22.282	24.780	27.511	12.184	4.233	10.993	18.874	21.993	22.780	23.954	26.547	28.690	20.402
1960	28.992	27.789	26.829	26.038	15.769	15.792	18.881	20.107	23.592	26.484	27.619	29.094	23.915
1961	29.254	27.854	25.447	24.383	15.038	15.482	19.480	21.503	23.917	26.280	27.403	28.913	23.746
1962	28.986	28.015	25.795	24.930	6.835	11.394	17.706	18.959	21.184	24.020	26.796	28.814	21.953
1963	16.133	19.986	16.748	18.362	3.214	8.897	1.548	7.200	16.526	20.590	24.832	28.297	15.194
1964	29.205	20.510	22.507	20.341	19.230	21.805	18.481	19.573	23.642	26.337	27.478	28.704	23.151
1965	29.229	27.823	2.987	0.804	7.476	13.142	5.888	10.466	19.260	21.626	24.859	28.351	15.993
1966	29.311	23.416	20.839	13.331	11.992	13.142	17.290	19.613	22.036	24.354	26.867	29.156	20.946
1967	28.496	27.209	10.901	5.283	4.604	3.722	3.662	3.589	5.569	16.521	25.091	23.466	13.176
1968	20.782	24.359	25.720	13.849	3.736	7.412	14.969	20.780	23.666	24.716	26.780	29.077	19.654
1969	28.884	27.794	19.753	0.888	0.530	2.909	3.320	2.682	6.700	17.407	25.352	28.049	13.689
1970	23.107	24.025	5.290	0.248	1.373	6.343	13.977	18.835	22.258	21.251	24.451	28.251	15.784
1971	29.268	25.637	4.758	5.328	9.718	7.684	11.721	10.585	17.107	19.879	24.296	26.425	16.034
1972	27.203	28.238	26.200	24.580	17.175	11.473	17.559	22.364	21.462	23.136	26.625	29.084	22.925
1973	29.153	24.306	16.301	2.057	1.436	3.537	12.072	15.722	19.228	22.323	25.894	28.593	16.719
1974	29.348	6.485	2.885	0.628	5.931	1.012	2.134	9.213	16.301	21.330	25.746	24.795	12.151
1975	25.149	27.319	26.605	25.847	4.155	1.473	8.898	10.186	14.588	20.532	25.643	25.374	17.981
1976	22.971	25.134	26.621	26.758	24.426	21.430	21.760	25.337	28.064	28.977	29.325	30.029	25.903
1977	30.057	29.510	27.518	26.959	26.460	25.957	25.499	26.687	27.664	26.897	28.177	30.025	27.617
1978	30.016	29.130	26.187	3.450	3.814	2.793	4.733	9.701	15.443	20.883	25.687	28.492	16.694
1979	29.317	28.885	26.856	18.182	7.058	8.303	13.337	16.763	19.427	23.055	26.610	29.080	20.573
1980	29.238	27.892	23.107	1.343	0.572	3.454	10.767	13.911	19.585	22.947	25.140	27.563	17.127
1981	28.858	28.694	27.126	19.711	12.975	10.497	14.734	20.260	24.492	26.702	27.656	28.891	22.550
1982	28.956	15.978	1.776	1.942	1.150	1.417	0.491	3.536	11.310	19.580	25.322	24.729	11.349
1983	15.697	7.321	1.725	0.917	0.298	0.215	1.180	1.709	1.631	8.273	17.543	14.979	5.957
1984	13.750	2.079	0.386	2.231	6.106	7.807	13.552	18.024	21.197	21.346	24.799	28.205	13.290
1985	29.068	16.458	14.679	21.428	22.025	20.095	19.216	20.459	23.990	26.562	27.606	28.335	22.493
1986	28.651	28.177	24.585	17.902	0.267	0.415	7.871	14.228	19.325	22.525	25.343	27.697	18.082
1987	28.821	28.644	28.048	26.703	20.129	13.294	17.732	22.130	24.663	26.520	28.335	29.860	24.573
1988	28.672	27.867	22.296	13.655	17.602	22.069	23.163	24.559	25.267	26.918	28.665	29.814	24.212
1989	29.969	28.899	27.848	26.034	24.465	8.204	13.075	18.898	23.484	26.340	27.570	28.566	23.613
1990	28.801	27.526	27.499	23.726	20.426	21.185	21.636	23.662	26.750	28.072	28.453	29.555	25.607
1991	30.360	29.174	28.087	28.280	26.885	13.309	15.903	21.634	26.025	28.341	28.765	29.575	25.528
AVG:	27.809	25.628	20.131	15.330	10.894	10.893	12.943	15.473	19.548	23.276	26.492	28.153	19.714
MIN:	13.750	2.079	0.386	0.248	0.267	0.215	0.491	1.709	1.631	8.273	17.543	14.979	5.957
MAX:	30.360	29.510	28.435	28.280	26.885	25.957	25.499	26.730	28.064	28.977	29.325	30.029	27.617

Table 4.4.6-35 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, G-model results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.16%	0.23%	0.42%	0.23%	0.18%	0.25%	0.25%	0.05%	0.00%	0.07%	0.15%
1923	0.08%	0.01%	0.44%	0.33%	0.06%	0.04%	0.11%	0.15%	0.03%	-0.01%	0.00%	-0.02%	0.10%
1924	-0.02%	-0.03%	-0.02%	-0.09%	0.07%	0.08%	0.29%	0.26%	-0.13%	0.17%	0.08%	-0.11%	0.05%
1925	0.08%	-0.19%	-0.44%	-0.26%	-0.63%	-0.05%	0.22%	-0.01%	-0.03%	0.00%	-0.06%	-0.11%	-0.12%
1926	-0.02%	-0.02%	-0.05%	-0.02%	0.06%	0.12%	0.86%	0.65%	0.16%	-0.02%	-0.05%	-0.04%	0.14%
1927	-0.07%	0.26%	1.87%	0.91%	0.78%	0.11%	-0.51%	-0.74%	-0.83%	0.17%	0.29%	0.11%	0.20%
1928	-0.12%	-0.27%	-0.20%	0.03%	0.05%	-0.01%	0.16%	0.04%	-0.01%	0.00%	0.00%	0.00%	-0.03%
1929	0.06%	0.01%	0.00%	-0.01%	0.14%	-0.80%	-0.49%	-0.02%	0.02%	0.00%	-0.05%	-0.05%	-0.10%
1930	0.11%	-0.06%	-0.10%	0.18%	0.14%	0.69%	0.66%	0.65%	0.01%	-0.15%	0.14%	0.17%	0.20%
1931	-0.03%	-0.11%	-0.02%	-0.03%	-0.70%	-0.51%	-0.09%	0.08%	0.04%	-0.11%	-0.06%	0.00%	-0.13%
1932	0.10%	-0.06%	0.07%	0.27%	1.70%	0.56%	-0.05%	0.08%	0.07%	0.01%	0.04%	0.04%	0.23%
1933	0.01%	-0.08%	-0.17%	-0.14%	-0.10%	0.23%	0.17%	0.11%	0.07%	0.01%	0.00%	-0.01%	0.01%
1934	-0.04%	-0.02%	-0.08%	-0.39%	-0.24%	-0.05%	0.00%	0.00%	0.00%	0.00%	-0.72%	-0.77%	-0.19%
1935	0.26%	-0.46%	-0.34%	1.06%	0.37%	-0.85%	-0.41%	0.08%	0.12%	0.05%	0.01%	0.00%	-0.01%
1936	0.06%	-0.04%	0.07%	0.34%	-3.32%	-0.77%	-0.05%	0.30%	0.08%	-0.01%	0.00%	0.00%	-0.28%
1937	0.00%	0.04%	-0.01%	-0.02%	-1.73%	-0.19%	0.16%	0.49%	0.08%	-0.03%	0.00%	0.00%	-0.10%
1938	0.00%	0.27%	3.02%	0.36%	0.10%	0.06%	0.17%	0.21%	0.28%	0.04%	0.00%	-0.22%	0.36%
1939	0.28%	0.28%	0.19%	0.22%	0.25%	0.73%	0.75%	0.63%	0.07%	-0.11%	0.04%	0.06%	0.28%
1940	-0.08%	-0.11%	0.13%	1.04%	1.61%	-1.80%	0.05%	-0.15%	-0.46%	-0.25%	-0.04%	-1.47%	-0.13%
1941	-1.94%	0.37%	1.84%	0.41%	6.12%	0.42%	0.18%	0.25%	0.00%	-0.01%	-0.48%	-0.28%	0.57%
1942	0.08%	0.05%	1.10%	0.19%	0.09%	0.18%	0.23%	0.25%	0.26%	0.07%	0.01%	0.19%	0.23%
1943	0.39%	0.65%	0.62%	-0.70%	0.11%	0.16%	0.18%	0.03%	0.00%	-0.05%	-0.03%	0.03%	0.12%
1944	0.04%	0.00%	0.02%	0.02%	0.18%	0.37%	0.19%	0.17%	0.07%	0.01%	0.00%	0.01%	0.09%
1945	0.01%	0.21%	0.39%	0.16%	0.50%	0.10%	0.09%	0.16%	0.06%	0.00%	0.00%	0.03%	0.14%
1946	0.00%	0.11%	0.25%	0.41%	-0.04%	0.27%	0.19%	0.17%	0.06%	0.01%	0.00%	0.00%	0.12%
1947	0.02%	-0.01%	-0.07%	-0.03%	0.15%	-0.02%	0.04%	0.03%	-0.02%	-0.01%	0.07%	0.07%	0.02%
1948	-0.02%	0.01%	-0.03%	-0.06%	-0.01%	0.03%	0.13%	0.28%	0.17%	0.06%	0.01%	0.03%	0.05%
1949	0.16%	0.02%	0.04%	0.09%	0.30%	0.29%	0.09%	0.08%	0.02%	0.00%	0.06%	0.10%	0.10%
1950	-0.01%	-0.06%	0.01%	0.18%	0.24%	0.14%	0.13%	0.17%	0.17%	0.07%	0.01%	0.01%	0.09%
1951	0.02%	0.63%	0.33%	-0.05%	0.13%	0.19%	0.12%	0.17%	0.04%	-0.03%	-0.02%	0.01%	0.13%
1952	0.01%	0.01%	1.03%	0.22%	0.15%	0.17%	0.35%	0.22%	0.24%	0.04%	0.00%	0.36%	0.23%
1953	0.52%	0.17%	0.12%	0.10%	-0.01%	0.01%	0.07%	0.14%	0.14%	-0.01%	-0.03%	0.36%	0.13%
1954	0.34%	0.31%	-0.08%	0.19%	0.24%	0.19%	0.19%	-0.01%	0.09%	0.07%	0.01%	0.00%	0.13%
1955	0.03%	0.01%	0.49%	0.36%	0.07%	0.15%	-0.07%	0.04%	0.06%	0.01%	0.01%	0.01%	0.10%
1956	0.01%	0.00%	0.68%	0.05%	0.14%	0.17%	0.12%	0.26%	0.21%	0.07%	0.01%	0.31%	0.17%
1957	0.51%	0.26%	-0.25%	-0.05%	1.30%	0.37%	0.02%	0.24%	0.06%	0.05%	0.04%	0.05%	0.22%
1958	0.27%	0.21%	0.36%	0.27%	0.06%	0.14%	0.12%	0.19%	0.23%	0.05%	0.00%	0.29%	0.18%
1959	0.50%	0.20%	0.04%	0.13%	0.13%	-0.01%	0.42%	-0.02%	-0.12%	0.04%	0.04%	0.61%	0.16%
1960	-0.32%	0.02%	0.55%	0.32%	0.96%	0.57%	0.16%	0.62%	0.31%	0.04%	-0.22%	-0.23%	0.23%
1961	0.22%	-0.14%	-0.03%	0.21%	2.50%	0.41%	-0.10%	0.03%	-0.12%	-0.11%	-0.05%	-0.03%	0.23%
1962	0.04%	-0.05%	-0.20%	-0.12%	0.46%	0.42%	0.57%	0.25%	0.41%	0.26%	0.05%	0.04%	0.18%
1963	1.98%	1.04%	1.04%	0.72%	-3.69%	-0.06%	-0.35%	-0.13%	-0.02%	-0.07%	-0.04%	0.03%	0.04%
1964	0.08%	0.34%	0.12%	0.68%	0.32%	0.91%	-0.82%	0.07%	0.15%	-0.08%	0.01%	0.14%	0.16%
1965	0.00%	-0.02%	0.08%	0.07%	0.18%	0.00%	0.34%	-0.01%	-0.02%	0.00%	0.00%	0.05%	0.06%
1966	0.06%	0.86%	0.72%	0.26%	0.20%	0.09%	0.11%	0.12%	0.01%	-0.02%	0.00%	0.00%	0.20%
1967	0.00%	0.19%	0.83%	0.21%	0.50%	0.22%	0.21%	0.23%	0.24%	0.22%	0.11%	0.26%	0.27%
1968	0.43%	0.17%	0.14%	0.24%	0.23%	0.69%	0.08%	0.44%	0.08%	0.08%	0.13%	0.04%	0.23%
1969	-0.01%	0.11%	0.60%	-1.09%	0.05%	0.26%	0.51%	0.58%	0.33%	0.05%	0.00%	0.27%	0.14%
1970	0.63%	0.26%	0.64%	0.03%	0.14%	0.19%	0.01%	0.11%	0.01%	0.00%	0.01%	0.06%	0.18%
1971	0.07%	0.24%	0.73%	0.18%	-0.06%	0.57%	0.09%	0.33%	0.18%	0.00%	-0.02%	0.20%	0.21%
1972	0.19%	0.06%	0.16%	0.70%	0.71%	0.31%	-0.01%	-0.03%	-0.01%	0.00%	0.00%	0.00%	0.17%
1973	0.02%	0.28%	0.85%	0.51%	0.16%	0.18%	0.10%	0.16%	0.02%	-0.01%	0.00%	0.07%	0.19%
1974	0.10%	0.78%	0.22%	0.09%	0.18%	0.15%	0.17%	0.14%	0.13%	0.05%	0.01%	0.22%	0.19%
1975	0.69%	0.50%	0.31%	0.18%	0.05%	0.14%	0.10%	0.26%	0.08%	0.01%	0.00%	0.33%	0.22%
1976	0.53%	0.30%	0.15%	-0.08%	0.02%	0.34%	0.40%	0.64%	0.26%	-0.05%	-0.02%	0.00%	0.21%
1977	-0.12%	-0.18%	0.00%	0.01%	-0.03%	0.00%	0.00%	0.01%	-0.01%	0.04%	0.04%	0.01%	-0.02%
1978	0.03%	0.00%	-0.01%	0.38%	6.98%	2.54%	1.18%	0.27%	0.13%	0.04%	0.00%	0.04%	0.97%
1979	0.05%	-0.06%	-0.04%	0.16%	1.28%	0.99%	0.46%	0.18%	0.04%	0.00%	0.00%	0.00%	0.25%
1980	-0.14%	0.01%	0.30%	2.83%	-1.76%	0.01%	0.13%	0.19%	0.17%	0.08%	0.00%	0.12%	0.16%
1981	0.13%	0.00%	0.04%	0.20%	0.49%	0.81%	0.65%	0.66%	0.20%	-0.03%	0.01%	0.21%	0.28%
1982	-0.17%	0.84%	-0.90%	-0.29%	0.12%	0.15%	0.11%	0.21%	0.24%	0.07%	-0.09%	0.12%	0.03%
1983	0.73%	0.31%	0.16%	0.06%	0.03%	0.01%	0.15%	0.20%	0.20%	0.23%	0.24%	0.38%	0.23%
1984	0.46%	0.32%	0.08%	0.05%	0.12%	0.15%	0.00%	0.10%	0.16%	0.00%	-0.04%	0.05%	0.12%
1985	0.01%	0.50%	0.32%	0.07%	0.17%	0.13%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
1986	0.04%	0.00%	0.12%	0.27%	0.34%	0.11%	0.09%	0.15%	0.05%	0.00%	0.02%	0.06%	0.10%
1987	0.04%	0.00%	0.01%	-0.01%	0.10%	1.76%	0.25%	-0.10%	-0.05%	-0.03%	-0.01%	0.00%	0.16%
1988	0.08%	0.09%	0.28%	0.60%	0.05%	-0.04%	2.73%	1.36%	-0.12%	-0.03%	-0.01%	0.00%	0.42%
1989	-0.03%	-0.01%	0.00%	0.00%	0.01%	4.72%	0.77%	-0.09%	-0.10%	-0.04%	0.04%	-0.07%	0.43%
1990	-0.11%	0.22%	0.24%	0.26%	0.14%	0.30%	0.18%	0.47%	0.35%	-0.17%	-0.12%	0.05%	0.15%
1991	-0.24%	-0.05%	-0.35%	-0.51%	-0.09%	0.36%	0.60%	0.51%	0.21%	0.04%	0.07%	0.06%	0.05%
AVG:	0.10%	0.14%	0.27%	0.19%	0.28%	0.26%	0.20%	0.20%	0.07%	0.01%	-0.01%	0.03%	0.15%
MIN:	-1.94%	-0.46%	-0.90%	-1.09%	-3.69%	-1.80%	-0.82%	-0.74%	-0.83%	-0.25%	-0.72%	-1.47%	-0.28%
MAX:	1.98%	1.04%	3.02%	2.83%	6.98%	4.72%	2.73%	1.36%	0.41%	0.26%	0.29%	0.61%	0.97%

Table 4.4.6-36 Difference in simulated monthly average electrical conductivity (%) at Martinez/Benicia, G-model results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.14%	0.21%	0.40%	0.22%	0.17%	0.23%	-2.41%	-0.53%	-0.03%	0.43%	-0.10%
1923	0.48%	-0.16%	1.34%	1.29%	0.23%	0.05%	0.11%	0.18%	0.04%	-0.01%	0.00%	0.02%	0.30%
1924	0.02%	-0.23%	-0.24%	-0.17%	0.04%	0.08%	0.01%	0.01%	-0.01%	0.02%	-0.25%	-0.27%	-0.08%
1925	0.02%	-0.11%	-0.32%	-0.21%	-0.70%	-0.06%	0.11%	0.28%	0.08%	-0.01%	0.07%	0.10%	-0.06%
1926	0.00%	0.03%	0.06%	0.00%	0.26%	0.07%	1.03%	0.36%	0.02%	-0.01%	0.00%	0.00%	0.15%
1927	-0.02%	0.31%	0.42%	0.28%	0.36%	0.19%	0.21%	0.53%	-0.28%	0.08%	0.16%	0.28%	0.21%
1928	-0.24%	0.25%	1.23%	0.86%	0.13%	2.53%	0.36%	0.03%	0.03%	0.02%	0.00%	0.00%	0.43%
1929	-0.06%	0.11%	-0.02%	0.03%	0.29%	-0.01%	-0.07%	-0.01%	0.00%	0.00%	-0.10%	-0.10%	0.01%
1930	0.09%	-0.04%	-0.05%	0.20%	0.07%	0.15%	0.11%	0.10%	0.00%	-0.02%	0.25%	0.26%	0.09%
1931	-0.10%	-0.01%	0.13%	0.03%	-0.66%	-0.50%	-0.09%	0.08%	0.04%	-0.06%	-0.02%	0.01%	-0.10%
1932	0.00%	-0.01%	0.22%	0.26%	0.68%	0.24%	0.11%	0.18%	0.08%	0.01%	0.03%	0.03%	0.15%
1933	0.01%	0.02%	0.00%	0.09%	0.20%	0.13%	0.03%	0.07%	0.05%	0.01%	0.00%	0.00%	0.05%
1934	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.19%	-0.21%	-0.03%
1935	0.01%	-0.29%	-0.29%	-0.19%	-0.22%	-1.23%	0.32%	0.12%	0.10%	0.05%	0.01%	0.00%	-0.13%
1936	0.10%	-0.06%	0.03%	0.51%	3.92%	2.00%	1.41%	0.58%	0.05%	-0.03%	-0.01%	0.00%	0.71%
1937	0.02%	0.12%	-0.02%	0.00%	1.49%	0.24%	0.14%	-0.85%	-0.35%	-0.06%	-0.01%	0.00%	0.06%
1938	0.00%	0.28%	1.95%	0.29%	0.06%	0.05%	0.17%	0.24%	-2.38%	-0.39%	-0.02%	1.35%	0.13%
1939	2.91%	1.18%	0.40%	0.29%	0.29%	0.33%	0.19%	0.13%	0.12%	0.07%	0.02%	0.01%	0.50%
1940	0.01%	0.01%	0.05%	0.23%	0.33%	0.51%	0.48%	-1.05%	0.37%	0.44%	0.07%	-1.44%	0.00%
1941	-1.93%	0.41%	2.21%	0.42%	6.10%	0.41%	0.18%	-0.33%	-0.04%	0.00%	-0.60%	0.31%	0.60%
1942	0.68%	0.23%	1.06%	0.16%	0.09%	0.18%	0.23%	0.27%	-2.37%	-0.78%	-0.06%	0.87%	0.05%
1943	1.04%	1.81%	1.58%	-0.18%	0.13%	0.13%	0.17%	0.02%	0.00%	1.15%	0.76%	0.36%	0.58%
1944	0.28%	-0.03%	0.08%	-0.05%	0.02%	0.18%	0.12%	0.16%	0.07%	0.01%	0.00%	-0.02%	0.07%
1945	-0.04%	0.88%	0.61%	-0.07%	-0.13%	-0.05%	0.33%	0.53%	0.17%	0.01%	0.00%	0.20%	0.20%
1946	0.00%	0.14%	0.37%	1.26%	-0.09%	0.99%	0.50%	-1.46%	-0.70%	-0.06%	-0.01%	0.00%	0.08%
1947	-0.20%	0.21%	0.50%	0.18%	0.21%	-0.35%	-0.11%	0.04%	0.11%	0.07%	0.05%	0.03%	0.06%
1948	0.05%	0.06%	0.07%	-0.01%	-0.04%	-0.03%	0.07%	0.25%	0.15%	0.05%	0.01%	0.03%	0.05%
1949	-0.24%	-0.04%	0.17%	0.04%	0.17%	0.20%	0.10%	0.09%	0.02%	0.00%	-0.39%	-0.36%	-0.02%
1950	0.18%	0.12%	-0.01%	0.27%	0.26%	0.72%	0.87%	0.64%	-0.04%	-0.11%	-0.02%	0.23%	0.26%
1951	0.09%	0.81%	-0.17%	-0.13%	0.11%	0.19%	0.12%	-1.18%	-0.39%	-0.24%	-0.14%	0.05%	-0.07%
1952	0.08%	-0.27%	3.61%	0.57%	0.15%	0.16%	-0.06%	0.22%	-1.94%	-0.33%	-0.01%	1.59%	0.31%
1953	1.38%	0.27%	-1.57%	-0.05%	0.07%	0.03%	0.06%	0.18%	0.18%	-0.01%	-0.04%	0.39%	0.08%
1954	0.37%	0.32%	-0.09%	0.34%	0.26%	0.19%	0.19%	-0.01%	0.09%	0.07%	0.01%	0.00%	0.15%
1955	-0.13%	-0.02%	0.36%	0.02%	-0.05%	-0.01%	-0.01%	0.12%	0.06%	0.01%	0.00%	0.00%	0.03%
1956	-0.04%	-0.05%	1.90%	0.07%	0.13%	0.19%	0.12%	0.28%	-1.44%	-0.61%	-0.06%	1.55%	0.17%
1957	1.67%	0.54%	-0.30%	0.14%	1.28%	0.26%	0.01%	0.28%	0.07%	0.08%	0.06%	0.07%	0.35%
1958	0.66%	0.55%	0.46%	0.28%	-0.02%	0.10%	0.11%	0.21%	-2.43%	-0.57%	-0.03%	1.87%	0.10%
1959	3.11%	1.19%	0.25%	-0.10%	0.03%	-0.01%	0.05%	-0.07%	0.25%	0.00%	-0.12%	-0.17%	0.37%
1960	0.01%	-0.03%	-0.13%	-0.04%	0.18%	0.09%	0.02%	0.15%	0.08%	0.01%	-0.21%	-0.21%	-0.01%
1961	0.25%	-0.16%	-0.03%	0.24%	0.53%	0.10%	-0.01%	0.05%	-0.06%	-0.07%	-0.02%	0.00%	0.07%
1962	0.01%	-0.34%	-0.22%	-0.05%	-0.27%	-0.17%	0.02%	0.03%	0.10%	0.07%	0.01%	-0.04%	-0.07%
1963	0.61%	0.41%	0.38%	0.19%	0.33%	-0.07%	0.27%	2.19%	0.38%	-0.20%	-0.10%	0.22%	0.38%
1964	0.30%	0.43%	0.12%	0.67%	0.32%	1.12%	-1.01%	-0.52%	0.12%	0.06%	0.02%	0.27%	0.16%
1965	0.09%	-0.10%	2.77%	0.21%	0.18%	-0.01%	0.18%	0.00%	-0.42%	0.66%	0.53%	0.27%	0.36%
1966	0.22%	-0.13%	0.29%	0.06%	0.14%	0.08%	0.08%	0.09%	0.02%	0.00%	0.00%	0.00%	0.07%
1967	0.01%	0.12%	0.57%	0.30%	0.80%	0.22%	0.17%	0.25%	-0.80%	-0.27%	-0.09%	0.93%	0.18%
1968	0.84%	0.18%	0.14%	0.24%	0.23%	0.20%	0.02%	0.10%	0.01%	0.01%	0.03%	0.01%	0.17%
1969	-0.03%	-0.01%	0.18%	0.68%	0.09%	0.16%	0.19%	0.36%	-2.37%	-0.46%	-0.02%	0.60%	-0.05%
1970	1.96%	0.87%	1.20%	0.03%	0.14%	0.18%	0.01%	0.15%	0.01%	0.04%	0.04%	0.08%	0.39%
1971	0.09%	0.23%	0.80%	0.18%	-0.06%	0.56%	0.09%	0.39%	0.22%	0.06%	0.00%	0.25%	0.23%
1972	0.22%	0.07%	0.14%	0.74%	0.75%	0.31%	-0.01%	-0.03%	-0.01%	0.00%	0.00%	0.00%	0.18%
1973	-0.14%	-0.14%	0.40%	0.76%	0.64%	0.20%	0.09%	-0.84%	-0.19%	0.06%	0.01%	0.31%	0.10%
1974	0.37%	0.07%	0.13%	0.08%	0.17%	0.13%	0.17%	-0.58%	-0.69%	-0.25%	-0.03%	0.80%	0.03%
1975	1.76%	1.17%	0.37%	0.10%	-2.88%	-0.09%	0.09%	0.29%	-0.81%	-0.34%	-0.03%	1.10%	0.06%
1976	1.21%	0.50%	0.52%	-0.15%	-0.26%	0.13%	0.11%	0.15%	0.08%	0.00%	0.00%	0.00%	0.19%
1977	-0.18%	-0.15%	-0.11%	-0.15%	-0.08%	-0.02%	0.00%	0.02%	-0.05%	0.12%	0.15%	0.05%	-0.03%
1978	0.01%	0.04%	-0.01%	0.11%	0.45%	-0.66%	0.13%	0.16%	0.13%	0.04%	0.00%	0.04%	0.04%
1979	0.05%	-0.03%	0.01%	0.17%	0.81%	0.41%	-0.06%	-0.42%	-0.10%	0.03%	0.00%	0.00%	0.07%
1980	0.04%	0.04%	0.18%	0.05%	2.12%	1.55%	0.85%	1.38%	1.15%	0.51%	0.00%	0.47%	0.69%
1981	0.53%	-0.14%	0.15%	0.53%	1.72%	0.62%	0.13%	0.14%	0.04%	-0.01%	0.00%	0.06%	0.31%
1982	-0.12%	0.03%	0.67%	0.90%	0.17%	0.12%	0.10%	0.24%	-1.63%	-0.53%	0.15%	0.96%	0.09%
1983	1.82%	0.53%	0.15%	0.06%	0.04%	0.01%	0.15%	0.22%	0.23%	-1.44%	0.67%	1.83%	0.36%
1984	0.71%	0.27%	0.06%	0.05%	0.09%	0.14%	0.01%	0.14%	0.01%	0.13%	0.09%	0.14%	0.15%
1985	0.03%	0.42%	0.31%	0.07%	0.17%	0.13%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
1986	0.05%	-0.08%	-0.06%	0.08%	0.46%	0.10%	0.09%	-1.08%	-0.33%	0.02%	0.35%	0.53%	0.01%
1987	0.33%	-0.07%	0.08%	-0.05%	0.77%	1.54%	0.12%	-0.10%	0.02%	0.03%	0.01%	0.00%	0.22%
1988	0.03%	0.03%	-0.05%	0.12%	0.03%	-0.01%	0.09%	0.04%	0.00%	0.00%	-0.02%	-0.02%	0.02%
1989	0.03%	0.00%	0.00%	-0.02%	-0.03%	1.20%	0.27%	-0.01%	-0.03%	-0.01%	0.02%	0.07%	0.12%
1990	-0.12%	0.11%	0.23%	-0.05%	-0.08%	0.01%	0.01%	0.11%	0.08%	0.00%	-0.03%	-0.02%	0.02%
1991	-0.18%	0.19%	-0.14%	-0.42%	-0.19%	0.03%	0.18%	0.26%	0.14%	0.03%	0.01%	0.00%	-0.01%
AVG:	0.30%	0.18%	0.36%	0.18%	0.33%	0.24%	0.15%	0.07%	-0.25%	-0.05%	0.01%	0.23%	0.15%
MIN:	-1.93%	-0.34%	-1.57%	-0.42%	-2.88%	-1.23%	-1.01%	-1.46%	-2.43%	-1.44%	-0.60%	-1.44%	-0.13%
MAX:	3.11%	1.81%	3.61%	1.29%	6.10%	2.53%	1.41%	2.19%	1.15%	1.15%	0.76%	1.87%	0.71%

Table 4.4.6-37 Simulated monthly average electrical conductivity (mS/cm) at Chipps Island, G-model results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	13.100	12.615	6.196	3.175	0.275	0.341	0.462	0.194	0.256	1.585	6.224	10.310	4.561
1923	12.084	10.161	0.726	0.351	1.060	2.055	0.618	0.827	2.566	5.171	8.125	10.584	4.527
1924	11.728	10.465	9.989	8.710	4.610	3.355	4.863	8.049	9.645	8.500	9.906	13.056	8.573
1925	14.039	12.617	8.760	6.566	0.185	0.262	0.487	1.207	2.912	5.879	8.384	10.901	6.017
1926	12.660	11.827	10.988	5.089	0.266	1.069	0.810	1.549	4.796	8.033	9.975	12.414	6.623
1927	12.910	4.000	2.187	0.726	0.180	0.193	0.192	0.346	1.425	3.303	6.537	10.706	3.559
1928	11.952	8.375	6.501	2.913	1.279	0.180	0.248	0.809	2.735	4.686	7.258	11.242	4.848
1929	12.242	10.361	9.248	8.818	4.971	3.305	4.549	6.169	7.117	9.110	10.618	12.321	8.236
1930	13.940	12.354	5.111	1.394	1.408	0.584	1.411	2.883	5.033	7.780	9.904	12.412	6.184
1931	12.705	11.527	9.636	7.254	5.993	6.319	6.719	8.128	9.537	8.610	10.042	13.208	9.140
1932	13.734	12.219	3.158	1.216	0.828	1.655	2.402	2.668	3.072	5.408	7.935	10.548	5.404
1933	12.625	11.639	9.297	5.948	3.866	3.545	3.507	5.211	7.145	9.119	10.308	11.912	7.843
1934	14.105	12.162	8.139	3.452	2.148	2.394	3.013	5.155	6.643	8.470	11.191	13.351	7.519
1935	13.793	11.583	9.696	0.835	1.253	0.728	0.189	0.288	1.336	4.119	7.740	11.464	5.252
1936	12.034	10.697	10.493	0.511	0.181	0.263	0.443	0.830	2.551	5.193	8.133	11.647	5.248
1937	12.503	10.880	10.255	8.379	0.259	0.194	0.302	0.606	1.952	4.618	7.922	11.549	5.785
1938	13.116	4.720	0.184	0.249	0.180	0.180	0.180	0.180	0.194	1.193	6.095	7.980	2.871
1939	4.691	5.809	6.807	6.059	4.222	2.710	2.706	3.397	5.299	7.757	9.885	12.393	5.978
1940	11.817	10.799	11.042	0.595	0.183	0.180	0.181	0.414	2.222	4.193	7.091	10.881	4.966
1941	12.471	9.571	0.331	0.180	0.180	0.180	0.180	0.192	0.652	2.800	6.610	7.977	3.444
1942	8.642	10.222	0.200	0.180	0.180	0.232	0.191	0.212	0.505	2.272	6.452	8.019	3.109
1943	7.981	7.157	1.273	0.180	0.183	0.180	0.229	0.470	1.831	3.822	6.728	10.871	3.409
1944	12.663	11.311	10.318	8.392	1.300	0.940	1.710	2.745	4.283	6.761	9.956	12.834	6.934
1945	11.560	9.336	6.091	5.894	0.249	0.421	1.119	1.481	2.657	4.910	8.029	11.490	5.270
1946	12.957	9.403	0.185	0.192	0.335	0.974	1.784	2.005	3.078	5.128	8.109	10.858	4.584
1947	11.444	10.127	7.113	6.654	3.612	1.752	2.073	3.254	5.016	7.313	9.368	11.841	6.631
1948	11.837	10.974	10.512	7.337	3.979	2.619	0.591	0.373	1.266	3.990	7.693	11.124	6.025
1949	11.460	10.170	8.363	8.421	6.723	0.234	0.746	1.947	3.530	6.486	9.352	12.026	6.622
1950	12.075	11.266	10.007	2.809	0.417	0.868	0.949	1.055	2.052	4.340	7.820	11.242	5.408
1951	12.182	0.276	0.180	0.181	0.181	0.276	0.862	1.009	2.957	4.309	6.410	10.213	3.253
1952	11.879	9.359	0.421	0.180	0.180	0.181	0.181	0.181	0.199	1.249	6.113	5.150	2.940
1953	3.098	5.345	0.311	0.180	0.289	0.990	1.203	0.575	1.159	2.750	6.143	7.373	2.451
1954	8.416	9.088	9.195	0.727	0.187	0.195	0.208	0.422	2.378	4.895	7.329	10.426	4.455
1955	11.264	9.607	3.424	2.117	2.456	3.542	3.157	2.889	4.332	6.936	9.819	12.623	6.014
1956	12.236	11.162	0.180	0.180	0.180	0.214	0.496	0.233	0.717	2.842	6.641	7.883	3.580
1957	7.216	8.562	9.911	8.403	0.705	0.210	0.495	0.908	2.339	4.032	6.783	10.777	5.028
1958	8.880	8.334	3.731	0.336	0.180	0.180	0.180	0.184	0.270	1.669	6.252	6.528	3.060
1959	4.189	5.961	9.150	0.624	0.187	0.391	1.962	3.692	4.330	5.280	7.879	10.965	4.551
1960	11.737	10.112	8.776	7.756	1.333	1.123	2.073	2.674	4.798	7.760	9.425	11.757	6.610
1961	12.288	10.267	7.250	5.956	1.119	1.047	2.295	3.419	5.145	7.570	9.149	11.450	6.413
1962	11.836	10.447	7.638	6.489	0.231	0.426	1.590	2.160	3.194	5.224	8.145	11.160	5.712
1963	1.479	2.423	1.491	1.855	0.183	0.275	0.180	0.222	1.201	2.854	5.825	10.134	2.343
1964	11.921	3.377	4.020	2.979	2.301	3.586	2.091	2.390	4.831	7.589	9.230	11.136	5.454
1965	12.189	10.218	0.182	0.180	0.227	0.627	0.205	0.361	2.071	3.507	5.912	10.239	3.827
1966	12.111	5.409	3.232	0.746	0.512	0.646	1.481	2.411	3.721	5.556	8.267	11.709	4.650
1967	11.058	9.280	0.478	0.196	0.189	0.184	0.184	0.184	0.198	1.148	5.883	5.022	2.834
1968	3.175	5.475	7.044	0.875	0.185	0.230	0.884	2.879	4.910	5.983	8.218	11.603	4.288
1969	11.640	10.110	2.938	0.180	0.180	0.182	0.183	0.181	0.214	1.391	6.160	9.769	3.594
1970	4.991	5.342	0.199	0.180	0.180	0.207	0.720	2.024	3.827	3.409	5.545	10.068	3.058
1971	12.020	7.492	0.193	0.195	0.320	0.244	0.464	0.393	1.369	2.540	5.315	7.762	3.192
1972	8.876	10.448	8.020	6.169	1.724	0.480	1.507	3.866	3.524	4.542	7.894	11.536	5.716
1973	12.028	6.192	1.437	0.181	0.180	0.183	0.475	1.108	2.185	3.898	6.992	10.693	3.796
1974	12.239	0.224	0.182	0.180	0.200	0.180	0.180	0.287	1.188	3.197	6.758	6.236	2.588
1975	6.481	8.986	8.339	7.440	0.188	0.180	0.271	0.361	0.840	2.729	6.603	6.765	4.099
1976	4.696	6.356	8.123	8.416	6.070	3.648	3.674	6.431	9.902	11.576	12.363	13.710	7.914
1977	13.933	13.027	9.986	8.969	8.287	7.593	7.057	8.275	9.632	8.763	10.386	13.506	9.951
1978	13.757	12.343	8.251	0.184	0.184	0.181	0.190	0.317	1.003	2.929	6.669	10.485	4.708
1979	12.148	11.709	8.934	2.171	0.231	0.260	0.646	1.358	2.304	4.380	7.835	11.508	5.290
1980	12.154	10.272	5.109	0.180	0.180	0.183	0.376	0.756	2.272	4.341	6.297	9.216	4.278
1981	11.348	11.342	9.229	2.877	0.674	0.386	0.868	2.609	5.541	8.065	9.512	11.461	6.159
1982	11.795	1.452	0.180	0.180	0.180	0.180	0.180	0.183	0.415	2.234	6.238	6.116	2.444
1983	1.266	0.237	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.251	1.481	1.014	0.459
1984	0.745	0.181	0.180	0.181	0.204	0.244	0.668	1.730	3.181	3.409	5.863	10.034	2.218
1985	11.707	1.590	0.901	3.164	3.842	2.764	2.324	2.845	5.144	7.882	9.428	10.622	5.184
1986	11.247	10.642	6.411	1.974	0.180	0.180	0.234	0.788	2.193	4.035	6.462	9.405	4.479
1987	11.305	11.270	10.455	8.670	3.073	0.726	1.592	3.722	5.808	7.897	10.440	13.133	7.341
1988	11.495	10.232	4.524	0.806	1.558	3.679	4.616	5.806	6.611	8.458	11.023	13.121	6.827
1989	13.647	11.961	10.318	7.917	6.095	0.279	0.595	2.025	4.660	7.568	9.338	10.939	7.112
1990	11.497	9.762	9.596	5.592	3.043	3.296	3.585	4.963	8.080	10.085	10.842	12.714	7.755
1991	14.349	12.463	10.689	10.840	8.952	0.804	1.103	3.354	7.066	10.316	11.287	12.758	8.665
AVG:	10.734	8.753	5.626	3.275	1.532	1.121	1.347	2.043	3.388	5.223	7.965	10.513	5.127
MIN:	0.745	0.181	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.251	1.481	1.014	0.459
MAX:	14.349	13.027	11.042	10.840	8.952	7.593	7.057	8.275	9.902	11.576	12.363	13.710	9.951

Table 4.4.6-38 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, G-model results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.57%	0.88%	0.57%	0.42%	0.42%	0.07%	0.28%	0.20%	0.02%	0.28%	0.31%
1923	0.33%	0.07%	1.25%	0.63%	0.22%	0.15%	0.30%	0.44%	0.14%	-0.01%	0.00%	-0.08%	0.29%
1924	-0.09%	-0.12%	-0.10%	-0.34%	0.19%	0.32%	1.09%	1.08%	-0.39%	0.59%	0.40%	-0.42%	0.18%
1925	0.29%	-0.68%	-1.72%	-1.11%	-0.07%	-0.07%	0.50%	0.00%	-0.10%	0.00%	-0.21%	-0.45%	-0.30%
1926	-0.11%	-0.08%	-0.22%	-0.09%	0.07%	0.38%	2.52%	2.33%	0.74%	-0.02%	-0.17%	-0.18%	0.43%
1927	-0.27%	0.88%	6.68%	3.03%	0.00%	0.03%	-0.12%	-1.30%	-2.77%	0.39%	1.15%	0.48%	0.68%
1928	-0.41%	-1.01%	-0.81%	0.02%	0.17%	0.00%	0.16%	0.13%	-0.02%	-0.01%	0.00%	0.00%	-0.15%
1929	0.23%	0.06%	-0.01%	-0.02%	0.48%	-2.74%	-2.07%	-0.22%	0.04%	0.01%	-0.19%	-0.22%	-0.39%
1930	0.42%	-0.18%	-0.41%	0.58%	0.51%	1.80%	2.27%	2.47%	0.21%	-0.57%	0.51%	0.72%	0.69%
1931	-0.05%	-0.41%	-0.10%	-0.12%	-2.55%	-2.13%	-0.51%	0.24%	0.14%	-0.42%	-0.25%	-0.01%	-0.51%
1932	0.39%	-0.20%	0.19%	0.90%	5.07%	2.25%	-0.09%	0.26%	0.27%	0.04%	0.17%	0.16%	0.78%
1933	0.07%	-0.28%	-0.67%	-0.58%	-0.41%	0.77%	0.67%	0.45%	0.30%	0.07%	-0.01%	-0.02%	0.03%
1934	-0.17%	-0.10%	-0.30%	-1.41%	-0.95%	-0.22%	-0.03%	0.01%	0.01%	0.00%	-2.73%	-3.20%	-0.76%
1935	0.75%	-1.72%	-1.54%	3.06%	1.36%	-2.26%	-0.08%	0.11%	0.40%	0.21%	0.04%	0.01%	0.03%
1936	0.24%	-0.12%	0.26%	0.85%	-0.05%	-0.94%	-0.17%	0.87%	0.36%	-0.01%	0.00%	0.00%	0.11%
1937	0.02%	0.15%	-0.02%	-0.09%	-1.92%	-0.06%	0.24%	1.29%	0.38%	-0.09%	-0.02%	-0.01%	-0.01%
1938	0.00%	0.97%	0.26%	0.42%	0.00%	0.00%	0.00%	0.00%	0.07%	0.16%	0.01%	-0.81%	0.09%
1939	0.92%	1.15%	0.79%	0.89%	0.99%	2.64%	2.90%	2.48%	0.44%	-0.38%	0.15%	0.26%	1.10%
1940	-0.27%	-0.42%	0.46%	2.79%	0.11%	0.00%	0.00%	-0.29%	-1.60%	-1.03%	-0.20%	-5.60%	-0.51%
1941	-7.73%	0.65%	3.23%	0.00%	0.00%	0.00%	0.00%	0.05%	0.03%	-0.05%	-1.81%	-1.18%	-0.57%
1942	0.23%	0.19%	0.42%	0.00%	0.00%	0.15%	0.05%	0.14%	0.64%	0.30%	0.04%	0.72%	0.24%
1943	1.54%	2.56%	2.26%	0.00%	0.01%	0.00%	0.14%	0.08%	-0.01%	-0.18%	-0.14%	0.12%	0.53%
1944	0.17%	0.00%	0.08%	0.10%	0.59%	1.14%	0.72%	0.63%	0.32%	0.05%	0.01%	0.04%	0.32%
1945	0.04%	0.80%	1.51%	0.76%	0.54%	0.23%	0.28%	0.55%	0.24%	0.03%	0.01%	0.13%	0.43%
1946	0.02%	0.39%	0.03%	0.09%	-0.04%	0.80%	0.71%	0.61%	0.27%	0.04%	0.01%	0.00%	0.24%
1947	0.08%	-0.05%	-0.25%	-0.15%	0.52%	-0.02%	0.10%	0.11%	-0.06%	-0.05%	0.26%	0.29%	0.07%
1948	-0.06%	0.03%	-0.11%	-0.24%	-0.06%	0.10%	0.35%	0.54%	0.59%	0.25%	0.05%	0.14%	0.13%
1949	0.61%	0.12%	0.15%	0.39%	1.14%	0.28%	0.26%	0.30%	0.11%	0.01%	0.25%	0.40%	0.33%
1950	0.00%	-0.22%	0.04%	0.63%	0.53%	0.45%	0.41%	0.54%	0.61%	0.28%	0.06%	0.05%	0.28%
1951	0.09%	0.82%	0.00%	0.00%	0.00%	0.24%	0.37%	0.52%	0.19%	-0.08%	-0.07%	0.02%	0.18%
1952	0.03%	0.03%	2.23%	0.00%	0.00%	0.00%	0.01%	0.00%	0.08%	0.15%	0.01%	1.30%	0.32%
1953	1.97%	0.80%	0.22%	0.00%	-0.02%	0.03%	0.21%	0.38%	0.47%	0.01%	-0.11%	1.32%	0.44%
1954	1.40%	1.29%	-0.15%	0.51%	0.03%	0.05%	0.10%	-0.01%	0.29%	0.27%	0.06%	0.02%	0.32%
1955	0.10%	0.06%	1.73%	1.41%	0.35%	0.55%	-0.20%	0.11%	0.26%	0.04%	0.04%	0.03%	0.37%
1956	0.04%	0.01%	0.00%	0.00%	0.00%	0.10%	0.29%	0.22%	0.61%	0.30%	0.04%	1.17%	0.23%
1957	2.02%	1.18%	-0.82%	-0.26%	3.69%	0.23%	0.05%	0.70%	0.25%	0.19%	0.17%	0.22%	0.63%
1958	1.03%	0.89%	1.38%	0.53%	0.00%	0.00%	0.00%	0.01%	0.28%	0.19%	0.02%	1.07%	0.45%
1959	1.93%	0.90%	0.24%	0.39%	0.02%	-0.01%	1.42%	0.05%	-0.47%	0.14%	0.14%	2.41%	0.60%
1960	-1.03%	-0.08%	2.18%	1.37%	3.31%	1.99%	0.65%	2.20%	1.34%	0.23%	-0.81%	-0.93%	0.87%
1961	0.79%	-0.45%	-0.19%	0.80%	8.13%	1.85%	-0.32%	0.08%	-0.42%	-0.44%	-0.23%	-0.15%	0.79%
1962	0.15%	-0.16%	-0.78%	-0.53%	0.36%	0.91%	1.95%	0.99%	1.49%	1.08%	0.26%	0.19%	0.49%
1963	6.68%	4.26%	3.72%	2.67%	-0.20%	-0.17%	0.00%	-0.09%	-0.06%	-0.24%	-0.17%	0.12%	1.38%
1964	0.31%	1.24%	0.58%	2.42%	1.35%	3.35%	-2.43%	-0.11%	0.63%	-0.29%	0.02%	0.56%	0.64%
1965	0.04%	-0.09%	0.00%	0.00%	0.14%	0.04%	0.16%	0.01%	-0.06%	0.00%	0.01%	0.20%	0.04%
1966	0.23%	3.13%	2.99%	0.93%	0.51%	0.26%	0.36%	0.45%	0.08%	-0.06%	-0.02%	0.00%	0.74%
1967	0.02%	0.70%	2.01%	0.07%	0.09%	0.02%	0.02%	0.02%	0.08%	0.72%	0.45%	0.97%	0.43%
1968	1.62%	0.76%	0.57%	0.78%	0.02%	0.55%	0.31%	1.54%	0.41%	0.29%	0.55%	0.18%	0.63%
1969	-0.01%	0.43%	2.16%	0.00%	0.00%	0.01%	0.03%	0.02%	0.20%	0.21%	0.02%	1.06%	0.34%
1970	2.39%	1.20%	0.24%	0.00%	0.00%	0.09%	0.05%	0.38%	0.06%	0.00%	0.06%	0.25%	0.39%
1971	0.28%	0.92%	0.20%	0.05%	-0.09%	0.54%	0.26%	0.67%	0.65%	0.05%	-0.09%	0.76%	0.35%
1972	0.79%	0.29%	0.65%	2.68%	2.68%	0.80%	0.01%	-0.13%	-0.04%	-0.02%	0.00%	0.00%	0.64%
1973	0.06%	1.03%	2.92%	0.01%	0.00%	0.01%	0.22%	0.50%	0.11%	-0.05%	-0.01%	0.26%	0.42%
1974	0.42%	0.58%	0.01%	0.00%	0.07%	0.00%	0.00%	0.20%	0.42%	0.19%	0.03%	0.83%	0.23%
1975	2.66%	2.13%	1.34%	0.86%	0.01%	0.00%	0.12%	0.48%	0.27%	0.05%	0.01%	1.21%	0.76%
1976	2.08%	1.32%	0.69%	-0.23%	0.04%	1.24%	1.55%	2.54%	1.21%	-0.11%	-0.03%	0.00%	0.86%
1977	-0.45%	-0.72%	-0.08%	0.03%	-0.13%	-0.03%	-0.01%	0.04%	-0.02%	0.15%	0.19%	0.07%	-0.08%
1978	0.12%	0.03%	-0.03%	0.03%	0.67%	0.08%	0.23%	0.48%	0.43%	0.18%	0.03%	0.17%	0.20%
1979	0.20%	-0.22%	-0.16%	0.52%	1.07%	1.16%	1.32%	0.65%	0.16%	0.02%	0.00%	0.00%	0.39%
1980	-0.52%	-0.02%	1.10%	0.01%	0.00%	0.00%	0.25%	0.55%	0.62%	0.33%	0.03%	0.47%	0.23%
1981	0.54%	0.03%	0.16%	0.74%	1.39%	1.66%	2.01%	2.46%	0.92%	-0.04%	0.06%	0.82%	0.89%
1982	-0.58%	2.68%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.51%	0.29%	-0.31%	0.42%	0.25%
1983	2.39%	0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.82%	1.21%	0.41%
1984	1.36%	0.00%	0.00%	0.00%	0.05%	0.15%	0.03%	0.33%	0.59%	0.04%	-0.14%	0.19%	0.22%
1985	0.04%	1.65%	1.09%	0.30%	0.62%	0.54%	0.14%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.36%
1986	0.15%	0.01%	0.41%	0.97%	0.00%	0.00%	0.08%	0.45%	0.20%	0.02%	0.09%	0.22%	0.22%
1987	0.19%	0.04%	0.06%	-0.02%	0.36%	5.03%	1.20%	-0.36%	-0.20%	-0.14%	-0.05%	-0.02%	0.51%
1988	0.31%	0.37%	1.06%	1.85%	0.28%	-0.14%	10.25%	6.12%	-0.02%	-0.01%	0.01%	0.01%	1.67%
1989	-0.10%	-0.03%	0.01%	0.01%	0.03%	6.61%	2.44%	-0.25%	-0.40%	-0.17%	0.14%	-0.27%	0.67%
1990	-0.46%	0.77%	1.00%	1.05%	0.61%	1.11%	0.76%	1.79%	1.50%	-0.54%	-0.48%	0.18%	0.61%
1991	-0.95%	-0.29%	-1.33%	-2.08%	-0.56%	0.98%	1.93%	1.97%	0.91%	0.24%	0.29%	0.29%	0.12%
AVG:	0.36%	0.43%	0.56%	0.43%	0.46%	0.48%	0.53%	0.57%	0.22%	0.05%	-0.02%	0.12%	0.35%
MIN:	-7.73%	-1.72%	-1.72%	-2.08%	-2.55%	-2.74%	-2.43%	-1.30%	-2.77%	-1.03%	-2.73%	-5.60%	-0.76%
MAX:	6.68%	4.26%	6.68%	3.06%	8.13%	6.61%	10.25%	6.12%	1.50%	1.08%	1.15%	2.41%	1.67%

Table 4.4.6-39 Difference in simulated monthly average electrical conductivity (%) at Chipps Island, G-model results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.49%	0.81%	0.53%	0.41%	0.39%	0.06%	-2.51%	-2.11%	-0.18%	1.66%	-0.04%
1923	2.01%	-0.44%	3.79%	2.50%	0.88%	0.18%	0.29%	0.54%	0.19%	-0.02%	0.00%	0.07%	0.83%
1924	0.08%	-0.87%	-1.01%	-0.72%	0.02%	0.28%	0.06%	0.03%	-0.04%	0.06%	-0.94%	-1.13%	-0.35%
1925	0.00%	-0.42%	-1.24%	-0.90%	-0.08%	-0.08%	0.25%	0.90%	0.34%	-0.03%	0.26%	0.40%	-0.05%
1926	0.05%	0.13%	0.26%	0.01%	0.31%	0.25%	3.00%	1.41%	0.15%	-0.04%	0.00%	0.01%	0.46%
1927	-0.06%	1.08%	1.59%	0.87%	0.00%	0.05%	0.05%	0.94%	-0.82%	0.18%	0.64%	1.12%	0.47%
1928	-0.84%	0.79%	4.76%	3.55%	0.66%	0.01%	0.40%	0.12%	0.09%	0.08%	0.02%	0.01%	0.80%
1929	-0.22%	0.41%	-0.04%	0.08%	1.09%	0.08%	-0.24%	-0.04%	0.00%	0.00%	-0.37%	-0.42%	0.03%
1930	0.32%	-0.12%	-0.22%	0.65%	0.28%	0.38%	0.39%	0.39%	0.03%	-0.09%	0.96%	1.11%	0.34%
1931	-0.30%	-0.06%	0.51%	0.15%	-2.36%	-2.08%	-0.50%	0.21%	0.15%	-0.22%	-0.10%	0.03%	-0.38%
1932	0.01%	-0.04%	0.77%	0.90%	2.04%	0.94%	0.43%	0.66%	0.33%	0.05%	0.13%	0.13%	0.53%
1933	0.05%	0.07%	0.02%	0.34%	0.77%	0.53%	0.17%	0.28%	0.21%	0.05%	0.03%	0.02%	0.21%
1934	0.02%	0.00%	-0.01%	0.12%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.75%	-0.88%	-0.12%
1935	-0.05%	-1.10%	-1.22%	-0.67%	-0.72%	-3.39%	0.05%	0.18%	0.35%	0.20%	0.04%	0.01%	-0.53%
1936	0.39%	-0.18%	0.07%	1.27%	0.07%	2.42%	3.30%	1.85%	0.27%	-0.12%	-0.03%	-0.01%	0.77%
1937	0.09%	0.47%	-0.02%	0.00%	1.73%	0.07%	0.21%	-2.14%	-1.35%	-0.27%	-0.06%	-0.02%	-0.11%
1938	-0.01%	1.00%	0.17%	0.33%	0.00%	0.00%	0.00%	0.00%	-0.59%	-1.47%	-0.10%	5.15%	0.37%
1939	11.47%	5.50%	2.02%	1.36%	1.21%	1.28%	0.77%	0.51%	0.50%	0.29%	0.10%	0.05%	2.09%
1940	0.05%	0.05%	0.21%	0.61%	0.02%	0.00%	0.01%	-2.09%	1.06%	1.76%	0.35%	-5.44%	-0.29%
1941	-7.65%	0.84%	3.92%	0.00%	0.00%	0.00%	0.00%	-0.07%	-0.14%	0.01%	-2.23%	0.96%	-0.36%
1942	2.75%	1.09%	0.41%	0.00%	0.00%	0.14%	0.05%	0.15%	-5.35%	-3.15%	-0.37%	3.24%	-0.09%
1943	4.25%	7.27%	5.98%	0.00%	0.01%	0.00%	0.13%	0.07%	-0.01%	4.17%	3.26%	1.64%	2.23%
1944	1.26%	0.03%	0.33%	-0.10%	0.03%	0.56%	0.44%	0.60%	0.32%	0.05%	0.01%	-0.06%	0.29%
1945	-0.15%	3.33%	2.66%	-0.04%	-0.12%	-0.10%	1.01%	1.81%	0.72%	0.09%	0.02%	0.77%	0.83%
1946	0.05%	0.49%	0.04%	0.29%	-0.08%	2.96%	1.95%	-4.73%	-2.90%	-0.40%	-0.09%	-0.03%	-0.20%
1947	-0.77%	0.70%	1.95%	0.85%	0.85%	-1.06%	-0.48%	0.14%	0.39%	0.31%	0.20%	0.14%	0.27%
1948	0.21%	0.25%	0.30%	0.02%	-0.15%	-0.13%	0.17%	0.47%	0.52%	0.22%	0.04%	0.14%	0.17%
1949	-0.90%	-0.23%	0.62%	0.20%	0.64%	0.18%	0.28%	0.32%	0.11%	0.01%	-1.47%	-1.49%	-0.14%
1950	0.57%	0.50%	-0.03%	0.97%	0.60%	2.14%	2.76%	2.12%	-0.01%	-0.41%	-0.08%	0.88%	0.83%
1951	0.41%	1.07%	0.00%	0.00%	0.00%	0.25%	0.38%	-3.49%	-1.67%	-0.94%	-0.62%	0.16%	-0.37%
1952	0.32%	-0.99%	8.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.64%	-1.27%	-0.09%	5.84%	0.93%
1953	5.64%	1.38%	-2.35%	0.00%	0.09%	0.10%	0.21%	0.48%	0.60%	0.02%	-0.14%	1.47%	0.62%
1954	1.54%	1.34%	-0.17%	0.93%	0.04%	0.05%	0.09%	-0.01%	0.29%	0.27%	0.06%	0.02%	0.37%
1955	-0.49%	-0.12%	1.26%	0.21%	-0.18%	-0.06%	-0.03%	0.40%	0.27%	0.05%	0.00%	-0.01%	0.11%
1956	-0.16%	-0.22%	0.01%	0.00%	0.00%	0.11%	0.29%	0.24%	-3.83%	-2.47%	-0.35%	5.87%	-0.04%
1957	6.94%	2.64%	-0.81%	0.49%	3.72%	0.17%	0.03%	0.83%	0.30%	0.31%	0.27%	0.30%	1.27%
1958	2.50%	2.34%	1.89%	0.57%	0.00%	0.00%	0.00%	0.01%	-2.82%	-2.27%	-0.20%	7.04%	0.75%
1959	12.48%	5.56%	1.45%	-0.08%	0.00%	-0.01%	0.18%	-0.24%	0.87%	0.10%	-0.47%	-0.68%	1.60%
1960	-0.03%	-0.12%	-0.51%	-0.18%	0.55%	0.33%	0.08%	0.52%	0.32%	0.05%	-0.78%	-0.86%	-0.05%
1961	0.90%	-0.51%	-0.20%	0.90%	1.72%	0.42%	-0.03%	0.17%	-0.22%	-0.29%	-0.08%	-0.02%	0.23%
1962	0.03%	-1.26%	-0.96%	-0.28%	-0.23%	-0.38%	0.04%	0.13%	0.37%	0.27%	0.06%	-0.14%	-0.19%
1963	1.99%	1.63%	1.34%	0.72%	0.02%	-0.07%	0.00%	1.54%	1.53%	-0.67%	-0.43%	0.84%	0.70%
1964	1.21%	1.64%	0.61%	2.40%	1.33%	4.14%	-2.99%	-2.19%	0.36%	0.25%	0.09%	1.05%	0.66%
1965	0.45%	-0.34%	0.14%	0.00%	0.14%	-0.01%	0.08%	0.00%	-1.42%	2.26%	2.21%	1.18%	0.39%
1966	0.96%	-0.33%	0.98%	0.28%	0.32%	0.24%	0.26%	0.34%	0.11%	-0.01%	0.00%	0.00%	0.26%
1967	0.03%	0.44%	1.38%	0.09%	0.15%	0.02%	0.01%	0.02%	-0.26%	-0.94%	-0.36%	3.36%	0.33%
1968	3.38%	0.91%	0.60%	0.77%	0.02%	0.16%	0.07%	0.33%	0.08%	0.05%	0.11%	0.04%	0.54%
1969	-0.12%	-0.05%	0.64%	0.00%	0.00%	0.01%	0.01%	0.01%	-1.32%	-1.78%	-0.13%	2.30%	-0.04%
1970	7.46%	4.00%	0.47%	0.00%	0.00%	0.09%	0.04%	0.51%	0.09%	0.14%	0.17%	0.34%	1.11%
1971	0.37%	0.89%	0.21%	0.06%	-0.09%	0.54%	0.26%	0.77%	0.79%	0.25%	0.00%	0.92%	0.41%
1972	0.93%	0.34%	0.58%	2.80%	2.83%	0.81%	0.00%	-0.13%	-0.04%	-0.02%	0.00%	0.00%	0.68%
1973	-0.53%	-0.55%	1.26%	0.01%	0.00%	0.01%	0.22%	-2.53%	-0.86%	0.20%	0.04%	1.23%	-0.13%
1974	1.54%	0.07%	0.00%	0.00%	0.06%	0.00%	0.00%	-0.76%	-2.22%	-1.05%	-0.16%	2.92%	0.03%
1975	7.02%	5.12%	1.89%	0.65%	-0.44%	0.00%	0.11%	0.54%	-2.27%	-1.40%	-0.19%	4.11%	1.26%
1976	4.91%	2.28%	2.20%	-0.33%	-0.99%	0.42%	0.44%	0.61%	0.34%	0.02%	0.02%	0.01%	0.83%
1977	-0.68%	-0.64%	-0.48%	-0.65%	-0.37%	-0.10%	-0.03%	0.08%	-0.17%	0.44%	0.63%	0.25%	-0.14%
1978	0.06%	0.18%	-0.01%	0.01%	0.04%	-0.02%	0.02%	0.26%	0.42%	0.18%	0.03%	0.17%	0.11%
1979	0.19%	-0.09%	0.02%	0.60%	0.68%	0.49%	-0.12%	-1.35%	-0.43%	0.09%	0.02%	0.01%	0.01%
1980	0.14%	0.16%	0.65%	0.00%	0.00%	0.09%	1.69%	4.03%	4.31%	2.15%	0.14%	1.83%	1.27%
1981	2.21%	-0.35%	0.56%	1.99%	4.89%	1.42%	0.41%	0.50%	0.19%	-0.02%	0.01%	0.25%	1.01%
1982	-0.43%	0.05%	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%	-3.26%	-2.16%	0.47%	3.59%	-0.14%
1983	6.31%	0.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.43%	1.95%	5.91%	1.11%
1984	2.31%	0.00%	0.00%	0.00%	0.04%	0.14%	0.03%	0.46%	0.07%	0.46%	0.40%	0.59%	0.37%
1985	0.18%	1.42%	1.05%	0.30%	0.62%	0.53%	0.14%	0.02%	0.00%	0.00%	0.00%	0.00%	0.35%
1986	0.18%	-0.27%	-0.25%	0.26%	0.00%	0.00%	0.08%	-3.00%	-1.37%	0.00%	1.32%	2.13%	-0.08%
1987	1.43%	-0.13%	0.31%	-0.13%	2.65%	4.64%	0.67%	-0.38%	0.07%	0.13%	0.04%	0.02%	0.78%
1988	0.12%	0.14%	-0.16%	0.32%	0.11%	-0.02%	0.32%	0.19%	0.00%	0.00%	-0.07%	-0.09%	0.07%
1989	0.11%	0.01%	-0.01%	-0.07%	-0.12%	1.60%	0.79%	0.00%	-0.10%	-0.03%	0.08%	0.29%	0.21%
1990	-0.43%	0.35%	0.92%	-0.10%	-0.29%	0.01%	0.03%	0.39%	0.34%	0.02%	-0.12%	-0.09%	0.09%
1991	-0.71%	0.66%	-0.45%	-1.68%	-0.84%	-0.01%	0.58%	0.98%	0.58%	0.17%	0.05%	0.00%	-0.06%
AVG:	1.19%	0.71%	0.70%	0.35%	0.35%	0.32%	0.28%	0.07%	-0.27%	-0.14%	0.05%	0.86%	0.37%
MIN:	-7.65%	-1.26%	-2.35%	-1.68%	-2.36%	-3.39%	-2.99%	-4.73%	-5.35%	-3.15%	-2.23%	-5.44%	-0.53%
MAX:	12.48%	7.27%	8.01%	3.55%	4.89%	4.64%	3.30%	4.03%	4.31%	4.17%	3.26%	7.04%	2.23%

Table 4.4.6-40 Simulated monthly average electrical conductivity (mS/cm) at Collinsville, G-model results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	7.696	7.165	1.690	0.737	0.150	0.152	0.156	0.150	0.150	0.513	3.708	6.909	2.431
1923	7.770	5.086	0.157	0.152	0.260	0.509	0.160	0.197	0.867	2.395	4.750	6.560	2.405
1924	7.169	5.397	5.227	3.965	1.196	0.912	2.065	4.701	5.525	4.012	5.689	8.703	4.547
1925	9.033	7.082	3.545	2.466	0.150	0.151	0.158	0.283	0.979	3.041	4.757	6.908	3.213
1926	8.066	6.654	5.869	1.229	0.150	0.310	0.174	0.405	2.389	4.667	5.986	8.098	3.667
1927	7.892	0.709	0.483	0.166	0.150	0.150	0.150	0.153	0.372	1.156	3.640	7.199	1.852
1928	7.461	3.450	2.527	0.558	0.238	0.150	0.150	0.198	0.981	1.910	4.024	7.572	2.435
1929	7.600	5.253	4.478	4.268	1.356	0.865	1.823	2.868	3.438	5.225	6.248	7.777	4.267
1930	9.020	6.814	1.170	0.233	0.303	0.159	0.369	0.877	2.318	4.338	5.936	8.114	3.304
1931	7.666	6.279	4.525	2.836	2.249	2.744	2.995	4.312	5.329	4.093	5.807	8.832	4.806
1932	8.638	6.727	0.471	0.232	0.182	0.422	0.610	0.712	0.891	2.631	4.365	6.654	2.711
1933	8.130	6.482	4.252	1.915	1.045	1.054	1.043	2.352	3.620	5.268	5.911	7.410	4.040
1934	9.325	6.580	3.160	0.697	0.459	0.605	0.888	2.393	3.142	4.743	7.083	8.825	3.992
1935	8.619	6.026	4.594	0.161	0.320	0.168	0.150	0.151	0.357	1.803	4.609	7.758	2.893
1936	7.300	5.645	5.613	0.152	0.150	0.151	0.155	0.197	0.866	2.413	4.754	7.805	2.933
1937	7.754	5.703	5.335	3.623	0.150	0.150	0.151	0.168	0.573	2.071	4.673	7.779	3.178
1938	8.515	0.977	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.385	3.673	4.288	1.574
1939	1.329	2.730	3.081	2.442	1.193	0.620	0.717	1.079	2.415	4.255	5.903	8.094	2.821
1940	6.678	5.757	6.101	0.153	0.150	0.150	0.150	0.160	0.703	1.643	3.967	7.212	2.735
1941	7.982	4.411	0.150	0.150	0.150	0.150	0.150	0.150	0.188	0.996	3.806	4.123	1.867
1942	4.608	5.915	0.150	0.150	0.150	0.150	0.150	0.150	0.163	0.766	3.771	4.215	1.695
1943	3.934	3.046	0.197	0.150	0.150	0.150	0.150	0.158	0.549	1.414	3.713	7.318	1.744
1944	8.229	6.141	5.336	3.619	0.195	0.208	0.407	0.808	1.686	3.547	6.267	8.633	3.756
1945	6.346	4.374	1.980	2.452	0.150	0.157	0.252	0.311	0.825	2.187	4.701	7.658	2.616
1946	8.333	4.151	0.150	0.150	0.152	0.229	0.420	0.454	1.002	2.288	4.725	6.878	2.411
1947	6.770	5.144	2.651	2.854	0.816	0.331	0.509	1.070	2.171	3.902	5.438	7.628	3.274
1948	6.841	5.943	5.515	2.745	0.991	0.595	0.158	0.152	0.329	1.726	4.591	7.371	3.080
1949	6.746	5.228	3.667	4.163	2.561	0.150	0.212	0.471	1.313	3.445	5.676	7.888	3.460
1950	7.102	6.184	4.938	0.434	0.152	0.213	0.198	0.225	0.551	1.868	4.625	7.453	2.829
1951	7.523	0.150	0.150	0.150	0.150	0.151	0.207	0.210	1.170	1.532	3.354	6.592	1.778
1952	7.503	4.322	0.151	0.150	0.150	0.150	0.150	0.150	0.150	0.402	3.678	1.748	1.559
1953	0.760	2.616	0.150	0.150	0.152	0.225	0.247	0.159	0.275	0.874	3.395	3.596	1.050
1954	4.553	4.743	4.820	0.157	0.150	0.150	0.150	0.156	0.895	2.099	4.064	6.580	2.377
1955	6.709	4.675	0.630	0.464	0.627	1.220	0.825	0.778	1.726	3.687	6.064	8.419	2.985
1956	7.124	6.029	0.150	0.150	0.150	0.150	0.161	0.150	0.197	1.012	3.828	4.017	1.926
1957	3.243	4.593	5.604	3.810	0.157	0.150	0.163	0.201	0.741	1.490	3.718	7.177	2.587
1958	4.139	4.102	0.766	0.151	0.150	0.150	0.150	0.150	0.151	0.542	3.716	2.823	1.416
1959	1.197	2.917	5.501	0.155	0.150	0.156	0.602	1.300	1.568	2.192	4.445	7.040	2.269
1960	7.068	5.072	4.092	3.396	0.200	0.247	0.533	0.724	2.185	4.366	5.419	7.510	3.401
1961	7.353	5.100	2.721	2.246	0.186	0.233	0.655	1.114	2.281	4.109	5.137	7.243	3.198
1962	6.923	5.399	2.980	2.617	0.150	0.158	0.411	0.507	1.060	2.342	4.737	7.217	2.875
1963	0.202	0.900	0.255	0.483	0.150	0.151	0.150	0.150	0.329	0.869	3.111	6.728	1.123
1964	7.617	0.551	1.698	0.654	0.560	1.257	0.394	0.657	2.207	4.207	5.241	6.863	2.659
1965	7.418	5.049	0.150	0.150	0.150	0.172	0.150	0.153	0.714	1.115	3.076	6.798	2.091
1966	7.796	1.362	0.841	0.165	0.159	0.170	0.360	0.639	1.350	2.519	4.779	7.813	2.329
1967	6.105	4.460	0.152	0.150	0.150	0.150	0.150	0.150	0.150	0.359	3.487	1.680	1.429
1968	0.806	2.703	3.402	0.167	0.150	0.150	0.227	0.994	2.119	2.657	4.625	7.664	2.139
1969	6.765	5.122	0.461	0.150	0.150	0.150	0.150	0.150	0.150	0.448	3.691	6.288	1.973
1970	1.331	2.356	0.150	0.150	0.150	0.150	0.194	0.540	1.469	0.923	2.788	6.698	1.408
1971	7.752	2.719	0.150	0.150	0.152	0.150	0.159	0.153	0.375	0.678	2.750	4.159	1.612
1972	4.915	6.120	3.359	2.324	0.264	0.155	0.421	1.523	0.992	1.839	4.618	7.761	2.858
1973	7.257	1.820	0.228	0.150	0.150	0.150	0.164	0.237	0.613	1.465	3.929	7.029	1.933
1974	7.773	0.150	0.150	0.150	0.150	0.150	0.150	0.151	0.290	1.158	3.861	2.466	1.383
1975	2.990	5.166	3.948	3.312	0.150	0.150	0.151	0.152	0.206	0.950	3.814	2.953	1.995
1976	1.478	3.133	4.279	4.283	2.113	0.932	1.169	3.429	6.257	7.237	7.552	8.750	4.218
1977	8.540	7.472	4.498	4.299	3.771	3.420	3.026	4.372	5.358	4.227	6.120	9.075	5.348
1978	8.577	6.843	3.147	0.150	0.150	0.150	0.150	0.152	0.239	1.036	3.834	6.922	2.612
1979	7.755	6.685	3.908	0.315	0.150	0.150	0.176	0.302	0.624	1.866	4.624	7.763	2.860
1980	7.415	5.177	1.314	0.150	0.150	0.150	0.155	0.182	0.734	1.730	3.118	5.564	2.153
1981	7.111	6.490	4.269	0.472	0.163	0.152	0.210	0.863	2.764	4.529	5.422	7.130	3.298
1982	6.873	0.197	0.150	0.150	0.150	0.150	0.150	0.150	0.158	0.754	3.545	2.470	1.241
1983	0.204	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.429	0.195	0.181
1984	0.178	0.150	0.150	0.150	0.150	0.150	0.182	0.428	1.066	0.996	3.038	6.567	1.100
1985	7.386	0.211	0.202	1.305	1.190	0.672	0.532	0.824	2.408	4.414	5.381	6.217	2.562
1986	6.514	5.676	2.061	0.320	0.150	0.150	0.150	0.193	0.650	1.547	3.343	5.718	2.206
1987	7.027	6.409	5.497	3.878	0.545	0.166	0.425	1.421	2.763	4.293	6.477	8.777	3.973
1988	6.167	5.261	0.999	0.169	0.408	1.402	1.738	2.614	3.000	4.711	6.885	8.604	3.496
1989	8.506	6.462	5.099	3.217	2.233	0.150	0.176	0.565	2.146	4.228	5.374	6.608	3.730
1990	6.707	4.744	4.980	1.612	0.709	0.999	1.106	2.112	4.713	6.002	6.323	8.087	4.008
1991	9.371	6.811	5.395	5.886	4.024	0.161	0.267	1.290	4.118	6.600	6.796	8.072	4.899
AVG:	6.360	4.445	2.513	1.304	0.522	0.389	0.452	0.796	1.491	2.527	4.605	6.615	2.668
MIN:	0.178	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.429	0.195	0.181
MAX:	9.371	7.472	6.101	5.886	4.024	3.420	3.026	4.701	6.257	7.237	7.552	9.075	5.348

Table 4.4.6-41 Difference in simulated monthly average electrical conductivity (%) at Collinsville, G-model results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	1.21%	1.29%	0.00%	0.03%	0.06%	0.00%	0.01%	0.21%	0.01%	0.51%	0.28%
1923	0.50%	0.00%	0.18%	0.03%	0.15%	0.24%	0.06%	0.30%	0.13%	-0.04%	-0.01%	-0.15%	0.12%
1924	-0.14%	-0.20%	-0.13%	-0.63%	0.63%	0.43%	2.11%	1.60%	-1.15%	1.45%	0.33%	-0.83%	0.29%
1925	0.60%	-1.48%	-2.97%	-1.36%	0.00%	0.00%	0.11%	-0.12%	-0.13%	0.01%	-0.40%	-0.74%	-0.54%
1926	-0.03%	-0.11%	-0.34%	-0.07%	0.00%	0.53%	1.08%	3.19%	0.78%	-0.21%	-0.34%	-0.27%	0.35%
1927	-0.43%	1.85%	11.42%	0.60%	0.00%	0.00%	0.00%	-0.12%	-3.88%	1.79%	1.78%	0.58%	1.13%
1928	-0.99%	-1.82%	-1.16%	0.42%	0.12%	0.00%	0.01%	0.05%	-0.04%	-0.02%	0.00%	0.00%	-0.29%
1929	0.42%	-0.01%	-0.01%	-0.07%	1.04%	-5.56%	-2.66%	0.15%	0.18%	0.03%	-0.36%	-0.31%	-0.60%
1930	0.82%	-0.56%	-0.55%	0.58%	0.56%	0.36%	3.17%	4.14%	-0.45%	-1.06%	1.11%	1.09%	0.77%
1931	-0.36%	-0.78%	-0.02%	-0.21%	-5.07%	-2.84%	-0.22%	0.72%	0.18%	-0.86%	-0.28%	0.07%	-0.81%
1932	0.75%	-0.58%	0.53%	0.76%	2.84%	2.25%	-0.50%	0.60%	0.36%	0.02%	0.31%	0.23%	0.63%
1933	0.06%	-0.58%	-1.19%	-0.80%	-0.55%	1.72%	0.90%	0.73%	0.40%	0.02%	-0.05%	-0.05%	0.05%
1934	-0.30%	-0.10%	-0.59%	-2.40%	-1.04%	-0.18%	0.00%	0.02%	0.01%	0.00%	-4.99%	-4.62%	-1.18%
1935	2.60%	-3.70%	-1.46%	0.69%	1.47%	-0.80%	0.00%	0.01%	0.56%	0.28%	0.03%	0.00%	-0.03%
1936	0.44%	-0.36%	0.60%	0.04%	0.00%	-0.03%	-0.01%	0.64%	0.37%	-0.06%	-0.01%	0.00%	0.14%
1937	0.03%	0.28%	-0.13%	-0.15%	-0.01%	0.00%	0.01%	0.49%	0.25%	-0.19%	-0.02%	0.00%	0.05%
1938	0.00%	1.96%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	0.00%	-1.59%	0.04%
1939	2.40%	1.59%	1.21%	1.37%	1.57%	4.52%	4.44%	3.95%	-0.04%	-0.78%	0.37%	0.41%	1.75%
1940	-0.62%	-0.67%	1.06%	0.21%	0.00%	0.00%	0.00%	-0.09%	-2.88%	-1.43%	-0.13%	-9.90%	-1.20%
1941	-11.74%	5.30%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.07%	-3.43%	-1.52%	-0.95%
1942	0.76%	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.18%	0.36%	0.02%	1.43%	0.26%
1943	2.67%	4.49%	1.08%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.02%	-0.36%	-0.19%	0.25%	0.66%
1944	0.28%	-0.07%	0.17%	0.13%	0.36%	0.89%	0.86%	1.06%	0.40%	0.01%	0.00%	0.06%	0.35%
1945	0.06%	1.60%	2.60%	0.80%	0.00%	0.03%	0.30%	0.70%	0.27%	0.01%	0.00%	0.22%	0.55%
1946	-0.02%	0.82%	0.00%	0.00%	-0.01%	0.86%	0.88%	0.89%	0.31%	0.01%	0.00%	0.00%	0.31%
1947	0.15%	-0.14%	-0.47%	-0.18%	1.09%	-0.24%	0.28%	0.13%	-0.15%	-0.08%	0.51%	0.43%	0.11%
1948	-0.22%	0.07%	-0.26%	-0.38%	-0.03%	0.20%	0.06%	0.04%	0.73%	0.32%	0.03%	0.22%	0.07%
1949	1.11%	-0.09%	0.32%	0.60%	2.21%	0.00%	0.22%	0.43%	0.12%	0.00%	0.46%	0.62%	0.50%
1950	-0.16%	-0.41%	0.16%	0.99%	0.03%	0.35%	0.26%	0.47%	0.94%	0.36%	0.03%	0.06%	0.26%
1951	0.14%	0.00%	0.00%	0.00%	0.00%	0.01%	0.26%	0.40%	0.21%	-0.20%	-0.10%	0.05%	0.06%
1952	0.06%	0.05%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	2.72%	0.25%
1953	3.06%	0.88%	0.00%	0.00%	0.00%	0.03%	0.22%	0.08%	0.53%	-0.13%	-0.18%	2.72%	0.60%
1954	2.04%	1.99%	-0.99%	0.09%	0.00%	0.00%	0.00%	-0.01%	0.61%	0.41%	0.05%	0.00%	0.35%
1955	0.18%	0.06%	3.19%	1.61%	0.30%	1.03%	-0.66%	0.42%	0.37%	0.02%	0.05%	0.04%	0.55%
1956	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.44%	0.39%	0.02%	2.33%	0.28%
1957	3.43%	1.41%	-2.09%	-0.06%	0.58%	0.00%	0.01%	0.55%	0.21%	0.37%	0.23%	0.35%	0.42%
1958	2.00%	1.18%	2.23%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.21%	0.01%	2.20%	0.65%
1959	3.27%	1.00%	0.14%	0.03%	0.00%	0.00%	2.70%	-0.53%	-0.73%	0.38%	0.21%	4.37%	0.90%
1960	-2.97%	0.80%	3.77%	1.97%	2.02%	1.73%	0.68%	4.14%	1.69%	0.07%	-1.66%	-1.37%	0.91%
1961	1.84%	-1.34%	0.21%	1.40%	4.66%	0.58%	-0.53%	0.22%	-0.89%	-0.64%	-0.30%	-0.16%	0.42%
1962	0.36%	-0.40%	-1.45%	-0.65%	0.00%	0.19%	2.98%	1.11%	2.81%	1.50%	0.18%	0.22%	0.57%
1963	4.77%	5.97%	3.52%	3.81%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.47%	-0.23%	0.26%	1.47%
1964	0.53%	2.05%	0.57%	4.41%	1.37%	6.58%	-4.91%	1.49%	0.73%	-0.61%	0.09%	1.02%	1.11%
1965	-0.16%	-0.13%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	-0.07%	0.02%	0.01%	0.36%	0.00%
1966	0.35%	6.49%	3.88%	0.16%	0.10%	0.08%	0.52%	0.71%	-0.01%	-0.12%	-0.01%	0.00%	1.01%
1967	0.03%	1.40%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.07%	0.64%	1.87%	0.42%
1968	2.63%	0.88%	0.89%	0.19%	0.00%	0.01%	0.11%	3.12%	0.11%	0.63%	0.82%	0.16%	0.80%
1969	-0.13%	0.85%	3.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.22%	0.01%	1.96%	0.52%
1970	4.32%	1.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.70%	-0.05%	0.03%	0.09%	0.43%	0.57%
1971	0.41%	1.80%	0.00%	0.00%	-0.01%	0.00%	0.03%	0.05%	0.83%	-0.07%	-0.15%	1.54%	0.37%
1972	1.15%	0.26%	1.15%	5.12%	2.20%	0.08%	-0.16%	-0.20%	-0.05%	-0.02%	0.00%	0.00%	0.79%
1973	0.12%	2.13%	2.44%	0.00%	0.00%	0.00%	0.07%	0.49%	0.05%	-0.09%	-0.01%	0.48%	0.47%
1974	0.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.50%	0.24%	0.02%	1.70%	0.26%
1975	4.87%	2.94%	1.80%	0.95%	0.00%	0.00%	0.01%	0.03%	0.15%	0.06%	0.00%	2.50%	1.11%
1976	3.51%	1.75%	0.82%	-0.78%	0.25%	2.31%	2.54%	4.39%	1.32%	-0.59%	-0.15%	-0.03%	1.28%
1977	-0.85%	-1.14%	0.25%	0.08%	-0.22%	-0.01%	0.00%	0.08%	-0.06%	0.31%	0.27%	0.06%	-0.10%
1978	0.18%	-0.02%	-0.07%	0.00%	0.00%	0.00%	0.00%	0.02%	0.41%	0.22%	0.01%	0.30%	0.09%
1979	0.30%	-0.50%	-0.19%	0.71%	0.00%	0.02%	0.57%	0.65%	0.15%	0.00%	0.00%	0.00%	0.14%
1980	-0.98%	0.26%	2.16%	0.00%	0.00%	0.00%	0.04%	0.29%	1.03%	0.44%	-0.04%	0.87%	0.34%
1981	0.81%	-0.15%	0.30%	1.10%	0.36%	0.12%	1.56%	4.23%	0.98%	-0.31%	0.07%	1.47%	0.88%
1982	-1.48%	1.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.11%	0.34%	-0.65%	1.02%	0.11%
1983	1.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	1.27%	0.73%	0.31%
1984	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	1.04%	-0.15%	-0.23%	0.37%	0.18%
1985	0.00%	1.28%	0.63%	0.35%	1.18%	0.70%	0.11%	0.00%	-0.01%	-0.01%	0.01%	-0.02%	0.35%
1986	0.29%	-0.07%	0.90%	1.11%	0.00%	0.00%	0.00%	0.30%	0.23%	0.01%	0.17%	0.38%	0.28%
1987	0.26%	-0.01%	0.09%	-0.09%	0.67%	1.64%	0.56%	-0.67%	-0.33%	-0.19%	-0.04%	-0.01%	0.16%
1988	0.62%	0.54%	1.93%	0.56%	0.03%	-0.24%	22.05%	7.14%	-1.73%	-0.25%	-0.03%	0.00%	2.55%
1989	-0.18%	0.00%	0.03%	0.02%	0.04%	0.05%	0.76%	-0.64%	-0.64%	-0.21%	0.33%	-0.55%	-0.08%
1990	-0.72%	1.76%	1.50%	1.69%	0.58%	2.05%	0.98%	3.43%	2.10%	-1.54%	-0.69%	0.42%	0.96%
1991	-1.70%	-0.04%	-2.63%	-3.11%	-0.11%	0.23%	2.27%	3.26%	1.15%	0.16%	0.42%	0.37%	0.02%
AVG:	0.49%	0.63%	0.57%	0.33%	0.28%	0.29%	0.63%	0.80%	0.15%	0.02%	-0.07%	0.25%	0.36%
MIN:	-11.74%	-3.70%	-2.97%	-3.11%	-5.07%	-5.56%	-4.91%	-0.67%	-3.88%	-1.54%	-4.99%	-9.90%	-1.20%
MAX:	4.87%	6.49%	11.42%	5.12%	4.66%	6.58%	22.05%	7.14%	2.81%	1.79%	1.78%	4.37%	2.55%

Table 4.4.6-42 Difference in simulated monthly average electrical conductivity (%) at Collinsville, G-model results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	1.03%	1.22%	0.00%	0.03%	0.06%	0.00%	-0.05%	-2.23%	-0.08%	3.08%	0.26%
1923	3.07%	-1.72%	0.60%	0.14%	0.62%	0.24%	0.06%	0.38%	0.17%	-0.06%	-0.01%	0.13%	0.30%
1924	0.13%	-1.76%	-1.47%	-0.98%	0.53%	0.42%	0.04%	0.03%	-0.08%	0.13%	-1.80%	-1.64%	-0.54%
1925	0.40%	-0.77%	-2.13%	-1.17%	0.00%	0.00%	0.05%	1.12%	0.33%	-0.10%	0.51%	0.62%	-0.09%
1926	-0.06%	0.23%	0.40%	-0.12%	0.00%	0.26%	1.32%	1.47%	0.05%	-0.11%	0.00%	0.02%	0.29%
1927	-0.12%	2.09%	2.20%	0.21%	0.00%	0.00%	0.00%	0.10%	-1.64%	0.89%	1.00%	1.85%	0.55%
1928	-2.02%	2.39%	8.85%	4.12%	0.21%	0.00%	0.01%	0.04%	0.19%	0.12%	0.01%	0.00%	1.16%
1929	-0.42%	0.94%	-0.37%	0.29%	2.05%	-0.36%	-0.40%	-0.01%	0.01%	0.00%	-0.70%	-0.61%	0.04%
1930	0.73%	-0.38%	-0.20%	0.61%	0.24%	0.07%	0.53%	0.64%	-0.07%	-0.16%	1.84%	1.61%	0.45%
1931	-0.99%	0.01%	0.92%	0.09%	-4.87%	-2.81%	-0.22%	0.66%	0.22%	-0.48%	-0.09%	0.09%	-0.62%
1932	0.02%	-0.07%	1.31%	0.70%	1.08%	0.98%	0.63%	1.10%	0.39%	0.02%	0.24%	0.18%	0.55%
1933	0.05%	0.10%	0.00%	0.70%	1.31%	0.72%	0.15%	0.51%	0.29%	0.02%	0.02%	0.01%	0.32%
1934	0.02%	0.00%	-0.02%	0.23%	0.04%	-0.01%	0.00%	0.00%	0.00%	0.00%	-1.37%	-1.28%	-0.20%
1935	0.24%	-2.12%	-1.64%	-0.09%	-0.93%	-1.09%	0.00%	0.01%	0.51%	0.27%	0.03%	0.00%	-0.40%
1936	0.72%	-0.57%	0.30%	0.06%	0.00%	0.09%	0.45%	1.08%	0.10%	-0.23%	-0.03%	-0.01%	0.16%
1937	0.17%	0.89%	-0.30%	0.06%	0.01%	0.00%	0.01%	-0.83%	-1.64%	-0.26%	-0.03%	-0.01%	-0.16%
1938	0.00%	2.03%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.41%	-0.04%	10.40%	0.91%
1939	21.23%	5.93%	1.95%	1.66%	1.76%	1.87%	1.00%	0.79%	0.80%	0.37%	0.09%	0.03%	3.12%
1940	0.07%	0.06%	0.38%	0.04%	0.00%	0.00%	0.00%	-0.59%	3.17%	2.70%	0.24%	-9.84%	-0.31%
1941	-11.70%	5.62%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	0.03%	-4.25%	2.96%	-0.61%
1942	4.53%	1.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.57%	-3.71%	-0.18%	6.69%	0.57%
1943	6.79%	13.22%	2.70%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.02%	8.65%	4.51%	2.01%	3.16%
1944	1.54%	-0.59%	0.60%	-0.55%	0.08%	0.42%	0.57%	1.04%	0.39%	0.02%	0.00%	-0.12%	0.28%
1945	-0.26%	6.88%	3.15%	-0.87%	0.00%	-0.02%	1.20%	2.25%	0.80%	0.02%	0.00%	1.36%	1.21%
1946	-0.21%	1.13%	0.00%	0.00%	-0.02%	3.21%	2.17%	-8.02%	-3.52%	-0.14%	-0.02%	-0.01%	-0.45%
1947	-1.44%	1.84%	3.42%	0.84%	1.25%	-1.77%	-0.34%	0.30%	0.75%	0.44%	0.27%	0.17%	0.48%
1948	0.33%	0.36%	0.46%	-0.17%	-0.26%	-0.20%	0.03%	0.03%	0.65%	0.29%	0.03%	0.22%	0.15%
1949	-1.77%	0.07%	1.23%	0.18%	1.21%	0.00%	0.25%	0.46%	0.12%	0.00%	-2.76%	-2.12%	-0.26%
1950	1.65%	0.71%	-0.15%	1.50%	0.03%	1.93%	1.77%	1.73%	-0.57%	-0.63%	-0.06%	1.62%	0.79%
1951	0.40%	0.00%	0.00%	0.00%	0.00%	0.01%	0.27%	-2.86%	-1.89%	-1.57%	-0.78%	0.49%	-0.49%
1952	0.55%	-2.13%	0.27%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.24%	-0.04%	12.54%	0.83%
1953	7.56%	1.10%	-0.03%	0.00%	0.01%	0.08%	0.21%	0.10%	0.68%	-0.17%	-0.23%	3.02%	1.03%
1954	2.24%	2.03%	-1.05%	0.15%	0.00%	0.00%	0.00%	-0.01%	0.61%	0.41%	0.05%	0.00%	0.37%
1955	-0.93%	0.03%	2.29%	-0.14%	-0.27%	-0.08%	-0.03%	0.78%	0.34%	0.02%	-0.03%	-0.03%	0.16%
1956	-0.30%	-0.35%	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	-2.96%	-3.17%	-0.19%	12.18%	0.44%
1957	10.87%	2.44%	-2.83%	1.39%	0.54%	0.00%	0.00%	0.64%	0.25%	0.61%	0.37%	0.47%	1.23%
1958	4.99%	3.19%	2.54%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.09%	-2.44%	-0.09%	15.04%	1.93%
1959	21.77%	6.06%	0.83%	-0.04%	0.00%	0.00%	0.35%	-0.56%	1.94%	-0.32%	-0.81%	-1.12%	2.34%
1960	0.25%	-0.29%	-0.83%	-0.15%	0.41%	0.25%	0.07%	0.98%	0.41%	0.02%	-1.51%	-1.24%	-0.13%
1961	2.04%	-1.53%	0.25%	1.57%	0.88%	0.17%	-0.07%	0.35%	-0.52%	-0.44%	-0.06%	0.00%	0.22%
1962	0.07%	-2.49%	-1.11%	-0.25%	0.00%	-0.08%	0.20%	0.16%	0.71%	0.38%	0.04%	-0.28%	-0.22%
1963	1.42%	2.41%	1.23%	0.96%	0.00%	0.00%	0.00%	0.02%	1.18%	-1.38%	-0.58%	1.65%	0.58%
1964	1.92%	2.37%	0.53%	4.36%	1.35%	8.23%	-6.00%	-2.06%	0.98%	0.38%	0.09%	1.90%	1.17%
1965	0.38%	-0.80%	0.00%	0.00%	0.00%	-0.03%	0.00%	0.00%	-2.68%	5.25%	3.06%	1.55%	0.56%
1966	1.23%	-1.24%	2.23%	0.01%	0.08%	0.07%	0.37%	0.54%	0.09%	-0.04%	0.00%	0.00%	0.28%
1967	0.07%	0.87%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.17%	-0.49%	7.22%	0.55%
1968	4.64%	0.79%	0.85%	0.19%	0.00%	0.00%	0.02%	0.68%	0.01%	0.11%	0.17%	0.03%	0.62%
1969	-0.26%	-0.03%	1.07%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-1.81%	-0.06%	4.33%	0.27%
1970	14.48%	4.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	-0.06%	0.31%	0.23%	0.57%	1.74%
1971	0.53%	1.70%	0.00%	0.00%	-0.01%	0.00%	0.03%	0.06%	1.02%	0.26%	-0.03%	1.83%	0.45%
1972	1.36%	0.30%	0.99%	5.41%	2.33%	0.08%	-0.17%	-0.20%	-0.05%	-0.02%	0.00%	0.00%	0.84%
1973	-0.99%	-0.78%	1.26%	0.00%	0.00%	0.00%	0.07%	-2.63%	-0.59%	0.42%	0.03%	2.21%	-0.08%
1974	2.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.05%	-2.65%	-1.34%	-0.09%	6.23%	0.37%
1975	12.56%	6.93%	1.55%	0.25%	0.00%	0.00%	0.01%	0.03%	-1.95%	-1.75%	-0.10%	8.69%	2.19%
1976	7.55%	2.73%	3.36%	-1.73%	-1.64%	1.06%	0.68%	1.04%	0.41%	-0.07%	-0.01%	0.01%	1.12%
1977	-1.28%	-0.88%	-0.68%	-0.95%	-0.39%	-0.02%	0.01%	0.18%	-0.37%	0.99%	0.93%	0.22%	-0.19%
1978	-0.04%	0.30%	-0.19%	0.00%	0.00%	0.00%	0.00%	0.02%	0.41%	0.22%	0.01%	0.29%	0.08%
1979	0.28%	-0.25%	0.10%	0.76%	0.00%	0.01%	-0.11%	-1.75%	-0.32%	0.19%	0.02%	0.01%	-0.09%
1980	0.26%	0.23%	1.25%	0.00%	0.00%	0.00%	0.24%	2.20%	7.08%	2.92%	-0.34%	3.39%	1.44%
1981	3.31%	-1.52%	1.36%	2.72%	1.34%	0.08%	0.28%	0.88%	0.20%	-0.09%	0.02%	0.46%	0.75%
1982	-0.93%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.70%	-2.56%	1.26%	7.29%	0.37%
1983	4.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	4.42%	3.73%	1.01%
1984	0.84%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.79%	-0.07%	0.97%	0.53%	0.96%	0.33%
1985	0.08%	1.08%	0.61%	0.35%	1.18%	0.70%	0.11%	0.00%	-0.01%	-0.01%	0.01%	-0.01%	0.34%
1986	0.34%	-0.62%	-0.28%	0.38%	0.00%	0.00%	0.00%	-2.08%	-1.38%	0.19%	2.62%	3.48%	0.22%
1987	1.87%	-0.90%	0.64%	-0.62%	5.03%	1.32%	0.09%	-0.66%	0.24%	0.22%	0.04%	0.01%	0.61%
1988	0.23%	0.20%	-0.39%	0.12%	0.07%	-0.04%	0.65%	0.22%	-0.05%	-0.01%	-0.14%	-0.13%	0.06%
1989	0.23%	-0.04%	0.00%	-0.17%	-0.18%	0.01%	0.28%	-0.12%	-0.17%	-0.04%	0.16%	0.51%	0.04%
1990	-0.94%	0.99%	1.49%	-0.66%	-0.41%	0.09%	0.05%	0.78%	0.48%	-0.08%	-0.24%	-0.13%	0.12%
1991	-1.23%	1.68%	-1.41%	-2.77%	-0.95%	0.04%	0.69%	1.76%	0.78%	0.14%	-0.01%	-0.03%	-0.11%
AVG:	1.81%	0.94%	0.56%	0.28%	0.20%	0.23%	0.11%	0.06%	0.01%	-0.02%	0.08%	1.64%	0.49%
MIN:	-11.70%	-2.49%	-2.83%	-2.77%	-4.87%	-2.81%	-6.00%	-8.02%	-3.52%	-3.71%	-4.25%	-9.84%	-0.62%
MAX:	21.77%	13.22%	8.85%	5.41%	5.03%	8.23%	2.17%	2.25%	7.08%	8.65%	4.51%	15.04%	3.16%

Table 4.4.6-43 Simulated monthly average electrical conductivity (mS/cm) at Jersey Point, G-model results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1.996	1.864	0.545	0.248	0.200	0.200	0.200	0.200	0.200	0.202	0.416	1.067	0.612
1923	1.547	1.180	0.200	0.200	0.201	0.208	0.200	0.200	0.215	0.341	0.693	1.186	0.531
1924	1.500	1.257	1.151	0.903	0.345	0.251	0.330	0.689	1.005	0.831	1.089	1.855	0.934
1925	2.191	1.843	0.954	0.559	0.200	0.200	0.200	0.201	0.224	0.401	0.745	1.259	0.748
1926	1.742	1.588	1.398	0.401	0.200	0.200	0.200	0.203	0.307	0.673	1.055	1.654	0.802
1927	1.852	0.310	0.213	0.200	0.200	0.200	0.200	0.200	0.202	0.237	0.468	1.171	0.454
1928	1.537	0.841	0.536	0.238	0.202	0.200	0.200	0.200	0.219	0.310	0.569	1.309	0.530
1929	1.629	1.237	1.003	0.911	0.377	0.249	0.308	0.452	0.578	0.900	1.235	1.667	0.879
1930	2.154	1.770	0.410	0.203	0.202	0.200	0.202	0.225	0.333	0.647	1.045	1.655	0.754
1931	1.800	1.532	1.108	0.661	0.472	0.492	0.540	0.738	1.004	0.858	1.122	1.901	1.019
1932	2.111	1.735	0.259	0.202	0.200	0.204	0.214	0.221	0.233	0.364	0.677	1.177	0.633
1933	1.725	1.538	1.030	0.483	0.282	0.257	0.253	0.354	0.571	0.895	1.166	1.559	0.843
1934	2.190	1.720	0.831	0.267	0.212	0.215	0.231	0.345	0.507	0.777	1.341	1.935	0.881
1935	2.126	1.575	1.127	0.201	0.201	0.200	0.200	0.200	0.201	0.269	0.621	1.354	0.690
1936	1.578	1.307	1.266	0.200	0.200	0.200	0.200	0.200	0.215	0.343	0.695	1.415	0.652
1937	1.707	1.361	1.220	0.849	0.200	0.200	0.200	0.200	0.206	0.300	0.655	1.383	0.707
1938	1.857	0.367	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.399	0.675	0.408
1939	0.337	0.418	0.543	0.461	0.302	0.226	0.223	0.245	0.359	0.651	1.045	1.653	0.538
1940	1.578	1.347	1.403	0.200	0.200	0.200	0.200	0.200	0.209	0.278	0.542	1.224	0.632
1941	1.675	1.074	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.220	0.469	0.691	0.461
1942	0.822	1.145	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.210	0.446	0.693	0.393
1943	0.716	0.611	0.203	0.200	0.200	0.200	0.200	0.200	0.205	0.259	0.495	1.213	0.392
1944	1.717	1.452	1.234	0.852	0.203	0.200	0.204	0.222	0.286	0.509	1.037	1.752	0.806
1945	1.514	1.031	0.501	0.447	0.200	0.200	0.201	0.203	0.219	0.324	0.678	1.378	0.575
1946	1.819	1.052	0.200	0.200	0.200	0.200	0.205	0.208	0.231	0.343	0.695	1.246	0.550
1947	1.440	1.181	0.638	0.547	0.270	0.206	0.209	0.238	0.336	0.586	0.941	1.506	0.675
1948	1.570	1.383	1.283	0.680	0.294	0.224	0.200	0.200	0.201	0.262	0.613	1.279	0.682
1949	1.437	1.185	0.837	0.825	0.569	0.200	0.200	0.207	0.246	0.469	0.916	1.536	0.719
1950	1.622	1.452	1.177	0.239	0.200	0.200	0.200	0.201	0.208	0.285	0.639	1.313	0.645
1951	1.615	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.224	0.290	0.467	1.083	0.423
1952	1.517	1.024	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.401	0.361	0.409
1953	0.239	0.362	0.200	0.200	0.200	0.200	0.201	0.200	0.201	0.220	0.423	0.605	0.271
1954	0.777	0.923	0.955	0.200	0.200	0.200	0.200	0.200	0.211	0.321	0.578	1.140	0.492
1955	1.385	1.068	0.266	0.211	0.216	0.249	0.239	0.229	0.290	0.532	1.015	1.699	0.617
1956	1.678	1.435	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.221	0.473	0.678	0.490
1957	0.606	0.814	1.086	0.829	0.200	0.200	0.200	0.200	0.211	0.271	0.505	1.198	0.527
1958	0.903	0.800	0.281	0.200	0.200	0.200	0.200	0.200	0.200	0.203	0.419	0.496	0.359
1959	0.297	0.428	0.887	0.200	0.200	0.200	0.206	0.254	0.293	0.366	0.670	1.271	0.439
1960	1.513	1.183	0.911	0.724	0.203	0.201	0.208	0.221	0.316	0.642	0.954	1.487	0.714
1961	1.681	1.232	0.664	0.467	0.202	0.201	0.211	0.244	0.346	0.622	0.906	1.413	0.682
1962	1.564	1.263	0.726	0.532	0.200	0.200	0.203	0.210	0.235	0.352	0.702	1.312	0.625
1963	0.205	0.213	0.203	0.206	0.200	0.200	0.200	0.200	0.201	0.223	0.394	1.044	0.291
1964	1.513	0.266	0.275	0.235	0.214	0.251	0.211	0.214	0.318	0.617	0.917	1.341	0.531
1965	1.644	1.219	0.200	0.200	0.200	0.200	0.200	0.200	0.207	0.247	0.408	1.072	0.500
1966	1.564	0.428	0.247	0.200	0.200	0.200	0.202	0.214	0.256	0.383	0.727	1.441	0.505
1967	1.369	1.005	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.380	0.350	0.392
1968	0.241	0.373	0.562	0.201	0.200	0.200	0.200	0.223	0.325	0.432	0.728	1.423	0.426
1969	1.506	1.183	0.244	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.407	0.965	0.476
1970	0.369	0.376	0.200	0.200	0.200	0.200	0.200	0.207	0.259	0.249	0.378	1.037	0.323
1971	1.539	0.696	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.217	0.349	0.649	0.404
1972	0.855	1.192	0.770	0.492	0.207	0.200	0.202	0.259	0.253	0.305	0.661	1.388	0.565
1973	1.587	0.520	0.204	0.200	0.200	0.200	0.200	0.201	0.210	0.264	0.528	1.183	0.458
1974	1.613	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.201	0.232	0.491	0.474	0.368
1975	0.499	0.874	0.798	0.657	0.200	0.200	0.200	0.200	0.200	0.219	0.468	0.531	0.421
1976	0.334	0.476	0.729	0.796	0.481	0.268	0.261	0.470	1.024	1.443	1.690	2.092	0.839
1977	2.204	1.971	1.218	0.964	0.823	0.691	0.604	0.773	1.032	0.889	1.199	1.991	1.197
1978	2.126	1.771	0.859	0.200	0.200	0.200	0.200	0.200	0.200	0.224	0.478	1.124	0.649
1979	1.578	1.536	0.956	0.217	0.200	0.200	0.200	0.202	0.212	0.288	0.643	1.373	0.634
1980	1.613	1.218	0.397	0.200	0.200	0.200	0.200	0.200	0.210	0.287	0.456	0.894	0.506
1981	1.381	1.436	1.005	0.241	0.200	0.200	0.200	0.216	0.370	0.691	0.976	1.423	0.695
1982	1.557	0.205	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.209	0.425	0.454	0.354
1983	0.202	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.202	0.201	0.200
1984	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.204	0.234	0.247	0.406	1.035	0.294
1985	1.467	0.207	0.200	0.229	0.266	0.226	0.214	0.226	0.343	0.664	0.958	1.236	0.520
1986	1.412	1.299	0.548	0.211	0.200	0.200	0.200	0.200	0.209	0.270	0.471	0.928	0.512
1987	1.373	1.420	1.256	0.899	0.248	0.200	0.203	0.253	0.403	0.675	1.159	1.854	0.829
1988	1.514	1.220	0.347	0.200	0.203	0.251	0.311	0.413	0.513	0.780	1.308	1.873	0.744
1989	2.082	1.666	1.266	0.778	0.490	0.200	0.200	0.207	0.302	0.609	0.932	1.298	0.836
1990	1.472	1.114	1.065	0.445	0.240	0.243	0.255	0.336	0.693	1.090	1.293	1.778	0.835
1991	2.283	1.810	1.358	1.370	0.968	0.200	0.201	0.237	0.528	1.100	1.379	1.786	1.102
AVG:	1.408	1.048	0.636	0.384	0.250	0.219	0.221	0.248	0.314	0.438	0.726	1.238	0.594
MIN:	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.202	0.201	0.200
MAX:	2.283	1.971	1.403	1.370	0.968	0.691	0.604	0.773	1.032	1.443	1.690	2.092	1.197

Table 4.4.6-44 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, G-model results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.86%	0.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	0.53%	0.16%
1923	0.65%	0.17%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.04%	-0.01%	0.00%	-0.15%	0.06%
1924	-0.18%	-0.23%	-0.21%	-0.61%	0.17%	0.20%	1.17%	1.98%	-0.56%	1.01%	0.85%	-0.72%	0.24%
1925	0.54%	-1.19%	-3.11%	-1.95%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.01%	-0.36%	-0.86%	-0.58%
1926	-0.25%	-0.17%	-0.44%	-0.15%	0.00%	0.00%	0.02%	0.12%	0.84%	0.05%	-0.27%	-0.34%	-0.05%
1927	-0.50%	0.80%	1.42%	0.02%	0.00%	0.00%	0.00%	0.00%	-0.09%	0.10%	1.72%	0.99%	0.37%
1928	-0.68%	-1.78%	-1.35%	-0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	-0.32%
1929	0.42%	0.13%	0.00%	-0.02%	0.58%	-1.48%	-2.16%	-0.53%	-0.03%	-0.01%	-0.36%	-0.43%	-0.33%
1930	0.73%	-0.29%	-0.58%	0.03%	0.02%	0.00%	0.08%	0.89%	0.40%	-0.90%	0.91%	1.39%	0.22%
1931	-0.02%	-0.73%	-0.22%	-0.21%	-3.59%	-3.42%	-1.08%	0.25%	0.23%	-0.74%	-0.51%	-0.07%	-0.84%
1932	0.69%	-0.32%	0.10%	0.03%	0.03%	0.16%	0.01%	0.08%	0.13%	0.07%	0.29%	0.33%	0.13%
1933	0.15%	-0.49%	-1.23%	-0.93%	-0.38%	0.45%	0.44%	0.57%	0.55%	0.17%	0.02%	-0.04%	-0.06%
1934	-0.31%	-0.20%	-0.52%	-0.99%	-0.20%	-0.07%	-0.02%	0.00%	0.01%	0.00%	-4.98%	-6.11%	-1.12%
1935	0.97%	-3.13%	-3.18%	0.04%	0.03%	-0.01%	0.00%	0.00%	0.01%	0.16%	0.09%	0.03%	-0.41%
1936	0.44%	-0.18%	0.46%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%	0.02%	0.01%	0.00%	0.07%
1937	0.03%	0.27%	-0.02%	-0.16%	0.00%	0.00%	0.00%	0.00%	0.05%	-0.07%	-0.03%	-0.01%	0.00%
1938	-0.01%	1.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	-1.33%	-0.02%
1939	0.90%	1.68%	1.35%	1.39%	0.99%	0.97%	1.02%	1.47%	0.75%	-0.54%	0.28%	0.51%	0.90%
1940	-0.46%	-0.80%	0.78%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.22%	-0.87%	-0.42%	-10.09%	-1.01%
1941	-14.37%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-2.59%	-2.17%	-1.59%
1942	0.27%	0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.07%	1.23%	0.16%
1943	2.72%	4.39%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.11%	-0.22%	0.20%	0.59%
1944	0.33%	0.01%	0.15%	0.19%	0.03%	0.01%	0.06%	0.20%	0.31%	0.11%	0.05%	0.08%	0.13%
1945	0.09%	1.44%	2.37%	1.27%	0.00%	0.00%	0.00%	0.03%	0.07%	0.04%	0.02%	0.24%	0.46%
1946	0.05%	0.70%	0.00%	0.00%	0.00%	0.01%	0.06%	0.08%	0.13%	0.06%	0.03%	0.01%	0.09%
1947	0.15%	-0.07%	-0.41%	-0.27%	0.36%	0.00%	0.01%	0.06%	-0.06%	-0.09%	0.46%	0.57%	0.06%
1948	-0.06%	0.05%	-0.18%	-0.41%	-0.07%	0.03%	0.00%	0.00%	0.01%	0.19%	0.10%	0.26%	-0.01%
1949	1.15%	0.31%	0.29%	0.73%	1.85%	0.00%	0.00%	0.03%	0.07%	0.03%	0.45%	0.77%	0.47%
1950	0.05%	-0.38%	0.05%	0.31%	0.00%	0.00%	0.00%	0.01%	0.08%	0.26%	0.13%	0.11%	0.05%
1951	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.07%	-0.06%	-0.10%	0.02%	0.01%
1952	0.06%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	1.52%	0.14%
1953	1.01%	1.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	-0.15%	2.13%	0.35%
1954	2.61%	2.50%	-0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.29%	0.12%	0.04%	0.46%
1955	0.20%	0.12%	1.22%	0.28%	0.11%	0.33%	-0.07%	0.03%	0.23%	0.09%	0.08%	0.06%	0.22%
1956	0.07%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.09%	1.98%	0.19%
1957	3.44%	2.35%	-1.27%	-0.49%	0.02%	0.00%	0.00%	0.01%	0.05%	0.15%	0.28%	0.44%	0.41%
1958	1.86%	1.71%	1.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	1.58%	0.53%
1959	1.82%	1.45%	0.57%	0.00%	0.00%	0.00%	0.13%	0.09%	-0.42%	0.13%	0.25%	4.50%	0.71%
1960	-1.60%	-0.32%	4.00%	2.57%	0.21%	0.04%	0.10%	0.65%	1.52%	0.53%	-1.36%	-1.78%	0.38%
1961	1.34%	-0.73%	-0.44%	1.16%	0.27%	0.03%	-0.04%	0.04%	-0.46%	-0.76%	-0.46%	-0.32%	-0.03%
1962	0.24%	-0.29%	-1.33%	-0.92%	0.00%	0.00%	0.10%	0.18%	0.69%	1.38%	0.57%	0.42%	0.09%
1963	0.61%	0.99%	0.25%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.08%	-0.24%	0.20%	0.17%
1964	0.58%	0.88%	0.54%	1.11%	0.32%	2.06%	-0.35%	-0.08%	0.67%	-0.45%	0.02%	1.03%	0.53%
1965	0.14%	-0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.01%	0.36%	0.03%
1966	0.45%	4.26%	1.86%	0.01%	0.00%	0.00%	0.02%	0.10%	0.07%	-0.07%	-0.03%	-0.01%	0.55%
1967	0.03%	1.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.60%	1.11%	0.25%
1968	0.87%	1.09%	1.01%	0.01%	0.00%	0.00%	0.00%	0.48%	0.54%	0.42%	1.01%	0.40%	0.49%
1969	0.02%	0.80%	1.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	1.94%	0.33%
1970	2.97%	1.73%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.06%	0.00%	0.08%	0.46%	0.44%
1971	0.54%	1.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.02%	-0.11%	1.26%	0.28%
1972	1.49%	0.63%	1.17%	4.09%	0.36%	0.00%	0.00%	-0.08%	-0.03%	-0.02%	-0.01%	0.00%	0.63%
1973	0.12%	1.55%	0.21%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	-0.03%	-0.01%	0.48%	0.20%
1974	0.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.09%	0.06%	1.19%	0.18%
1975	4.13%	4.18%	2.66%	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.02%	1.85%	1.21%
1976	2.35%	2.18%	1.39%	-0.25%	0.06%	0.90%	1.11%	3.92%	2.55%	-0.01%	0.02%	0.03%	1.19%
1977	-0.80%	-1.35%	-0.25%	0.02%	-0.25%	-0.07%	-0.02%	0.06%	-0.03%	0.25%	0.36%	0.16%	-0.16%
1978	0.24%	0.07%	-0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.05%	0.33%	0.06%
1979	0.39%	-0.38%	-0.31%	0.13%	0.00%	0.00%	0.00%	0.02%	0.03%	0.02%	0.01%	0.01%	-0.01%
1980	-0.96%	-0.11%	1.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.31%	0.07%	0.85%	0.14%
1981	1.06%	0.13%	0.30%	0.38%	0.00%	0.00%	0.01%	0.62%	1.31%	0.04%	0.14%	1.55%	0.46%
1982	-0.94%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	-0.41%	0.55%	-0.04%
1983	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.02%	0.01%
1984	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.26%	0.05%	-0.19%	0.33%	0.04%
1985	0.09%	0.18%	0.01%	0.14%	0.45%	0.20%	0.04%	0.01%	0.00%	-0.01%	0.01%	-0.01%	0.09%
1986	0.27%	0.04%	0.63%	0.18%	0.00%	0.00%	0.00%	0.00%	0.03%	0.03%	0.13%	0.41%	0.14%
1987	0.38%	0.09%	0.12%	-0.02%	0.20%	0.02%	0.08%	-0.19%	-0.27%	-0.26%	-0.11%	-0.05%	0.00%
1988	0.55%	0.71%	1.21%	0.02%	0.02%	-0.07%	10.55%	9.56%	0.64%	0.25%	0.12%	0.07%	1.97%
1989	-0.15%	-0.05%	0.03%	0.01%	0.04%	0.00%	0.00%	-0.02%	-0.37%	-0.32%	0.22%	-0.48%	-0.09%
1990	-0.87%	1.33%	1.90%	1.57%	0.36%	0.61%	0.54%	2.01%	2.80%	-0.78%	-0.88%	0.31%	0.74%
1991	-1.72%	-0.65%	-2.43%	-3.99%	-1.33%	0.01%	0.03%	0.98%	1.60%	0.58%	0.62%	0.59%	-0.48%
AVG:	0.25%	0.44%	0.19%	0.10%	0.01%	0.01%	0.17%	0.34%	0.21%	0.01%	-0.05%	0.15%	0.15%
MIN:	-14.37%	-3.13%	-3.18%	-3.99%	-3.59%	-3.42%	-2.16%	-0.53%	-0.56%	-0.90%	-4.98%	-10.09%	-1.59%
MAX:	4.13%	4.39%	4.00%	4.09%	1.85%	2.06%	10.55%	9.56%	2.80%	1.38%	1.72%	4.50%	1.97%

Table 4.4.6-45 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, G-model results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.74%	0.48%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.10%	-0.35%	3.02%	0.32%
1923	3.91%	-0.56%	0.03%	0.00%	0.01%	0.03%	0.00%	0.00%	0.05%	-0.01%	0.00%	0.13%	0.30%
1924	0.16%	-1.55%	-1.94%	-1.42%	-0.09%	0.16%	0.07%	0.05%	-0.06%	0.10%	-1.69%	-2.19%	-0.70%
1925	-0.14%	-0.82%	-2.29%	-1.59%	0.00%	0.00%	0.00%	0.02%	0.13%	-0.01%	0.46%	0.77%	-0.29%
1926	0.14%	0.25%	0.52%	0.05%	0.00%	0.00%	0.02%	0.08%	0.22%	-0.03%	0.01%	0.02%	0.11%
1927	-0.11%	1.01%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.05%	0.97%	2.14%	0.37%
1928	-1.41%	1.24%	7.67%	1.93%	0.03%	0.00%	0.00%	0.00%	0.03%	0.08%	0.04%	0.01%	0.80%
1929	-0.41%	0.71%	0.00%	0.12%	1.34%	0.10%	-0.22%	-0.06%	-0.01%	0.00%	-0.68%	-0.82%	0.01%
1930	0.53%	-0.19%	-0.33%	0.04%	0.01%	0.00%	0.01%	0.14%	0.07%	-0.14%	1.75%	2.17%	0.34%
1931	-0.42%	-0.11%	0.96%	0.32%	-3.28%	-3.32%	-1.04%	0.22%	0.25%	-0.40%	-0.21%	0.04%	-0.58%
1932	0.01%	-0.07%	0.49%	0.03%	0.01%	0.07%	0.10%	0.20%	0.16%	0.09%	0.24%	0.25%	0.13%
1933	0.11%	0.13%	0.06%	0.50%	0.65%	0.38%	0.13%	0.34%	0.38%	0.11%	0.06%	0.04%	0.24%
1934	0.04%	0.01%	-0.01%	0.09%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.37%	-1.70%	-0.24%
1935	-0.20%	-2.03%	-2.38%	-0.01%	-0.02%	-0.01%	0.00%	0.00%	0.01%	0.16%	0.08%	0.03%	-0.36%
1936	0.72%	-0.28%	0.11%	0.00%	0.00%	0.00%	0.00%	0.01%	0.08%	-0.11%	-0.05%	-0.02%	0.04%
1937	0.16%	0.88%	0.03%	-0.01%	0.00%	0.00%	0.00%	0.00%	-0.14%	-0.31%	-0.14%	-0.06%	0.04%
1938	-0.03%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.18%	8.82%	0.81%
1939	13.80%	8.95%	4.04%	2.42%	1.30%	0.50%	0.28%	0.31%	0.63%	0.54%	0.24%	0.11%	2.76%
1940	0.11%	0.10%	0.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	1.47%	0.69%	-9.70%	-0.57%
1941	-14.18%	0.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-3.18%	1.35%	-1.30%
1942	5.03%	2.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.51%	-0.73%	5.43%	0.96%
1943	7.76%	12.76%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.76%	5.40%	3.44%	2.71%
1944	2.66%	0.32%	0.70%	-0.04%	0.00%	0.01%	0.03%	0.19%	0.30%	0.11%	0.04%	-0.10%	0.35%
1945	-0.27%	6.01%	4.49%	0.26%	0.00%	0.00%	0.02%	0.09%	0.22%	0.14%	0.06%	1.44%	1.04%
1946	0.18%	0.87%	0.00%	0.00%	0.00%	0.03%	0.18%	-0.56%	-1.27%	-0.64%	-0.27%	-0.11%	-0.13%
1947	-1.44%	1.14%	3.30%	1.57%	0.69%	-0.10%	-0.08%	0.06%	0.43%	0.54%	0.39%	0.30%	0.57%
1948	0.41%	0.49%	0.59%	0.09%	-0.12%	-0.04%	0.00%	0.00%	0.01%	0.17%	0.09%	0.26%	0.16%
1949	-1.61%	-0.53%	1.06%	0.40%	1.03%	0.00%	0.00%	0.04%	0.07%	0.03%	-2.60%	-2.91%	-0.42%
1950	0.85%	0.92%	-0.04%	0.47%	0.00%	0.01%	0.03%	0.03%	0.02%	-0.34%	-0.17%	1.63%	0.28%
1951	0.85%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.61%	-0.87%	-1.02%	0.20%	-0.12%
1952	0.58%	-1.72%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.17%	6.98%	0.47%
1953	3.09%	2.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	-0.20%	2.36%	0.62%
1954	2.88%	2.61%	-0.06%	0.01%	0.00%	0.00%	0.00%	0.00%	0.05%	0.29%	0.12%	0.04%	0.49%
1955	-0.88%	-0.29%	0.88%	0.06%	-0.04%	-0.04%	-0.02%	0.15%	0.26%	0.10%	0.01%	-0.02%	0.01%
1956	-0.29%	-0.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.78%	-0.69%	10.01%	0.65%
1957	12.41%	5.62%	-0.86%	0.95%	0.02%	0.00%	0.00%	0.01%	0.06%	0.24%	0.45%	0.60%	1.62%
1958	4.48%	4.48%	1.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.13%	-0.39%	10.73%	1.74%
1959	12.74%	9.30%	3.59%	0.00%	0.00%	0.00%	0.02%	-0.13%	0.74%	0.20%	-0.79%	-1.29%	2.03%
1960	-0.14%	-0.22%	-0.95%	-0.38%	0.03%	0.01%	0.01%	0.15%	0.36%	0.13%	-1.36%	-1.66%	-0.34%
1961	1.54%	-0.83%	-0.47%	1.30%	0.05%	0.01%	0.00%	0.09%	-0.23%	-0.49%	-0.18%	-0.06%	0.06%
1962	0.04%	-2.27%	-1.80%	-0.55%	0.00%	0.00%	0.00%	0.02%	0.16%	0.34%	0.14%	-0.24%	-0.35%
1963	0.17%	0.36%	0.09%	0.07%	0.00%	0.00%	0.00%	0.00%	0.03%	-0.19%	-0.60%	1.50%	0.12%
1964	2.33%	1.21%	0.59%	1.10%	0.32%	2.55%	-0.43%	-0.52%	0.24%	0.39%	0.17%	1.96%	0.83%
1965	0.97%	-0.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.15%	1.20%	3.20%	2.43%	0.59%
1966	2.00%	-0.27%	0.52%	0.00%	0.00%	0.00%	0.01%	0.07%	0.08%	0.00%	0.00%	0.00%	0.20%
1967	0.06%	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.50%	3.80%	0.35%
1968	1.90%	1.41%	1.11%	0.01%	0.00%	0.00%	0.00%	0.10%	0.11%	0.07%	0.20%	0.08%	0.42%
1969	-0.21%	-0.11%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.26%	4.18%	0.32%
1970	9.46%	5.85%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.08%	0.08%	0.23%	0.64%	1.37%
1971	0.72%	1.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.07%	0.02%	1.54%	0.33%
1972	1.77%	0.75%	1.08%	4.26%	0.38%	0.00%	0.00%	-0.09%	-0.03%	-0.02%	-0.01%	0.00%	0.68%
1973	-0.96%	-0.90%	0.08%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.15%	0.11%	0.05%	2.28%	0.04%
1974	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.48%	-0.34%	4.21%	0.53%
1975	11.28%	10.31%	4.12%	1.56%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.41%	-0.38%	6.34%	2.73%
1976	5.79%	3.94%	4.24%	-0.16%	-1.40%	0.27%	0.31%	0.93%	0.70%	0.10%	0.06%	0.04%	1.24%
1977	-1.23%	-1.25%	-0.96%	-1.27%	-0.77%	-0.26%	-0.09%	0.12%	-0.31%	0.74%	1.22%	0.53%	-0.29%
1978	0.16%	0.37%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.05%	0.31%	0.08%
1979	0.38%	-0.14%	0.03%	0.15%	0.00%	0.00%	0.00%	-0.04%	-0.09%	0.06%	0.03%	0.01%	0.03%
1980	0.26%	0.31%	0.83%	0.00%	0.00%	0.00%	0.00%	0.01%	0.74%	2.05%	0.41%	3.38%	0.67%
1981	4.38%	-0.35%	1.03%	1.05%	0.02%	0.00%	0.00%	0.12%	0.27%	-0.01%	0.03%	0.47%	0.59%
1982	-0.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.33%	0.49%	5.13%	0.38%
1983	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.09%	0.04%
1984	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.04%	0.25%	0.57%	1.12%	0.17%
1985	0.41%	0.16%	0.01%	0.14%	0.44%	0.20%	0.04%	0.01%	0.00%	-0.01%	0.01%	-0.01%	0.12%
1986	0.32%	-0.46%	-0.42%	0.04%	0.00%	0.00%	0.00%	-0.01%	-0.22%	-0.05%	1.90%	4.02%	0.43%
1987	2.91%	-0.01%	0.62%	-0.10%	1.48%	0.02%	0.05%	-0.21%	0.08%	0.23%	0.09%	0.04%	0.43%
1988	0.23%	0.28%	-0.16%	0.00%	0.01%	-0.01%	0.30%	0.29%	0.03%	0.01%	-0.13%	-0.17%	0.06%
1989	0.19%	0.03%	-0.02%	-0.11%	-0.19%	0.00%	0.00%	0.00%	-0.10%	-0.06%	0.13%	0.55%	0.03%
1990	-0.74%	0.57%	1.74%	-0.03%	-0.14%	0.00%	0.02%	0.42%	0.63%	0.08%	-0.20%	-0.18%	0.18%
1991	-1.30%	1.10%	-0.71%	-3.13%	-1.69%	0.00%	0.01%	0.47%	0.99%	0.39%	0.13%	0.03%	-0.31%
AVG:	1.39%	1.10%	0.50%	0.15%	0.00%	0.01%	0.00%	0.04%	0.08%	0.10%	0.02%	1.23%	0.38%
MIN:	-14.18%	-2.27%	-2.38%	-3.13%	-3.28%	-3.32%	-1.04%	-0.56%	-1.27%	-0.87%	-3.18%	-9.70%	-1.30%
MAX:	13.80%	12.76%	7.67%	4.26%	1.48%	2.55%	0.31%	0.93%	0.99%	2.76%	5.40%	10.73%	2.76%

Table 4.4.6-46 Simulated monthly average chloride concentration (mg/L) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	211.6	211.6	125.2	42.0	24.4	22.0	22.0	22.0	22.0	22.1	35.2	85.2	70.4
1923	146.4	147.9	70.5	22.0	22.0	22.5	22.4	22.0	22.9	31.3	58.8	106.1	57.9
1924	149.5	150.3	131.9	111.6	65.6	32.2	32.4	58.0	94.9	100.0	107.0	166.1	100.0
1925	224.3	219.9	148.9	81.0	39.8	22.0	22.0	22.1	23.5	35.4	64.9	113.0	84.7
1926	167.7	182.3	163.2	93.5	32.0	22.0	22.0	22.2	28.6	55.9	97.1	152.2	86.6
1927	193.9	110.5	28.2	22.7	22.0	22.0	22.0	22.0	22.1	24.3	40.1	94.0	52.0
1928	150.9	126.9	74.1	40.9	24.0	22.1	22.0	22.0	23.1	29.6	49.8	107.4	57.7
1929	163.3	155.5	121.9	104.8	67.9	33.7	31.0	42.6	57.4	83.1	119.2	162.0	95.2
1930	212.8	213.7	112.4	32.6	22.3	22.1	22.1	23.6	31.3	55.6	95.2	151.8	83.0
1931	190.8	181.8	142.8	94.8	61.2	53.1	57.0	71.3	97.2	101.6	110.3	170.5	111.1
1932	221.8	209.5	101.6	25.0	22.1	22.2	23.0	24.0	25.1	33.6	59.0	104.7	72.6
1933	162.6	178.4	138.5	80.2	41.0	29.5	28.0	34.0	52.1	82.4	114.8	152.0	91.1
1934	209.6	212.4	135.4	57.3	26.0	23.5	24.6	32.3	47.7	72.1	119.6	183.4	95.3
1935	224.4	200.5	146.1	67.9	22.1	22.1	22.0	22.0	22.1	26.2	50.9	112.7	78.3
1936	162.5	157.2	141.3	74.7	22.0	22.0	22.0	22.0	22.9	31.4	59.0	120.0	71.4
1937	173.3	166.8	141.1	111.7	54.1	22.0	22.0	22.0	22.4	28.3	54.5	116.1	77.9
1938	180.8	114.1	30.3	22.0	22.0	22.0	22.0	22.0	22.0	22.0	34.1	60.6	47.8
1939	53.8	41.9	53.5	54.7	41.1	28.6	24.7	25.9	33.9	57.2	95.4	151.7	55.2
1940	177.3	159.6	151.5	81.6	22.0	22.0	22.0	22.0	22.5	27.2	46.6	100.9	71.3
1941	161.9	147.9	65.3	22.0	22.0	22.0	22.0	22.0	22.0	23.2	39.3	65.0	52.9
1942	84.0	110.0	68.8	22.0	22.0	22.0	22.0	22.0	22.0	22.6	37.4	64.0	43.2
1943	77.6	72.4	42.5	22.1	22.0	22.0	22.0	22.0	22.3	25.8	42.7	97.9	40.9
1944	163.9	172.9	146.5	112.6	54.5	22.2	22.3	23.5	28.3	44.9	87.9	157.3	86.4
1945	178.3	137.3	81.3	51.9	34.2	22.0	22.0	22.2	23.3	30.4	57.1	116.9	64.8
1946	178.3	153.7	64.2	22.0	22.0	22.0	22.3	22.7	24.3	32.2	59.1	109.8	61.0
1947	148.8	142.8	97.1	64.7	43.4	25.8	22.9	24.7	32.1	52.1	85.9	137.7	73.2
1948	169.5	161.4	146.1	104.7	51.5	28.1	23.2	22.0	22.1	25.8	50.1	107.7	76.0
1949	150.2	142.8	109.3	91.4	75.3	40.3	22.0	22.4	25.1	40.5	78.6	138.3	78.0
1950	174.2	168.1	143.1	72.7	23.9	22.0	22.0	22.1	22.5	27.5	52.8	111.1	71.8
1951	162.7	92.0	22.0	22.0	22.0	22.0	22.0	22.0	23.5	28.6	42.6	88.6	47.5
1952	145.4	137.0	62.8	22.0	22.0	22.0	22.0	22.0	22.0	22.1	34.2	41.7	47.9
1953	32.3	33.7	30.0	22.0	22.0	22.0	22.1	22.1	22.1	23.3	36.5	57.5	28.8
1954	76.9	94.3	103.4	59.4	22.0	22.0	22.0	22.0	22.6	29.9	50.9	97.6	51.9
1955	140.2	133.2	69.0	26.0	23.6	25.8	26.8	25.6	28.9	46.5	87.7	153.0	65.5
1956	185.6	169.9	83.1	22.0	22.0	22.0	22.0	22.0	22.0	23.3	39.5	64.4	58.2
1957	70.3	79.3	106.0	103.9	53.2	22.0	22.0	22.0	22.7	26.9	44.0	97.5	55.8
1958	113.9	93.1	56.6	26.0	22.0	22.0	22.0	22.0	22.0	22.2	35.4	50.8	42.3
1959	42.5	40.6	74.9	56.0	22.0	22.0	22.3	25.5	30.3	36.6	58.6	110.1	45.1
1960	154.5	146.4	113.7	88.9	48.1	22.2	22.5	23.7	30.0	54.5	89.5	137.2	77.6
1961	175.3	157.7	101.2	61.1	35.3	22.1	22.7	25.2	33.0	54.8	85.6	130.3	75.4
1962	164.6	153.9	106.4	68.1	38.5	22.0	22.2	22.8	24.6	32.9	59.9	114.1	69.2
1963	77.3	23.0	22.8	22.5	22.3	22.0	22.0	22.0	22.0	23.5	34.9	82.7	33.1
1964	143.2	91.0	29.8	27.8	24.6	25.8	25.2	23.4	29.8	53.1	86.0	126.5	57.2
1965	165.8	155.1	72.5	22.0	22.0	22.0	22.0	22.0	22.4	25.2	36.9	85.1	56.1
1966	147.7	103.3	36.1	24.3	22.0	22.0	22.1	23.0	26.1	35.9	62.9	123.2	54.0
1967	154.2	128.6	61.9	22.0	22.0	22.0	22.0	22.0	22.0	22.0	32.9	40.0	47.6
1968	31.9	34.5	52.5	39.9	22.0	22.0	22.0	23.4	30.7	42.2	65.4	122.2	42.4
1969	161.5	146.1	73.3	24.2	22.0	22.0	22.0	22.0	22.0	22.1	34.6	78.5	54.2
1970	70.1	41.0	30.7	22.0	22.0	22.0	22.0	22.4	25.9	27.9	35.2	81.4	35.2
1971	144.4	118.3	46.6	22.0	22.0	22.0	22.0	22.0	22.1	23.1	31.9	56.5	46.1
1972	83.8	114.4	105.6	67.8	36.9	22.4	22.1	25.7	28.1	31.0	55.1	116.6	59.1
1973	164.7	110.1	38.1	22.2	22.0	22.0	22.0	22.0	22.6	26.3	45.0	97.7	51.2
1974	156.1	91.9	22.0	22.0	22.0	22.0	22.0	22.0	22.1	24.0	41.2	53.0	43.4
1975	53.6	77.6	91.6	79.2	44.6	22.0	22.0	22.0	22.0	23.1	39.1	55.3	46.0
1976	46.5	45.3	67.6	84.3	68.5	40.0	29.1	41.4	85.2	137.9	173.7	210.2	85.8
1977	236.9	228.3	171.2	118.6	97.5	82.6	70.8	76.7	100.7	104.8	116.5	179.8	132.0
1978	227.2	212.4	139.6	54.6	22.0	22.0	22.0	22.0	22.0	23.5	40.0	91.6	74.9
1979	151.1	171.0	133.9	60.5	22.9	22.0	22.0	22.1	22.8	27.9	53.2	114.9	68.7
1980	165.5	153.5	84.3	31.7	22.0	22.0	22.0	22.0	22.6	27.7	41.8	76.7	57.7
1981	127.8	155.2	131.9	64.3	24.0	22.0	22.0	23.0	33.1	60.1	93.2	134.4	74.2
1982	164.7	89.5	22.2	22.0	22.0	22.0	22.0	22.0	22.0	22.5	36.1	48.5	43.0
1983	34.7	22.1	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.1	23.1
1984	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.3	24.2	26.5	36.8	82.7	28.9
1985	140.0	85.1	22.3	23.8	27.5	26.8	24.2	24.3	31.9	57.1	90.8	122.2	56.3
1986	146.6	148.5	97.4	39.9	22.6	22.0	22.0	22.0	22.6	26.7	41.8	79.5	57.6
1987	129.0	153.8	146.3	116.6	59.5	24.4	22.2	25.4	36.9	60.8	103.5	169.6	87.3
1988	183.3	148.7	81.4	29.3	22.2	25.2	31.3	40.4	51.5	72.6	117.7	178.1	81.8
1989	218.7	203.9	159.1	109.7	68.1	36.4	22.0	22.4	28.5	51.8	86.6	124.7	94.3
1990	153.3	140.3	119.5	79.6	36.6	26.6	27.5	32.9	58.6	100.2	132.2	171.6	89.9
1991	226.2	222.5	171.7	150.1	126.4	60.0	22.1	24.3	43.6	92.7	137.9	176.3	121.2
AVG:	146.5	133.1	90.4	54.7	34.1	25.6	24.2	25.9	31.2	42.0	65.6	110.9	65.4
MIN:	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.1	23.1
MAX:	236.9	228.3	171.7	150.1	126.4	82.6	70.8	76.7	100.7	137.9	173.7	210.2	132.0

Table 4.4.6-47 Difference in simulated monthly average chloride concentration (%) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.23%	0.74%	0.27%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	0.41%	0.14%
1923	0.60%	0.42%	0.14%	0.00%	0.00%	0.01%	0.01%	0.00%	0.02%	0.01%	0.00%	-0.10%	0.09%
1924	-0.17%	-0.20%	-0.22%	-0.40%	-0.36%	0.18%	0.80%	1.75%	0.35%	0.23%	0.91%	-0.21%	0.22%
1925	0.02%	-0.34%	-1.93%	-2.63%	-1.36%	0.00%	0.00%	0.00%	-0.02%	-0.02%	-0.25%	-0.69%	-0.60%
1926	-0.48%	-0.21%	-0.31%	-0.36%	-0.09%	0.00%	0.01%	0.07%	0.59%	0.27%	-0.16%	-0.32%	-0.08%
1927	-0.44%	-0.28%	1.08%	0.67%	0.01%	0.00%	0.00%	0.00%	-0.05%	0.02%	1.25%	1.17%	0.29%
1928	-0.04%	-1.12%	-1.59%	-0.88%	-0.01%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	-0.31%
1929	0.25%	0.28%	0.07%	-0.01%	0.18%	-0.34%	-1.89%	-1.12%	-0.23%	-0.02%	-0.23%	-0.40%	-0.29%
1930	0.28%	0.22%	-0.35%	-0.35%	0.03%	0.01%	0.04%	0.54%	0.57%	-0.52%	0.30%	1.22%	0.17%
1931	0.59%	-0.38%	-0.49%	-0.21%	-1.79%	-3.50%	-2.08%	-0.25%	0.24%	-0.26%	-0.60%	-0.21%	-0.75%
1932	0.37%	0.18%	-0.26%	0.06%	0.03%	0.10%	0.07%	0.04%	0.10%	0.09%	0.22%	0.32%	0.11%
1933	0.21%	-0.18%	-0.82%	-1.12%	-0.70%	0.06%	0.45%	0.52%	0.56%	0.30%	0.07%	-0.02%	-0.06%
1934	-0.21%	-0.26%	-0.32%	-0.66%	-0.60%	-0.12%	-0.04%	-0.01%	0.01%	0.01%	-3.38%	-5.70%	-0.94%
1935	-2.05%	-0.98%	-3.15%	-2.61%	0.04%	0.01%	0.00%	0.00%	0.01%	0.11%	0.11%	0.05%	-0.71%
1936	0.27%	0.13%	0.17%	0.38%	0.00%	0.00%	0.00%	0.00%	0.05%	0.04%	0.01%	0.00%	0.09%
1937	0.02%	0.15%	0.12%	-0.08%	-0.12%	0.00%	0.00%	0.00%	0.03%	-0.03%	-0.04%	-0.02%	0.00%
1938	-0.01%	0.22%	0.68%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.89%	0.00%
1939	-0.49%	1.37%	1.48%	1.37%	1.21%	0.98%	1.00%	1.28%	1.01%	-0.14%	0.01%	0.43%	0.79%
1940	-0.01%	-0.63%	0.09%	0.66%	0.00%	0.00%	0.00%	0.00%	-0.13%	-0.63%	-0.55%	-7.52%	-0.73%
1941	-12.77%	-8.03%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-1.87%	-2.32%	-2.08%
1942	-0.73%	0.30%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.07%	0.83%	0.06%
1943	2.06%	3.57%	3.16%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.07%	-0.19%	0.10%	0.72%
1944	0.28%	0.17%	0.08%	0.17%	0.16%	0.02%	0.04%	0.14%	0.27%	0.18%	0.07%	0.07%	0.14%
1945	0.09%	0.70%	1.79%	1.79%	0.82%	0.00%	0.00%	0.02%	0.05%	0.05%	0.03%	0.17%	0.46%
1946	0.12%	0.32%	0.57%	0.00%	0.00%	0.00%	0.04%	0.07%	0.11%	0.08%	0.04%	0.01%	0.11%
1947	0.09%	0.04%	-0.20%	-0.34%	-0.03%	0.19%	0.01%	0.04%	-0.02%	-0.08%	0.27%	0.53%	0.04%
1948	0.22%	-0.01%	-0.07%	-0.27%	-0.29%	-0.02%	0.01%	0.00%	0.01%	0.12%	0.12%	0.22%	0.00%
1949	0.78%	0.73%	0.30%	0.53%	1.24%	1.29%	0.00%	0.02%	0.05%	0.04%	0.32%	0.66%	0.50%
1950	0.36%	-0.18%	-0.17%	0.10%	0.15%	0.00%	0.00%	0.01%	0.05%	0.19%	0.16%	0.11%	0.07%
1951	0.15%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	-0.01%	-0.09%	-0.01%	0.02%
1952	0.05%	0.06%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.80%	0.08%
1953	1.29%	1.09%	0.68%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.10%	1.30%	0.36%
1954	2.43%	2.55%	1.08%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.03%	0.21%	0.17%	0.07%	0.54%
1955	0.13%	0.16%	0.38%	0.76%	0.18%	0.24%	0.11%	-0.02%	0.15%	0.13%	0.08%	0.07%	0.20%
1956	0.07%	0.05%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.09%	1.29%	0.13%
1957	2.74%	2.77%	0.11%	-0.90%	-0.38%	0.01%	0.00%	0.00%	0.03%	0.11%	0.24%	0.40%	0.43%
1958	1.12%	1.78%	1.55%	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.03%	0.95%	0.50%
1959	1.68%	1.58%	0.82%	0.45%	0.00%	0.00%	0.07%	0.11%	-0.21%	-0.08%	0.21%	3.22%	0.65%
1960	0.89%	-0.97%	1.78%	3.30%	1.97%	0.12%	0.08%	0.41%	1.20%	0.81%	-0.69%	-1.63%	0.60%
1961	0.03%	0.36%	-0.61%	0.30%	0.85%	0.14%	-0.01%	0.01%	-0.28%	-0.67%	-0.57%	-0.37%	-0.07%
1962	0.00%	-0.02%	-0.72%	-1.13%	-0.63%	0.00%	0.06%	0.14%	0.47%	1.13%	0.80%	0.46%	0.05%
1963	0.45%	0.82%	0.59%	0.26%	0.13%	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.19%	0.10%	0.18%
1964	0.44%	0.63%	0.69%	0.83%	0.70%	1.35%	0.84%	-0.20%	0.40%	-0.12%	-0.15%	0.67%	0.51%
1965	0.50%	0.00%	-0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.28%	0.05%
1966	0.42%	1.40%	3.27%	0.94%	0.00%	0.00%	0.01%	0.06%	0.08%	-0.02%	-0.04%	-0.02%	0.51%
1967	0.01%	0.61%	1.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.42%	0.87%	0.24%
1968	1.00%	1.01%	1.04%	0.71%	0.00%	0.00%	0.00%	0.28%	0.52%	0.47%	0.82%	0.58%	0.54%
1969	0.19%	0.40%	0.87%	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	1.45%	0.29%
1970	2.27%	2.28%	1.05%	0.00%	0.00%	0.00%	0.00%	0.02%	0.05%	0.03%	0.05%	0.37%	0.51%
1971	0.51%	0.91%	1.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	-0.06%	0.84%	0.28%
1972	1.40%	0.95%	0.87%	2.45%	2.82%	0.16%	0.00%	-0.05%	-0.05%	-0.02%	-0.01%	-0.01%	0.71%
1973	0.07%	0.53%	1.11%	0.09%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.01%	-0.02%	0.35%	0.18%
1974	0.69%	0.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.07%	0.67%	0.18%
1975	2.84%	4.16%	3.38%	2.18%	1.24%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	1.08%	1.24%
1976	2.07%	2.24%	1.67%	0.45%	-0.12%	0.40%	1.02%	3.04%	2.92%	0.93%	0.01%	0.03%	1.22%
1977	-0.43%	-1.08%	-0.87%	-0.12%	-0.12%	-0.16%	-0.04%	0.03%	0.00%	0.11%	0.32%	0.23%	-0.18%
1978	0.21%	0.16%	0.03%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.06%	0.26%	0.06%
1979	0.37%	-0.02%	-0.35%	-0.22%	0.06%	0.00%	0.00%	0.01%	0.03%	0.03%	0.01%	0.01%	-0.01%
1980	-0.56%	-0.55%	0.32%	0.86%	0.00%	0.00%	0.00%	0.00%	0.06%	0.23%	0.15%	0.62%	0.09%
1981	0.99%	0.54%	0.21%	0.32%	0.19%	0.00%	0.01%	0.36%	1.08%	0.43%	0.11%	1.04%	0.44%
1982	0.12%	-0.78%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	-0.28%	0.14%	-0.06%
1983	0.40%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.02%	0.04%
1984	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.16%	0.14%	-0.11%	0.20%	0.04%
1985	0.18%	0.10%	0.09%	0.09%	0.32%	0.32%	0.11%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.10%
1986	0.15%	0.15%	0.24%	0.49%	0.08%	0.00%	0.00%	0.00%	0.02%	0.03%	0.10%	0.33%	0.13%
1987	0.39%	0.22%	0.11%	0.05%	0.04%	0.11%	0.06%	-0.08%	-0.24%	-0.26%	-0.16%	-0.07%	0.01%
1988	0.25%	0.63%	0.84%	0.72%	0.02%	-0.04%	6.32%	9.94%	4.18%	0.38%	0.16%	0.08%	1.96%
1989	-0.06%	-0.10%	-0.01%	0.02%	0.02%	0.03%	0.00%	-0.01%	-0.25%	-0.33%	0.03%	-0.22%	-0.07%
1990	-0.71%	0.19%	1.64%	1.79%	1.09%	0.50%	0.57%	1.44%	2.57%	0.45%	-0.84%	-0.13%	0.71%
1991	-0.93%	-1.19%	-1.50%	-3.29%	-2.76%	-1.06%	0.02%	0.59%	1.43%	0.87%	0.60%	0.60%	-0.55%
AVG:	0.19%	0.29%	0.33%	0.13%	0.06%	0.01%	0.11%	0.28%	0.26%	0.07%	-0.03%	0.07%	0.15%
MIN:	-12.77%	-8.03%	-3.15%	-3.29%	-2.76%	-3.50%	-2.08%	-1.12%	-0.28%	-0.67%	-3.38%	-7.52%	-2.08%
MAX:	2.84%	4.16%	3.38%	3.30%	2.82%	1.35%	6.32%	9.94%	4.18%	1.13%	1.25%	3.22%	1.96%

Table 4.4.6-48 Difference in simulated monthly average chloride concentration (%) at Contra Costa Canal at Pumping Plant No.1, G-model results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	0.00%	0.19%	0.65%	0.24%	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.28%	2.21%	0.25%
1923	3.59%	1.75%	-0.46%	0.01%	0.01%	0.02%	0.01%	0.00%	0.03%	0.01%	-0.01%	0.09%	0.42%
1924	0.15%	-0.70%	-1.76%	-1.69%	-1.00%	0.03%	0.11%	0.06%	-0.02%	0.02%	-1.00%	-2.03%	-0.65%
1925	-0.98%	-0.49%	-1.39%	-2.00%	-1.10%	0.00%	0.00%	0.01%	0.08%	0.03%	0.32%	0.67%	-0.40%
1926	0.37%	0.20%	0.39%	0.40%	0.03%	0.00%	0.01%	0.05%	0.17%	0.04%	0.00%	0.02%	0.14%
1927	-0.05%	0.08%	0.71%	0.16%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.02%	0.70%	1.85%	0.29%
1928	-0.04%	-0.35%	4.06%	5.65%	0.96%	0.02%	0.00%	0.00%	0.01%	0.06%	0.05%	0.02%	0.87%
1929	-0.24%	0.13%	0.36%	0.07%	0.53%	0.79%	-0.09%	-0.12%	-0.03%	-0.01%	-0.42%	-0.77%	0.02%
1930	0.01%	0.17%	-0.22%	-0.19%	0.02%	0.01%	0.01%	0.08%	0.09%	-0.08%	1.12%	2.03%	0.25%
1931	0.69%	-0.26%	0.39%	0.69%	-1.35%	-3.30%	-2.01%	-0.26%	0.24%	-0.08%	-0.28%	-0.04%	-0.47%
1932	0.02%	-0.03%	0.02%	0.27%	0.02%	0.04%	0.09%	0.16%	0.18%	0.11%	0.19%	0.25%	0.11%
1933	0.16%	0.12%	0.10%	0.22%	0.56%	0.51%	0.24%	0.26%	0.36%	0.20%	0.08%	0.05%	0.24%
1934	0.04%	0.03%	0.00%	0.02%	0.05%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.93%	-1.58%	-0.20%
1935	-0.84%	-1.07%	-2.20%	-1.96%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.10%	0.10%	0.05%	-0.49%
1936	0.43%	0.21%	-0.07%	0.09%	0.00%	0.00%	0.00%	0.01%	0.05%	-0.04%	-0.06%	-0.03%	0.05%
1937	0.09%	0.52%	0.43%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.08%	-0.25%	-0.19%	-0.08%	0.04%
1938	-0.04%	0.21%	0.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.14%	5.89%	0.55%
1939	10.71%	10.88%	5.93%	3.21%	1.92%	0.92%	0.38%	0.30%	0.52%	0.57%	0.34%	0.16%	2.99%
1940	0.11%	0.11%	0.26%	0.33%	0.00%	0.00%	0.00%	0.00%	0.07%	0.96%	0.92%	-6.94%	-0.35%
1941	-12.50%	-7.76%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-2.30%	-0.27%	-1.87%
1942	3.53%	3.31%	1.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.29%	-0.67%	3.30%	0.92%
1943	6.73%	10.31%	9.18%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	1.67%	4.61%	3.93%	3.05%
1944	2.95%	1.47%	0.51%	0.36%	-0.03%	0.00%	0.02%	0.12%	0.25%	0.17%	0.06%	-0.06%	0.49%
1945	-0.19%	2.58%	5.45%	2.28%	0.17%	0.00%	0.01%	0.06%	0.17%	0.17%	0.08%	1.05%	0.98%
1946	0.66%	0.46%	0.71%	0.00%	0.00%	0.01%	0.11%	-0.23%	-0.97%	-0.87%	-0.38%	-0.16%	-0.05%
1947	-0.89%	-0.15%	2.00%	2.42%	1.24%	0.31%	-0.09%	0.00%	0.29%	0.51%	0.44%	0.33%	0.53%
1948	0.36%	0.45%	0.55%	0.39%	0.01%	-0.09%	-0.02%	0.00%	0.01%	0.11%	0.11%	0.21%	0.17%
1949	-0.82%	-1.07%	0.21%	0.70%	0.69%	0.72%	0.00%	0.02%	0.06%	0.04%	-1.83%	-2.81%	-0.34%
1950	-0.79%	0.89%	0.45%	0.06%	0.23%	0.01%	0.02%	0.03%	0.02%	-0.21%	-0.21%	1.12%	0.14%
1951	1.16%	0.74%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.37%	-0.77%	-0.97%	-0.12%	-0.03%
1952	0.44%	-0.46%	-1.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.13%	3.58%	0.17%
1953	5.24%	2.47%	1.27%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	-0.13%	1.43%	0.86%
1954	2.68%	2.72%	1.12%	-0.05%	0.00%	0.00%	0.00%	0.00%	0.03%	0.21%	0.17%	0.07%	0.58%
1955	-0.51%	-0.59%	-0.01%	0.47%	0.00%	-0.04%	-0.02%	0.07%	0.21%	0.15%	0.04%	-0.01%	-0.02%
1956	-0.17%	-0.36%	-0.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.45%	-0.72%	6.12%	0.34%
1957	11.26%	8.19%	1.61%	0.02%	0.74%	0.01%	0.00%	0.00%	0.04%	0.17%	0.38%	0.56%	1.91%
1958	2.46%	4.48%	3.65%	0.92%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.07%	-0.32%	6.18%	1.44%
1959	11.58%	10.55%	5.20%	2.81%	0.00%	0.00%	0.01%	-0.07%	0.38%	0.42%	-0.48%	-1.14%	2.44%
1960	-0.61%	-0.18%	-0.58%	-0.67%	-0.28%	0.02%	0.01%	0.09%	0.28%	0.19%	-0.83%	-1.56%	-0.34%
1961	0.20%	0.42%	-0.69%	0.35%	0.87%	0.03%	0.00%	0.05%	-0.11%	-0.41%	-0.29%	-0.10%	0.03%
1962	0.00%	-1.11%	-2.08%	-1.21%	-0.38%	0.00%	0.00%	0.01%	0.10%	0.28%	0.20%	-0.12%	-0.36%
1963	-0.18%	0.27%	0.21%	0.08%	0.03%	0.00%	0.00%	0.00%	0.02%	-0.10%	-0.47%	1.00%	0.07%
1964	2.03%	2.14%	0.86%	0.85%	0.69%	1.63%	1.04%	-0.48%	-0.03%	0.35%	0.25%	1.31%	0.89%
1965	1.36%	0.24%	-0.46%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.08%	0.65%	2.54%	2.61%	0.57%
1966	2.15%	1.43%	0.06%	0.26%	0.00%	0.00%	0.01%	0.05%	0.08%	0.03%	0.00%	0.00%	0.34%
1967	0.03%	0.41%	0.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.35%	1.78%	0.21%
1968	2.93%	1.58%	1.22%	0.78%	0.00%	0.00%	0.00%	0.06%	0.11%	0.09%	0.16%	0.12%	0.59%
1969	-0.09%	-0.16%	-0.02%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%	-0.20%	3.04%	0.23%
1970	5.86%	7.46%	3.54%	0.00%	0.00%	0.00%	0.00%	0.03%	0.07%	0.08%	0.18%	0.55%	1.48%
1971	0.69%	1.01%	1.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.05%	0.04%	1.07%	0.33%
1972	1.68%	1.13%	0.90%	2.48%	2.94%	0.17%	0.00%	-0.05%	-0.06%	-0.02%	-0.01%	0.00%	0.76%
1973	-0.56%	-0.95%	-0.58%	0.04%	0.00%	0.00%	0.00%	-0.02%	-0.10%	0.00%	0.07%	1.68%	-0.04%
1974	2.73%	2.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.30%	-0.38%	2.12%	0.56%
1975	8.19%	10.62%	7.05%	2.84%	1.14%	0.00%	0.00%	0.00%	-0.01%	-0.24%	-0.39%	3.52%	2.73%
1976	6.10%	4.61%	4.14%	1.73%	-0.69%	-0.72%	0.30%	0.74%	0.77%	0.32%	0.08%	0.05%	1.45%
1977	-0.67%	-1.24%	-1.13%	-1.11%	-1.02%	-0.51%	-0.17%	0.04%	-0.14%	0.23%	1.04%	0.76%	-0.33%
1978	0.32%	0.27%	0.24%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.06%	0.25%	0.10%
1979	0.35%	0.10%	-0.07%	0.05%	0.07%	0.00%	0.00%	-0.02%	-0.07%	0.00%	0.03%	0.02%	0.04%
1980	0.16%	0.28%	0.46%	0.51%	0.00%	0.00%	0.00%	0.01%	0.42%	1.56%	0.97%	2.51%	0.57%
1981	4.04%	1.74%	0.29%	1.04%	0.53%	0.01%	0.00%	0.07%	0.22%	0.07%	0.02%	0.31%	0.69%
1982	-0.23%	-0.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.19%	0.26%	3.12%	0.19%
1983	3.43%	0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.08%	0.31%
1984	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.04%	0.16%	0.47%	0.99%	0.14%
1985	0.67%	0.37%	0.08%	0.09%	0.32%	0.32%	0.11%	0.02%	0.00%	0.00%	0.00%	0.00%	0.16%
1986	0.19%	-0.09%	-0.44%	-0.27%	0.02%	0.00%	0.00%	-0.01%	-0.13%	-0.11%	1.28%	3.40%	0.32%
1987	3.31%	1.28%	0.32%	0.28%	0.30%	0.76%	0.04%	-0.11%	-0.02%	0.18%	0.14%	0.06%	0.54%
1988	0.14%	0.26%	0.17%	-0.09%	0.00%	0.00%	0.18%	0.29%	0.13%	0.02%	-0.09%	-0.15%	0.07%
1989	0.04%	0.11%	0.01%	-0.06%	-0.15%	-0.13%	0.00%	0.00%	-0.06%	-0.07%	0.06%	0.39%	0.01%
1990	-0.20%	-0.11%	1.20%	1.14%	-0.08%	-0.07%	0.01%	0.27%	0.57%	0.27%	-0.09%	-0.19%	0.23%
1991	-0.86%	-0.12%	0.23%	-2.05%	-2.46%	-1.35%	0.00%	0.28%	0.85%	0.56%	0.23%	0.07%	-0.38%
AVG:	1.29%	1.19%	0.81%	0.34%	0.08%	0.00%	0.00%	0.03%	0.07%	0.09%	0.05%	0.77%	0.39%
MIN:	-12.50%	-7.76%	-2.20%	-2.05%	-2.46%	-3.30%	-2.01%	-0.48%	-0.97%	-0.87%	-2.30%	-6.94%	-1.87%
MAX:	11.58%	10.88%	9.18%	5.65%	2.94%	1.63%	1.04%	0.74%	0.85%	1.67%	4.61%	6.18%	3.05%

Table 4.4.6-49 Simulated monthly average electrical conductivity (μS/cm) at Jersey Point, ANN results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	1356	1943	1064	715	321	292	272	267	284	273	404	1405	470
1923	2197	2478	581	291	289	299	272	270	294	545	1220	1984	893
1924	2754	2111	2522	2254	897	491	578	1085	1646	1191	1445	2215	1599
1925	2498	2325	1813	1512	367	270	272	274	307	528	916	2095	1098
1926	2702	2171	2265	1092	333	287	277	288	426	916	1455	2234	1204
1927	2480	896	605	415	277	279	275	272	264	320	775	1981	737
1928	2827	1946	1729	852	442	286	276	270	289	400	891	2204	1034
1929	2529	2248	2396	2344	1049	510	522	640	1004	1238	1477	1933	1491
1930	2763	2079	1049	443	363	363	289	317	590	1034	1591	2357	1103
1931	2427	2326	1624	1673	1132	912	997	1108	1547	1150	1557	2223	1556
1932	2614	2206	722	408	298	326	315	334	366	600	831	1819	903
1933	2628	2264	1494	1142	611	564	479	551	954	1305	1385	1844	1268
1934	2963	1968	1863	985	416	394	394	543	843	1169	1682	2308	1294
1935	2585	2214	2119	594	324	307	268	267	270	337	904	2388	1048
1936	2547	2178	2462	704	276	280	270	263	291	483	1233	2375	1113
1937	2608	2181	2497	2226	364	272	271	269	265	387	1137	2227	1225
1938	2843	1113	319	278	275	278	279	278	277	259	310	733	604
1939	451	1252	1354	1372	646	446	358	383	634	1181	1758	2621	1038
1940	2174	2280	2387	592	277	277	277	274	264	369	912	2027	1009
1941	2806	1826	506	276	277	278	278	276	268	283	581	1179	736
1942	1623	2676	618	276	277	277	274	273	284	276	522	1018	700
1943	1063	1549	746	281	278	276	274	266	263	311	812	2116	686
1944	2599	2246	2486	2268	500	346	294	321	478	895	1721	2813	1414
1945	2077	2170	1479	1490	437	284	269	273	330	572	1171	2315	1072
1946	2797	2083	440	284	275	275	278	298	372	616	1277	2233	936
1947	2558	2267	1626	1451	736	463	346	364	560	1146	1762	2584	1322
1948	2228	2541	2231	1789	868	499	316	270	272	390	991	2212	1217
1949	2481	2302	1889	2279	1234	363	272	275	393	766	1190	2477	1327
1950	2429	2377	1874	637	364	304	281	280	308	482	1093	2276	1059
1951	2832	541	273	278	277	277	263	266	324	442	992	1875	720
1952	2750	2123	567	274	279	278	276	276	279	263	324	477	681
1953	372	1052	515	271	279	277	266	266	278	318	671	1180	479
1954	1858	2252	2486	641	289	282	272	272	274	424	1079	2032	1013
1955	2594	2267	1025	537	409	488	427	388	509	761	1358	2533	1108
1956	2253	2503	489	272	279	279	260	260	265	299	653	1131	745
1957	1168	1953	2724	2101	499	289	272	261	302	402	907	2048	1077
1958	1768	2212	1024	350	270	279	278	278	279	259	393	681	673
1959	489	1174	2250	687	273	274	274	343	508	740	1324	1967	859
1960	2620	2065	1530	1863	627	357	304	341	574	1156	1752	2268	1288
1961	2403	2344	1794	1184	537	324	309	375	589	1311	1768	2317	1271
1962	2472	2345	1863	1217	355	296	273	288	398	657	1235	2346	1145
1963	976	498	430	329	288	279	272	276	268	284	626	1747	523
1964	2900	1335	891	601	398	440	411	334	510	1151	1780	2351	1092
1965	2441	2353	497	275	282	273	266	270	266	320	758	1776	815
1966	2367	1096	710	430	298	305	279	312	437	675	1270	2405	882
1967	2119	2352	589	271	284	279	272	274	280	265	330	458	648
1968	396	1093	1683	553	278	281	269	294	475	723	1381	2405	819
1969	2338	2377	881	289	275	279	277	275	270	256	357	1438	776
1970	593	1236	473	267	279	278	262	262	368	415	806	1772	584
1971	2786	1622	414	284	275	280	272	261	276	467	682	1117	728
1972	1917	2416	2208	1807	563	347	288	362	437	594	1136	2214	1191
1973	2483	1268	635	282	278	279	272	264	297	419	915	2053	787
1974	2996	578	276	277	280	278	277	275	269	296	709	1002	626
1975	1155	2115	2361	2272	413	275	276	272	264	305	648	985	945
1976	730	1399	2246	2458	1095	646	461	731	1663	2045	2000	2531	1501
1977	2248	2504	1495	1697	1251	1139	1047	1047	1449	1197	1742	2344	1597
1978	2519	2309	1825	403	280	279	273	270	264	285	687	2072	956
1979	2024	2788	2144	696	287	281	272	271	303	460	1045	2340	1076
1980	2535	2358	1171	321	275	279	272	256	268	395	803	1496	869
1981	2036	2660	2186	833	321	296	278	303	569	1251	1775	2343	1237
1982	2391	814	284	277	278	278	278	278	272	261	443	660	543
1983	301	284	269	276	277	279	279	279	278	273	248	293	278
1984	236	269	267	278	277	269	257	268	329	405	834	1825	460
1985	2733	881	298	468	510	417	386	371	593	1215	1803	2164	987
1986	2326	2449	1470	621	279	277	278	265	257	356	766	1588	911
1987	2292	2484	2333	2377	736	323	304	354	662	1076	1738	2824	1459
1988	1984	2000	924	432	344	392	505	675	883	1169	1697	2212	1101
1989	2506	2312	2188	1738	928	376	281	287	467	1042	1751	2110	1332
1990	2743	1919	2386	1618	581	541	469	544	1238	1565	1596	2147	1446
1991	2832	2062	1743	2118	1454	529	285	328	908	1522	1673	2152	1467
AVG:	2144	1898	1380	931	456	352	327	353	482	673	1107	1913	998
MIN:	236	269	267	267	270	269	257	256	257	256	248	293	278
MAX:	2996	2788	2724	2458	1454	1139	1047	1108	1663	2045	2000	2824	1599

Table 4.4.6-50 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, ANN results for Alternatives 2-5 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.09%	0.35%	0.80%	0.15%	0.04%	0.02%	-0.01%	0.00%	0.02%	0.14%	0.40%	0.30%
1923	0.17%	-0.12%	0.02%	0.16%	0.04%	0.06%	0.03%	0.01%	0.07%	0.09%	0.00%	-0.03%	0.02%
1924	-0.01%	-0.30%	0.49%	-0.41%	-0.20%	0.45%	1.17%	1.55%	-0.88%	1.08%	-1.39%	-2.02%	-0.24%
1925	-0.04%	-1.37%	-1.34%	-2.41%	0.01%	0.03%	0.01%	-0.01%	0.08%	0.01%	-0.35%	-0.42%	-0.80%
1926	0.30%	-0.27%	-0.28%	0.00%	-0.03%	-0.17%	0.05%	0.38%	1.00%	0.40%	-0.47%	-0.03%	-0.02%
1927	-0.47%	0.24%	4.55%	2.33%	-0.01%	0.01%	0.03%	0.00%	-0.16%	-0.24%	0.71%	0.95%	0.58%
1928	-1.50%	-1.47%	-0.95%	-0.19%	0.16%	0.01%	0.00%	0.00%	-0.02%	-0.14%	-0.35%	-0.36%	-0.80%
1929	0.26%	-0.20%	0.14%	-0.11%	0.34%	-3.53%	-1.96%	-0.79%	2.21%	-0.60%	-0.92%	-1.54%	-0.31%
1930	0.79%	-0.77%	-1.17%	0.51%	0.07%	0.52%	0.32%	0.93%	0.52%	0.53%	2.01%	-0.12%	0.30%
1931	-0.51%	-0.16%	-0.58%	-0.06%	-2.20%	-2.56%	-1.02%	0.52%	0.50%	-0.59%	-0.26%	-1.04%	-0.56%
1932	0.88%	-0.84%	-0.96%	0.71%	-0.01%	0.96%	0.37%	0.12%	0.21%	-0.23%	0.11%	1.25%	0.26%
1933	0.39%	-0.84%	-0.91%	-0.85%	-0.70%	0.13%	0.49%	0.03%	0.12%	-0.02%	-0.15%	-0.21%	-0.25%
1934	-0.39%	-0.08%	-0.28%	-2.03%	-0.60%	-0.78%	-0.16%	0.07%	-0.03%	-0.03%	-4.44%	-7.71%	-1.92%
1935	5.28%	-5.96%	0.10%	4.72%	-0.45%	-0.29%	-0.03%	0.04%	-0.02%	-0.04%	-0.33%	-2.40%	-0.22%
1936	0.54%	-0.20%	0.68%	1.31%	-0.23%	0.00%	0.10%	-0.05%	0.10%	-0.01%	-0.03%	0.10%	0.28%
1937	-0.25%	0.16%	-0.03%	0.03%	-0.94%	-0.01%	0.11%	-0.06%	-0.05%	-0.03%	-1.17%	-0.05%	-0.14%
1938	-0.78%	0.29%	0.20%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.09%	-1.15%	-0.37%
1939	0.23%	1.27%	1.29%	1.16%	0.82%	1.27%	1.33%	1.51%	0.91%	-0.68%	-0.02%	0.50%	0.66%
1940	-0.34%	-1.02%	0.12%	1.04%	0.05%	-0.02%	0.00%	0.01%	-0.01%	-0.23%	-0.67%	-3.52%	-0.82%
1941	-9.30%	3.80%	6.62%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	-0.01%	0.01%	-2.42%	-1.27%	-2.12%
1942	-0.13%	0.29%	0.21%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.01%	-0.03%	0.26%	1.27%	0.25%
1943	2.22%	3.87%	1.96%	-0.11%	0.01%	0.02%	-0.02%	-0.06%	0.01%	-0.01%	-0.19%	-0.10%	1.14%
1944	0.06%	-0.05%	0.03%	-0.03%	0.19%	0.07%	0.15%	0.27%	0.32%	0.02%	-0.17%	0.04%	0.02%
1945	-0.07%	1.36%	1.76%	1.01%	0.31%	0.01%	0.01%	0.04%	0.14%	0.14%	0.03%	0.09%	0.58%
1946	-0.16%	0.13%	0.15%	0.03%	0.05%	-0.06%	0.03%	0.17%	0.15%	0.18%	0.03%	0.01%	0.02%
1947	0.17%	-0.15%	-0.31%	-0.60%	0.20%	0.30%	0.02%	-0.05%	-0.04%	-0.66%	-0.12%	0.41%	-0.06%
1948	-0.37%	0.24%	-0.29%	-0.48%	0.09%	-0.13%	0.05%	0.01%	0.02%	0.26%	0.27%	0.10%	-0.08%
1949	0.10%	-0.79%	0.50%	0.62%	1.70%	0.81%	0.00%	-0.01%	0.10%	-0.11%	0.43%	0.51%	0.31%
1950	-0.38%	-0.36%	0.16%	0.35%	0.21%	0.04%	0.05%	0.06%	0.14%	0.13%	0.24%	0.08%	-0.05%
1951	0.02%	0.23%	0.00%	-0.01%	0.00%	0.01%	-0.02%	0.01%	0.13%	-0.01%	-0.09%	-0.01%	0.01%
1952	0.02%	-0.04%	0.36%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.00%	1.02%	0.08%
1953	1.04%	1.21%	0.33%	0.00%	0.00%	-0.01%	0.00%	0.01%	0.03%	0.09%	0.01%	1.84%	0.70%
1954	2.01%	2.24%	-1.52%	-1.18%	0.07%	0.00%	-0.01%	0.00%	0.03%	0.29%	0.19%	-0.05%	0.37%
1955	0.03%	-0.03%	1.02%	1.16%	0.45%	0.50%	0.04%	0.02%	0.14%	0.08%	0.12%	-0.13%	0.16%
1956	0.11%	-0.08%	0.07%	-0.01%	0.00%	0.00%	-0.01%	-0.01%	-0.01%	0.09%	0.26%	1.84%	0.26%
1957	2.89%	1.76%	-0.94%	0.88%	0.81%	0.07%	0.05%	0.02%	0.09%	-0.21%	0.10%	0.39%	0.57%
1958	1.29%	1.22%	0.99%	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.13%	1.28%	0.87%
1959	1.46%	1.28%	0.47%	0.14%	-0.01%	-0.05%	0.03%	0.08%	-0.17%	0.00%	0.24%	2.97%	0.92%
1960	-1.71%	1.49%	0.02%	2.42%	0.98%	0.80%	0.45%	0.88%	1.45%	0.65%	-0.14%	-3.06%	-0.07%
1961	1.97%	-1.38%	0.12%	1.81%	1.74%	0.83%	0.37%	0.10%	-0.65%	-0.76%	0.00%	-0.46%	0.18%
1962	0.27%	-0.16%	-1.20%	-0.94%	0.03%	-0.04%	0.07%	0.08%	0.98%	0.04%	3.80%	0.70%	0.27%
1963	1.47%	4.75%	2.23%	1.35%	0.11%	0.00%	0.02%	0.00%	-0.01%	0.10%	-0.16%	-0.28%	0.74%
1964	0.43%	0.82%	0.75%	1.44%	0.99%	2.35%	0.73%	-0.06%	-0.36%	0.68%	0.00%	0.35%	0.54%
1965	-0.49%	0.40%	0.24%	-0.01%	0.00%	0.01%	-0.01%	-0.01%	0.01%	0.02%	-0.06%	0.07%	-0.01%
1966	0.28%	2.65%	2.75%	0.90%	0.11%	0.05%	0.04%	0.13%	0.14%	-0.09%	-0.23%	0.00%	0.54%
1967	0.01%	1.21%	1.01%	0.00%	0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	0.11%	0.81%	0.50%
1968	1.06%	1.11%	0.89%	0.50%	0.01%	0.01%	-0.01%	0.30%	0.24%	-0.09%	0.46%	0.64%	0.58%
1969	-0.86%	0.14%	1.24%	0.17%	0.00%	0.00%	0.00%	-0.01%	-0.03%	0.00%	0.17%	0.83%	0.08%
1970	1.66%	1.91%	0.65%	-0.01%	0.00%	0.00%	0.01%	0.03%	0.05%	-0.10%	0.00%	0.21%	0.57%
1971	0.08%	1.18%	0.56%	0.00%	0.05%	0.01%	-0.02%	0.01%	0.05%	0.17%	0.06%	1.28%	0.45%
1972	1.29%	0.35%	0.66%	3.35%	2.10%	0.39%	0.07%	0.04%	-0.03%	-0.15%	-0.18%	0.00%	0.83%
1973	0.02%	1.09%	1.65%	0.20%	0.00%	0.00%	0.00%	0.00%	0.06%	0.04%	-0.26%	0.15%	0.28%
1974	0.55%	0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	0.08%	0.16%	0.89%	0.39%
1975	4.34%	3.13%	1.84%	0.90%	0.08%	0.00%	0.01%	-0.01%	-0.05%	0.07%	0.13%	1.48%	1.73%
1976	2.26%	1.78%	0.94%	-0.65%	-0.28%	0.32%	1.05%	3.63%	1.22%	0.03%	-0.08%	-0.56%	0.45%
1977	-1.05%	-0.85%	-0.11%	0.69%	-0.10%	-0.18%	-0.10%	-0.01%	-0.06%	0.09%	0.17%	-0.10%	-0.20%
1978	0.13%	-0.13%	-0.04%	0.19%	0.10%	-0.01%	-0.06%	-0.04%	-0.02%	0.09%	0.17%	0.08%	0.03%
1979	0.18%	-0.22%	0.06%	0.17%	0.13%	0.06%	-0.02%	0.06%	0.28%	-0.27%	0.01%	0.21%	0.04%
1980	-0.18%	0.16%	0.58%	0.32%	-0.01%	0.00%	0.01%	0.00%	0.07%	0.27%	0.20%	0.05%	0.10%
1981	0.45%	-0.17%	0.25%	0.75%	0.22%	0.19%	0.07%	0.60%	1.39%	0.59%	-0.01%	0.72%	0.35%
1982	-1.33%	-0.12%	0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.20%	0.46%	-0.46%
1983	0.36%	0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.02%	0.27%	0.05%
1984	0.15%	-0.01%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.02%	0.26%	0.13%	-0.05%	-0.08%	0.00%
1985	0.20%	0.55%	0.25%	0.45%	0.51%	0.32%	0.15%	0.03%	0.00%	0.00%	0.00%	-0.03%	0.15%
1986	0.37%	-0.25%	0.30%	0.72%	0.04%	0.00%	0.00%	-0.01%	0.02%	-0.06%	0.14%	0.25%	0.15%
1987	0.11%	-0.08%	0.07%	-0.06%	0.06%	0.65%	0.56%	0.42%	-0.44%	0.03%	0.00%	-0.03%	0.02%
1988	-0.08%	-0.14%	0.22%	0.79%	0.49%	0.18%	7.71%	6.55%	1.40%	-0.59%	-0.22%	0.25%	0.71%
1989	-0.15%	0.11%	-0.02%	0.05%	0.09%	1.09%	0.24%	0.41%	0.15%	-0.71%	-0.02%	0.02%	0.00%
1990	-0.92%	1.38%	0.57%	0.57%	1.06%	0.56%	0.82%	1.99%	2.03%	-0.02%	-0.67%	3.21%	0.76%
1991	-1.73%	0.21%	-2.89%	-2.67%	0.88%	-0.03%	0.24%	0.88%	1.87%	0.89%	0.27%	-0.36%	-0.61%
AVG:	0.21%	0.37%	0.38%	0.32%	0.14%	0.07%	0.19%	0.30%	0.22%	0.01%	-0.07%	0.01%	0.13%
MIN:	-9.30%	-5.96%	-2.89%	-2.67%	-2.20%	-3.53%	-1.96%	-0.79%	-0.88%	-0.76%	-4.44%	-7.71%	-2.12%
MAX:	5.28%	4.75%	6.62%	4.72%	2.10%	2.35%	7.71%	6.55%	2.21%	1.08%	3.80%	3.21%	1.73%

Table 4.4.6-51 Difference in simulated monthly average electrical conductivity (%) at Jersey Point, ANN results for Alternative 6 vs. Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.07%	0.30%	0.72%	0.14%	0.04%	0.01%	-0.01%	-0.06%	-0.10%	-1.36%	1.42%	0.09%
1923	2.37%	-1.57%	-1.39%	0.90%	0.11%	0.16%	0.09%	0.04%	0.08%	0.12%	-0.01%	0.02%	0.08%
1924	1.74%	-1.61%	0.36%	-0.31%	-0.98%	0.74%	-0.09%	0.08%	-0.07%	0.10%	-2.89%	-2.13%	-0.42%
1925	-0.20%	-1.30%	-0.54%	-0.30%	0.01%	-0.04%	0.02%	0.04%	-0.22%	-0.05%	0.12%	0.08%	-0.20%
1926	-0.38%	0.32%	0.36%	-0.05%	0.03%	-0.02%	0.07%	0.28%	0.70%	0.30%	0.04%	0.19%	0.15%
1927	-0.12%	0.52%	1.23%	0.53%	-0.04%	0.01%	0.02%	-0.04%	-0.01%	1.97%	0.59%	0.43%	0.42%
1928	-2.82%	1.73%	6.26%	4.21%	0.97%	0.06%	-0.01%	0.02%	0.20%	0.58%	0.00%	-0.42%	0.90%
1929	0.07%	1.34%	-0.92%	0.71%	1.13%	-0.20%	-0.03%	-0.15%	2.77%	-0.37%	-1.26%	-1.49%	0.13%
1930	0.76%	-0.75%	-0.81%	0.38%	0.08%	0.23%	0.06%	0.16%	0.09%	0.72%	2.95%	1.64%	0.46%
1931	-1.21%	0.86%	0.27%	-0.20%	-2.07%	-2.86%	-0.98%	0.45%	0.22%	-0.29%	-0.12%	0.02%	-0.49%
1932	0.07%	-0.07%	0.29%	0.42%	0.10%	0.37%	0.28%	0.25%	0.29%	-0.14%	0.10%	0.14%	0.18%
1933	0.00%	-0.01%	0.00%	0.31%	0.52%	0.44%	0.23%	0.22%	0.23%	0.10%	-0.01%	-0.02%	0.17%
1934	0.01%	-0.02%	0.00%	-0.15%	0.03%	-0.05%	-0.02%	0.02%	-0.01%	-0.01%	-1.00%	-1.72%	-0.24%
1935	1.61%	-2.62%	-0.44%	0.36%	-0.23%	-1.02%	-0.04%	0.05%	-0.03%	-0.03%	0.07%	-0.28%	-0.21%
1936	0.70%	-1.14%	0.68%	1.00%	0.01%	0.02%	-0.07%	0.02%	0.35%	-0.94%	-0.21%	0.40%	0.07%
1937	-0.51%	0.57%	-0.37%	0.31%	0.62%	-0.03%	-0.04%	0.04%	-0.15%	-1.41%	-1.64%	0.19%	-0.20%
1938	-1.26%	0.22%	0.85%	-0.04%	-0.05%	0.00%	0.00%	0.00%	0.01%	0.09%	-0.72%	7.79%	0.57%
1939	7.77%	8.71%	3.85%	1.78%	0.99%	0.79%	0.79%	0.34%	0.53%	-0.02%	-0.05%	0.06%	2.13%
1940	-0.04%	-0.23%	0.46%	0.41%	0.00%	0.00%	0.00%	0.01%	0.01%	0.36%	1.12%	-3.19%	-0.09%
1941	-9.36%	3.99%	6.90%	-0.01%	0.00%	-0.01%	-0.01%	0.00%	0.11%	-0.10%	-3.41%	2.75%	0.07%
1942	3.50%	1.99%	0.47%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.08%	1.70%	-2.59%	3.44%	0.70%
1943	7.59%	12.48%	5.84%	0.08%	0.00%	0.01%	-0.01%	0.18%	-0.08%	1.07%	4.30%	3.11%	2.88%
1944	1.25%	-1.11%	0.75%	-0.63%	-0.66%	0.22%	0.03%	0.22%	0.31%	0.44%	0.28%	-0.07%	0.09%
1945	-0.46%	6.09%	3.47%	1.50%	0.27%	-0.03%	0.01%	0.12%	0.44%	0.43%	0.10%	0.57%	1.04%
1946	0.88%	-0.99%	-0.57%	0.13%	0.34%	-0.26%	0.00%	-0.32%	-2.07%	-1.53%	-0.35%	-0.10%	-0.40%
1947	-1.99%	1.70%	2.54%	0.09%	0.58%	0.40%	-0.29%	-0.13%	0.28%	-1.19%	-0.22%	-0.17%	0.13%
1948	-0.39%	-0.29%	0.56%	0.17%	-0.06%	-0.02%	-0.02%	0.01%	0.02%	0.23%	0.24%	0.10%	0.04%
1949	-0.22%	0.72%	-0.19%	0.33%	0.45%	0.22%	0.00%	-0.02%	0.12%	-1.04%	-3.17%	-2.15%	-0.41%
1950	1.63%	-0.15%	-0.23%	0.86%	0.03%	0.01%	0.20%	0.28%	0.27%	-1.10%	-1.00%	0.94%	0.14%
1951	-0.68%	-0.33%	0.01%	-0.01%	0.00%	0.01%	-0.02%	-0.06%	-0.83%	1.39%	-0.55%	-1.27%	-0.20%
1952	1.34%	-1.33%	0.19%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.05%	-1.03%	4.09%	0.27%
1953	3.36%	2.97%	-0.90%	-0.06%	0.06%	-0.07%	-0.07%	0.02%	0.03%	0.20%	0.02%	1.95%	0.63%
1954	2.28%	2.36%	-1.59%	-1.17%	0.08%	0.00%	-0.01%	0.00%	0.03%	0.22%	0.18%	-0.03%	0.19%
1955	-1.19%	-0.13%	0.93%	0.41%	0.25%	0.04%	-0.02%	0.15%	0.24%	0.16%	0.06%	-0.24%	0.05%
1956	-0.28%	-0.28%	0.04%	-0.02%	0.00%	0.00%	-0.01%	-0.01%	0.17%	-0.49%	-2.02%	9.62%	0.56%
1957	9.72%	4.74%	-2.56%	2.42%	1.23%	-0.08%	0.09%	0.02%	0.10%	-0.19%	0.13%	0.49%	1.34%
1958	3.39%	3.16%	1.71%	0.45%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.09%	-1.24%	7.87%	1.27%
1959	12.79%	7.72%	3.00%	0.16%	-0.05%	-0.01%	0.00%	-0.09%	0.63%	-0.01%	-0.27%	-1.05%	1.90%
1960	0.56%	-0.81%	-0.46%	-0.06%	0.01%	0.20%	0.05%	0.18%	0.34%	-0.17%	0.00%	-3.35%	-0.29%
1961	2.17%	-1.51%	0.13%	2.05%	0.02%	0.18%	0.04%	0.10%	-0.39%	-0.41%	-0.01%	-0.17%	0.18%
1962	1.21%	-2.42%	-0.09%	0.10%	-0.09%	0.00%	0.00%	-0.06%	0.22%	-0.06%	-0.51%	-0.08%	-0.15%
1963	0.59%	1.53%	1.04%	0.40%	0.08%	0.00%	-0.01%	0.00%	-0.25%	2.93%	0.47%	-2.71%	0.34%
1964	3.50%	1.08%	0.72%	1.60%	0.97%	2.87%	0.89%	-0.75%	-0.82%	-0.87%	-0.01%	0.76%	0.83%
1965	-0.20%	-0.30%	-0.01%	-0.02%	0.01%	0.00%	0.00%	-0.01%	-0.01%	0.32%	2.04%	2.39%	0.35%
1966	0.84%	0.11%	0.65%	0.54%	0.03%	0.02%	0.03%	0.08%	0.15%	-0.04%	-0.21%	0.00%	0.18%
1967	0.06%	0.74%	0.64%	0.00%	0.02%	0.00%	-0.01%	-0.01%	0.00%	0.01%	-1.24%	1.88%	0.18%
1968	2.54%	1.84%	1.15%	0.49%	0.01%	0.00%	0.00%	0.07%	0.05%	-0.02%	0.09%	0.13%	0.53%
1969	-0.52%	-0.11%	0.38%	0.05%	-0.01%	0.00%	0.00%	0.00%	0.01%	0.07%	-1.13%	0.15%	-0.09%
1970	4.32%	6.51%	1.95%	-0.04%	-0.01%	0.00%	0.02%	0.03%	0.07%	-0.05%	0.12%	0.34%	1.11%
1971	0.19%	1.17%	0.52%	0.00%	0.07%	0.01%	-0.03%	0.01%	0.06%	0.28%	0.22%	1.58%	0.34%
1972	1.54%	0.44%	0.57%	3.50%	2.24%	0.41%	0.07%	0.04%	-0.03%	-0.13%	-0.15%	0.00%	0.71%
1973	-1.19%	-0.83%	0.51%	0.10%	0.00%	0.00%	-0.01%	0.01%	-0.27%	-0.39%	-0.56%	0.71%	-0.16%
1974	2.13%	1.02%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	-0.38%	-0.82%	3.25%	0.44%
1975	11.48%	7.66%	2.43%	0.54%	-1.38%	-0.03%	0.12%	-0.10%	-0.06%	-0.34%	-1.13%	5.30%	2.04%
1976	5.53%	3.45%	2.85%	-1.99%	-1.71%	0.41%	0.24%	1.00%	0.36%	0.04%	-0.04%	0.07%	0.85%
1977	-1.58%	-0.52%	-0.49%	-0.28%	-0.64%	-0.26%	-0.61%	0.02%	-0.37%	0.42%	0.77%	0.40%	-0.26%
1978	-0.34%	0.31%	-0.17%	-0.14%	0.01%	-0.01%	0.00%	0.00%	-0.01%	0.01%	0.16%	0.16%	0.00%
1979	0.14%	-0.25%	0.09%	0.36%	0.10%	0.04%	0.00%	-0.04%	-0.12%	-0.34%	-0.53%	0.05%	-0.04%
1980	0.05%	-0.04%	0.65%	0.14%	0.00%	0.00%	-0.06%	-0.09%	0.55%	1.87%	1.27%	0.15%	0.38%
1981	2.68%	-1.57%	1.47%	3.11%	0.55%	0.42%	0.08%	0.16%	0.32%	0.12%	0.00%	0.22%	0.63%
1982	-0.70%	-0.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.05%	-0.45%	3.29%	0.13%
1983	1.38%	0.10%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.05%	0.89%	0.20%
1984	0.34%	-0.01%	-0.02%	0.00%	0.00%	0.00%	-0.01%	0.03%	0.04%	0.29%	0.46%	0.43%	0.13%
1985	0.56%	0.51%	0.16%	0.42%	0.46%	0.32%	0.15%	0.03%	0.00%	0.00%	0.00%	-0.03%	0.22%
1986	0.51%	-0.85%	-0.50%	0.21%	0.01%	0.00%	0.00%	0.05%	-0.07%	-1.14%	1.82%	2.45%	0.21%
1987	1.86%	-1.33%	1.00%	-0.74%	2.22%	1.65%	0.37%	0.35%	0.08%	0.17%	0.01%	-0.02%	0.47%
1988	-0.10%	0.15%	-0.02%	-0.03%	0.14%	-0.02%	0.25%	0.22%	0.08%	-0.17%	-0.19%	-0.40%	-0.01%
1989	0.22%	-0.19%	0.04%	-0.10%	-0.20%	0.31%	0.05%	0.12%	0.09%	-0.32%	-0.01%	0.35%	0.03%
1990	-1.11%	1.42%	0.84%	-0.35%	0.15%	-0.16%	0.10%	0.42%	0.49%	1.10%	-0.08%	2.51%	0.44%
1991	-2.20%	2.19%	-2.37%	-2.86%	-0.63%	-0.88%	0.11%	0.42%	0.97%	0.52%	0.03%	-0.18%	-0.41%
AVG:	1.12%	0.96%	0.63%	0.33%	0.09%	0.06%	0.03%	0.06%	0.09%	0.06%	-0.20%	0.76%	0.33%
MIN:	-9.36%	-2.62%	-2.56%	-2.86%	-2.07%	-2.86%	-0.98%	-0.75%	-2.07%	-1.53%	-3.41%	-3.35%	-0.49%
MAX:	12.79%	12.48%	6.90%	4.21%	2.24%	2.87%	0.89%	1.00%	2.77%	2.93%	4.30%	9.62%	2.88%

Table 4.4.6-52 Simulated monthly average electrical conductivity (S/cm) at Rock Slough Entrance at Old River, ANN results for Alternative 1, 2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	544	698	614	426	303	242	234	231	233	233	256	463	291
1923	752	916	599	278	237	239	235	231	235	286	448	686	429
1924	938	925	912	919	627	360	320	427	604	597	581	761	664
1925	922	929	809	681	423	244	231	232	238	284	388	664	504
1926	944	929	872	665	358	243	234	235	263	374	544	766	536
1927	921	658	382	305	252	234	233	232	230	239	333	623	387
1928	951	904	740	545	345	258	234	232	234	258	366	681	479
1929	926	919	908	919	668	385	312	336	421	516	593	713	635
1930	933	920	631	372	273	261	247	242	298	419	586	808	499
1931	929	920	773	684	589	472	457	490	588	575	596	778	654
1932	945	923	587	320	256	245	247	249	258	306	382	601	443
1933	891	936	740	566	417	334	311	313	399	521	585	683	558
1934	958	927	768	589	358	275	272	300	377	480	622	812	561
1935	952	921	851	551	286	245	236	230	230	243	359	718	485
1936	956	909	910	620	293	233	232	229	234	274	442	762	508
1937	965	918	917	911	523	244	231	231	230	252	410	720	546
1938	989	750	358	239	233	233	234	234	233	230	237	323	358
1939	330	441	572	590	456	317	272	264	315	453	638	881	461
1940	918	875	910	588	277	233	233	233	230	249	365	651	480
1941	954	879	493	265	233	233	233	233	231	233	291	445	394
1942	613	873	633	281	233	233	233	232	234	234	279	407	374
1943	485	582	500	300	234	233	233	231	229	238	338	654	355
1944	927	929	924	917	554	277	246	244	277	378	591	912	598
1945	927	841	724	629	433	257	233	231	243	296	443	742	500
1946	992	926	517	257	234	232	233	237	254	310	469	741	450
1947	936	927	766	643	484	333	272	259	299	436	634	875	572
1948	923	932	918	791	556	358	271	237	231	254	383	697	546
1949	919	923	820	835	694	383	244	232	255	341	473	775	575
1950	946	929	828	524	300	250	238	234	239	276	415	723	492
1951	994	641	269	233	233	233	230	229	240	271	391	634	383
1952	922	927	546	273	233	234	233	233	233	231	240	277	382
1953	279	392	387	265	233	233	231	230	232	241	313	458	291
1954	657	826	925	611	286	236	233	231	232	260	405	676	465
1955	915	932	653	387	294	291	291	275	292	357	504	809	500
1956	921	929	585	262	233	234	230	228	228	236	307	446	403
1957	520	673	928	919	530	267	234	229	236	260	369	654	485
1958	762	806	645	352	242	232	234	233	234	230	252	325	379
1959	330	431	730	587	290	232	232	245	286	353	495	697	409
1960	910	897	719	707	521	297	249	249	298	440	634	814	561
1961	912	920	808	616	409	278	246	256	305	471	658	826	559
1962	932	929	821	632	379	248	235	235	257	321	466	756	518
1963	654	373	293	264	242	235	232	232	231	233	300	558	321
1964	932	800	497	380	301	281	281	263	285	430	638	834	493
1965	931	927	565	264	234	233	230	230	230	240	330	582	416
1966	836	680	429	323	259	241	238	240	268	330	476	772	424
1967	878	881	583	276	234	234	232	232	233	231	241	275	378
1968	281	403	612	482	272	234	232	235	273	345	503	788	388
1969	919	917	641	320	234	233	233	233	232	228	245	463	408
1970	455	458	404	259	232	234	231	228	248	272	352	588	330
1971	914	838	447	254	234	233	233	229	231	269	336	448	389
1972	659	865	896	791	501	286	245	251	275	315	439	718	520
1973	919	729	439	284	234	234	232	230	235	263	373	656	402
1974	993	671	275	233	234	234	233	233	231	236	317	430	360
1975	500	702	882	900	538	252	233	232	230	237	307	418	453
1976	418	508	761	919	693	417	319	344	557	760	805	898	617
1977	920	928	774	671	615	532	499	486	561	570	637	827	668
1978	944	929	809	474	251	234	233	231	230	233	311	628	459
1979	813	950	936	574	294	235	233	231	237	271	403	729	492
1980	947	941	693	367	239	233	232	228	229	254	349	536	437
1981	735	928	926	605	319	243	236	238	292	457	651	831	538
1982	920	630	310	234	233	234	233	233	232	229	262	328	340
1983	291	238	233	232	233	233	234	234	234	233	227	232	238
1984	228	226	230	232	233	232	228	229	242	264	356	602	275
1985	912	691	322	272	304	292	273	266	306	454	651	802	462
1986	883	929	762	465	282	234	233	231	228	245	336	548	448
1987	796	930	929	916	614	306	245	251	316	437	620	917	606
1988	911	796	596	353	267	264	292	340	403	486	625	796	511
1989	923	928	878	776	560	343	248	236	270	403	617	784	581
1990	954	887	860	781	478	325	306	310	451	610	662	770	616
1991	975	927	759	785	712	445	270	244	359	556	670	781	624
AVG:	811	800	668	510	358	272	253	255	282	336	445	657	469
MIN:	228	226	230	232	232	232	228	228	228	228	227	232	238
MAX:	994	950	936	919	712	532	499	490	604	760	805	917	668

Table 4.4.6-53 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, ANN results for Alternatives 2-5 vs. Alternative 1,2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.05%	0.07%	0.38%	0.29%	0.04%	0.01%	0.00%	0.00%	0.00%	0.04%	0.25%	0.15%
1923	0.20%	0.00%	-0.06%	0.04%	0.04%	0.02%	0.01%	0.01%	0.02%	0.04%	0.02%	-0.01%	0.03%
1924	-0.01%	-0.13%	0.16%	0.00%	-0.26%	0.05%	0.49%	0.96%	-0.06%	0.07%	-0.34%	-1.48%	-0.11%
1925	-0.70%	-0.66%	-1.12%	-1.51%	-1.21%	0.01%	0.01%	0.00%	0.02%	0.02%	-0.15%	-0.32%	-0.65%
1926	0.03%	0.00%	-0.23%	-0.14%	-0.01%	-0.05%	-0.02%	0.10%	0.37%	0.34%	-0.14%	-0.14%	-0.03%
1927	-0.25%	-0.18%	1.43%	1.86%	0.53%	0.00%	0.01%	0.00%	-0.03%	-0.08%	0.28%	0.69%	0.30%
1928	-0.56%	-1.25%	-0.96%	-0.48%	-0.03%	0.04%	0.00%	0.00%	0.00%	-0.05%	-0.18%	-0.28%	-0.50%
1929	0.01%	0.01%	0.00%	0.00%	0.04%	-0.75%	-1.43%	-0.71%	0.82%	0.33%	-0.60%	-1.05%	-0.20%
1930	-0.01%	0.00%	-0.72%	-0.34%	0.14%	0.15%	0.17%	0.28%	0.33%	0.35%	1.16%	0.49%	0.15%
1931	-0.30%	-0.27%	-0.29%	-0.22%	-0.82%	-1.67%	-1.13%	-0.07%	0.38%	-0.03%	-0.29%	-0.63%	-0.40%
1932	0.12%	-0.02%	-0.66%	-0.13%	0.16%	0.24%	0.27%	0.10%	0.07%	-0.05%	-0.01%	0.73%	0.05%
1933	0.58%	-0.23%	-0.70%	-0.66%	-0.52%	-0.14%	0.18%	0.12%	0.06%	0.02%	-0.07%	-0.15%	-0.13%
1934	-0.28%	-0.21%	-0.16%	-0.76%	-0.91%	-0.34%	-0.20%	-0.01%	0.00%	-0.02%	-2.26%	-5.41%	-1.09%
1935	0.08%	-0.62%	-2.12%	1.01%	1.28%	-0.15%	-0.06%	0.00%	0.00%	-0.02%	-0.16%	-1.56%	-0.45%
1936	-0.57%	0.12%	0.28%	0.66%	0.40%	-0.03%	0.02%	0.00%	0.01%	0.01%	-0.02%	0.05%	0.06%
1937	-0.09%	-0.03%	0.04%	0.00%	-0.11%	-0.20%	0.02%	0.00%	-0.02%	-0.02%	-0.61%	-0.29%	-0.10%
1938	-0.44%	-0.33%	0.16%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.48%	-0.18%
1939	-0.30%	0.71%	0.96%	0.92%	0.71%	0.57%	0.62%	0.67%	0.60%	-0.15%	-0.19%	0.28%	0.43%
1940	0.05%	-0.62%	-0.30%	0.27%	0.32%	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.35%	-2.19%	-0.36%
1941	-6.19%	-2.68%	3.25%	1.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.91%	-1.08%	-1.47%
1942	-0.41%	0.13%	0.21%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.09%	0.64%	0.07%
1943	1.29%	2.50%	2.23%	0.66%	-0.02%	0.01%	0.00%	-0.02%	-0.01%	0.00%	-0.09%	-0.09%	0.78%
1944	0.00%	0.00%	0.00%	0.00%	0.02%	0.06%	0.05%	0.09%	0.15%	0.07%	-0.09%	-0.02%	0.01%
1945	-0.01%	0.63%	1.25%	1.03%	0.54%	0.07%	0.00%	0.01%	0.04%	0.07%	0.04%	0.06%	0.40%
1946	-0.05%	-0.01%	0.10%	0.04%	0.02%	0.00%	0.00%	0.04%	0.07%	0.09%	0.05%	0.01%	0.02%
1947	0.09%	0.00%	-0.18%	-0.36%	-0.19%	0.14%	0.08%	-0.01%	-0.02%	-0.33%	-0.23%	0.19%	-0.07%
1948	-0.01%	0.00%	-0.04%	-0.32%	-0.19%	0.00%	-0.02%	0.01%	0.01%	0.08%	0.16%	0.11%	-0.04%
1949	0.08%	-0.33%	-0.09%	0.48%	0.86%	0.91%	0.17%	0.00%	0.03%	-0.03%	0.18%	0.40%	0.21%
1950	0.01%	-0.31%	-0.08%	0.16%	0.15%	0.06%	0.02%	0.02%	0.04%	0.07%	0.14%	0.10%	-0.01%
1951	0.04%	0.05%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.02%	-0.04%	-0.03%	0.01%
1952	0.01%	-0.01%	0.05%	0.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.33%	0.03%
1953	0.51%	0.75%	0.55%	0.09%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.02%	0.89%	0.31%
1954	1.53%	1.78%	0.00%	-1.10%	-0.36%	0.01%	0.00%	0.00%	0.01%	0.09%	0.14%	0.01%	0.32%
1955	0.00%	0.00%	0.29%	0.68%	0.41%	0.25%	0.13%	0.01%	0.05%	0.06%	0.08%	-0.05%	0.12%
1956	0.00%	-0.01%	-0.04%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.12%	0.93%	0.09%
1957	1.78%	1.66%	0.00%	-0.02%	0.63%	0.23%	0.02%	0.01%	0.02%	-0.05%	0.02%	0.25%	0.45%
1958	0.71%	1.03%	0.88%	0.48%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.53%	0.51%
1959	0.78%	0.89%	0.56%	0.28%	0.05%	-0.01%	0.00%	0.03%	-0.04%	-0.03%	0.12%	1.64%	0.49%
1960	-0.03%	-0.05%	0.61%	1.21%	1.43%	0.47%	0.26%	0.31%	0.67%	0.59%	0.09%	-1.64%	0.21%
1961	-0.09%	0.06%	-0.51%	0.70%	1.16%	0.65%	0.24%	0.09%	-0.22%	-0.51%	-0.21%	-0.24%	0.01%
1962	-0.03%	0.02%	-0.58%	-0.84%	-0.42%	0.00%	0.01%	0.03%	0.30%	0.19%	1.90%	1.28%	0.13%
1963	0.76%	1.73%	1.75%	0.82%	0.28%	0.02%	0.00%	0.00%	0.00%	0.02%	-0.05%	-0.19%	0.48%
1964	0.18%	0.48%	0.56%	0.67%	0.65%	0.89%	0.71%	0.14%	-0.13%	0.28%	0.17%	0.19%	0.36%
1965	-0.12%	0.01%	0.27%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.03%	0.02%
1966	0.17%	0.94%	1.81%	1.08%	0.23%	0.03%	0.02%	0.04%	0.06%	-0.01%	-0.13%	-0.05%	0.37%
1967	0.00%	0.61%	0.88%	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.27%	0.27%
1968	0.47%	0.71%	0.74%	0.54%	0.15%	0.00%	0.00%	0.07%	0.12%	0.01%	0.22%	0.48%	0.37%
1969	-0.18%	-0.24%	0.39%	0.51%	0.03%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.04%	0.50%	0.06%
1970	0.77%	1.27%	0.96%	0.17%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.02%	-0.02%	0.12%	0.36%
1971	0.11%	0.47%	0.70%	0.13%	0.01%	0.01%	0.00%	0.00%	0.01%	0.06%	0.06%	0.61%	0.25%
1972	1.01%	0.58%	0.44%	1.69%	2.14%	0.67%	0.09%	0.02%	0.00%	-0.06%	-0.11%	-0.04%	0.66%
1973	0.01%	0.37%	0.89%	0.55%	0.03%	0.00%	0.00%	0.00%	0.02%	0.02%	-0.11%	0.04%	0.17%
1974	0.36%	0.42%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.08%	0.43%	0.21%
1975	2.14%	2.78%	1.98%	1.11%	0.54%	0.02%	0.00%	0.00%	-0.01%	0.01%	0.06%	0.68%	1.17%
1976	1.23%	1.38%	0.98%	-0.01%	-0.41%	-0.01%	0.38%	1.64%	1.35%	0.39%	-0.03%	-0.32%	0.42%
1977	-0.70%	-0.79%	-0.42%	0.29%	0.23%	-0.11%	-0.10%	-0.03%	-0.03%	0.02%	0.11%	0.00%	-0.18%
1978	0.03%	-0.01%	-0.07%	0.01%	0.06%	0.02%	-0.01%	-0.02%	-0.01%	0.01%	0.08%	0.07%	0.01%
1979	0.11%	-0.07%	-0.07%	0.07%	0.08%	0.04%	0.00%	0.01%	0.08%	-0.04%	-0.04%	0.13%	0.02%
1980	-0.02%	0.01%	0.26%	0.31%	0.05%	0.00%	0.00%	0.00%	0.01%	0.09%	0.13%	0.07%	0.08%
1981	0.25%	0.05%	0.04%	0.32%	0.32%	0.08%	0.05%	0.16%	0.60%	0.55%	0.16%	0.38%	0.23%
1982	-0.39%	-0.73%	-0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.06%	0.14%	-0.19%
1983	0.22%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.03%
1984	0.08%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.09%	0.00%	-0.05%	0.01%
1985	0.09%	0.24%	0.25%	0.18%	0.26%	0.21%	0.11%	0.04%	0.00%	0.00%	0.00%	-0.01%	0.10%
1986	0.17%	0.01%	-0.01%	0.31%	0.23%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.05%	0.16%	0.09%
1987	0.13%	0.00%	0.00%	0.00%	-0.02%	0.15%	0.25%	0.21%	-0.10%	-0.08%	0.01%	-0.02%	0.02%
1988	-0.05%	-0.09%	0.00%	0.26%	0.30%	0.14%	2.54%	4.05%	2.11%	0.09%	-0.27%	0.06%	0.49%
1989	0.01%	0.00%	0.03%	0.01%	0.05%	0.26%	0.29%	0.13%	0.11%	-0.32%	-0.18%	0.00%	0.01%
1990	-0.49%	0.17%	0.73%	0.47%	0.51%	0.44%	0.37%	0.83%	1.39%	0.57%	-0.31%	1.49%	0.45%
1991	0.04%	-0.65%	-1.17%	-2.26%	-0.77%	0.40%	0.04%	0.26%	1.00%	0.88%	0.41%	-0.11%	-0.33%
AVG:	0.06%	0.17%	0.23%	0.20%	0.13%	0.06%	0.07%	0.14%	0.15%	0.05%	-0.03%	-0.03%	0.08%
MIN:	-6.19%	-2.68%	-2.12%	-2.26%	-1.21%	-1.67%	-1.43%	-0.71%	-0.22%	-0.51%	-2.26%	-5.41%	-1.47%
MAX:	2.14%	2.78%	3.25%	1.86%	2.14%	0.91%	2.54%	4.05%	2.11%	0.88%	1.90%	1.64%	1.17%

Table 4.4.6-54 Difference in simulated monthly average electrical conductivity (%) at Rock Slough Entrance at Old River, ANN results for Alternative 6 vs. Alternative 1,2020 LOD

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AVG
1922	0.00%	-0.04%	0.07%	0.33%	0.26%	0.04%	0.01%	0.00%	-0.01%	-0.03%	-0.42%	0.64%	0.07%
1923	1.67%	0.00%	-1.16%	-0.23%	0.18%	0.06%	0.05%	0.03%	0.03%	0.05%	0.02%	0.01%	0.06%
1924	0.96%	0.03%	-0.33%	0.00%	-0.42%	-0.15%	0.13%	0.02%	-0.02%	0.01%	-1.32%	-1.93%	-0.25%
1925	-0.82%	-0.69%	-0.75%	-0.32%	-0.15%	0.00%	0.00%	0.01%	-0.05%	-0.05%	0.05%	0.07%	-0.22%
1926	-0.18%	-0.01%	0.29%	0.16%	-0.02%	0.00%	0.01%	0.08%	0.26%	0.25%	0.09%	0.11%	0.09%
1927	0.00%	0.07%	0.53%	0.48%	0.11%	0.00%	0.00%	-0.01%	0.00%	0.49%	0.52%	0.36%	0.21%
1928	-1.45%	-0.53%	3.39%	4.02%	1.69%	0.25%	0.00%	0.00%	0.05%	0.20%	0.09%	-0.25%	0.62%
1929	-0.10%	0.64%	0.01%	0.00%	0.68%	0.38%	-0.06%	-0.06%	1.21%	0.59%	-0.70%	-1.13%	0.12%
1930	-0.01%	0.00%	-0.60%	-0.24%	0.11%	0.08%	0.06%	0.05%	0.06%	0.35%	1.68%	1.71%	0.27%
1931	-0.01%	-0.04%	0.47%	0.00%	-0.83%	-1.73%	-1.20%	-0.09%	0.23%	-0.02%	-0.14%	-0.02%	-0.28%
1932	0.04%	0.00%	0.03%	0.19%	0.12%	0.11%	0.13%	0.11%	0.12%	0.00%	0.01%	0.10%	0.08%
1933	0.04%	0.00%	0.00%	0.12%	0.26%	0.27%	0.18%	0.12%	0.15%	0.10%	0.02%	-0.02%	0.10%
1934	0.00%	0.00%	-0.01%	-0.05%	-0.05%	-0.01%	-0.01%	0.00%	0.00%	0.00%	-0.51%	-1.21%	-0.15%
1935	0.24%	-0.55%	-1.16%	-0.16%	0.06%	-0.28%	-0.20%	0.00%	0.00%	-0.01%	0.03%	-0.16%	-0.18%
1936	0.26%	-0.24%	-0.04%	0.59%	0.33%	0.01%	-0.01%	-0.01%	0.09%	-0.26%	-0.26%	0.19%	0.05%
1937	-0.12%	0.05%	0.00%	0.00%	0.27%	0.12%	-0.01%	0.00%	-0.03%	-0.43%	-1.04%	-0.26%	-0.12%
1938	-0.62%	-0.61%	0.24%	0.15%	-0.02%	-0.01%	0.00%	0.00%	0.00%	0.02%	-0.16%	3.22%	0.18%
1939	4.42%	5.77%	4.39%	2.02%	1.01%	0.49%	0.37%	0.24%	0.26%	0.09%	-0.03%	0.02%	1.59%
1940	0.01%	-0.12%	0.15%	0.34%	0.12%	0.00%	0.00%	0.00%	0.00%	0.10%	0.58%	-1.65%	-0.04%
1941	-6.13%	-2.63%	3.40%	1.84%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	-1.29%	0.74%	-0.34%
1942	2.49%	2.06%	1.26%	0.15%	0.00%	0.00%	0.00%	0.00%	-0.02%	0.36%	-0.68%	1.15%	0.56%
1943	4.14%	8.18%	7.06%	2.05%	0.01%	0.00%	0.00%	0.04%	0.01%	0.25%	2.08%	2.64%	2.21%
1944	1.65%	-0.02%	0.00%	-0.01%	-0.47%	-0.11%	0.05%	0.06%	0.14%	0.25%	0.25%	0.03%	0.15%
1945	-0.23%	2.79%	3.89%	1.81%	0.78%	0.05%	0.00%	0.03%	0.13%	0.23%	0.13%	0.36%	0.83%
1946	0.65%	-0.05%	-0.65%	-0.11%	0.10%	0.00%	-0.04%	-0.08%	-0.62%	-0.92%	-0.46%	-0.14%	-0.19%
1947	-1.06%	0.01%	1.72%	0.94%	0.20%	0.29%	0.03%	-0.09%	0.08%	-0.54%	-0.41%	-0.15%	0.08%
1948	-0.24%	-0.28%	0.14%	0.29%	0.06%	-0.03%	-0.01%	0.00%	0.00%	0.07%	0.15%	0.11%	0.02%
1949	-0.08%	0.25%	0.20%	0.11%	0.31%	0.25%	0.05%	0.00%	0.03%	-0.42%	-1.73%	-1.98%	-0.25%
1950	0.00%	0.53%	-0.16%	0.08%	0.26%	0.01%	0.05%	0.09%	0.11%	-0.32%	-0.67%	0.34%	0.03%
1951	-0.07%	-0.48%	-0.09%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.22%	0.28%	-0.04%	-0.83%	-0.12%
1952	0.39%	-0.02%	-0.69%	0.07%	0.01%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.27%	1.15%	0.05%
1953	1.82%	1.95%	0.91%	-0.26%	0.00%	-0.01%	-0.03%	-0.01%	0.01%	0.05%	0.04%	0.95%	0.45%
1954	1.70%	1.93%	0.00%	-1.14%	-0.35%	0.01%	0.00%	0.00%	0.01%	0.07%	0.12%	0.02%	0.20%
1955	-0.64%	-0.52%	0.21%	0.45%	0.17%	0.06%	0.01%	0.04%	0.10%	0.11%	0.06%	-0.13%	-0.01%
1956	-0.22%	-0.24%	-0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	-0.09%	-0.87%	4.17%	0.22%
1957	7.03%	4.95%	-0.02%	-0.03%	1.56%	0.31%	0.00%	0.02%	0.03%	-0.03%	0.03%	0.31%	1.18%
1958	1.66%	2.67%	2.03%	0.78%	0.09%	0.00%	0.00%	0.00%	0.00%	-0.02%	-0.38%	2.89%	0.81%
1959	5.85%	5.98%	3.48%	1.65%	0.04%	-0.01%	0.00%	-0.02%	0.20%	0.12%	-0.14%	-0.63%	1.38%
1960	-0.02%	-0.12%	-0.51%	-0.17%	-0.03%	0.05%	0.05%	0.06%	0.15%	-0.02%	-0.05%	-1.76%	-0.20%
1961	-0.09%	0.07%	-0.56%	0.79%	0.84%	0.05%	0.04%	0.03%	-0.12%	-0.29%	-0.12%	-0.09%	0.05%
1962	0.55%	-0.70%	-1.01%	0.00%	0.03%	-0.02%	0.00%	-0.01%	0.05%	0.02%	-0.27%	-0.16%	-0.13%
1963	0.13%	0.60%	0.65%	0.33%	0.09%	0.01%	0.00%	0.00%	-0.05%	0.63%	0.57%	-1.52%	0.12%
1964	1.33%	2.11%	0.65%	0.71%	0.69%	1.04%	0.87%	0.02%	-0.40%	-0.57%	-0.22%	0.40%	0.55%
1965	0.17%	-0.21%	-0.18%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.93%	1.74%	0.21%
1966	1.16%	0.44%	0.24%	0.34%	0.13%	0.01%	0.01%	0.03%	0.06%	0.01%	-0.12%	-0.05%	0.19%
1967	0.03%	0.39%	0.54%	0.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.31%	0.38%	0.10%
1968	1.10%	1.28%	1.05%	0.67%	0.14%	0.00%	0.00%	0.02%	0.03%	0.00%	0.04%	0.10%	0.37%
1969	-0.20%	-0.24%	0.04%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	-0.30%	-0.04%	-0.05%
1970	1.12%	4.09%	3.22%	0.49%	-0.01%	0.00%	0.00%	0.01%	0.02%	0.00%	0.04%	0.22%	0.77%
1971	0.20%	0.51%	0.68%	0.12%	0.02%	0.01%	0.00%	0.00%	0.01%	0.10%	0.14%	0.79%	0.21%
1972	1.22%	0.71%	0.43%	1.72%	2.24%	0.71%	0.10%	0.02%	0.00%	-0.05%	-0.10%	-0.03%	0.58%
1973	-0.60%	-0.84%	-0.20%	0.18%	0.02%	0.00%	0.00%	0.00%	-0.06%	-0.16%	-0.32%	0.31%	-0.14%
1974	1.41%	1.50%	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	-0.08%	-0.39%	1.23%	0.33%
1975	5.90%	6.99%	3.80%	1.15%	0.12%	-0.33%	0.02%	0.00%	-0.03%	-0.09%	-0.50%	2.10%	1.59%
1976	3.57%	2.90%	2.47%	-0.02%	-1.50%	-0.51%	0.18%	0.44%	0.39%	0.13%	0.00%	0.02%	0.67%
1977	-0.70%	-0.80%	-0.42%	-0.29%	-0.35%	-0.32%	-0.32%	-0.18%	-0.17%	0.03%	0.51%	0.44%	-0.21%
1978	-0.03%	0.02%	0.05%	-0.11%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.12%	0.01%
1979	0.12%	-0.10%	-0.07%	0.13%	0.14%	0.03%	0.00%	-0.01%	-0.03%	-0.13%	-0.31%	-0.08%	-0.03%
1980	0.04%	0.00%	0.19%	0.31%	0.03%	0.00%	-0.01%	-0.03%	0.11%	0.63%	0.85%	0.35%	0.20%
1981	1.44%	-0.02%	0.02%	1.55%	1.24%	0.20%	0.09%	0.05%	0.14%	0.12%	0.03%	0.12%	0.41%
1982	-0.26%	-0.50%	-0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.14%	1.16%	0.00%
1983	1.31%	0.27%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.22%	0.15%
1984	0.23%	0.05%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.09%	0.25%	0.33%	0.08%
1985	0.44%	0.43%	0.22%	0.16%	0.24%	0.20%	0.11%	0.04%	0.00%	0.00%	0.00%	-0.01%	0.15%
1986	0.24%	-0.24%	-0.56%	-0.17%	0.06%	0.00%	0.00%	0.01%	0.00%	-0.32%	0.61%	1.69%	0.11%
1987	1.70%	-0.02%	-0.02%	0.00%	0.10%	1.08%	0.39%	0.16%	0.09%	0.10%	0.05%	-0.01%	0.30%
1988	-0.05%	0.04%	0.06%	-0.02%	0.03%	0.02%	0.08%	0.13%	0.08%	-0.06%	-0.14%	-0.27%	-0.01%
1989	-0.02%	-0.01%	-0.05%	-0.03%	-0.11%	-0.01%	0.08%	0.03%	0.04%	-0.14%	-0.08%	0.17%	-0.01%
1990	-0.49%	0.10%	0.88%	0.22%	-0.13%	-0.01%	-0.01%	0.16%	0.32%	0.67%	0.33%	1.29%	0.28%
1991	-0.43%	-0.03%	-0.19%	-2.19%	-1.43%	-0.48%	-0.22%	0.12%	0.52%	0.49%	0.18%	-0.08%	-0.31%
AVG:	0.62%	0.71%	0.57%	0.32%	0.13%	0.03%	0.01%	0.02%	0.05%	0.03%	-0.06%	0.28%	0.23%
MIN:	-6.13%	-2.63%	-1.16%	-2.19%	-1.50%	-1.73%	-1.20%	-0.18%	-0.62%	-0.92%	-1.73%	-1.98%	-0.34%
MAX:	7.03%	8.18%	7.06%	4.02%	2.24%	1.08%	0.87%	0.44%	1.21%	0.67%	2.08%	4.17%	2.21%

Table 4.4.6-55 Simulated X2 position (km), Alternative 1, 2020 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	66.36	66.26	66.78	61.24	63.31
1923	71.47	73.57	68.64	70.22	76.17
1924	77.60	76.97	80.28	84.87	84.29
1925	63.67	64.80	66.73	71.20	76.08
1926	66.60	73.48	69.37	73.73	81.00
1927	54.82	59.20	59.09	64.47	71.83
1928	72.22	57.81	63.24	68.53	76.19
1929	77.85	76.85	79.65	81.00	82.02
1930	72.84	68.52	73.33	75.54	80.64
1931	80.13	81.25	81.20	84.17	84.44
1932	70.11	73.68	74.42	75.31	76.14
1933	77.27	77.17	76.87	81.04	82.03
1934	74.64	75.06	76.21	81.00	81.00
1935	73.91	69.34	61.48	64.35	72.01
1936	59.29	63.64	65.83	69.16	75.90
1937	67.19	62.05	64.51	67.56	74.12
1938	52.14	47.13	51.28	53.08	57.99
1939	77.38	75.44	75.75	76.98	80.80
1940	60.95	53.68	54.52	65.14	73.80
1941	51.16	51.63	53.02	57.73	67.49
1942	50.54	60.85	59.13	60.94	66.49
1943	57.77	53.97	60.94	65.52	73.73
1944	72.20	71.48	73.38	75.63	78.68
1945	66.93	67.96	70.91	71.92	75.89
1946	64.80	69.79	72.66	73.41	76.70
1947	76.23	73.57	74.56	76.90	79.88
1948	77.10	75.33	69.01	66.72	72.44
1949	80.07	66.29	71.38	73.21	77.80
1950	68.13	70.83	69.97	70.79	74.29
1951	55.15	62.51	68.54	69.63	78.08
1952	55.36	55.56	55.06	54.77	58.99
1953	64.17	69.18	70.57	68.03	71.70
1954	61.91	60.61	60.97	65.72	76.33
1955	75.15	77.55	75.77	75.99	79.20
1956	52.13	59.42	65.61	62.70	69.24
1957	70.46	63.77	67.66	69.43	75.43
1958	51.59	51.47	50.91	55.57	61.93
1959	61.92	66.44	74.13	76.64	78.09
1960	72.27	72.38	74.32	75.23	80.71
1961	71.59	71.94	75.07	76.69	80.36
1962	66.44	68.02	72.93	73.59	76.94
1963	61.48	64.54	55.92	61.32	71.16
1964	75.53	77.76	73.65	75.74	80.38
1965	61.31	66.89	61.89	65.53	75.29
1966	68.36	68.63	72.59	74.46	77.77
1967	60.03	58.15	57.56	57.27	59.46
1968	61.30	62.72	69.74	75.77	79.12
1969	50.67	54.66	56.01	55.54	60.25
1970	51.61	58.88	67.61	72.98	77.65
1971	64.60	63.01	66.62	65.78	72.83
1972	73.07	68.39	74.00	77.77	76.19
1973	54.48	56.52	65.92	69.54	74.27
1974	58.94	52.85	53.93	62.47	70.18
1975	64.48	56.12	63.24	64.59	69.35
1976	79.33	76.90	77.70	83.68	86.05
1977	82.08	82.28	81.20	84.60	84.36
1978	59.64	56.84	58.53	63.69	69.72
1979	65.12	64.33	68.30	71.41	74.44
1980	51.53	55.74	64.14	67.81	75.14
1981	69.84	66.91	70.20	75.80	81.00
1982	52.42	52.23	48.60	54.95	64.41
1983	46.58	42.09	48.62	51.62	52.38
1984	58.92	61.74	67.88	72.46	76.34
1985	76.66	75.55	74.62	76.13	81.00
1986	52.70	48.37	60.40	67.35	74.00
1987	75.36	70.07	74.14	77.70	80.93
1988	74.14	77.74	78.37	81.00	81.00
1989	80.11	67.16	69.72	74.13	79.96
1990	76.30	77.05	76.98	80.21	84.92
1991	82.19	70.85	72.85	77.80	84.13
AVG:	66.12	65.59	67.52	70.35	75.05
MIN:	46.58	42.09	48.60	51.62	52.38
MAX:	82.19	82.28	81.20	84.87	86.05

Table 4.4.6-56 Simulated X2 position (km), Alternatives 2-5 minus Alternative 1, 2020 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	0.03	0.03	0.02	0.02	0.02
1923	0.01	0.01	0.01	0.02	0.00
1924	0.02	0.01	0.14	0.08	-0.12
1925	-0.04	-0.01	0.02	-0.01	0.00
1926	0.00	0.03	0.09	0.13	0.00
1927	0.07	0.03	-0.02	-0.08	-0.17
1928	0.00	0.00	0.02	0.00	0.00
1929	0.03	-0.22	-0.06	0.00	0.00
1930	0.02	0.07	0.14	0.15	-0.08
1931	-0.25	-0.07	-0.02	0.06	-0.02
1932	0.20	0.07	0.00	0.03	0.01
1933	-0.02	0.07	0.02	0.06	0.01
1934	-0.04	-0.01	0.00	0.00	0.00
1935	0.09	-0.06	-0.03	0.00	0.02
1936	-0.11	-0.08	-0.02	0.03	0.00
1937	-0.09	-0.03	0.00	0.06	0.00
1938	0.02	0.01	0.01	0.01	0.02
1939	0.05	0.15	0.15	0.15	-0.05
1940	0.10	-0.03	0.00	-0.02	-0.13
1941	0.22	0.07	0.03	0.02	0.00
1942	0.01	0.02	0.02	0.02	0.03
1943	0.01	0.01	0.02	0.00	0.00
1944	0.02	0.05	0.03	0.04	0.01
1945	0.03	0.02	0.02	0.03	0.01
1946	0.00	0.05	0.03	0.03	0.01
1947	0.03	-0.01	0.01	0.00	-0.01
1948	0.00	0.01	0.01	0.03	0.03
1949	0.09	0.04	0.03	0.02	0.01
1950	0.02	0.02	0.02	0.03	0.04
1951	0.01	0.02	0.02	0.02	0.01
1952	0.01	0.01	0.02	0.01	0.02
1953	0.00	0.00	0.01	0.01	0.03
1954	0.00	0.01	0.01	0.00	0.04
1955	0.02	0.05	-0.02	0.03	0.01
1956	0.01	0.01	0.01	0.02	0.04
1957	0.11	0.04	0.01	0.04	0.00
1958	0.01	0.01	0.01	0.01	0.02
1959	0.01	0.00	0.13	-0.04	0.00
1960	0.11	0.10	0.03	0.15	0.04
1961	0.25	0.04	0.01	0.01	-0.06
1962	0.02	0.05	0.12	0.04	0.14
1963	-0.09	0.00	-0.01	-0.01	0.00
1964	0.04	0.31	-0.12	0.14	-0.04
1965	0.02	0.00	0.02	0.00	0.00
1966	0.03	0.02	0.02	0.03	0.00
1967	0.04	0.02	0.02	0.01	0.02
1968	0.02	0.06	0.01	0.15	-0.04
1969	0.00	0.01	0.03	0.03	0.03
1970	0.01	0.02	0.00	0.03	-0.01
1971	0.00	0.04	0.01	0.03	0.04
1972	0.10	0.05	0.00	0.00	0.00
1973	0.02	0.01	0.02	0.02	0.00
1974	0.02	0.01	0.01	0.02	0.02
1975	0.01	0.01	0.01	0.02	0.01
1976	0.02	0.07	0.09	0.40	-0.05
1977	-0.01	0.00	0.00	0.01	-0.01
1978	0.33	0.19	0.12	0.05	0.03
1979	0.08	0.09	0.07	0.04	0.01
1980	-0.03	0.00	0.01	0.02	0.05
1981	0.05	0.08	0.10	0.18	0.00
1982	0.00	0.00	0.00	0.01	0.03
1983	0.00	0.00	0.01	0.01	0.01
1984	0.01	0.01	0.00	0.02	0.04
1985	0.04	0.02	0.01	0.00	0.00
1986	0.03	0.01	0.01	0.02	0.01
1987	0.02	0.18	0.00	0.00	-0.02
1988	0.00	0.00	0.97	0.00	0.00
1989	0.00	0.26	0.10	0.00	-0.02
1990	0.02	0.09	0.03	0.22	0.07
1991	0.01	0.03	0.11	0.14	0.05
AVG:	0.03	0.03	0.04	0.04	0.00
MIN:	-0.25	-0.22	-0.12	-0.08	-0.17
MAX:	0.33	0.31	0.97	0.40	0.14

Table 4.4.6-57 Simulated X2 position (km), Alternative 6 minus Alternative 1, 2020 LOD

YEAR	FEB	MAR	APR	MAY	JUN
1922	0.03	0.03	0.02	0.02	-0.19
1923	0.04	0.02	0.01	0.03	0.00
1924	0.02	0.01	0.00	0.00	-0.01
1925	-0.04	-0.01	0.01	0.05	0.00
1926	0.02	0.01	0.11	0.05	0.00
1927	0.02	0.02	0.02	0.06	-0.08
1928	0.05	0.09	0.05	0.01	0.02
1929	0.06	-0.02	0.00	0.00	0.00
1930	0.01	0.02	0.02	0.02	-0.01
1931	-0.24	-0.07	-0.02	0.06	-0.01
1932	0.08	0.04	0.03	0.04	0.01
1933	0.04	0.02	0.01	0.04	0.01
1934	0.00	0.00	0.00	0.00	0.00
1935	-0.05	-0.13	-0.02	0.00	0.02
1936	0.16	0.21	0.17	0.10	0.01
1937	0.08	0.03	0.02	-0.10	-0.05
1938	0.01	0.01	0.01	0.01	-0.14
1939	0.06	0.06	0.04	0.04	0.05
1940	0.02	0.02	0.03	-0.15	0.19
1941	0.22	0.08	0.03	-0.01	0.00
1942	0.01	0.02	0.02	0.02	-0.29
1943	0.03	0.01	0.02	0.00	0.00
1944	0.00	0.02	0.02	0.04	0.01
1945	0.00	0.00	0.06	0.08	0.03
1946	0.00	0.18	0.07	-0.26	-0.08
1947	0.04	-0.06	0.00	0.00	0.04
1948	0.00	-0.01	0.00	0.02	0.03
1949	0.05	0.02	0.02	0.02	0.00
1950	0.03	0.12	0.11	0.10	-0.02
1951	0.00	0.02	0.02	-0.15	-0.03
1952	0.03	0.02	0.00	0.01	-0.12
1953	0.00	0.00	0.01	0.02	0.03
1954	0.00	0.01	0.01	0.00	0.04
1955	0.00	0.00	0.00	0.03	0.01
1956	0.01	0.02	0.02	0.02	-0.24
1957	0.12	0.05	0.01	0.04	0.00
1958	0.01	0.01	0.01	0.01	-0.21
1959	0.01	0.00	0.02	-0.03	0.10
1960	0.02	0.01	0.00	0.04	0.01
1961	0.06	0.01	0.00	0.02	-0.04
1962	-0.03	-0.03	0.01	0.00	0.03
1963	0.03	0.00	0.01	0.18	0.04
1964	0.04	0.39	-0.14	0.01	0.04
1965	0.03	0.00	0.01	0.00	-0.15
1966	0.02	0.01	0.02	0.02	0.00
1967	0.05	0.02	0.01	0.02	-0.04
1968	0.02	0.02	0.00	0.03	-0.01
1969	0.01	0.01	0.01	0.02	-0.16
1970	0.02	0.02	0.00	0.04	-0.02
1971	0.00	0.04	0.01	0.04	0.05
1972	0.11	0.06	0.00	0.00	0.00
1973	0.03	0.02	0.02	-0.12	0.00
1974	0.01	0.01	0.01	-0.06	-0.12
1975	-0.11	-0.03	0.00	0.02	-0.13
1976	-0.03	0.02	0.02	0.10	0.00
1977	-0.01	0.00	0.00	0.02	-0.04
1978	0.02	-0.02	0.00	0.01	0.02
1979	0.05	0.04	0.00	-0.07	0.00
1980	0.07	0.09	0.11	0.18	0.30
1981	0.19	0.08	0.04	0.05	0.00
1982	0.02	0.01	0.01	0.01	-0.20
1983	0.01	0.00	0.01	0.01	0.01
1984	0.01	0.01	0.00	0.03	-0.01
1985	0.04	0.02	0.01	0.00	0.00
1986	0.03	0.01	0.01	-0.15	-0.03
1987	0.13	0.16	0.00	0.00	0.02
1988	0.00	0.00	0.03	0.00	0.00
1989	0.00	0.07	0.03	0.00	0.00
1990	-0.01	0.00	0.00	0.05	0.02
1991	-0.04	-0.01	0.03	0.08	0.03
AVG:	0.02	0.03	0.02	0.01	-0.02
MIN:	-0.24	-0.13	-0.14	-0.26	-0.29
MAX:	0.22	0.39	0.17	0.18	0.30

4.4.7. An alternative analysis based on empirical significance criteria

During the scoping process for the FRWP EIR/EIS, comments were received from interested parties regarding significance thresholds for the water quality analysis. These comments recommended that the FRWA should adopt threshold significance criteria that are consistent with criteria used for certain Delta water projects. Specifically mentioned were criteria used by Contra Costa Water District in the EIR/EIS for the Los Vaqueros Reservoir Project. The comment stated that the Los Vaqueros Reservoir EIR/EIS considered water quality impacts as potentially significant and requiring further analysis if the increase in chloride concentration exceeded 5 mg/l or 5%, whichever is larger. This statement does not completely capture the significance criteria used in that EIR/EIS. The specific criteria (modified slightly to be consistent with the current regulatory framework) are provided below.

It should also be noted that FRWA reviewed a large number of other EIRs and EISs that addressed Delta water quality. There was no consistent methodology or approach that could be identified; nearly every analysis used different methods and significance thresholds.

4.4.7.1 Contra Costa Water District's Los Vaqueros Reservoir Project EIR/EIS significance criteria

The discussion below is excerpted from Chapter 5 (pages 5-9 and 5-10) of the Los Vaqueros Reservoir Project EIR/EIS Salinity differences were compared at 10 Delta stations using the Fischer Delta Model (FDM). Differences were considered for more detailed impact analysis if they met either of the following screening criteria:

Step 1 – Screening Criterion 1

- Salinity differences for the project alternative were greater than 5% of the base condition, and
- Salinity differences between project alternatives and the base case were greater than 5 mg/l chloride or 20 micromhos per centimeter.

Step 1 – Screening Criterion 2

- For Delta locations where Delta Water Quality Control Plan standards apply, when base salinity levels were greater than 95% of the applicable standard and the alternative caused *any* increase in salinity levels. This criterion recognized potential significance of project operations when Delta salinity approaches regulatory limits.

Salinity increases or decreases of less than 5% of base conditions were considered insignificant because changes of this magnitude are clearly smaller than the uncertainty in field measurements and the modeling methods. The additional 5 mg/l or 20 micromhos per centimeter criterion removed from consideration very small changes under low salinity conditions.

The second criterion was established to ensure that all increases were reviewed when calculated salinity levels approached regulatory limits. CCWD did not consider this to mean that the salinity

levels would in fact approach regulatory limits. CCWD considered it important to note that the simulations were based on estimated hydrology, monthly average flows, and 19-year mean tides. The initial screening procedure was considered by CCWD to eliminate changes that were clearly insignificant. Individual changes that passed (i.e., exceeded) the screening criteria were not necessarily significant, however. Conclusions of significance were reached after CCWD reviewed the changes in terms of frequency, magnitude, and duration of salinity increases and decreases.

CCWD also recognized that efforts are continuously underway to modify water quality standards. CCWD's position was that it is not possible to determine what possible future standards might be in sufficient detail to conduct a meaningful analysis of impacts. In addition, CCWD noted, until new standards are actually adopted, the existing standards remain in place.

Step 2 – Criteria for Conclusions of Significance

CCWD identified a number of criteria by which to evaluate the significance of water quality changes. These criteria stated that significant adverse impacts were determined using the following criteria:

- Results met either of the initial screening criteria; and
- Review of results meeting the screening criteria showed distinct periodic or seasonal trends or continuous increases throughout a substantial portion of the simulation period; or
- The frequency of salinity increases of the period of record was substantially greater than the frequency of salinity decreases (e.g., salinity levels predicted to increase 70% of the time and decrease 30% of the time); or
- The frequency, magnitude, and duration of salinity increases were consistent during certain water-year types or Delta conditions (e.g., consistent increases during critical dry years); or
- Trends in salinity increases are consistent at several Delta stations or over well-defined geographic areas; or
- Salinity changes have the potential to affect beneficial uses or CCWD operations.

4.4.7.2 Approach to supplemental water quality analysis

FRWA and its member agencies believe that the approach and methods used in the FRWP EIR/EIS to assess Delta water quality impacts are appropriate and thoroughly address the intent and spirit of CEQA and NEPA. However, in response to comments received during scoping, FRWA has elected to undertake this supplemental water quality analysis to address scoping comments. As part of this analysis, FRWA has examined water quality modeling results in a manner consistent with the CCWD Los Vaqueros Reservoir Project EIR/EIS. This analysis is focused on potential water quality changes at the locations of most concern to those parties who provided scoping comments; Rock Slough entrance, West Canal at Clifton Court Forebay (Clifton Court Forebay), and the DMC at the Tracy Pumping Plant (Tracy Pumping Plant). The

analysis presents the results and also compares those results to the significance criteria used in the Los Vaqueros Reservoir Project EIR/EIS.

4.4.7.3 Results of supplemental analysis

4.4.7.3.1 Alternatives 2-5

Figures 4.4.7.3.1-1 through 4.4.7.3.1-4 present scatter plots and summary statistics of this supplemental analysis for individual monthly tabulated chloride concentration and differences simulated for the FRWP alternative and no action condition. Tables 4.4.7.3.1-1 through 4.4.7.3.1-4 present the supporting tabular data and reflect the seasonal patterns of simulated differences. Figures 4.4.7.3.1-1 through 4.4.7.3.1-3 and Tables 4.4.7.3.1-1 through 4.4.7.3.1-3 show those simulated chloride differences at Rock Slough, Clifton Court Forebay, and the Tracy Pumping Plant that were greater than 5 mg/l and greater than 5% above no action conditions. Table 4.4.7.3.1-4 and Figure 4.4.7.3.1-4 show those changes at Rock Slough that were simulated when the base salinity levels were greater than 95% of the applicable water quality standard. Based on the methodology used by CCWD, other changes that did not meet these initial screening criteria are not addressed further in this analysis. An example of results not discussed further include FDM results for chloride concentrations at the southern Delta locations (West Canal and DMC Tracy) that generally do no approach the daily salinity standard of 250 mg/L.

Listed below are the specific significance criteria used by CCWD, along with a discussion regarding whether the results indicate that these criteria would be exceeded or not.

Step 2 – Specific Significance Criteria

Step 2 Specific Criterion – Review of results meeting the screening criteria showed distinct periodic or seasonal trends or continuous increases throughout a substantial portion of the simulation period

The following general pattern of observed simulation results are evident at all three locations analyzed (Rock Slough, Clifton Court Forebay, and Tracy Pumping Plant). As shown in Tables 4.4.7.3.1-1 through 4.4.7.3.1-4, there are no discernable trends in salinity increases. There is an overall seasonal trend of the observed changes in that all changes occur between the months of September through December. However, increases are scattered throughout those months, and do not occur throughout a substantial portion of the simulation period (0.8% of the months or less depending on location). This clear lack of distinct pattern exists for changes greater than 5 mg/L and 5% (Tables 4.4.7.3.1-1 through 4.4.7.3.1-3) and those changes when the No Action condition is near the standard (Table 4.4.7.3.1-4).

Step 2 Specific Criterion – The frequency of salinity increases of the period of record was substantially greater than the frequency of salinity decreases (e.g., salinity levels predicted to increase 70% of the time and decrease 30% of the time)

Summary counts of the observed changes shown Figures 4.4.7.3.1-1 through 4.4.7.3.1-4 indicate that the frequency of salinity increases was slightly greater than the frequency of salinity decreases. However, the total frequency of increases that exceeded the 5 mg/l and 5% threshold was extremely small at all locations (i.e., no more than 7 months out of a total 896 months). If all

months in the modeling period are taken into account, there is no substantial difference in the frequency of increases as compared to decreases.

Step 2 Specific Criterion – The frequency, magnitude, and duration of salinity increases were consistent during certain water-year types or Delta conditions (e.g., consistent increases during critical dry years)

As shown in Figures 4.4.7.3.1-1 through 4.4.7.3.1-3 for changes that are larger than normal model error, there is not a discernible pattern of the increases or decreases by year type or Delta conditions. The increases and decreases occur across all year types and are relatively equally distributed. For example, at Rock Slough three increases occur in critical and dry years, while four increases occur in above normal and wet years. For changes that occur when background conditions are within 95% of the standards (Figure 4.4.7.3.1-4), there are slightly more months with increased salinity but the average of the increases is only 2.6 mg/l, while the average of the decreases is 3.3 mg/l.

Step 2 Specific Criterion – Trends in salinity increases are consistent at several Delta stations or over well-defined geographic areas

The pattern in the magnitude of increases and decreases are not necessarily consistent between the three Delta locations. Very few changes occur at any location.

Step 2 Specific Criterion – Salinity changes have the potential to affect beneficial uses or CCWD operations

As described in the Chapter 4 of the FRWP EIR/EIS, salinity changes do not have the potential to affect beneficial uses of the Delta. Most notably, there are no project-related changes in the periods of compliance with the 150 mg/L standard. All observed chloride increases are with 95% of the 250 mg/L objective and all are within the limits of model error (<5%). In addition, the pattern of increases and decreases for all screening criteria values are equally distributed with respect to magnitude. While effects on CCWD operations are considered in the FRWP analysis, this specific criteria was more appropriately considered as part of CCWD's Los Vaqueros Reservoir Project EIR/EIS. CCWD is not considered differently than other users in the FRWP EIR/EIS analysis.

4.4.7.3.2 Alternative 6

Figure 4.4.7.3.2-1 and Table 4.4.7.3.2-1 show those simulated changes for Rock Slough that were greater than 5 mg/l and greater than 5% above base conditions. Figure 4.4.7.3.2-2 and Table 4.4.7.3.2-2 show those changes at Rock Slough that were simulated when the base salinity levels were greater than 95% of the applicable water quality standard. The analysis is focused on simulated Rock Slough chloride conditions because a review of the results indicate that it is representative of the pattern and relative magnitude of change that would be expected to occur at the southern Delta locations (Clifton Court Forebay and Tracy Pumping Plant).

Step 2 – Specific Significance Criteria

Step 2 Specific Criterion – Review of results meeting the screening criteria showed distinct periodic or seasonal trends or continuous increases throughout a substantial portion of the simulation period

As shown in Table 4.4.7.3.2-1 , there are no discernable trends in salinity increases. There are a greater number of months with changes that exceed the screening criteria under this alternative. There is an overall seasonal trend of the observed changes in that all changes occur between the months of September through December. However, increases are scattered throughout those months, and do not occur throughout a substantial portion of the simulation period (2.5% of the months). This clear lack of distinct pattern exists for changes greater than 5 mg/L and 5% (Table 4.4.7.3.2-1) and those changes when the No Action condition is near the standard (Table 4.4.7.3.2-2).

Step 2 Specific Criterion – The frequency of salinity increases of the period of record was substantially greater than the frequency of salinity decreases (e.g., salinity levels predicted to increase 70% of the time and decrease 30% of the time)

Summary counts of the observed changes shown in Figure 1 indicate that the frequency of salinity increases was greater than the frequency of salinity decreases. However, the total frequency of increases that exceeded the 5 mg/l and 5% threshold was small at all locations (i.e., 22 months out of a total 896 months). If all months in the modeling period are taken into account, there is no substantial difference in the frequency of increases as compared to decreases.

Step 2 Specific Criterion – The frequency, magnitude, and duration of salinity increases were consistent during certain water-year types or Delta conditions (e.g., consistent increases during critical dry years)

As shown in Figure 4.4.7.3.2-1, for changes that are larger than normal model error, there is a discernible pattern of the increases or decreases by year type or Delta conditions. The increases and decreases occur primarily in wet years. For example, at Rock Slough three increases occur in dry years, while 19 increases occur in above normal and wet years. For changes that occur when background conditions are within 95% of the standards (Figure 4.4.7.3.2-2), there are slightly more months with increased salinity but the average of the increase of the increases is only 1.5 mg/l, while the average of the decreases is 3.1 mg/l.

Step 2 Specific Criterion – Trends in salinity increases are consistent at several Delta stations or over well-defined geographic areas

Although for this alternative only Rock Slough was considered, it is reasonable to assume that the pattern of changes would be similar to the pattern described above for Alternatives 2-5.

Step 2 Specific Criterion – Salinity changes have the potential to affect beneficial uses or CCWD operations

As described in the Chapter 4 of the FRWP EIR/EIS, salinity changes do not have the potential to affect beneficial uses of the Delta. Most notably, there are no project-related changes in the periods of compliance with the 150 mg/L standard. All observed chloride increases are with 95% of the 250 mg/l objective and all are well within the limits of model error (<5%). In addition, the

pattern of increases and decreases for all screening criteria values are fairly equally distributed with respect to magnitude, with the magnitude of decreases being slightly higher than increases. A number of the increases identified under this alternative occurred when Delta salinity was low. These increases may have the potential to affect CCWD's operation in terms of filling Los Vaqueros Reservoir. While effects on CCWD operations are considered in the FRWP analysis, this specific criteria was more appropriately considered as part of CCWD's Los Vaqueros Reservoir Project EIR/EIS. CCWD is not considered differently than other users in the FRWP EIR/EIS analysis.

Table 4.4.7.3.1-1. Rock Slough Chloride (No Action/Change) for Alternatives 2-5 Fisher Delta Model: Changes >5% of No Action and > 5mg/L

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												
1925	D												
1926	D												
1927	W												
1928	AN												
1929	C												202 / 13
1930	D												182 / 18
1931	C												
1932	D												
1933	C												
1934	C												
1935	BN												
1936	BN												
1937	BN												
1938	W												
1939	D												
1940	AN												
1941	W												
1942	W		87 / 5										
1943	W												
1944	D												
1945	BN												
1946	BN												
1947	D												
1948	BN												
1949	D												
1950	BN												
1951	AN												
1952	W												
1953	W												
1954	AN		110 / 6	129 / 11									
1955	D												
1956	C												
1957	AN												
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W	194 / 16											
1975	W												
1976	C												
1977	C												
1978	AN												
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W												
1987	D												
1988	C												
1989	D												
1990	C												
1991	C												194 / 16

Table 4.4.7.3.1-2. Clifton Court Forebay Chloride (No Action/Change) for Alternatives 2-5
Fisher Delta Model: Changes >5% of No Action and > 5mg/L

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												
1925	D												
1926	D												
1927	W												
1928	AN												
1929	C						80 / 6						130 / 7
1930	D	188 / 11											116 / 11
1931	C												
1932	D												
1933	C												
1934	C										79 / -5		
1935	BN												
1936	BN												
1937	BN												
1938	W												
1939	D												
1940	AN												
1941	W												
1942	W												
1943	W												
1944	D												
1945	BN												
1946	BN												
1947	D												
1948	BN												
1949	D												
1950	BN												
1951	AN												
1952	W												
1953	W												
1954	AN			86 / 7									
1955	D												
1956	C												
1957	AN												
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W	130 / 9											
1975	W												
1976	C												
1977	C												
1978	AN												
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W												
1987	D												
1988	C												
1989	D												
1990	C												
1991	C			129 / 8									

Table 4.4.7.3.1-3. Tracy Pumping Plant Chloride (No Action/Change) for Alternatives 2-5
Fisher Delta Model: Changes >5% of No Action and > 5mg/L

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												
1925	D												
1926	D												
1927	W												
1928	AN												
1929	C												
1930	D												
1931	C												
1932	D												
1933	C												
1934	C												
1935	BN												
1936	BN												
1937	BN												
1938	W												
1939	D												
1940	AN												
1941	W												
1942	W												
1943	W												
1944	D												
1945	BN												
1946	BN												
1947	D												
1948	BN												
1949	D												
1950	BN												
1951	AN												
1952	W												
1953	W												
1954	AN												
1955	D												
1956	C												
1957	AN												
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W												
1975	W												
1976	C												
1977	C												
1978	AN												
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W		130 / 8										
1987	D							135 / -12					
1988	C												
1989	D												
1990	C												
1991	C												

Table 4.4.7.3.1-4. Rock Slough Chloride (No Action/Change) for Alternatives 2-5 Fisher Delta Model: Changes when No Action is >95% of Standards

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												263 / 3
1925	D	315 / -2	243 / -7										
1926	D												
1927	W	240 / -1											
1928	AN												
1929	C												
1930	D	291 / 12	267 / -1										
1931	C	243 / 3											270 / 1
1932	D	312 / 1											
1933	C	246 / 1											
1934	C	292 / -1	286 / -5										241 / 5
1935	BN	296 / 2											
1936	BN												
1937	BN												
1938	W	243 / 0											
1939	D												
1940	AN												
1941	W												
1942	W												
1943	W												
1944	D												268 / 0
1945	BN												
1946	BN												
1947	D												
1948	BN												
1949	D												
1950	BN												
1951	AN												
1952	W												
1953	W												
1954	AN												
1955	D												
1956	C												
1957	AN												
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W												
1975	W												
1976	C												276 / 1
1977	C	286 / 2	239 / -9										266 / -5
1978	AN	311 / -1	242 / 1										
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W												
1987	D												265 / 2
1988	C												
1989	D	286 / 4											
1990	C												261 / 1
1991	C	287 / 0		241 / -9									

Table 4.4.7.3.2-1. Rock Slough Chloride (No Action/Change) for Alternative 6 Fisher Delta Model: Changes >5% of No Action and > 5mg/L

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												
1925	D												
1926	D												
1927	W												155 / 10
1928	AN												
1929	C												
1930	D												
1931	C												
1932	D												
1933	C												
1934	C												
1935	BN												
1936	BN												
1937	BN												
1938	W												99 / 5
1939	D												
1940	AN												
1941	W												85 / 6
1942	W	84 / 15	87 / 23	88 / 8									90 / 8
1943	W	53 / 7	41 / 12	29 / 11									
1944	D												
1945	BN												
1946	BN												
1947	D												
1948	BN				39 / 6								
1949	D											101 / 5	170 / 13
1950	BN			120 / 8									
1951	AN												
1952	W												
1953	W												
1954	AN		110 / 7	129 / 13									
1955	D												
1956	C												
1957	AN		50 / -7	126 / -7									
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												36 / 5
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W	194 / 22	59 / 6										62 / 10
1975	W												83 / 8
1976	C												
1977	C												
1978	AN												
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W												100 / 11
1987	D	139 / 11											
1988	C												
1989	D												
1990	C												
1991	C												

Table 4.4.7.3.2-2. Rock Slough Chloride (No Action/Change) for Alternative 6 Fisher Delta Model: Changes when No Action is >95% of Standards

Water Year	Year Type	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	AN												
1923	BN												
1924	C												263 / 1
1925	D	315 / -4	243 / -9										
1926	D												
1927	W	240 / -2											
1928	AN												
1929	C												
1930	D	291 / 1	267 / -1										
1931	C	243 / 1											270 / 2
1932	D	312 / 1											
1933	C	246 / 1											
1934	C	292 / 1	286 / 1										241 / 4
1935	BN	286 / 0											
1936	BN												
1937	BN												
1938	W	243 / 2											
1939	D												
1940	AN												
1941	W												
1942	W												
1943	W												
1944	D												268 / 0
1945	BN												
1946	BN												
1947	D												
1948	BN												
1949	D												
1950	BN												
1951	AN												
1952	W												
1953	W												
1954	AN												
1955	D												
1956	C												
1957	AN												
1958	W												
1959	BN												
1960	D												
1961	D												
1962	BN												
1963	W												
1964	D												
1965	W												
1966	BN												
1967	W												
1968	BN												
1969	W												
1970	W												
1971	W												
1972	BN												
1973	AN												
1974	W												
1975	W												
1976	C												276 / 4
1977	C	286 / -4	239 / -7										266 / 1
1978	AN	311 / 1	242 / 1										
1979	BN												
1980	AN												
1981	D												
1982	W												
1983	W												
1984	W												
1985	D												
1986	W												
1987	D												265 / 3
1988	C												
1989	D	286 / 2											
1990	C												261 / -3
1991	C	287 / 0		241 / -1									

4.5 SUMMARY AND CONCLUSIONS

Sections 4.1 through 4.4 above provide a detailed discussion on the potential salinity changes in the Delta under Freeport Regional Water Project alternatives and their possible effects on beneficial uses. Historical hydrology is used to represent the variety of conditions that the alternatives could be operating under. The results serve as an indicator of the performance of the alternatives if they are to be implemented. Each alternative has been analyzed using two sets of comparison, one at the 2001 level of development (LoD), or existing conditions, and at 2020 LoD, or future (cumulative) conditions.

Results from a number of salinity models of different complexity are analyzed to estimate the range of potential changes. Model results are generally consistent, providing similar qualitative comparisons between alternatives. Potential changes estimated by the two numerical models FDM and DSM2 differ in magnitude by within a factor of three in most cases. In addition to differences in formulations and assumptions between the two models, differences between model results are also due to the conversion between salinity parameters (electrical conductivity and chloride concentration).

The amount of water proposed for diversion in the Project alternatives is small compared to the magnitude of flows and export demands on Delta water. Simulated changes in Delta salinity are small (of the order of 1% difference from the "No Action" case) in the long-term averages and are commensurate with the magnitude of the Project diversion relative to that of the system. However, there are months in which the potential changes are larger. In many cases, these larger differences are direct consequences of changes in the timing of Delta inflows and exports within a period of two to five months. The assumptions and approximations in CALSIM II that might lead to these timing changes are discussed in Sections 3.4.9 and §3.5.9. Even though these changes in hydrology make little or no differences in the overall water supply (in terms of upstream reservoir releases and Delta exports), they could lead to changes in Delta salinity. These changes are discussed in §4.4.1 and §4.4.4 on potential salinity changes at Martinez and in Rock Slough, respectively. In the comparison between Rock Slough salinity under Alts.2-5 and Alt.1 at 2001 LoD, the largest increases are less than 10% of the Alt.1 salinity based on FDM results.

A detailed discussion on potential Project effects on drinking water beneficial uses of Delta water is provided in §4.4.4 because of their sensitivity to salinity changes. Specifically, potential changes in the levels of disinfection by-products in treated Delta water and volume-weighted salinity in State Water Project exports and Contra Costa Water District diversions are quantified. Salinity in Rock Slough, the Delta intake subjected to the largest potential changes, is used in estimating disinfection by-products formation. Potential increases in bromate concentration under all Project alternatives would be a fraction of measurement resolution in all 277 quarterly reports of running annual averages. Potential increases in total trihalomethanes concentration under all Project alternatives average much less than 1 μg/L. Actual Project effects on Delta agencies would be even smaller – agencies using water exported from Clifton Court would be subjected to smaller salinity changes, and the source water salinity at Contra Costa Water District's water treatment plants would be subjected to smaller variations in salinity than in Rock Slough because of blending releases from the Los Vaqueros Reservoir.[1] Long-term changes in

[1] Operations of the Contra Costa Water District are discussed in Sections 4.1.2.1.3, 4.3.4, and 4.4.4.3. Section 4.4 (see in particular Tables 4.4.5-16 through 4.4.5-18 and Tables 4.4.6-16 through 4.4.6-18) shows

the (volume-)weighted salinity of export water at Banks Pumping Plant under all Freeport alternatives are less than 1%, and the increase under Alts.2-5 is about half that under Alt.6. Weighted salinity at Contra Costa Water District's water intakes also increases by a small percentage.

The analysis performed above is designed according to the specific nature of Freeport Project alternatives[2] and is the most detailed practicable at this time. As discussed in Sections 4.2.8 and 4.2.9, more complex analyses, for example by analyzing daily variations or using multi-dimensional models, would not provide additional insights or be appropriate. Quantitative estimates of all potential changes discussed in §4.4 are small, typically 1% or less in long-term averages. Significance criteria used in recent Environmental Impact Statements or Environmental Impact Reports help put the magnitude of these changes into perspective. CALFED estimates modeling uncertainty at 10% and identify all impacts below this magnitude as less-than-significant (CALFED, 2000, Section 5.3.5). For other projects of comparable size, Contra Costa Water District's Los Vaqueros Project (CCWD, 1993) focuses on monthly changes and assumes all impacts under 5% or less than 5 mg/L in chloride concentration (or 20 μS/cm) as clearly small and removes from further consideration, unless base salinity is within 95% of applicable standards, and determine a significant impact only if these larger impacts are frequent, seasonal, or consistent. Metropolitan Water District of Southern California's Eastside Reservoir Project (MWDSC, 1991) and Department of Water Resources' Kern Water Bank Project (DWR, 1990) did not quantify potential impacts on Delta water quality

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that many of the larger salinity increases occur when Delta salinity is high (e.g. September 1929, September 1930 in Table 4.4.5-17) when CCWD's diversion from Rock Slough is relatively low. The potential effects on the level of disinfection products would be smaller than simulated.

[2] Freeport Project alternatives would affect Delta salinity only through changes in Delta inflows and exports, and consequently the Delta outflow, and their operations would vary at a relatively long (monthly) time scale. These considerations determine the modeling tools and assumptions used and are discussed in Sections 4.1.3, 4.2.7 through 4.2.9, and 4.3.1 through 4.3.3.

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4.7 FIGURES

This section contains all figures for Section 4 of the Modeling Technical Appendix.

Figure 4.1.1-1 Variation of monthly average salinity at Jersey Point with net Delta outflow in water years 1965 to 1998

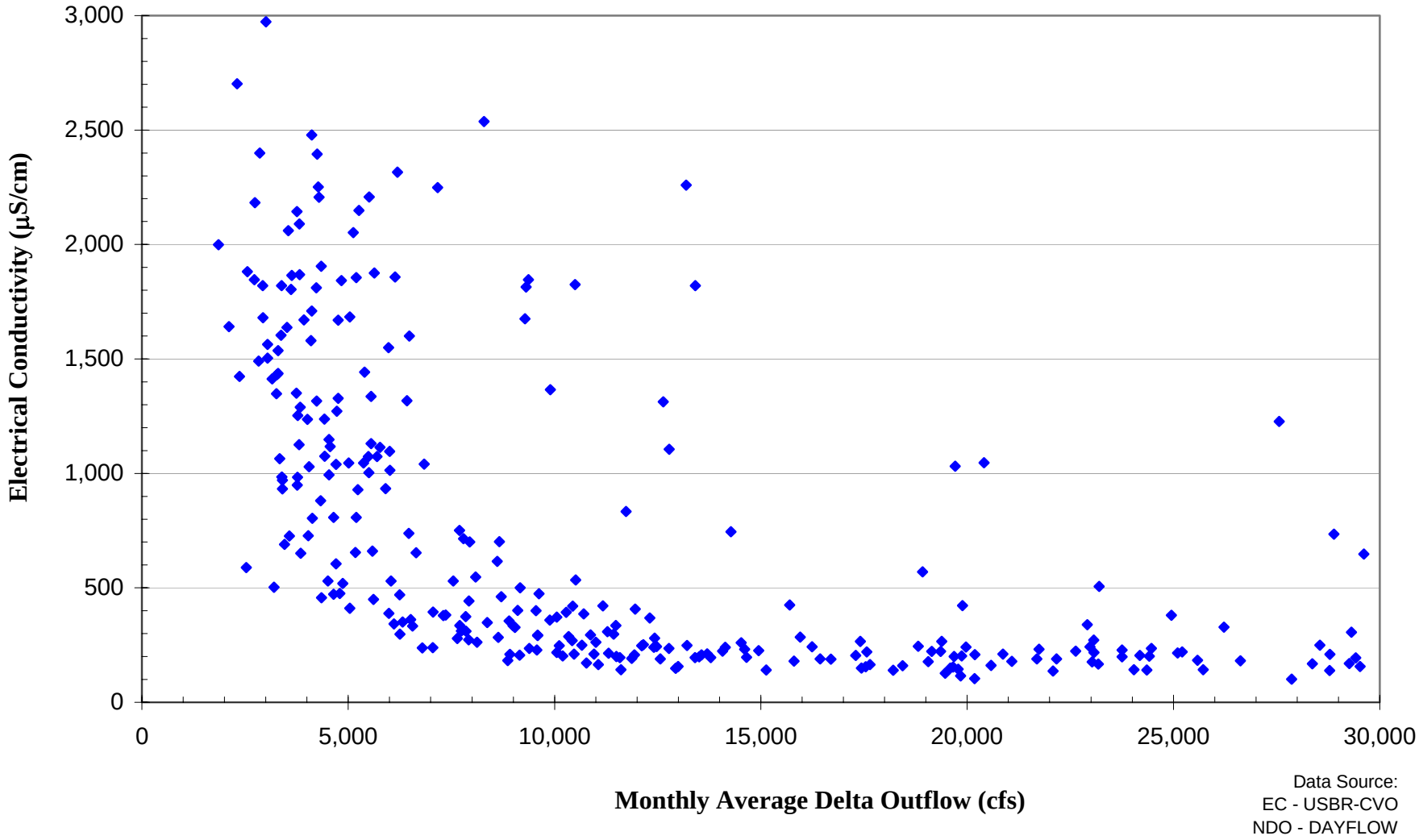


Figure 4.1.1-2 Variation of monthly average salinity at Jersey Point with antecedent Delta outflow (Denton, 1993) in water years 1965 to 1998

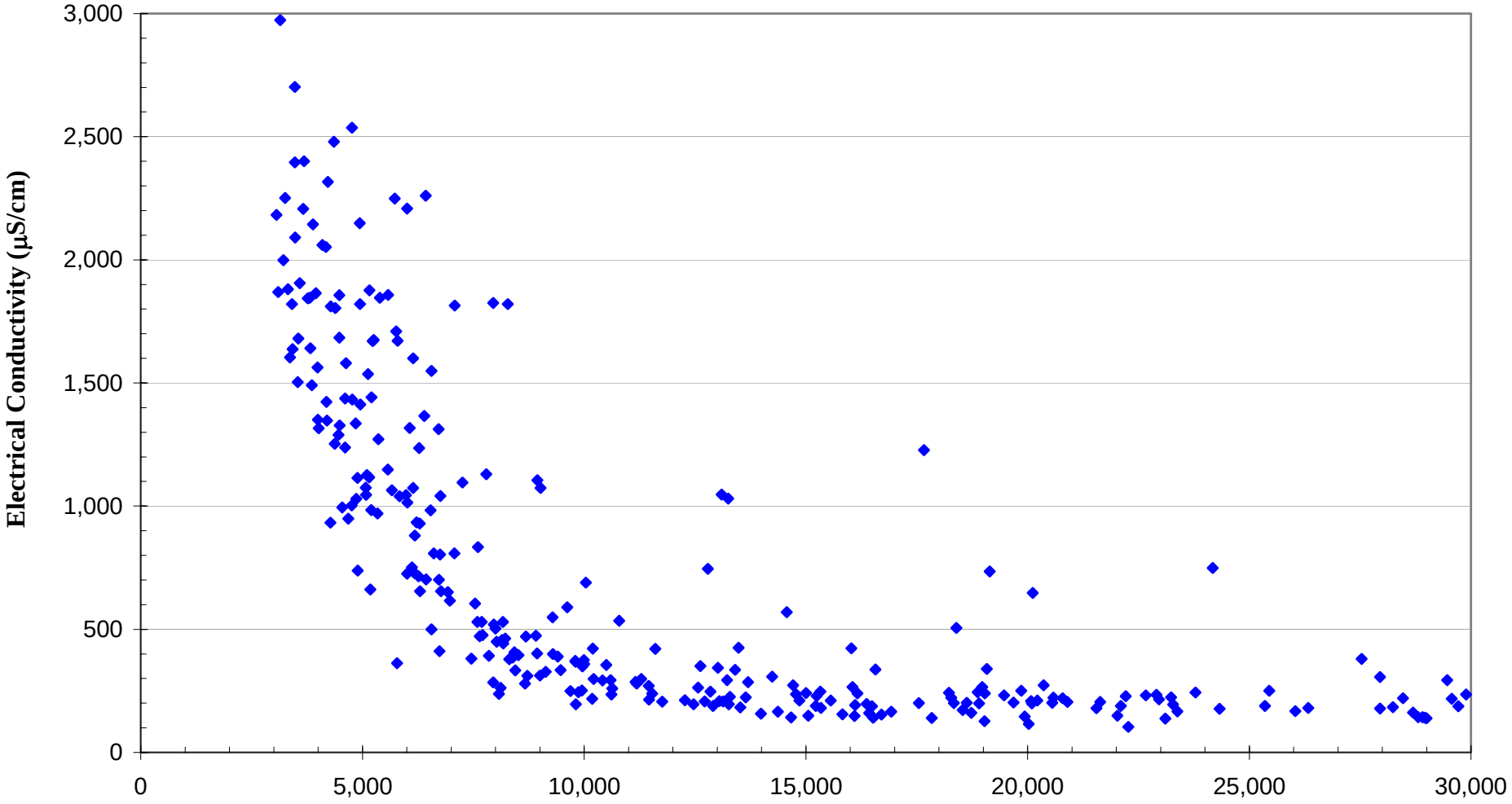


Figure 4.2.1-1 Variation of steady-state X2 location with Delta outflow based on the Kimmerer-Monismith Equation

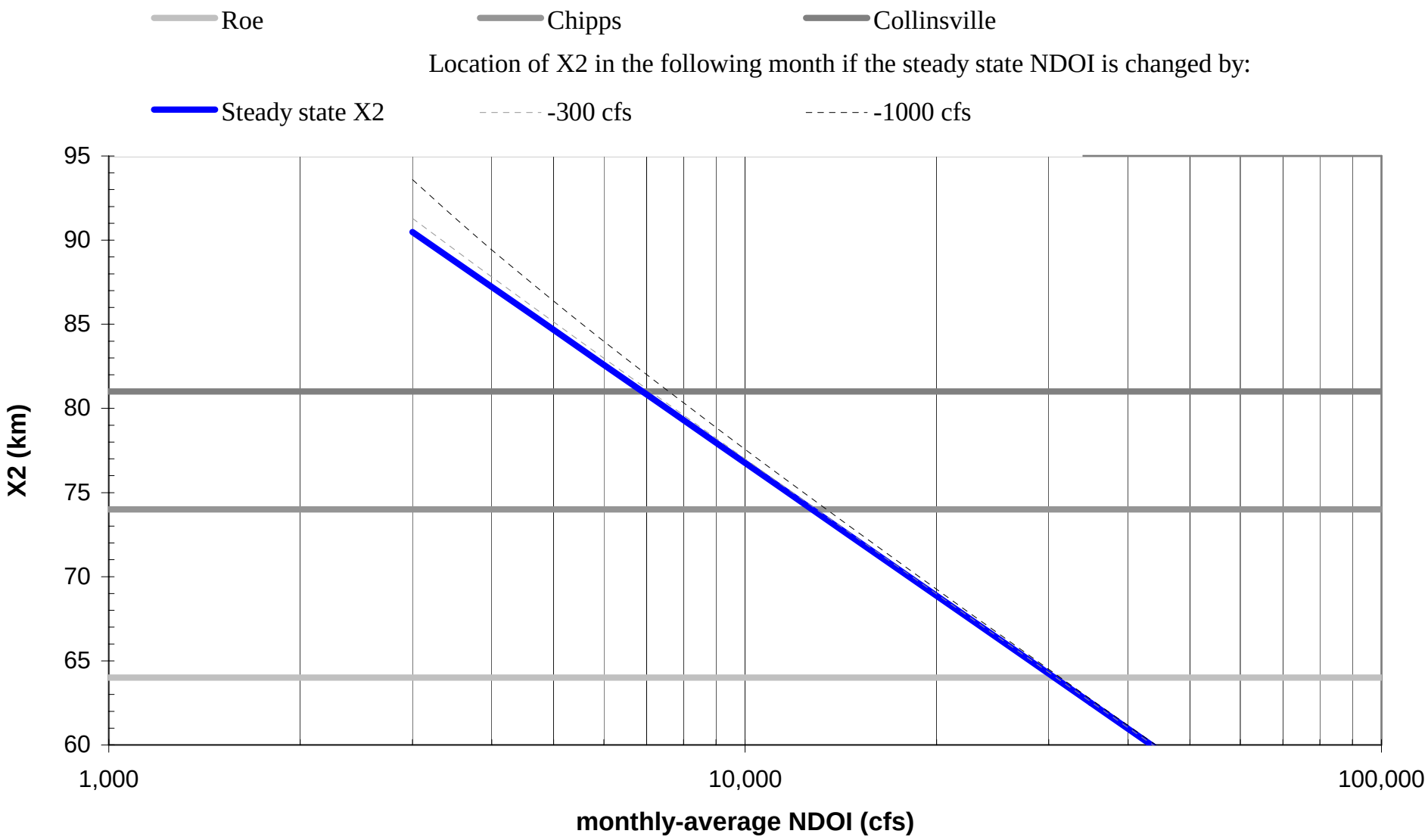


Figure 4.3.2.3-1a Simultaneous measurements of bromide and chloride concentration of water sample from Rock Slough collected between January 1990 and October 1994

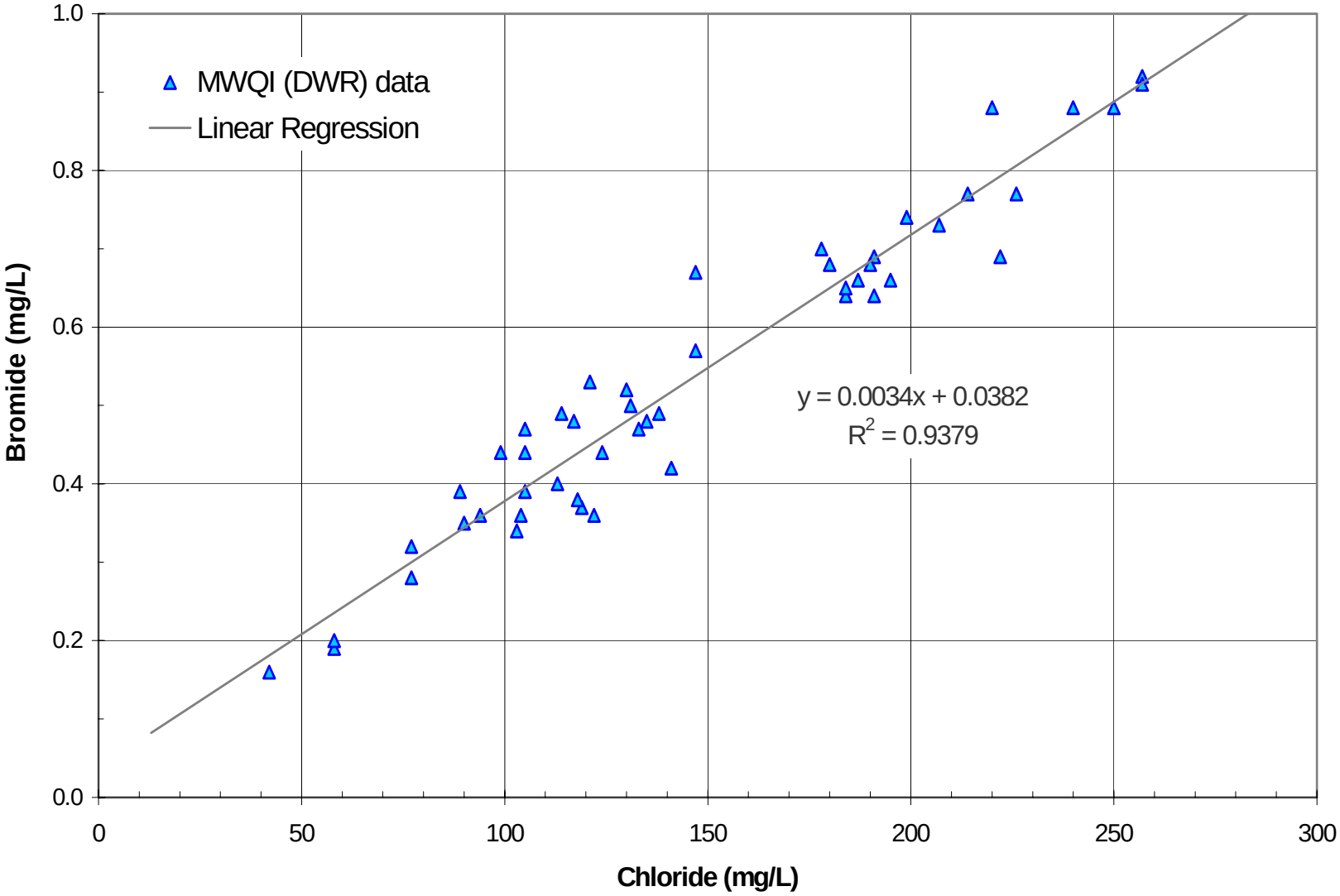


Figure 4.3.2.3-1b Simultaneous measurements of bromide concentration and electrical conductivity of water sample collected from Rock Slough between Jan 1990 and Oct 1994

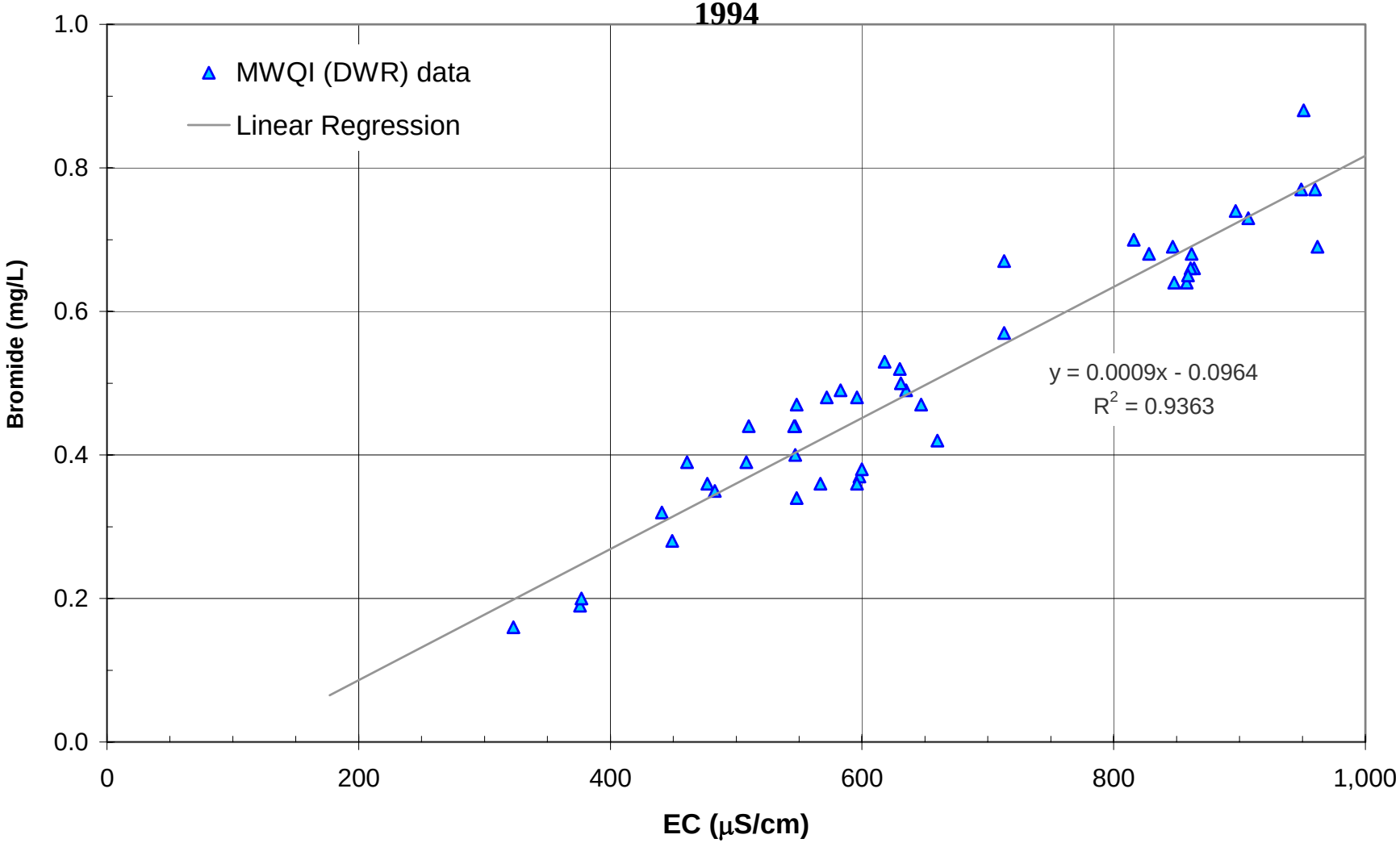


Figure 4.3.2.3-1c Simultaneous measurements of chloride concentration and electrical conductivity of water sample from Rock Slough collected between July 1983 and Oct 1994

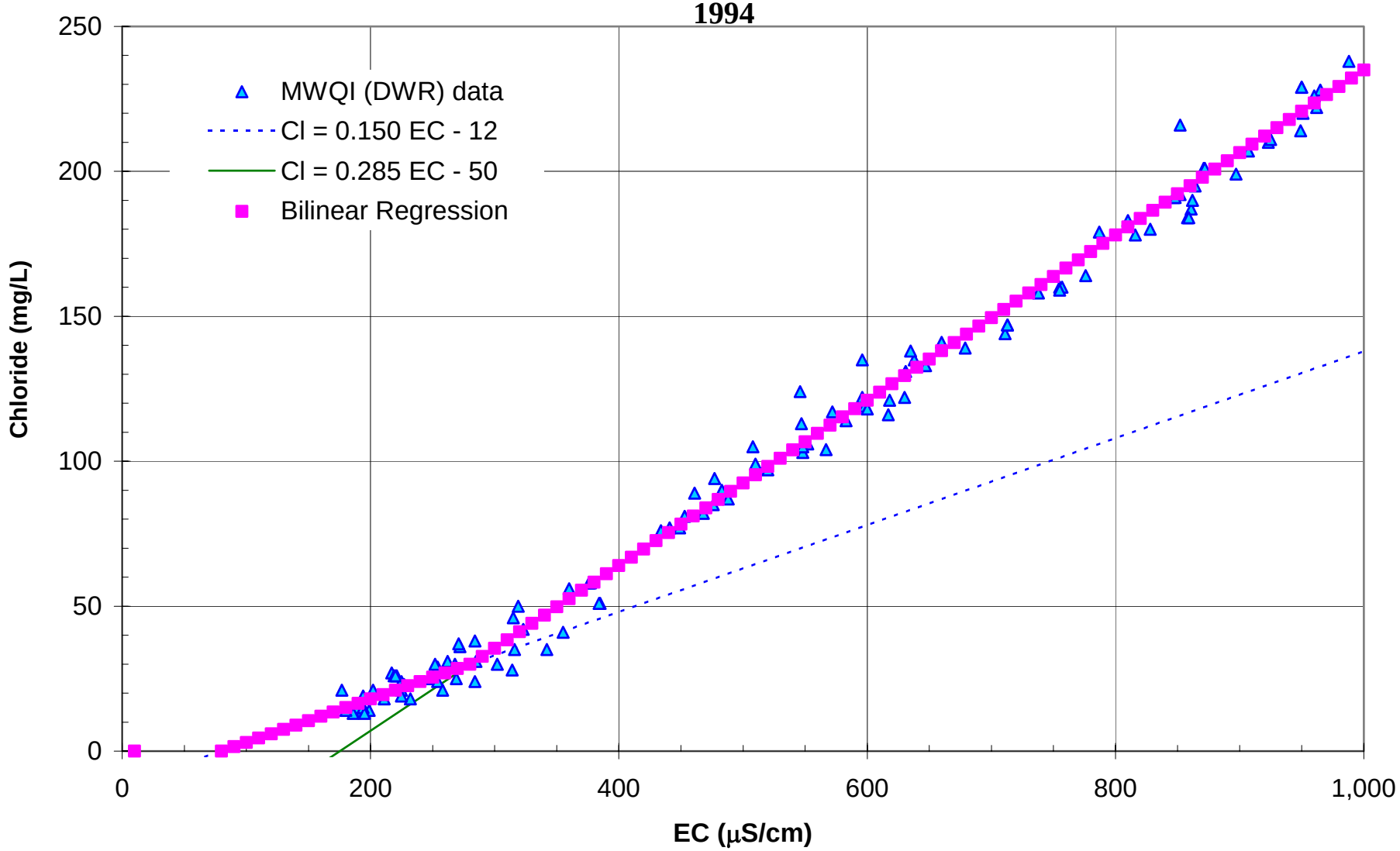


Figure 4.3.2.3-2a Simultaneous measurements of total dissolved solids and chloride concentration of water sample collected at Banks Pumping Plant between July 1986 and January 1995

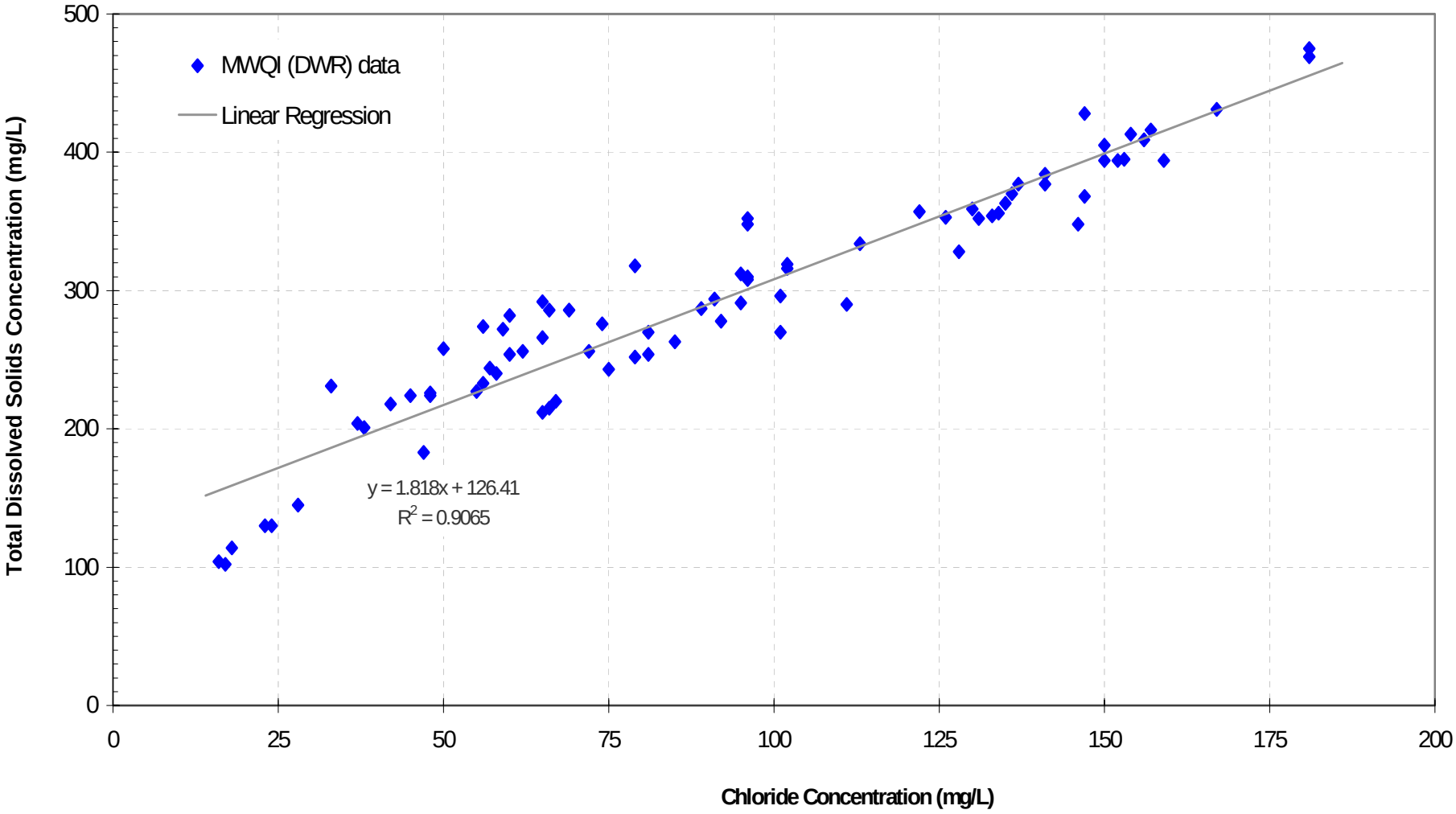


Figure 4.3.2.3-2b Simultaneous measurements of total dissolved solids concentration and electrical conductivity of water sample collected at Banks Pumping Plant between July 1986 and January 1995

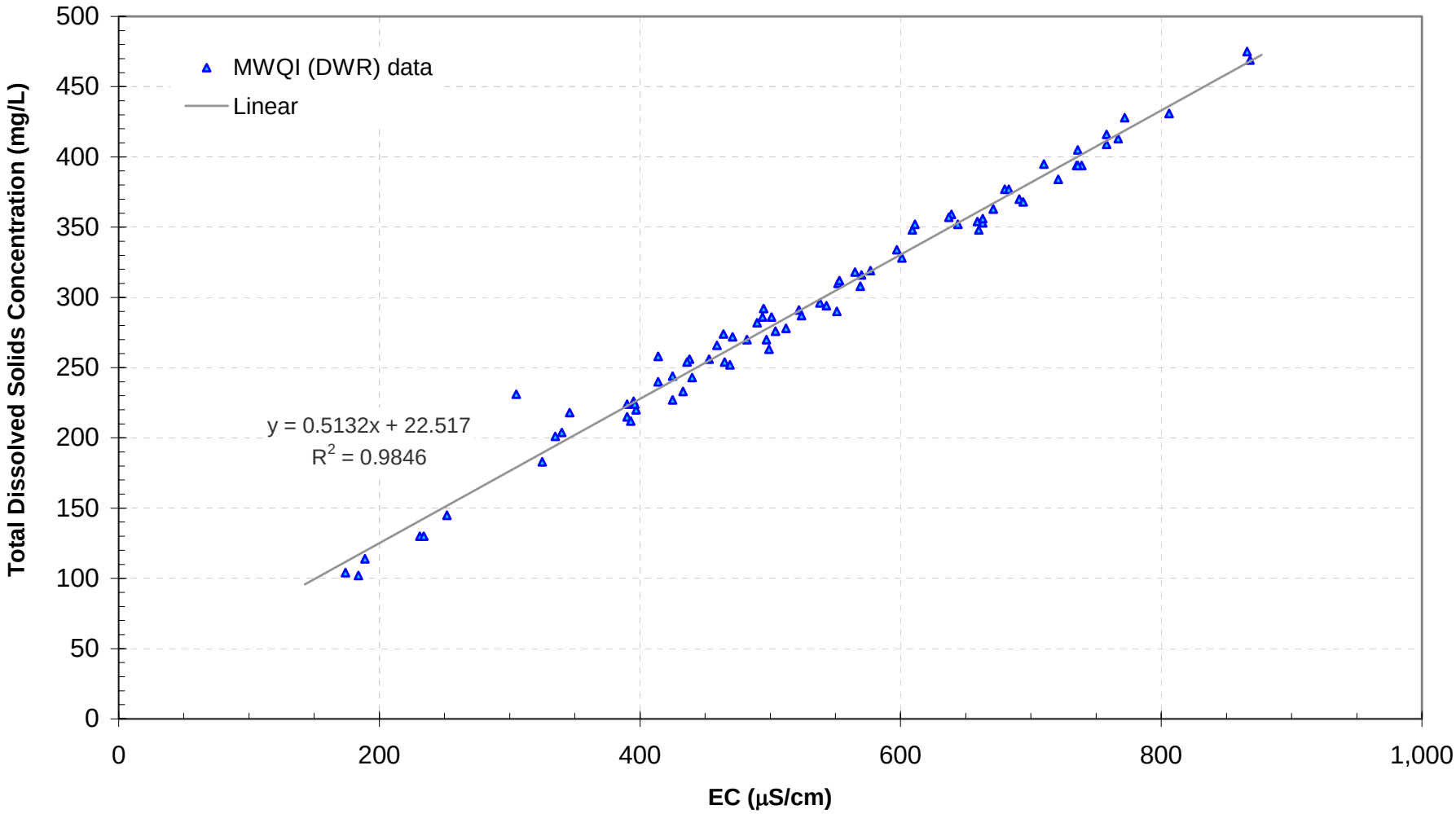


Figure 4.3.2.3-3 Simultaneous measurements of chloride concentration and electrical conductivity of water sample collected from Old River near the Los Vaqueros intake between March 1989 and January 1998

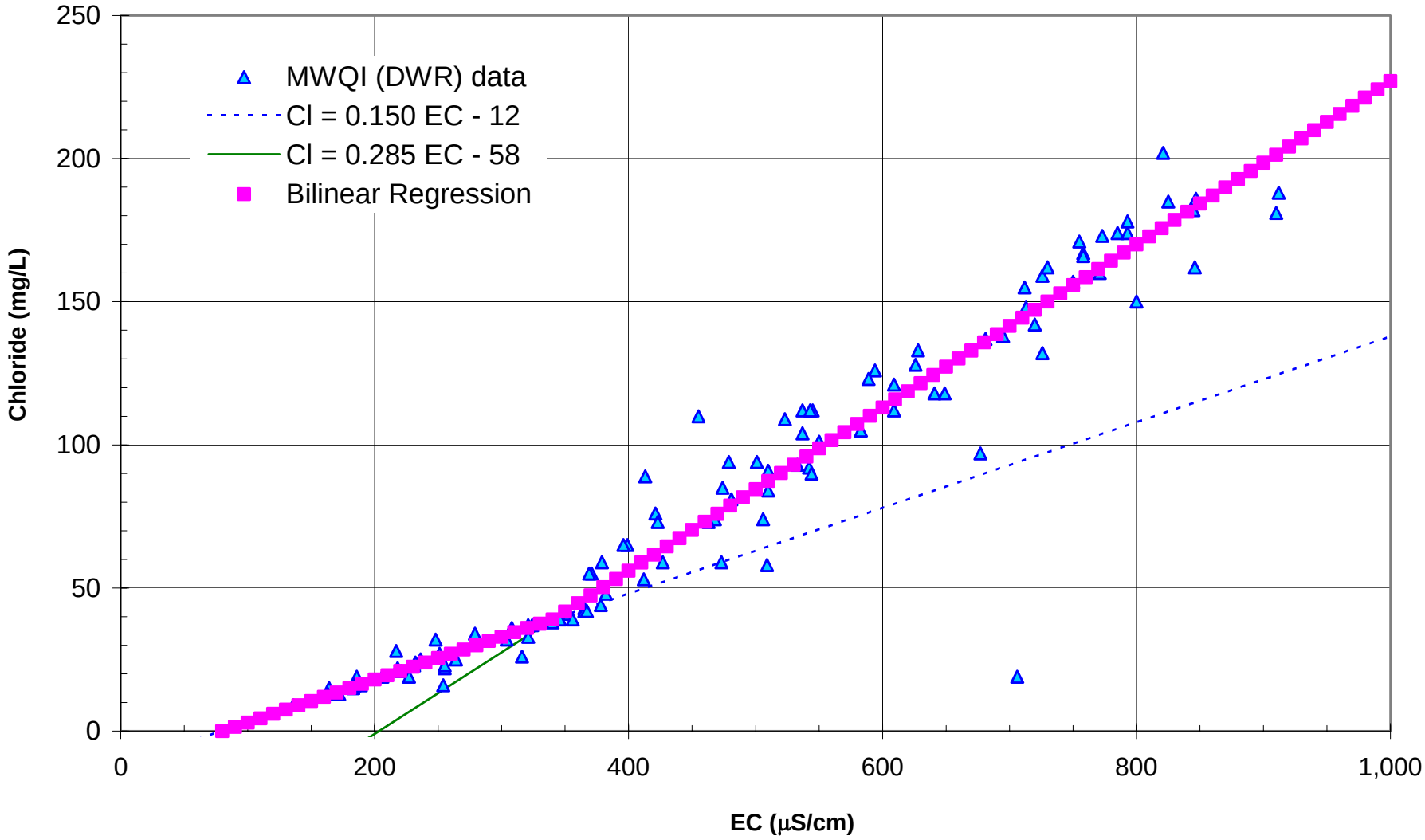


Figure 4.4.1-1a Simulated monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2001 LOD

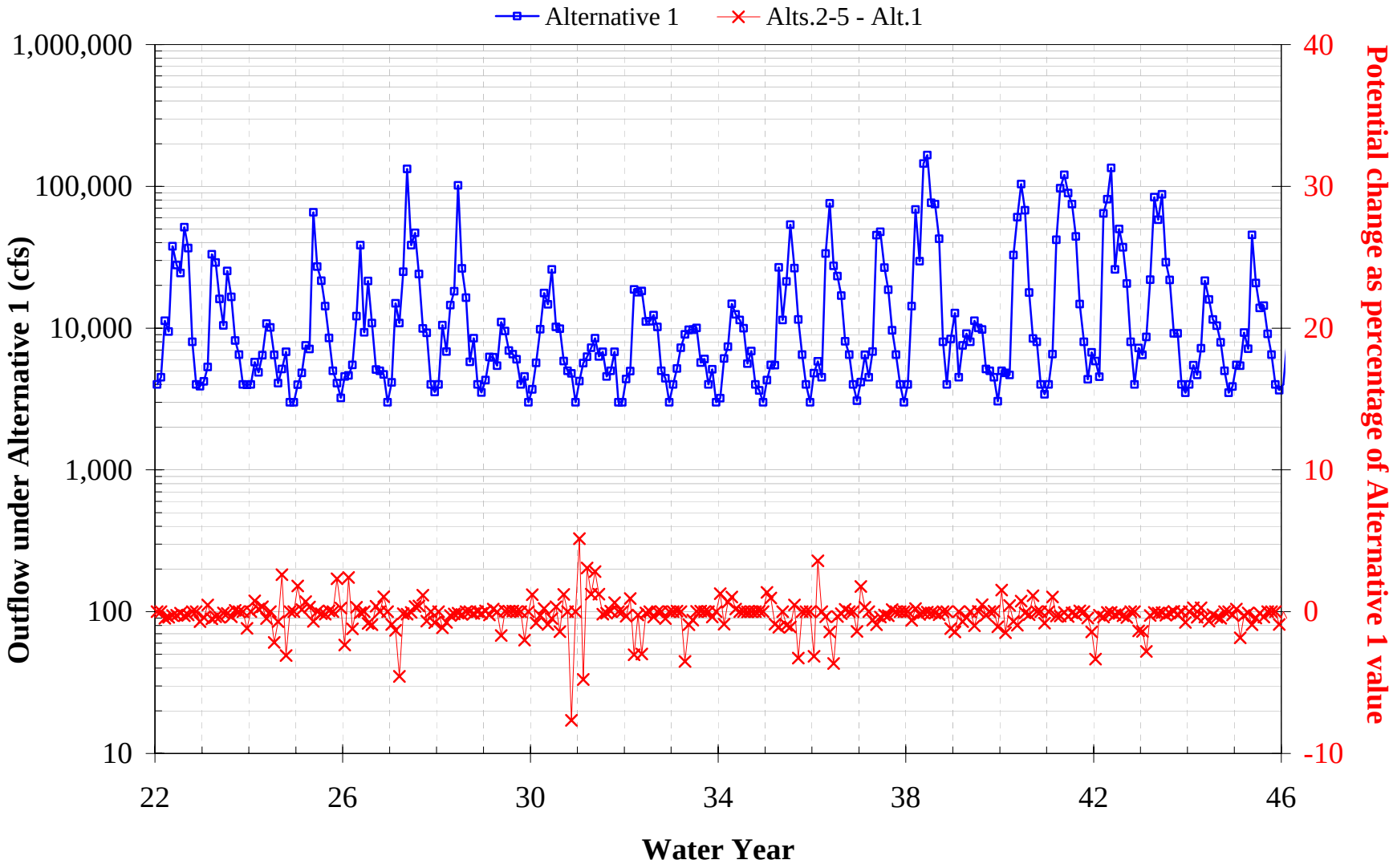


Figure 4.4.1-1b Simulated monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2001 LOD

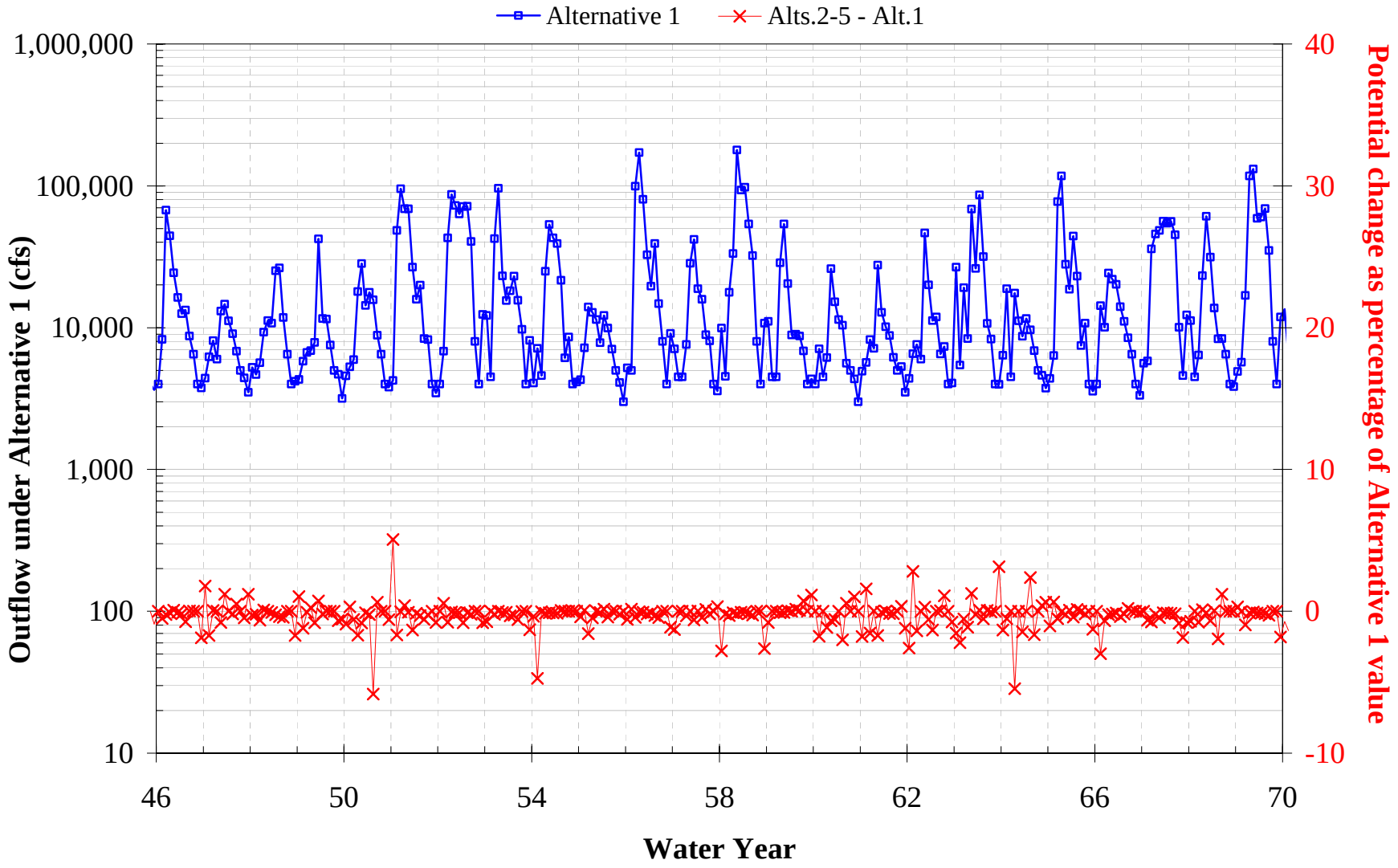
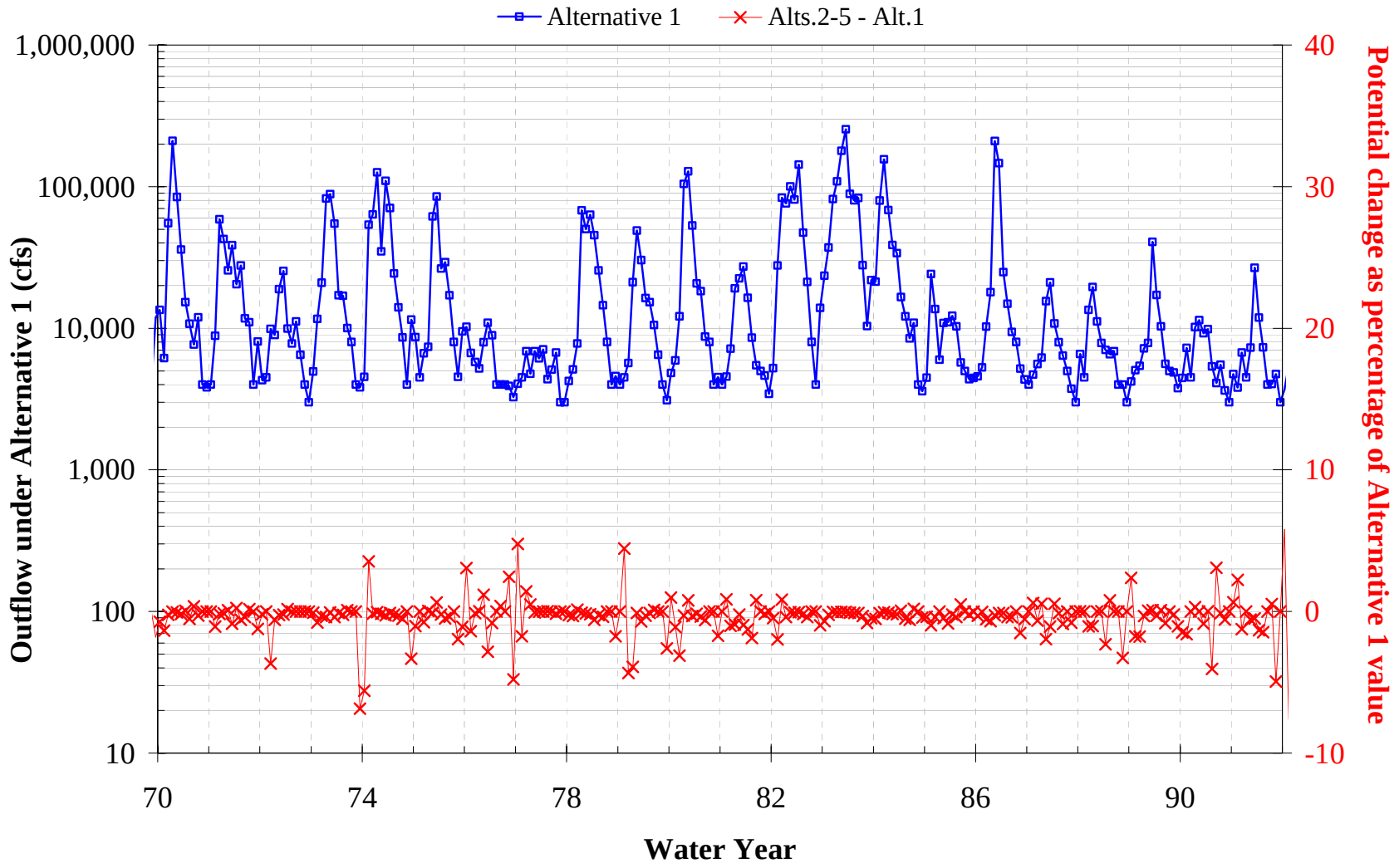


Figure 4.4.1-1c Simulated monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2001 LOD



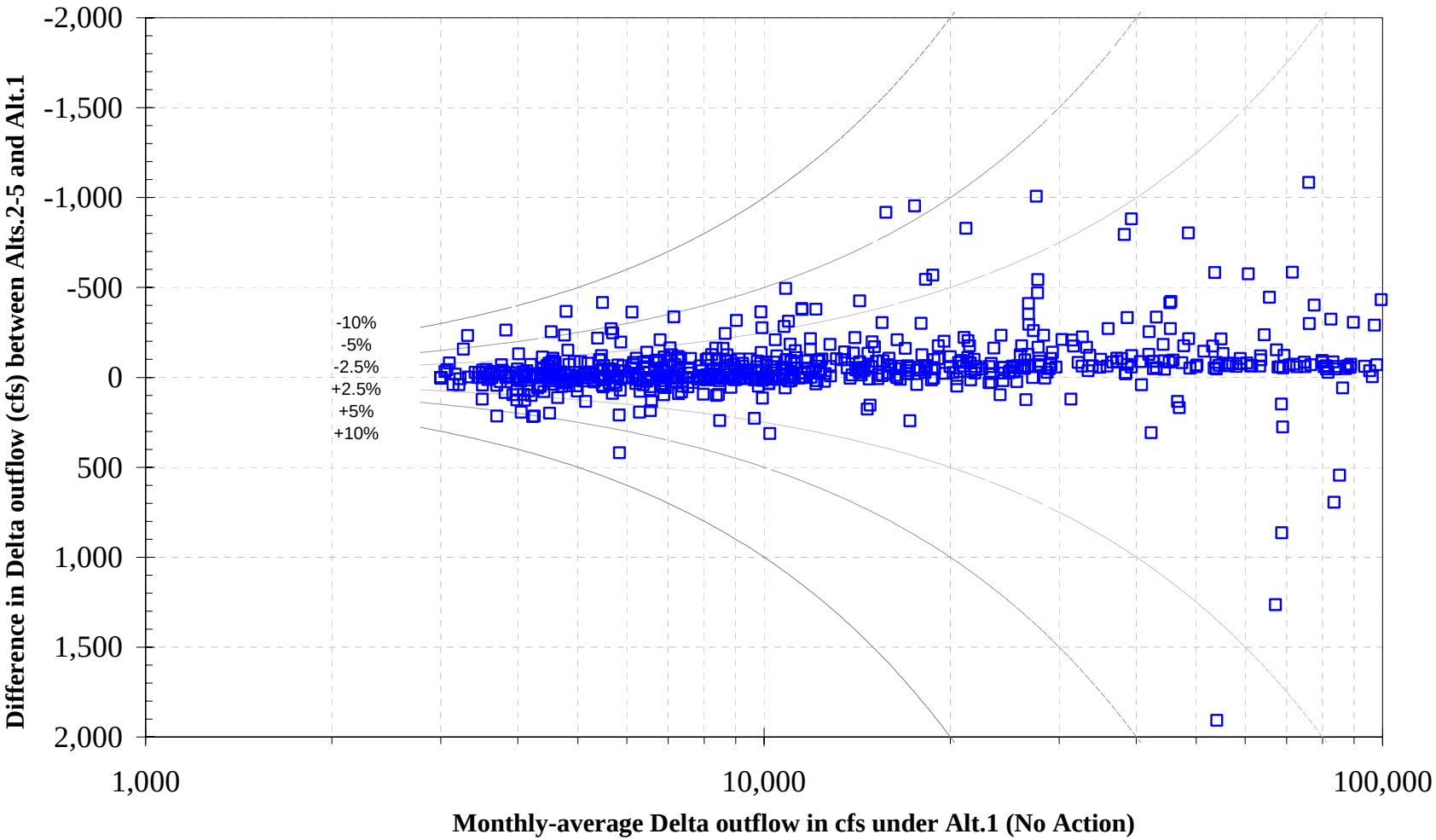


Figure 4.4.1-2 Potential changes in monthly-average Delta outflow at 2001 LOD under Alternatives 2-5

For each data point (indicated by a square), the x-value is the outflow corresponding to the CALSIM output under Alt.1 for a particular month, and the y-value (shown on the left-hand-side axis) corresponds to the difference in simulated outflow between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no effects on outflow in that month (that is, Alt.1 and Alts.2-5 have same outflow). A positive y-value would indicate an increase in outflow under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points below the y=0 line and the number above gives the frequencies the project increases and decreases outflow. (Note that the y-axis has a decreasing scale.) The solid lines represent the limits for differences of ±2.5%, ±5%, and ±10% of Alt.1 outflow.

Figure 4.4.1-3a Simulated monthly-average electrical conductivity at Martinez and potential changes under Alternatives 2-5 at 2001 LOD

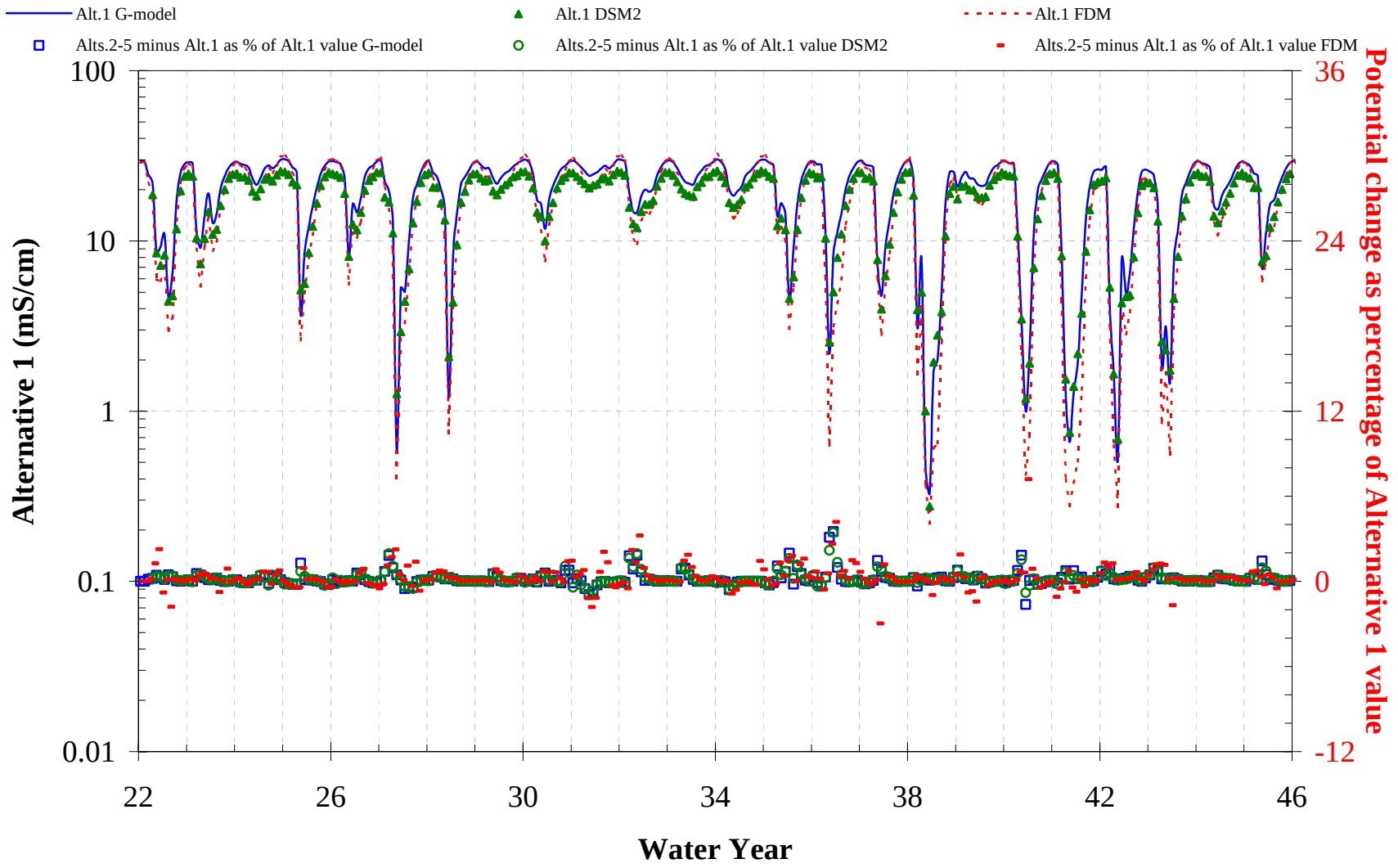


Figure 4.4.1-3b Simulated monthly-average electrical conductivity at Martinez and potential changes under Alternatives 2-5 at 2001 LOD

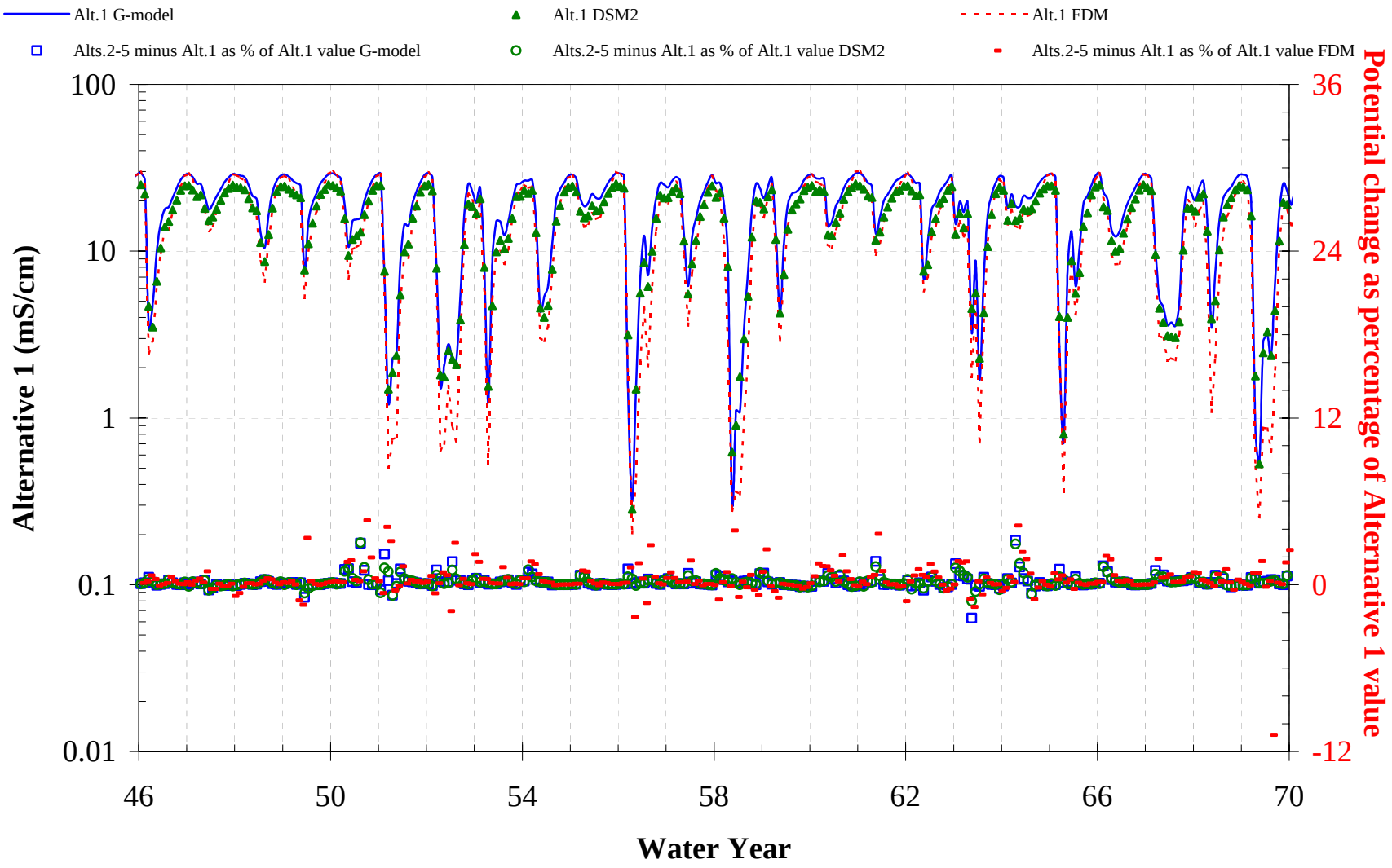
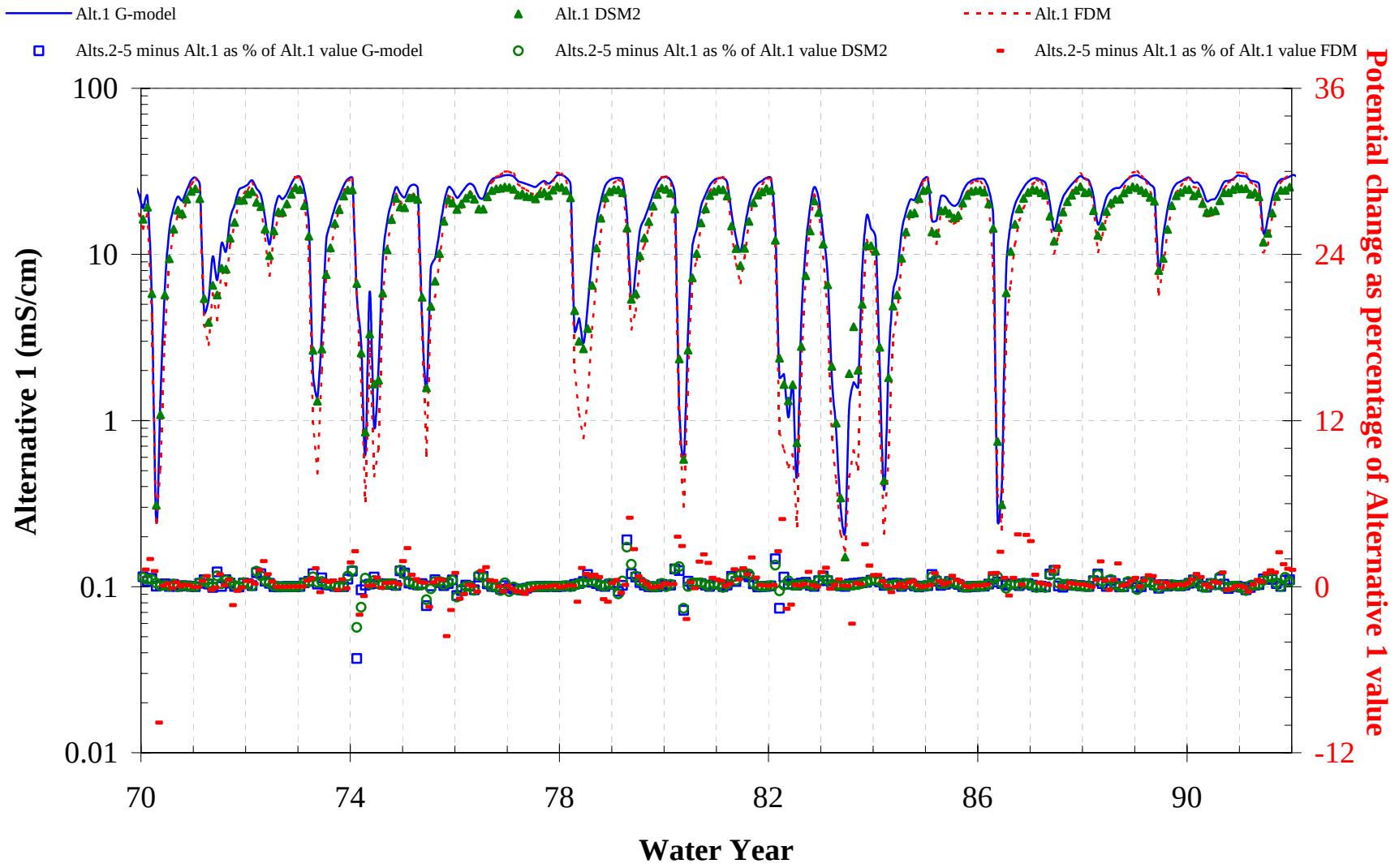


Figure 4.4.1-3c Simulated monthly-average electrical conductivity at Martinez and potential changes under Alternatives 2-5 at 2001 LOD



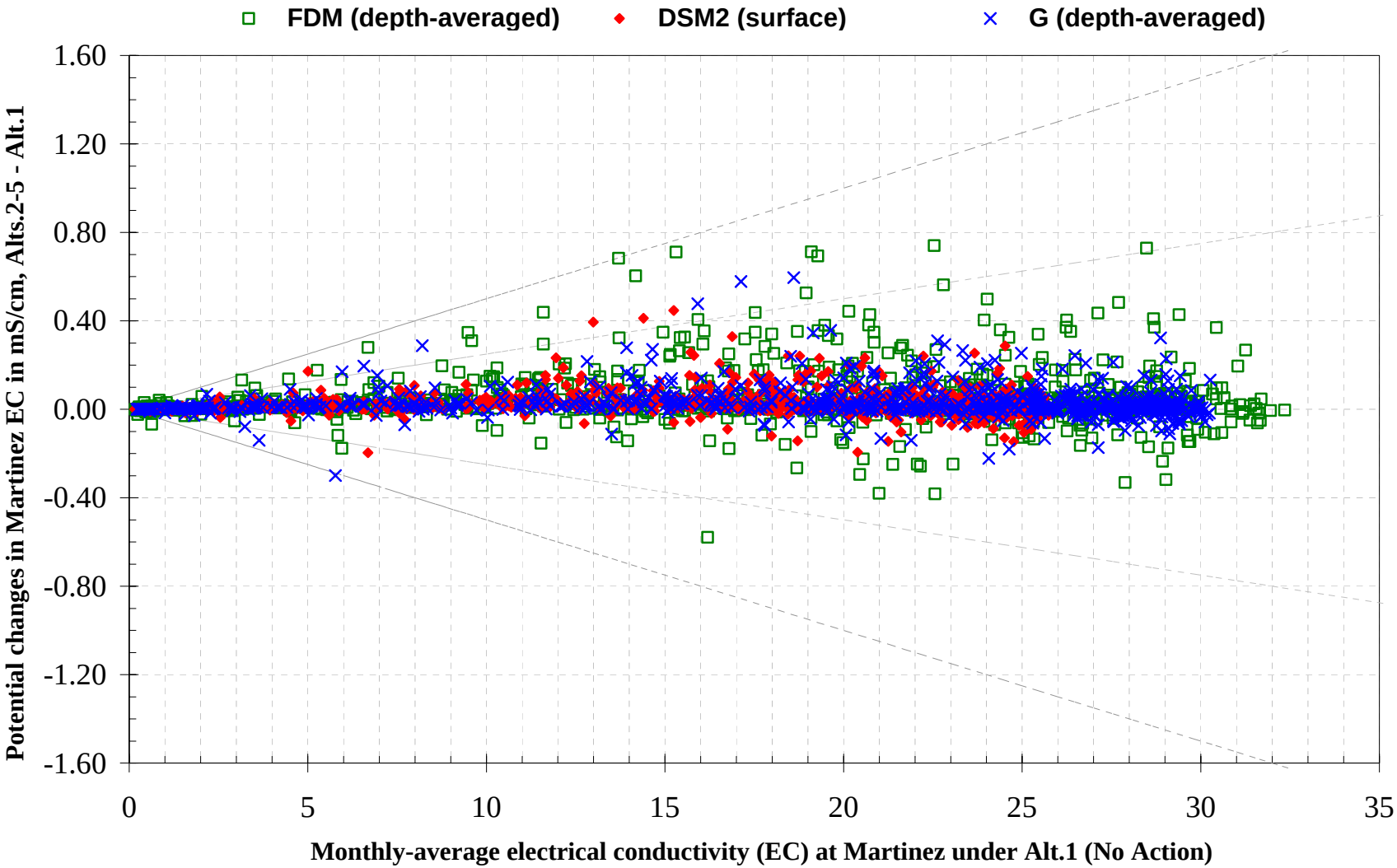


Figure 4.4.1-4 Potential changes in monthly-average salinity at Martinez under Alternatives 2-5 at 2001 LOD

For each data point, the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line (the line where the y-values are zero) indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alts.2-5 have same salinity). A positive y-value would indicate an increase in salinity under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases outflow. The solid lines represent the limits for impacts to be within ±2.5% and ±5% of Alt.1 value.

Figure 4.4.1.5.a Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2001 LoD

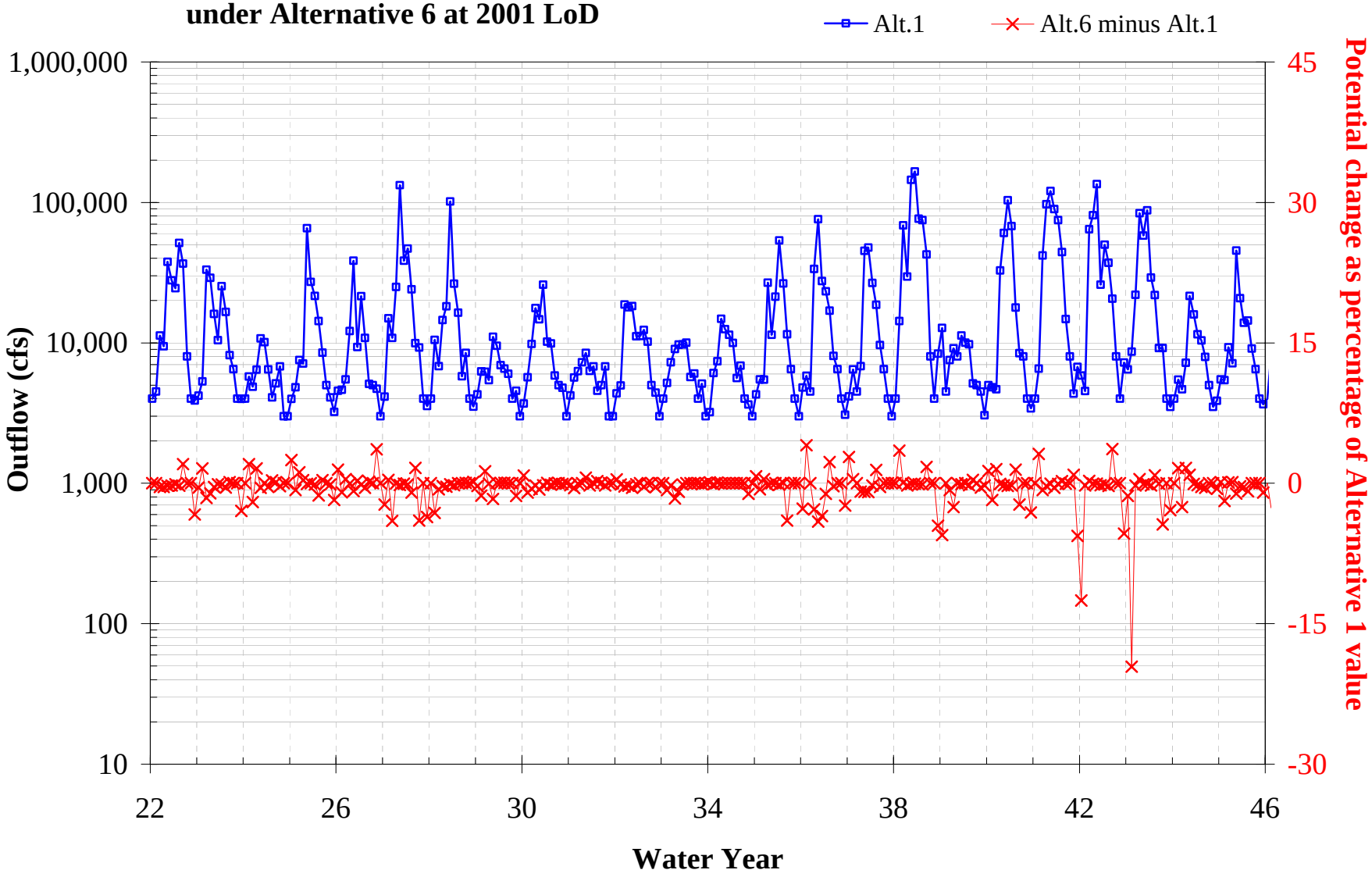


Figure 4.4.1.5.b Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2001 LoD

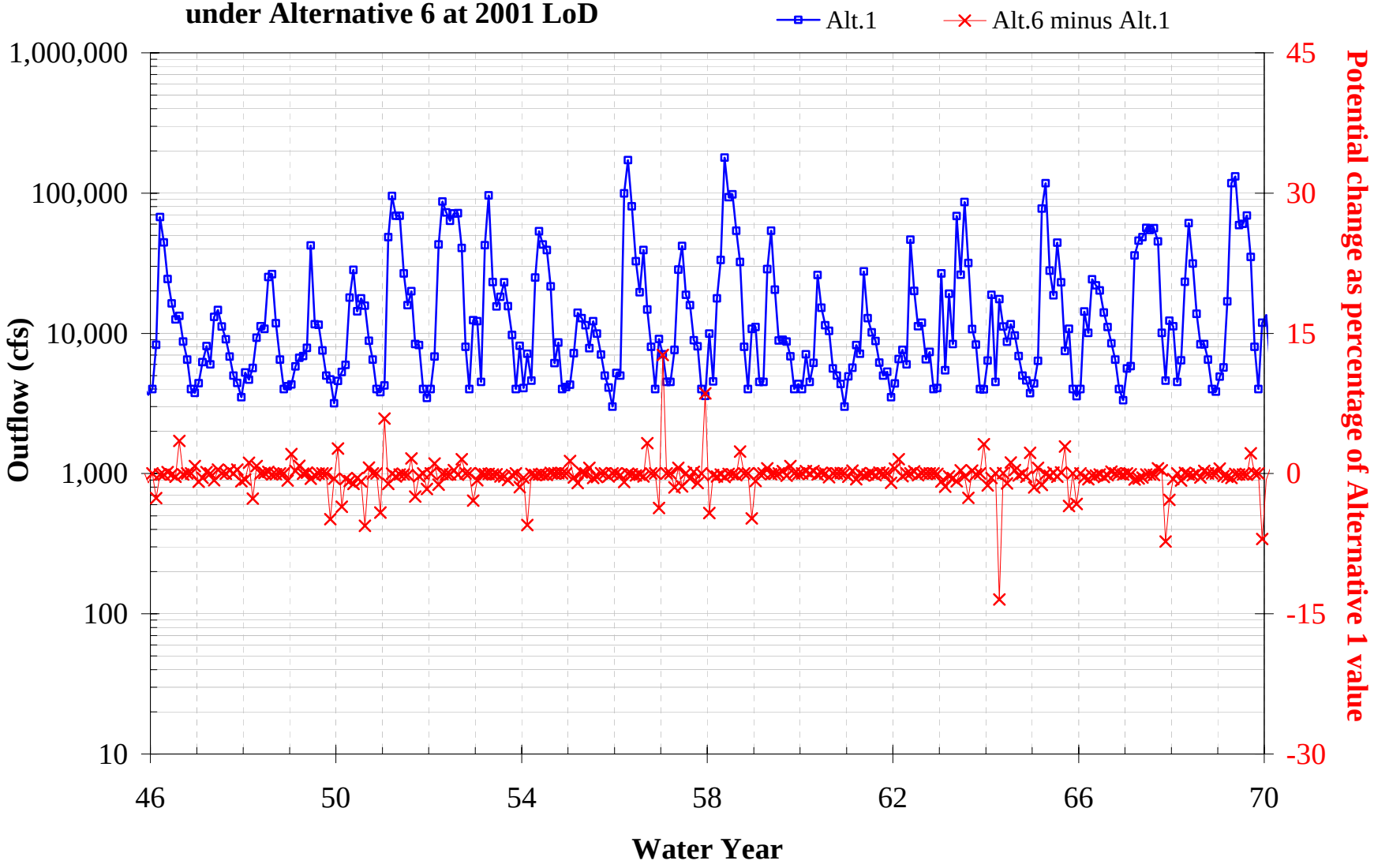
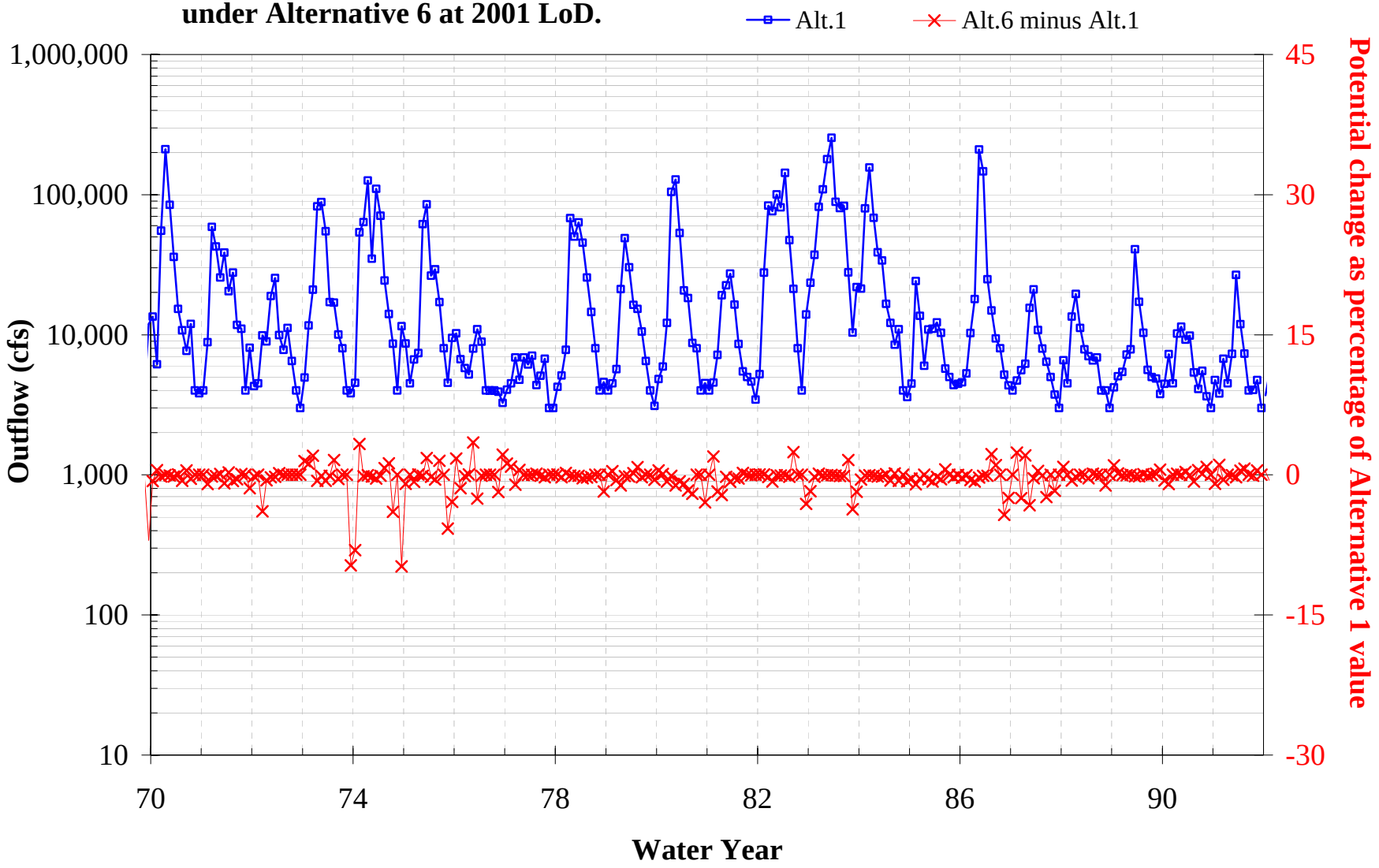


Figure 4.4.1.5.c. Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2001 LoD.



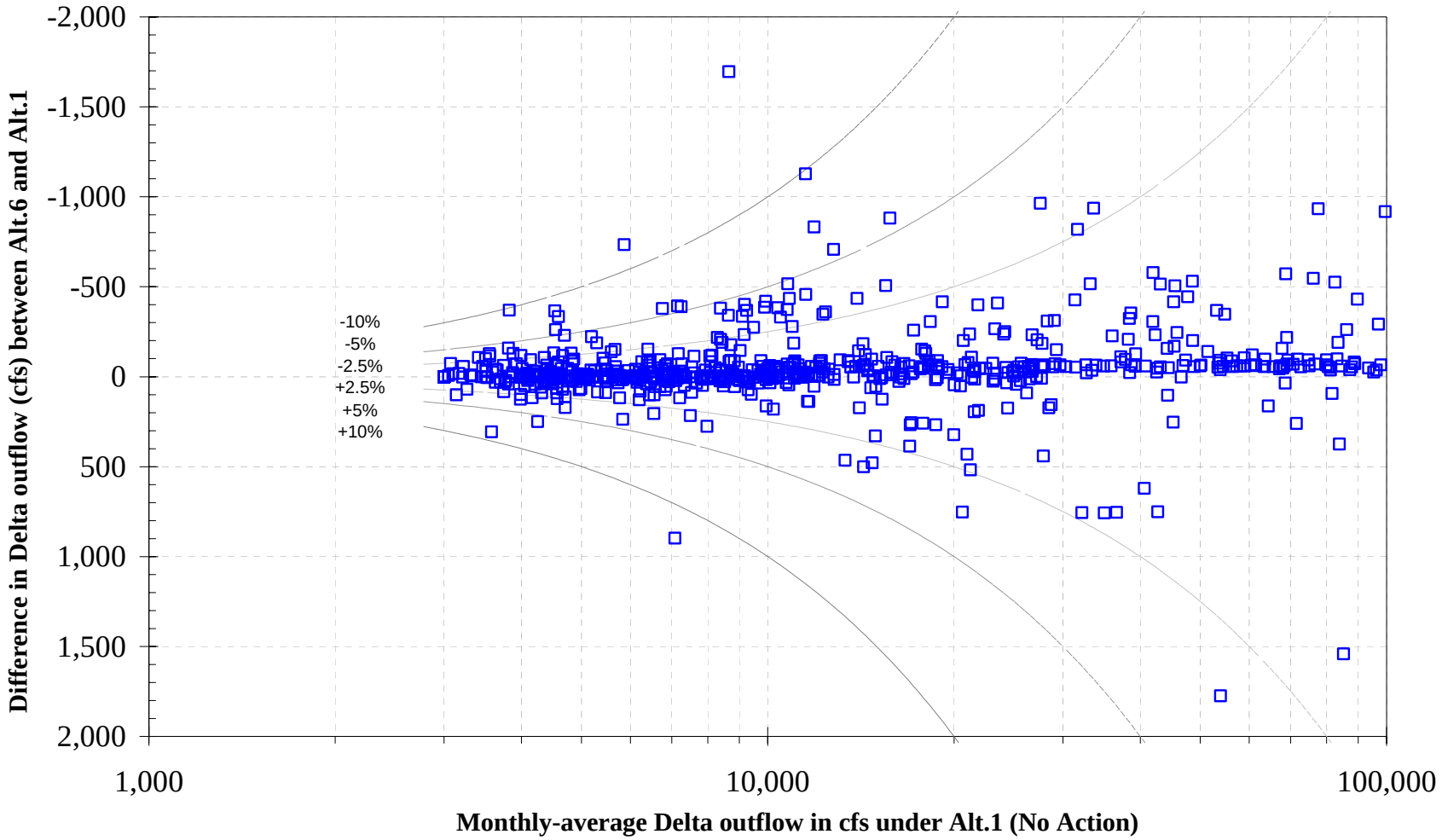


Figure 4.4.1-6 Potential changes in monthly-average Delta outflow at 2001 LOD under Alternative 6

For each data point (indicated by a square), the x-value is the outflow corresponding to the CALSIM output under Alt.1 for a particular month, and the y-value (shown on the left-hand-side axis) corresponds to the difference in simulated outflow between Alt.6 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no effects on outflow in that month (that is, Alt.1 and Alt.6 have same outflow). A positive y-value would indicate an increase in outflow under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points below the y=0 line and the number above gives the frequencies the project increases and decreases outflow. (Note that the y-axis has a decreasing scale.) The solid lines represent the limits for differences of ±2.5%, ±5%, and ±10% of Alt.1 outflow.

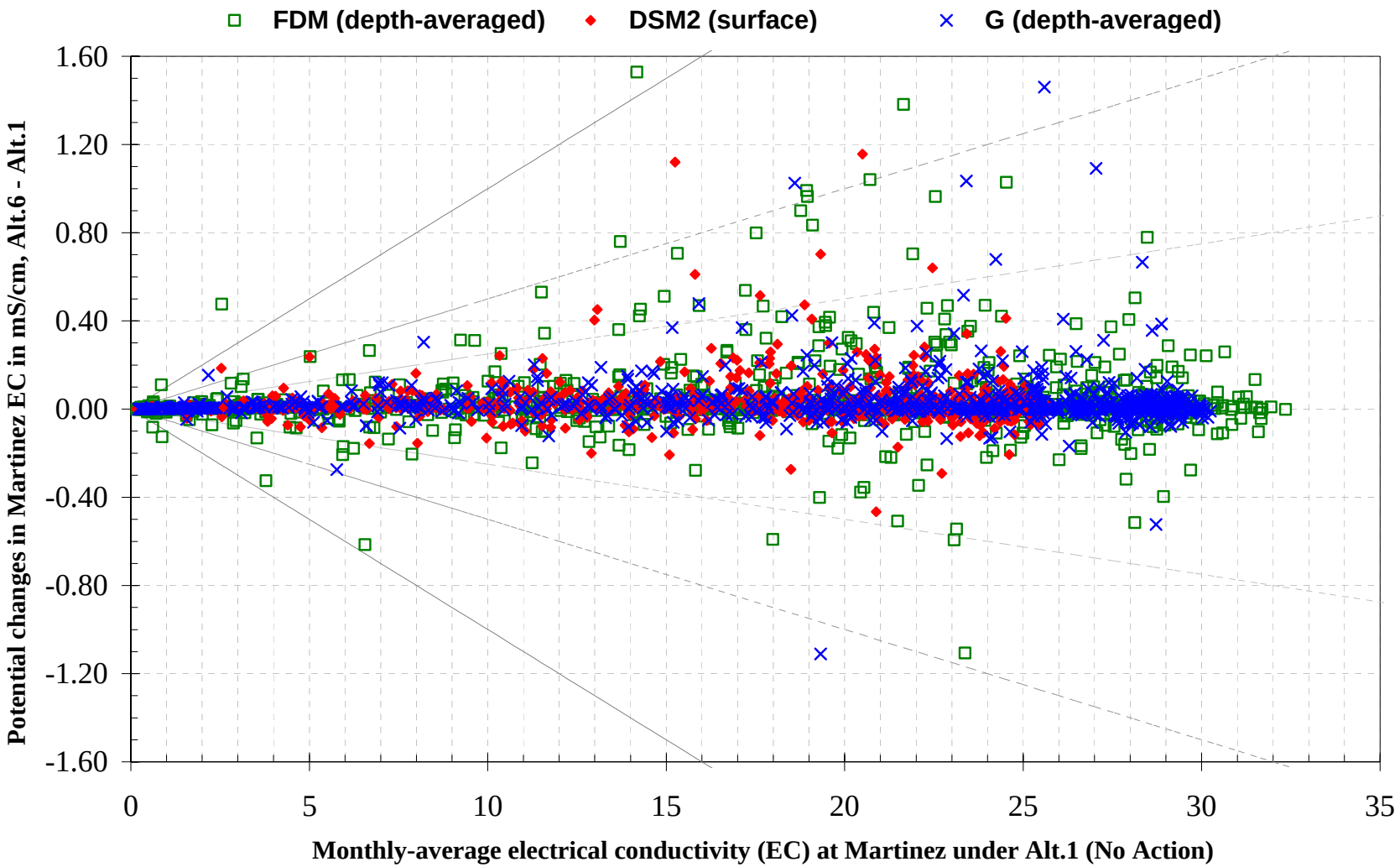


Figure 4.4.1-7 Potential changes in monthly-average salinity at Martinez under Alternative 6 at 2001 LOD

For each data point, the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alt.6 and Alt.1 for the same month. All data points on the horizontal line (the line where the y-values are zero) indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alt.6 have same salinity). A positive y-value would indicate an increase in salinity under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases outflow. The solid lines represent the limits for impacts to be within ±2.5%, ±5% and ±10% of Alt.1 value.

Figure 4.4.1-8a Monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2020 LoD

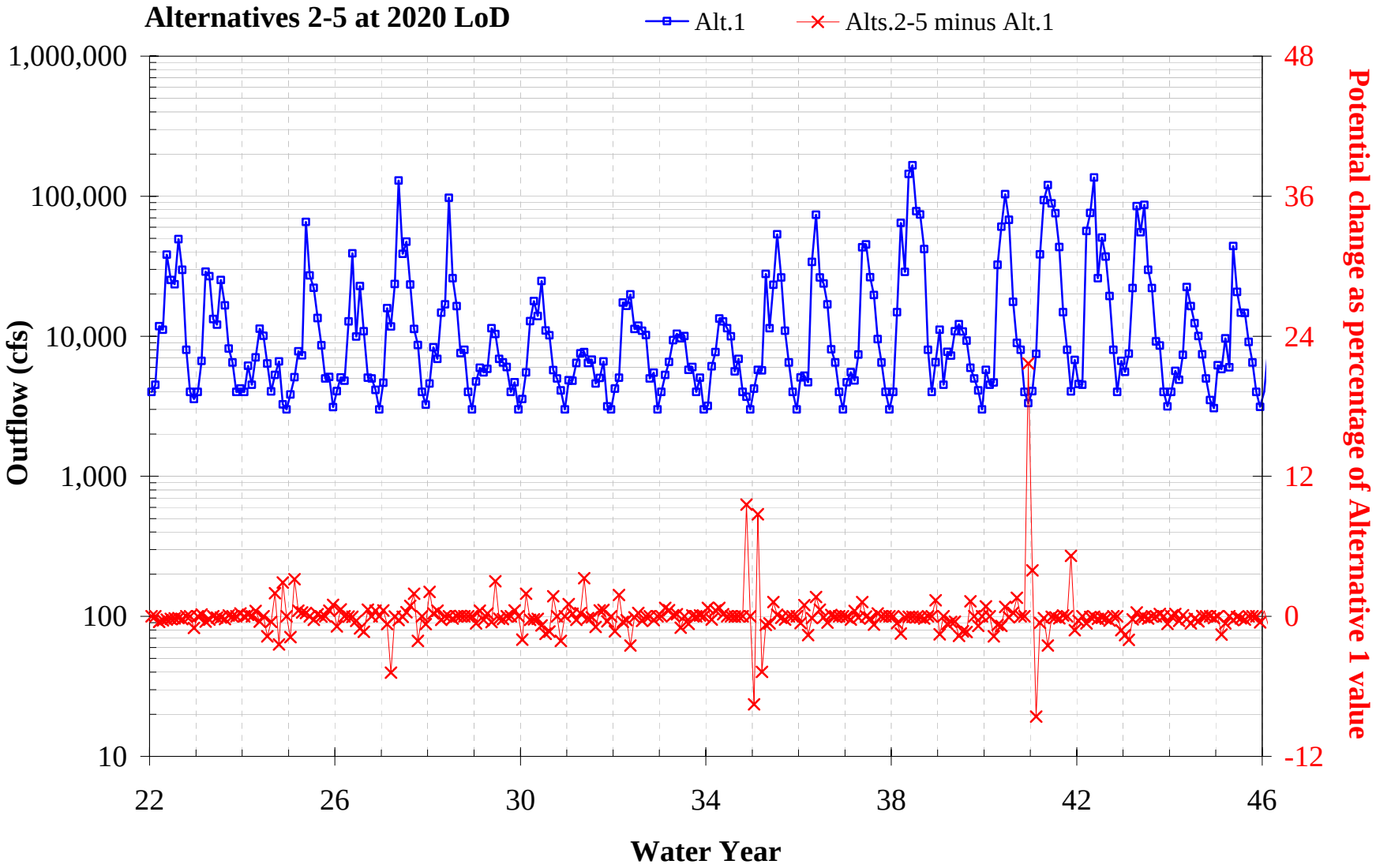


Figure 4.4.1-8b Monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2020 LoD

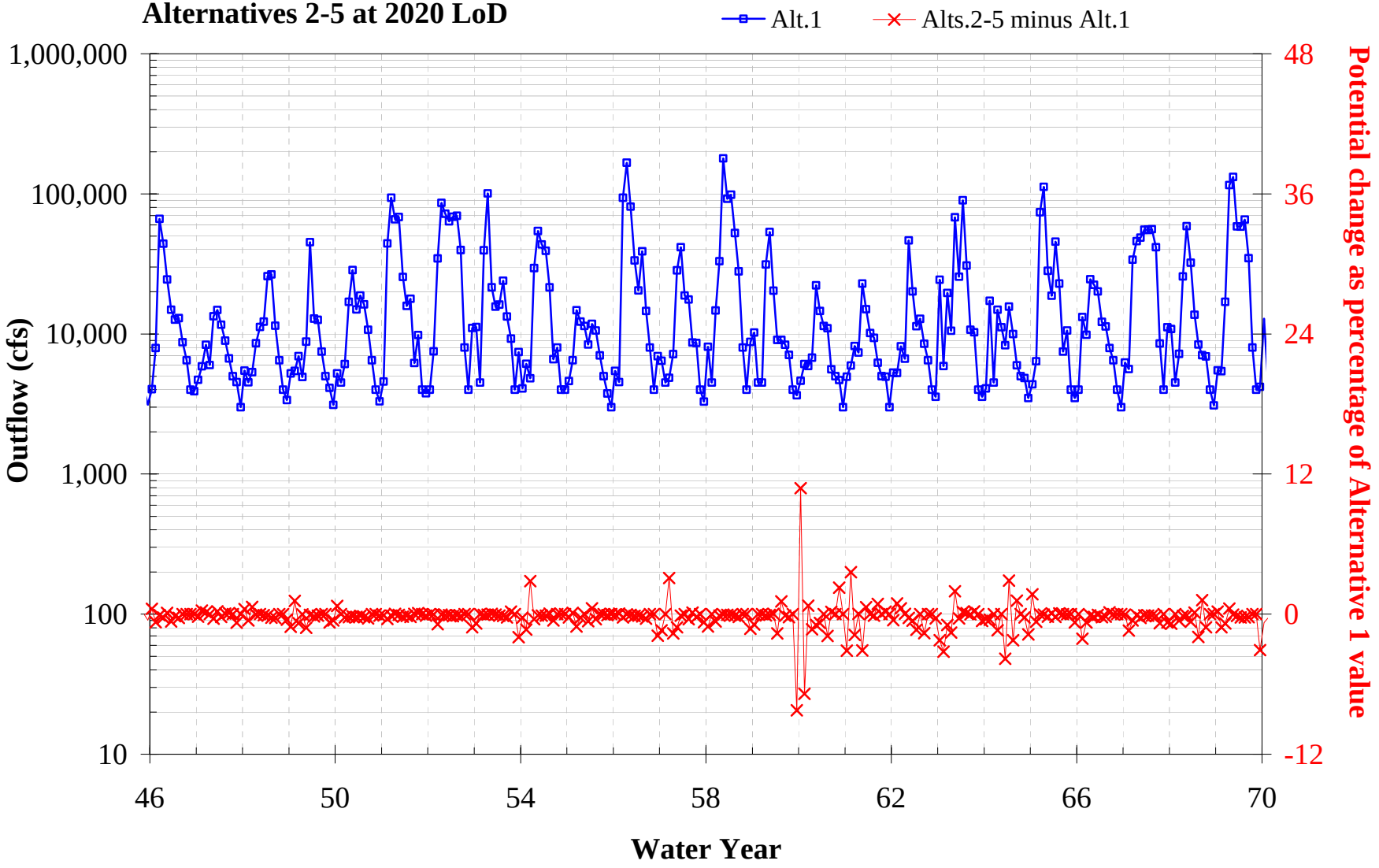
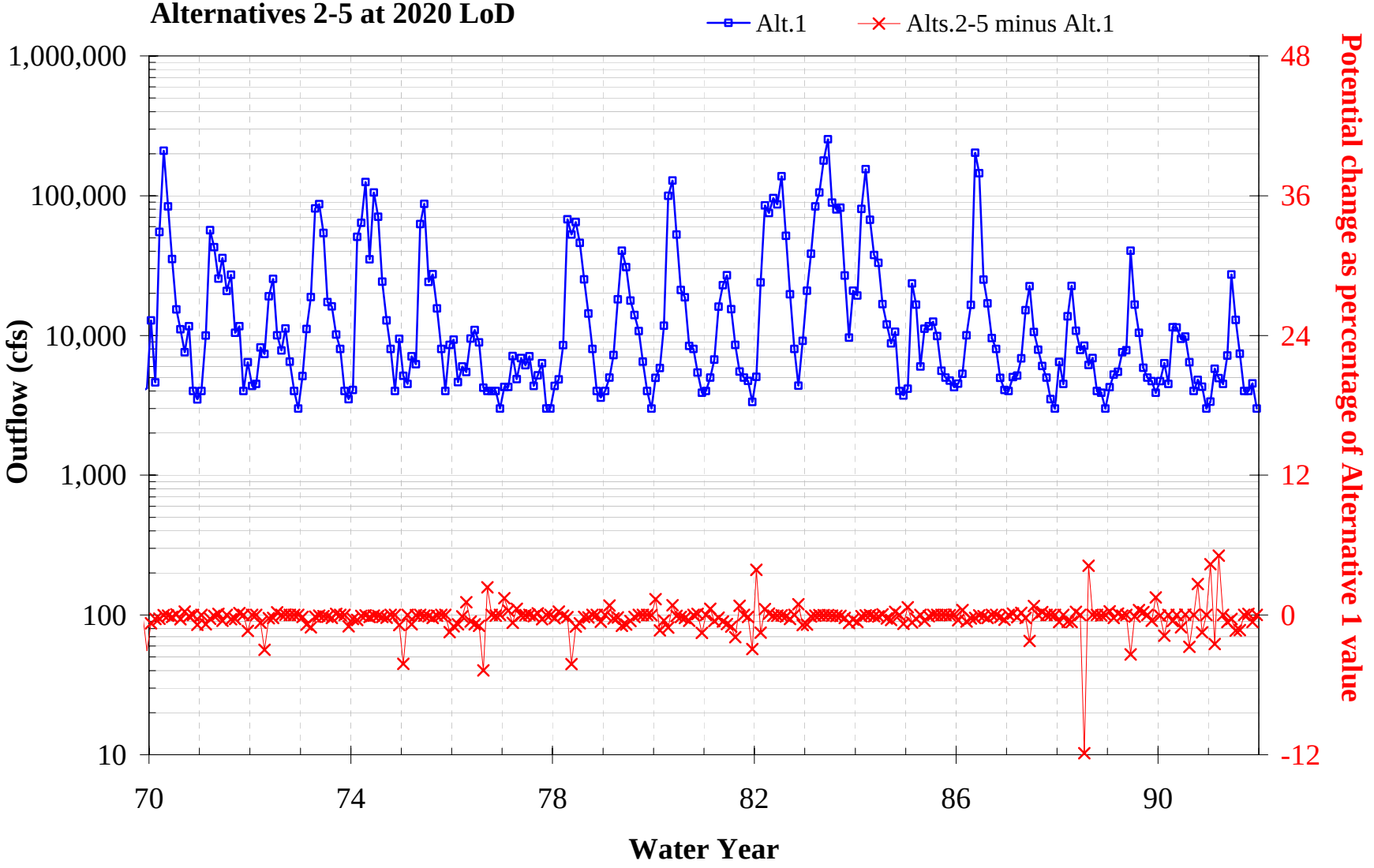


Figure 4.4.1-8c Monthly-average Delta outflow at Martinez and potential changes under Alternatives 2-5 at 2020 LoD



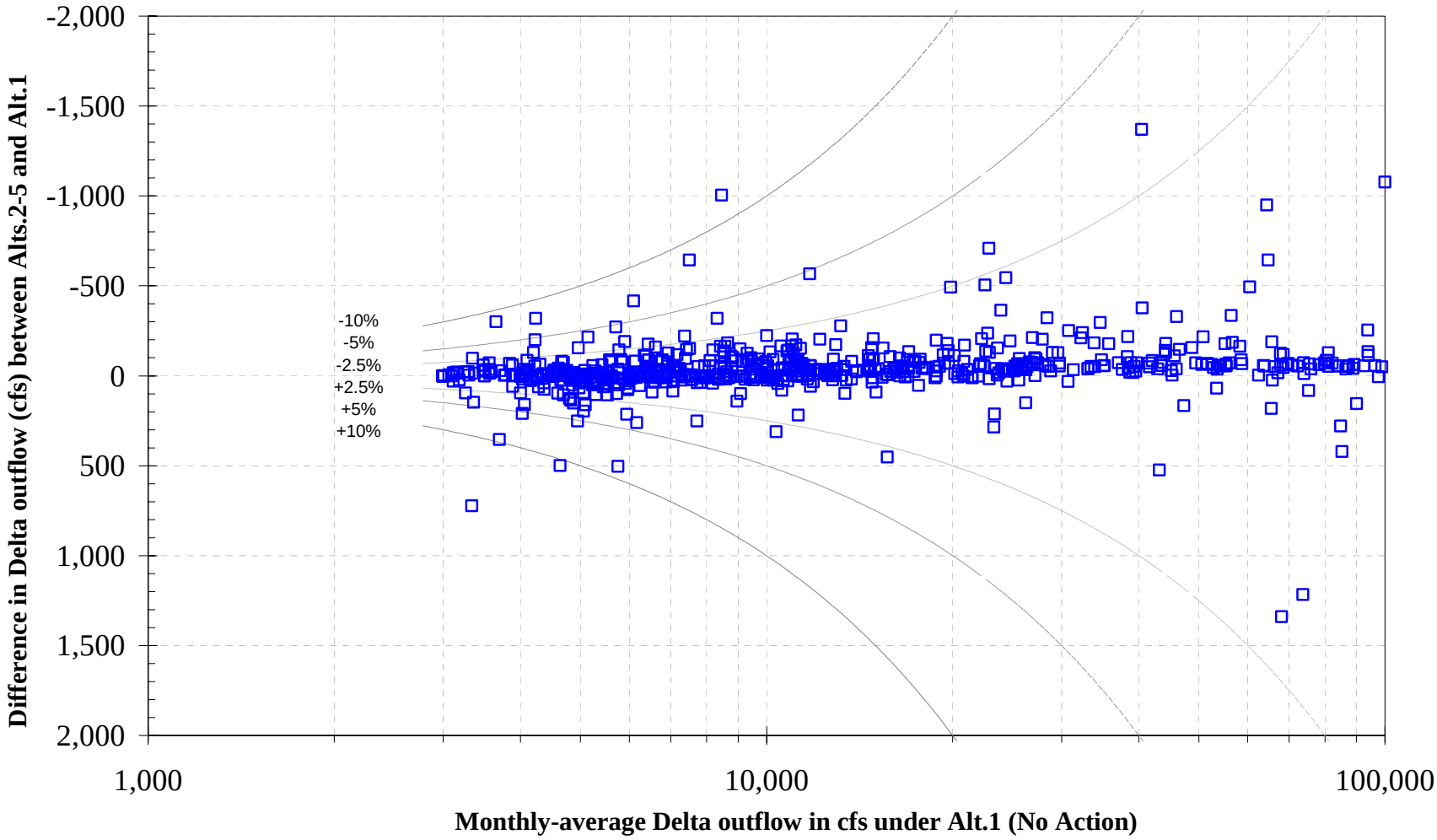


Figure 4.4.1-9 Potential changes in monthly-average Delta outflow at 2020 LOD under Alternatives 2-5

For each data point (indicated by a square), the x-value is the outflow corresponding to the CALSIM output under Alt.1 for a particular month, and the y-value (shown on the left-hand-side axis) corresponds to the difference in simulated outflow between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no effects on outflow in that month (that is, Alt.1 and Alts.2-5 have same outflow). A positive y-value would indicate an increase in outflow under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points below the y=0 line and the number above gives the frequencies the project increases and decreases outflow. (Note that the y-axis has a decreasing scale.) The solid lines represent the limits for differences of ±2.5%, ±5%, and ±10% of Alt.1 outflow.

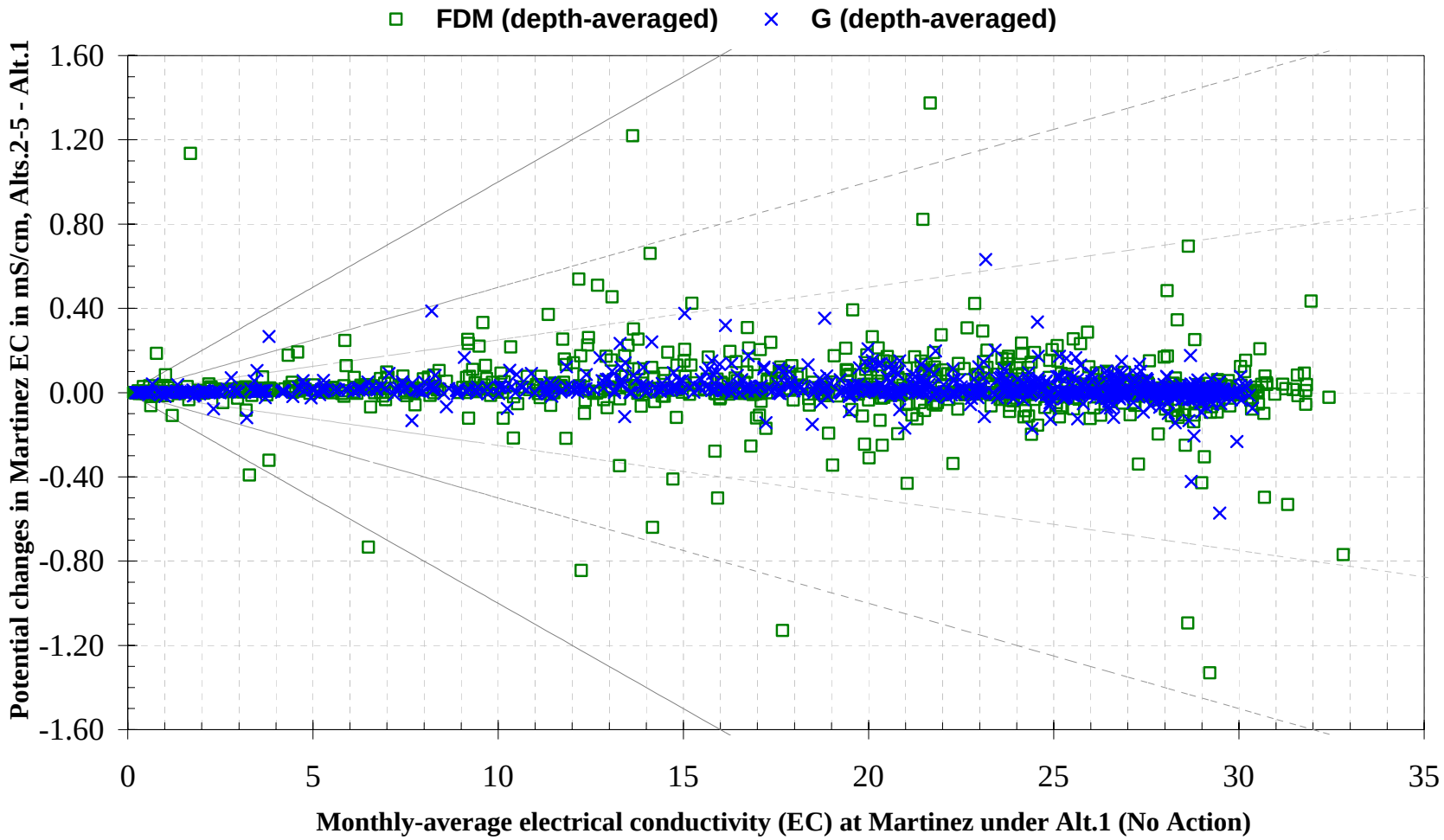


Figure 4.4.1-10 Potential changes in monthly-average salinity at Martinez under Alternatives 2-5 at 2020 LOD

For each data point, the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line (the line where the y-values are zero) indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alts.2-5 have same salinity). A positive y-value would indicate an increase in salinity under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases outflow. The solid lines represent the limits for impacts to be within ±2.5%, ±5% , and ±10% of Alt.1 value.

Figure 4.4.1-11a Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2020 LoD

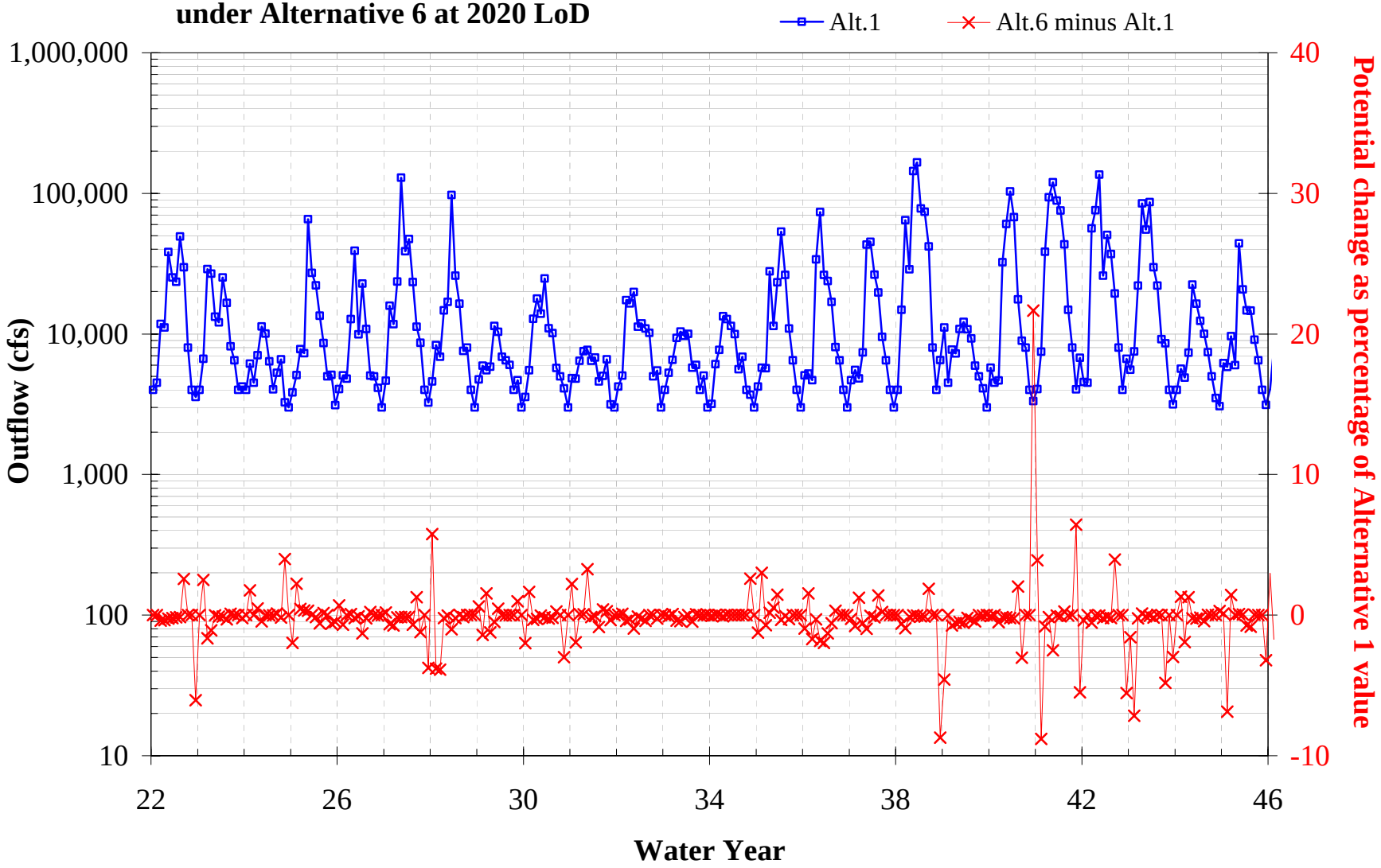


Figure 4.4.1-11b Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2020 LoD

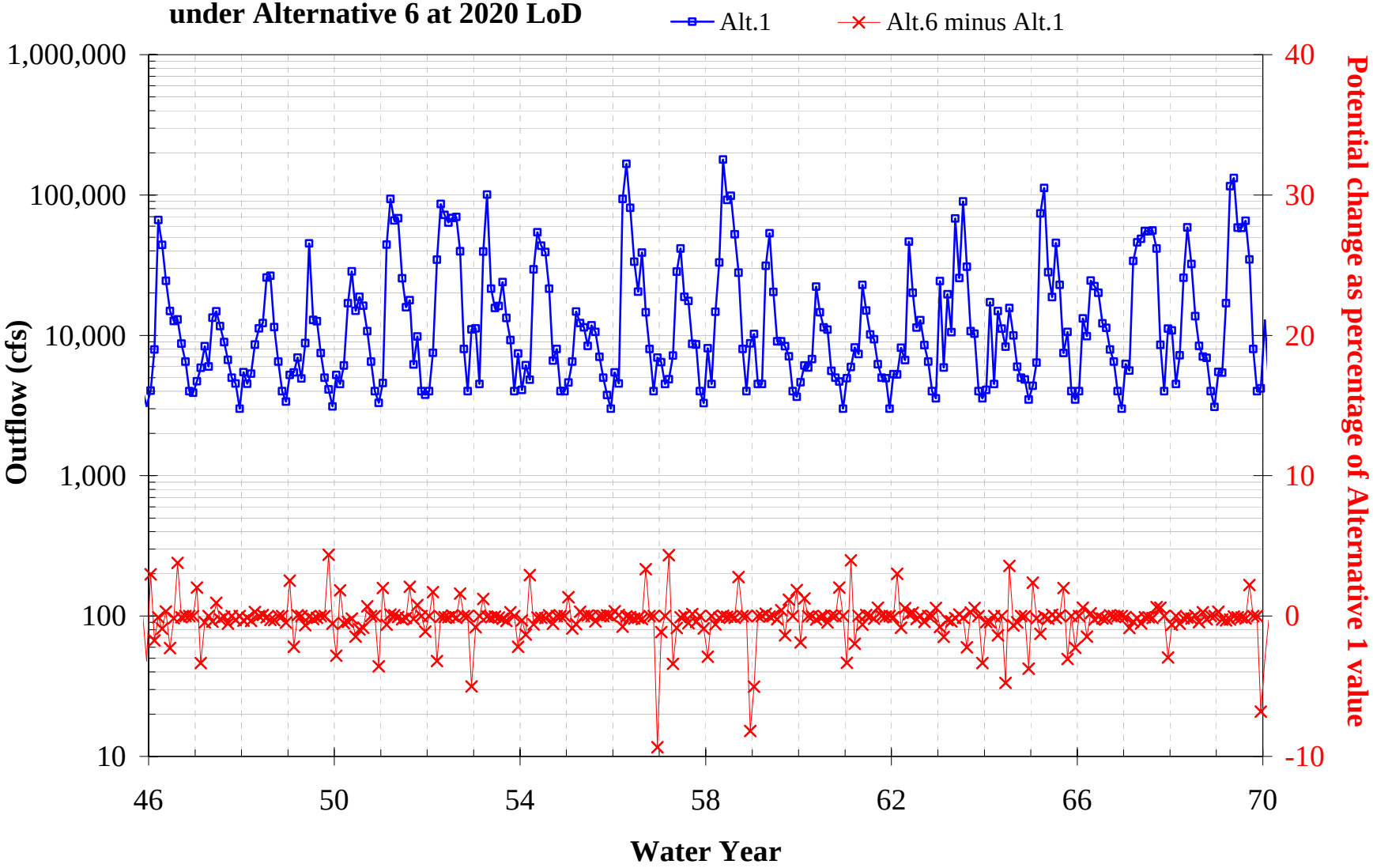
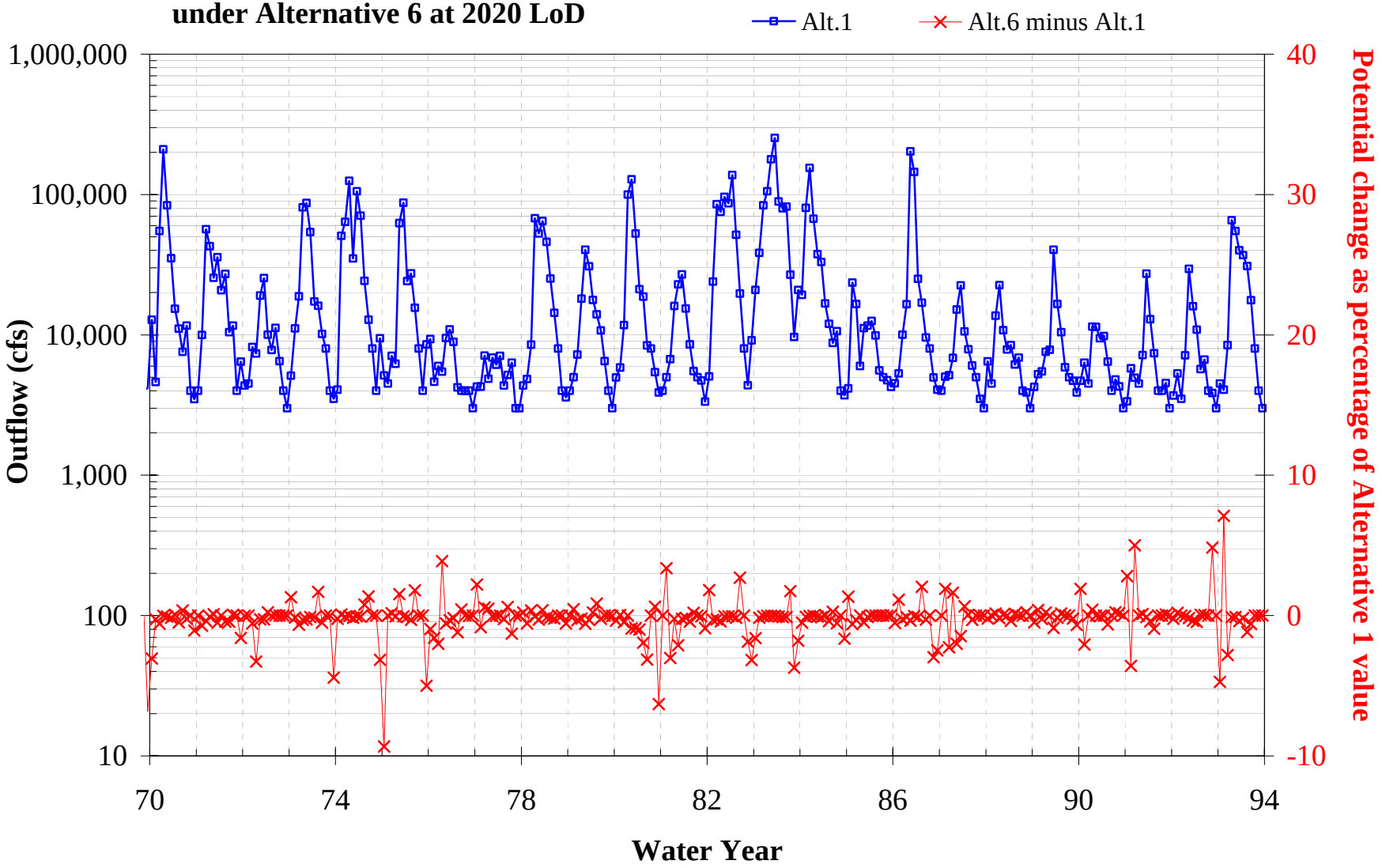


Figure 4.4.1-11c Monthly-average Delta outflow at Martinez and potential changes under Alternative 6 at 2020 LoD



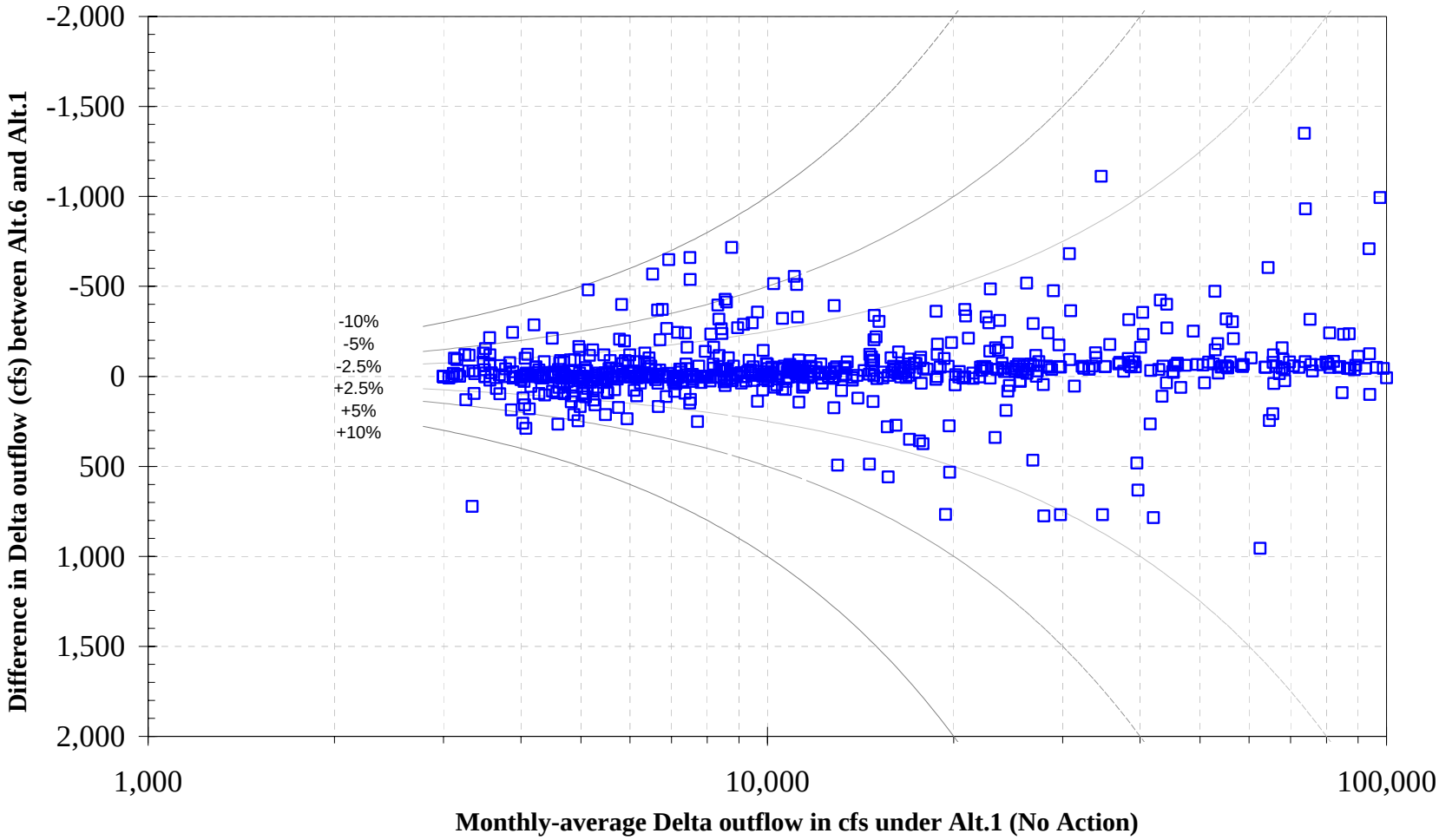


Figure 4.4.1-12 Potential changes in monthly-average Delta outflow at 2020 LOD under Alternative 6

For each data point (indicated by a square), the x-value is the outflow corresponding to the CALSIM output under Alt.1 for a particular month, and the y-value (shown on the left-hand-side axis) corresponds to the difference in simulated outflow between Alt.6 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no effects on outflow in that month (that is, Alt.1 and Alt.6 have same outflow). A positive y-value would indicate an increase in outflow under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points below the y=0 line and the number above gives the frequencies the project increases and decreases outflow. (Note that the y-axis has a decreasing scale.) The solid lines represent the limits for differences of ±2.5%, ±5%, and ±10% of Alt.1 outflow.

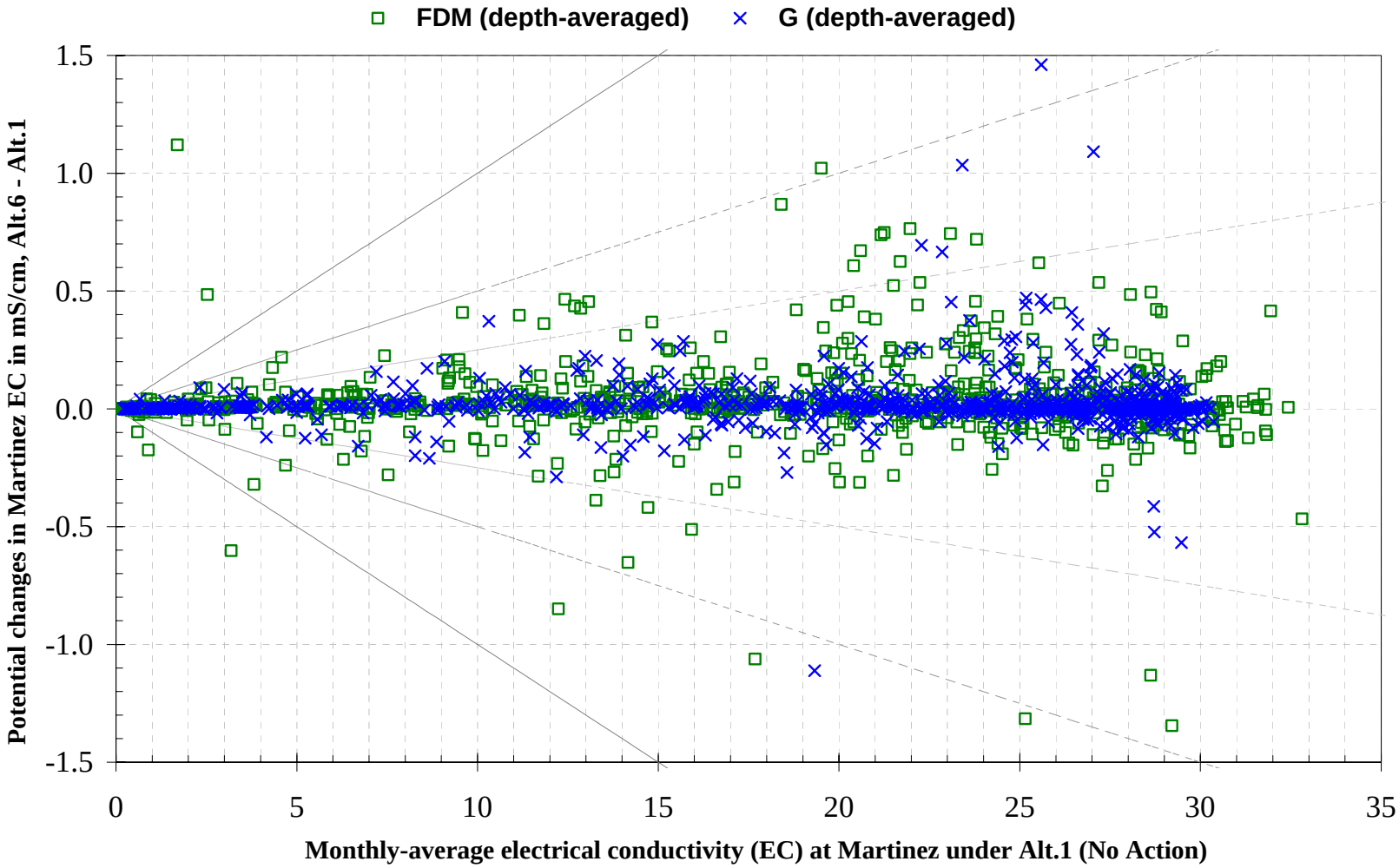


Figure 4.4.1-13 Potential changes in monthly-average salinity at Martinez under Alternative 6 at 2020 LOD

For each data point, the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alt.6 and Alt.1 for the same month. All data points on the horizontal line (the line where the y-values are zero) indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alt.6 have same salinity). A positive y-value would indicate an increase in salinity under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases outflow. The solid lines represent the limits for impacts to be within ±2.5%, ±5% and ±10% of Alt.1 value.

Figure 4.4.2-1a Potential changes in monthly mean X2 and salinity at Chipps Island under Aternatives 2-5 at 2001 LOD

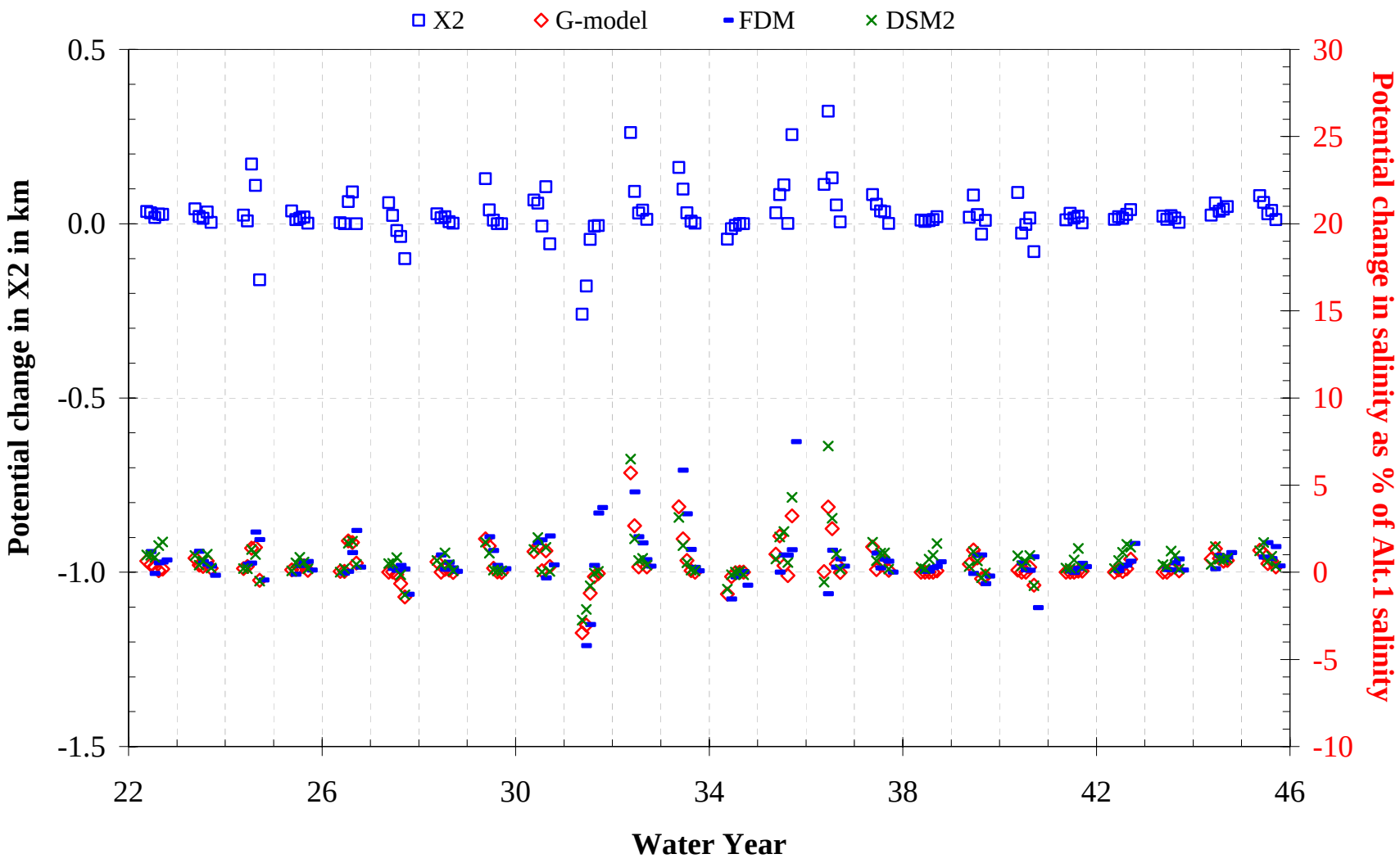


Figure 4.4.2-1b Potential changes in monthly mean X2 and salinity at Chipps Island under Aternatives 2-5 at 2001 LOD.

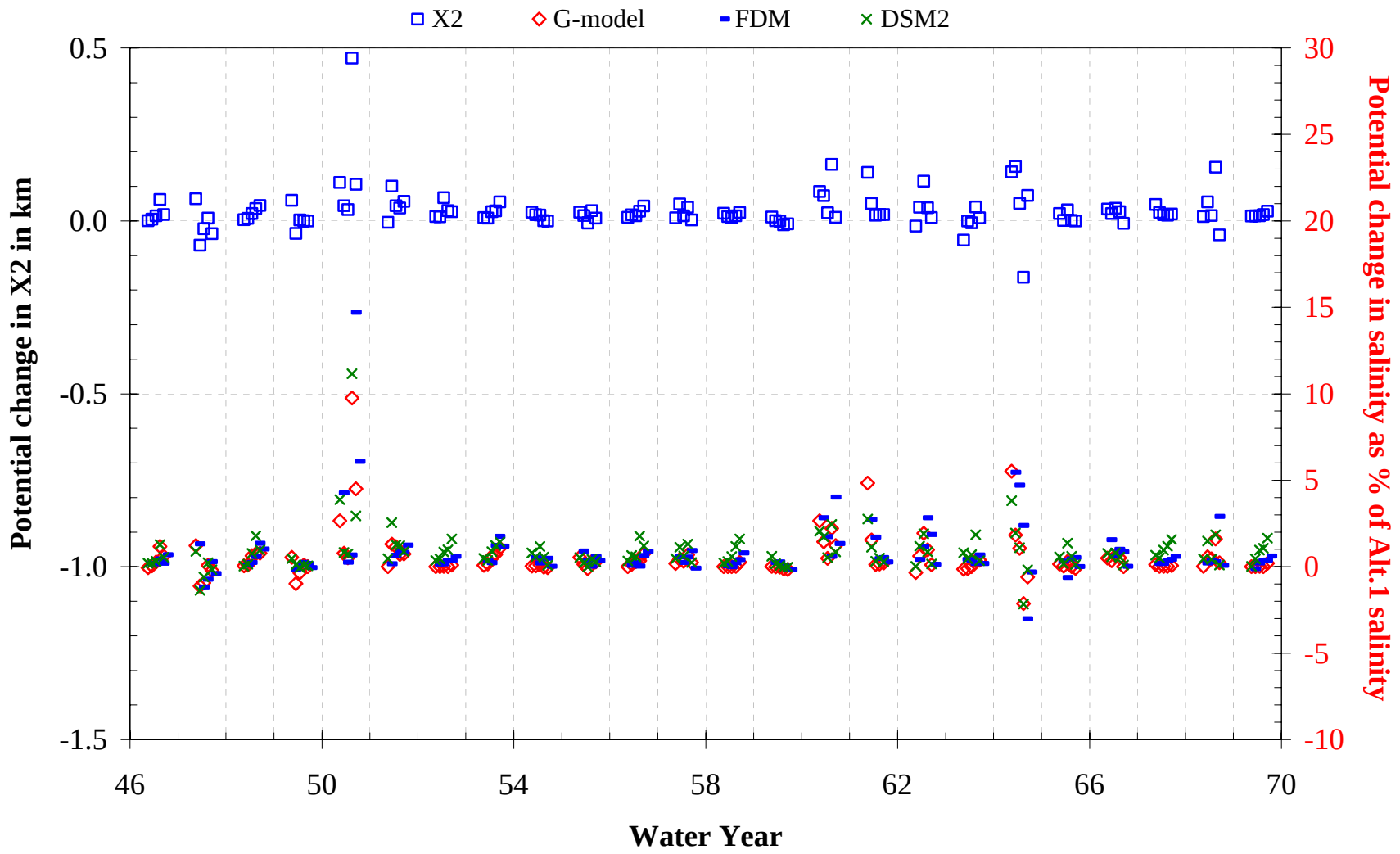


Figure 4.4.2-1c Potential changes in monthly mean X2 and salinity at Chipps Island under Aternatives 2-5 at 2001 LOD

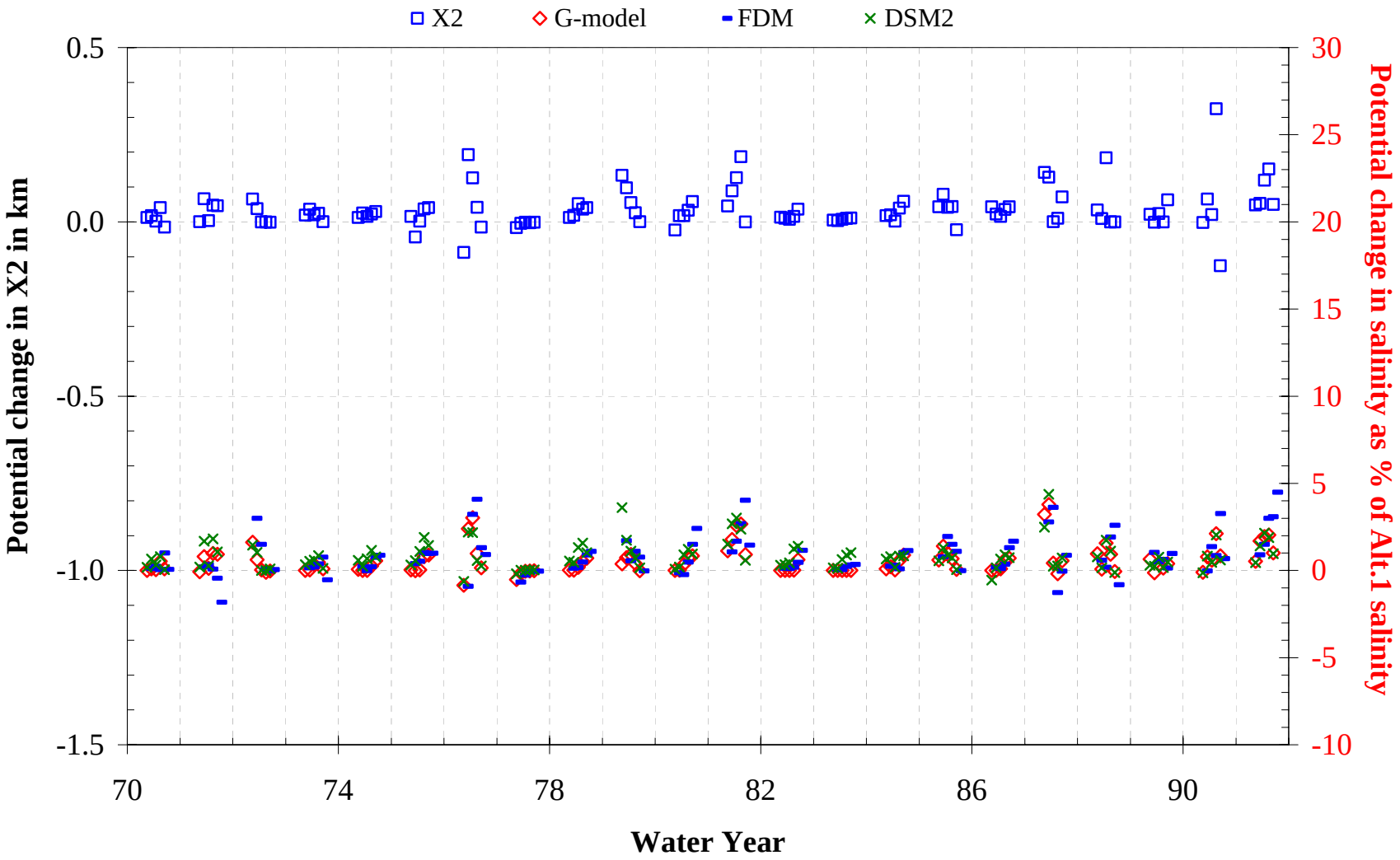


Figure 4.4.2-2 Potential changes in monthly-average X2 location from February through June under Alternatives 2-5 at 2001 LOD

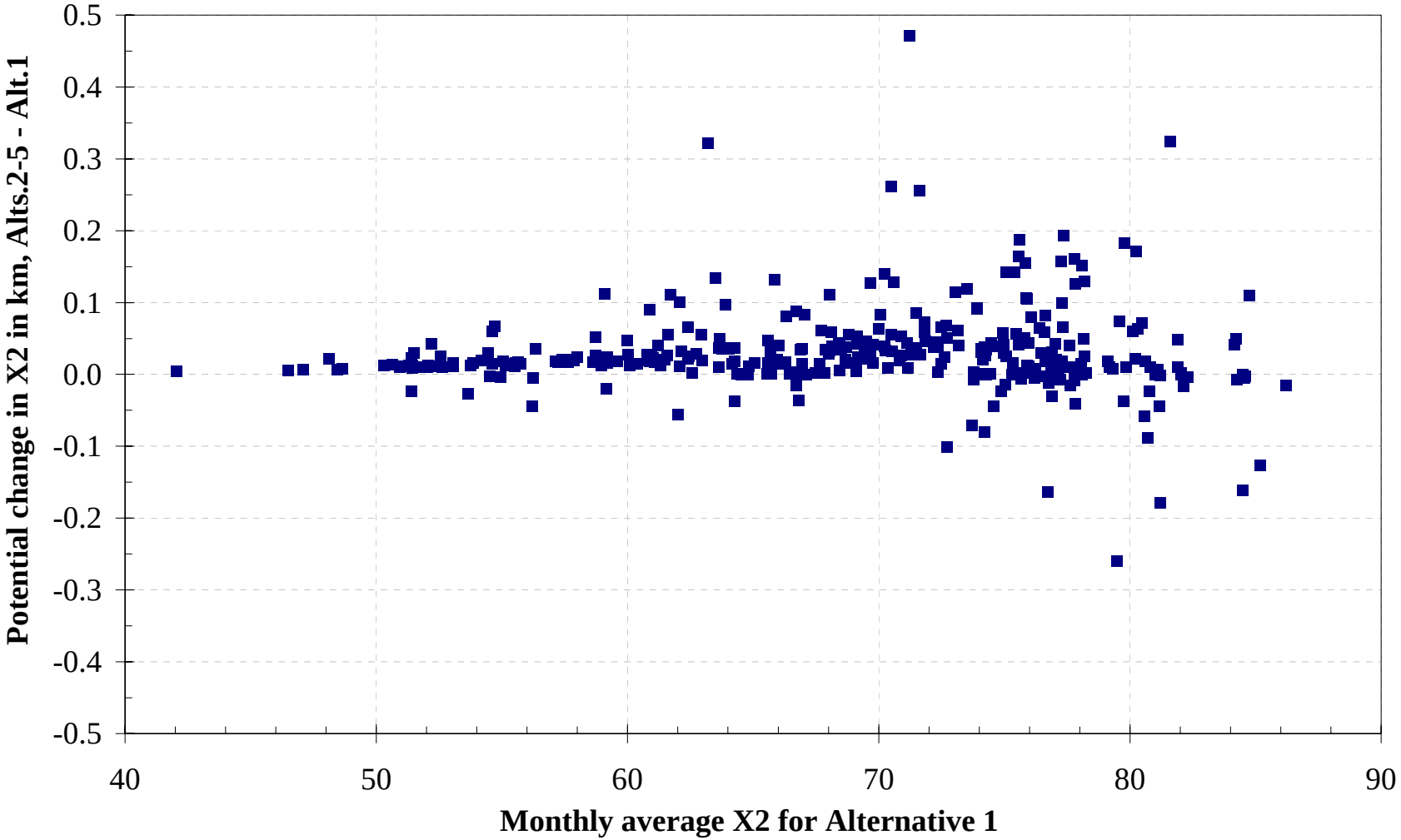


Figure 4.4.2-3 Potential changes in monthly-average X2 location from February through June under Alternative 6 at 2001 LoD

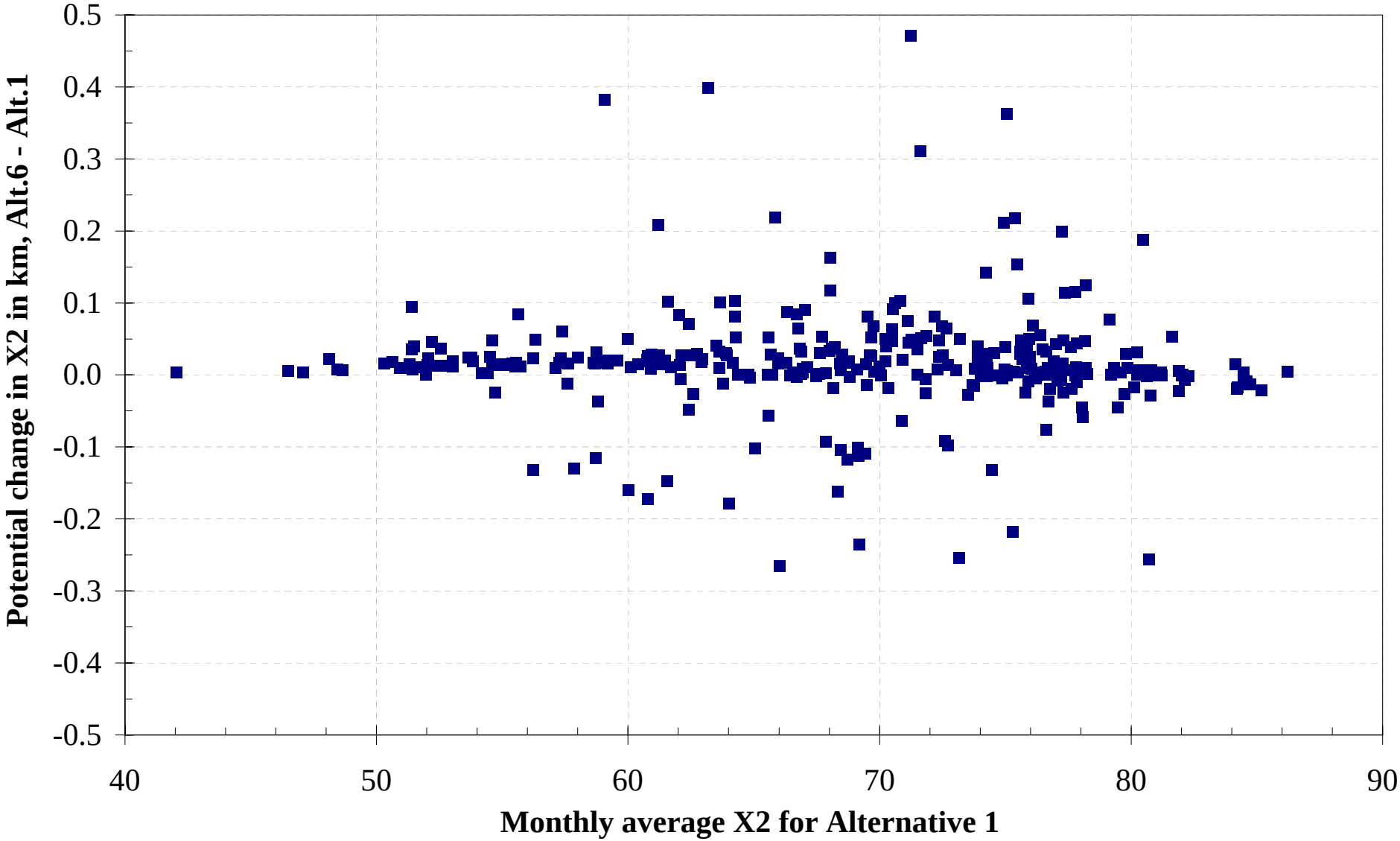


Figure 4.4.2-4 Potential changes in monthly-average X2 location from February through June under Alternatives 2-5 at 2020 LoD

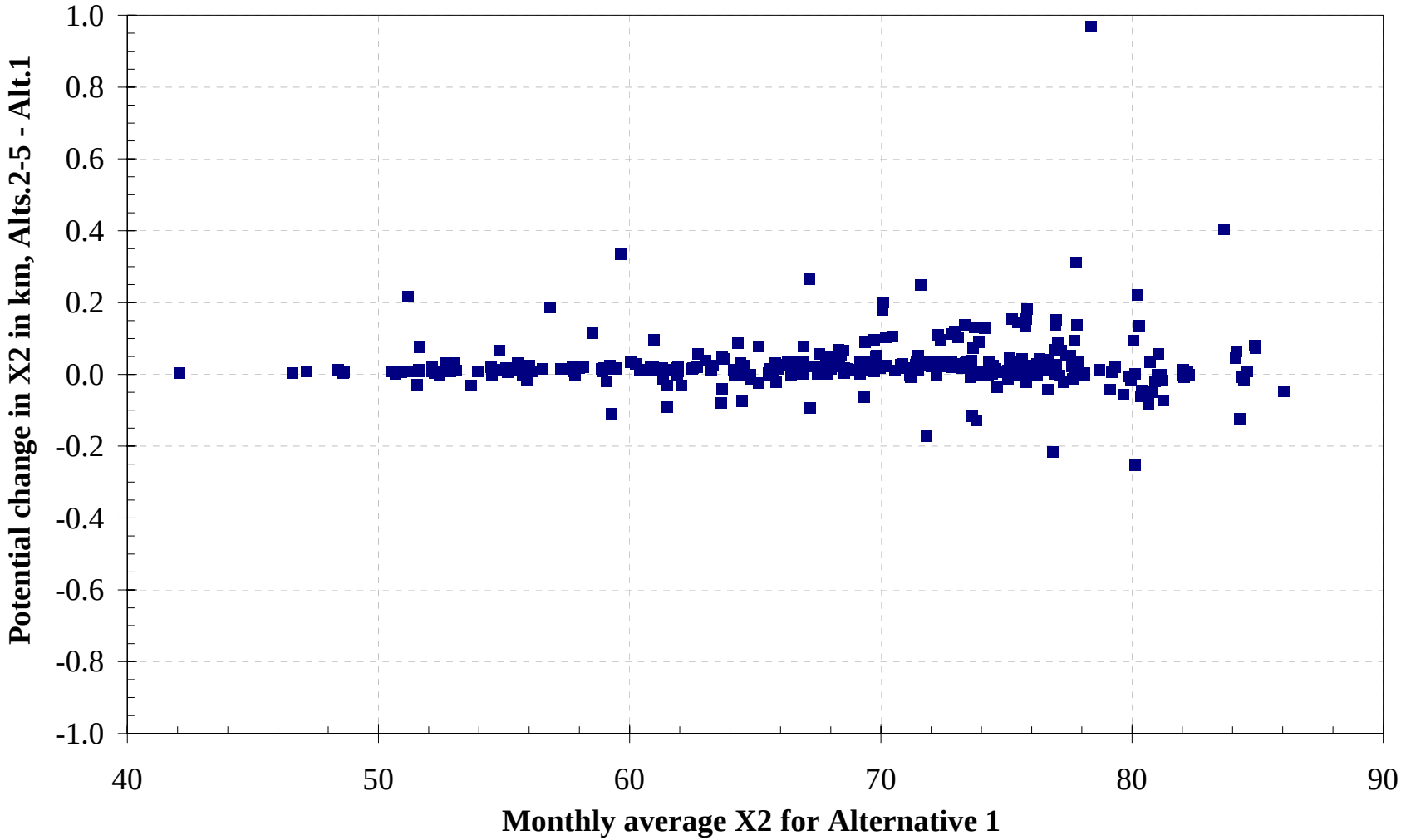


Figure 4.4.2-5 Potential changes in monthly-average X2 location from February through June under Alternative 6 at 2020 LoD

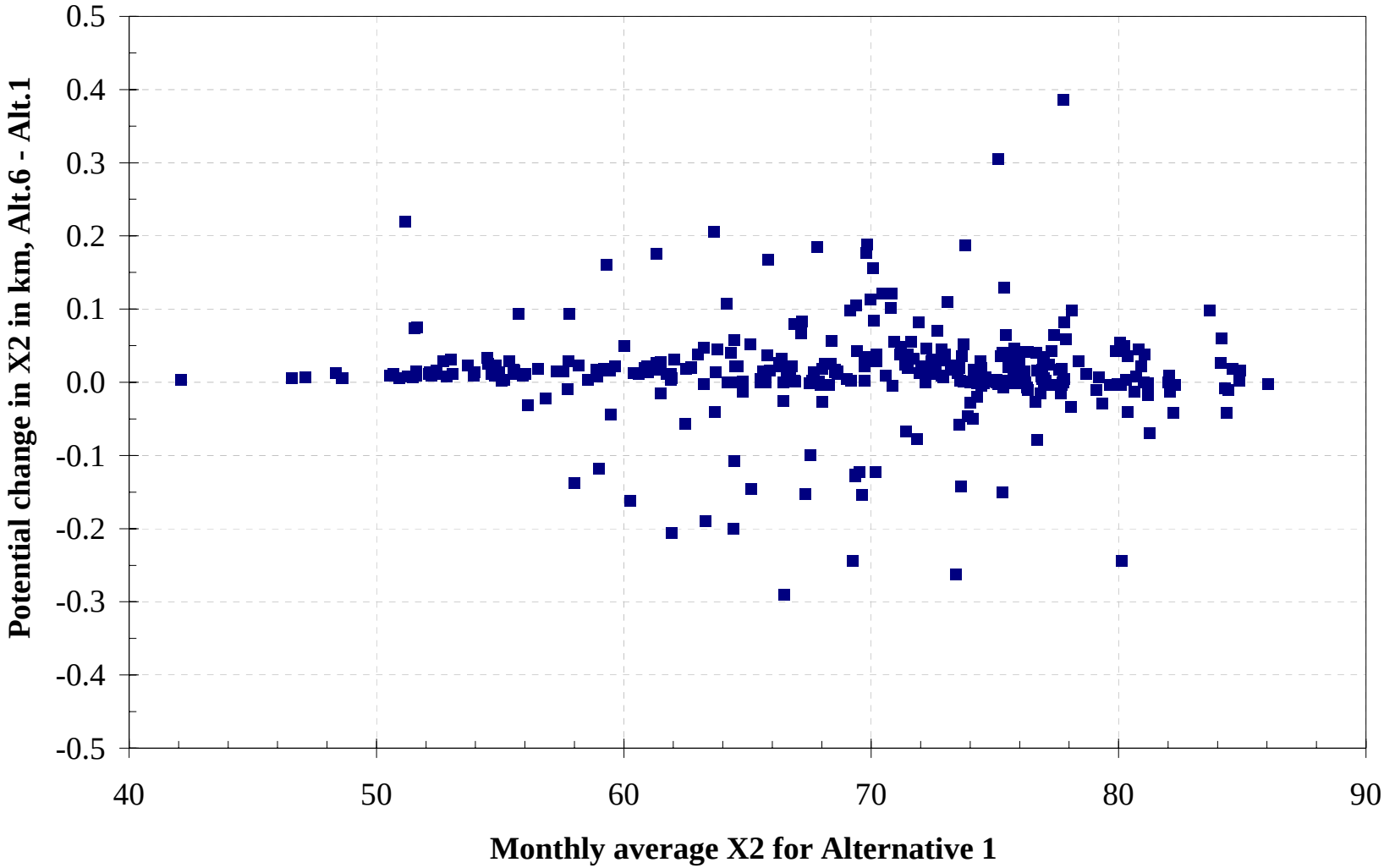


Figure 4.4.4-1a Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternatives 2-5 at 2001 LOD

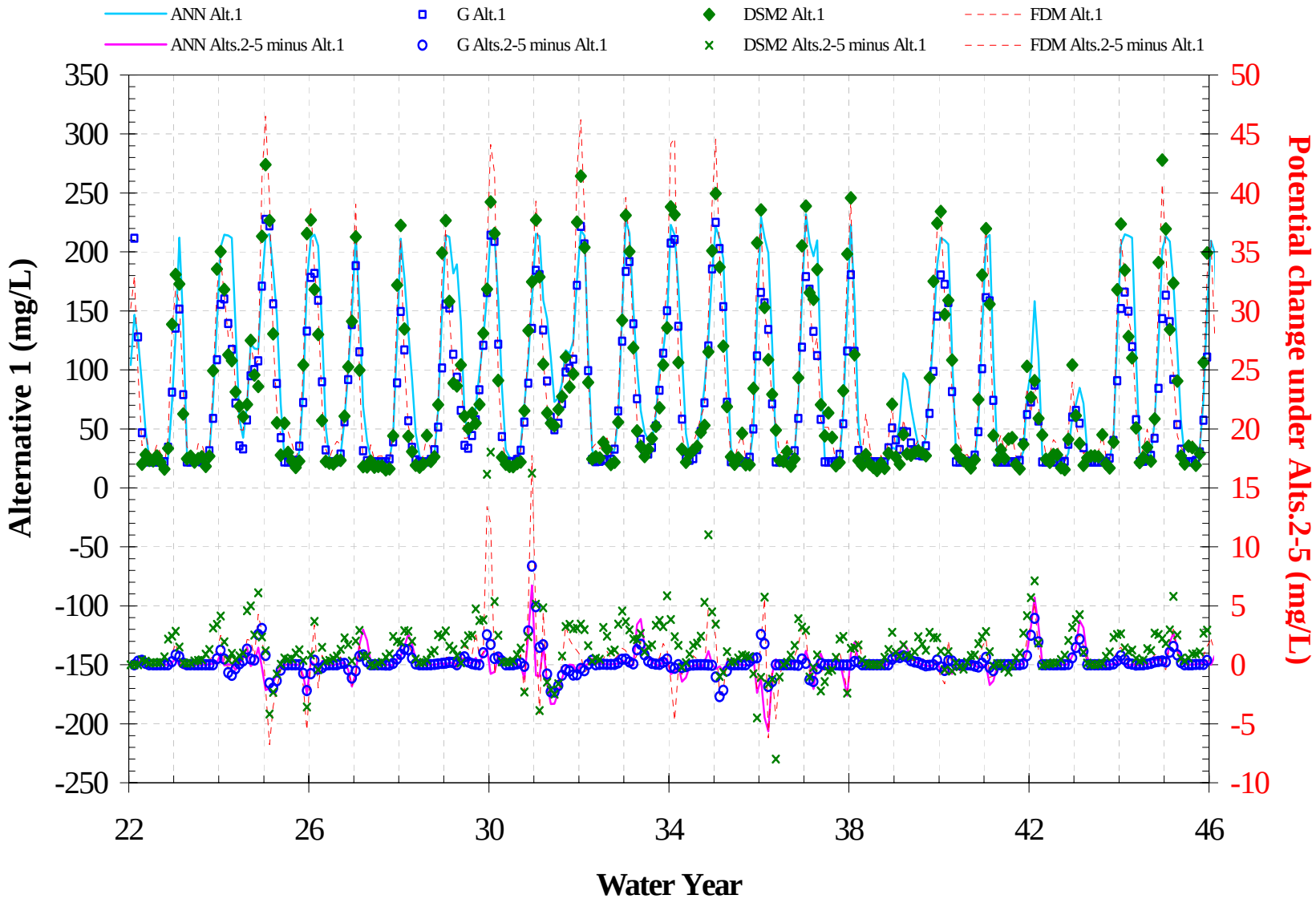


Figure 4.4.4-1b Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternatives 2-5 at 2001 LOD

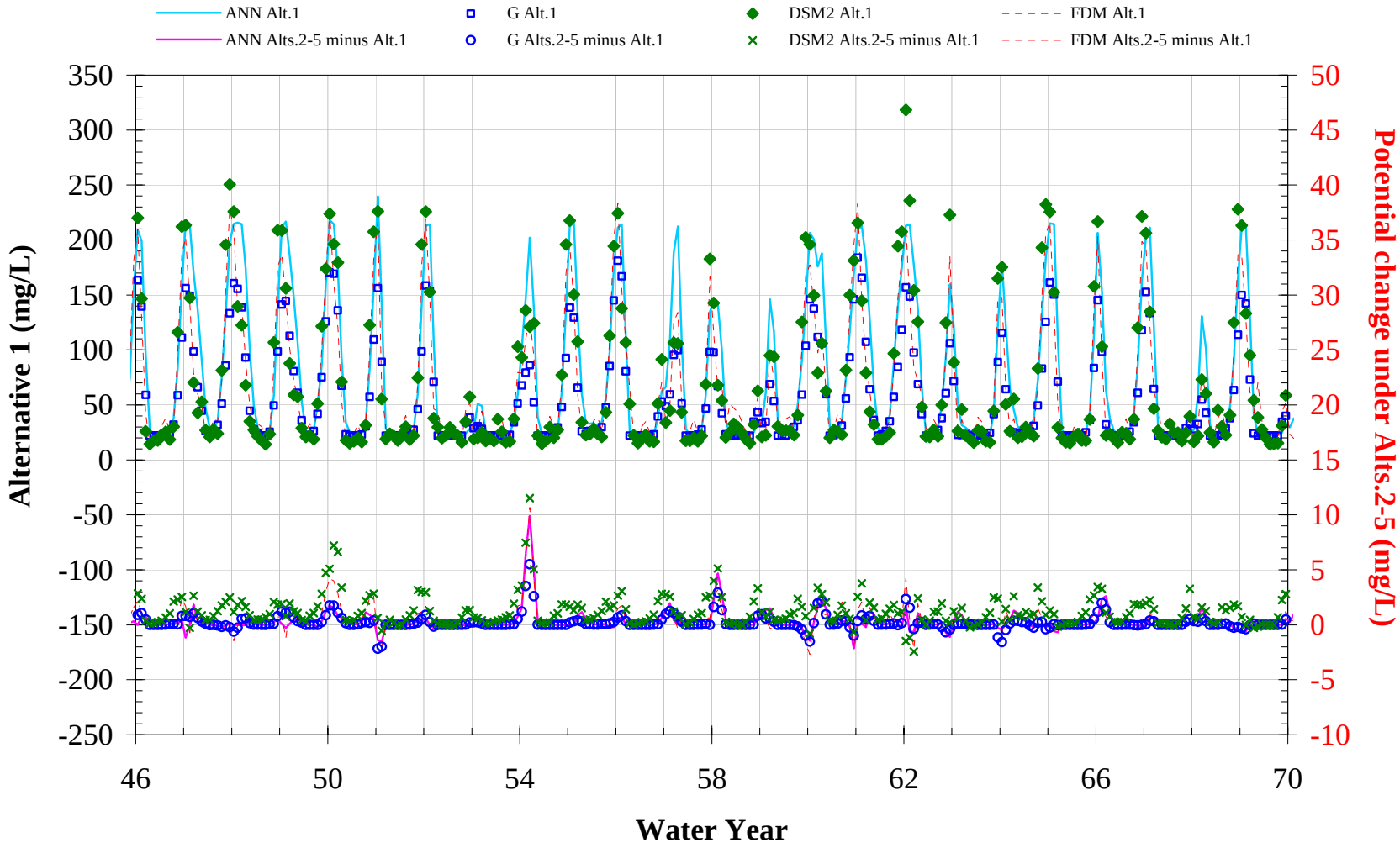
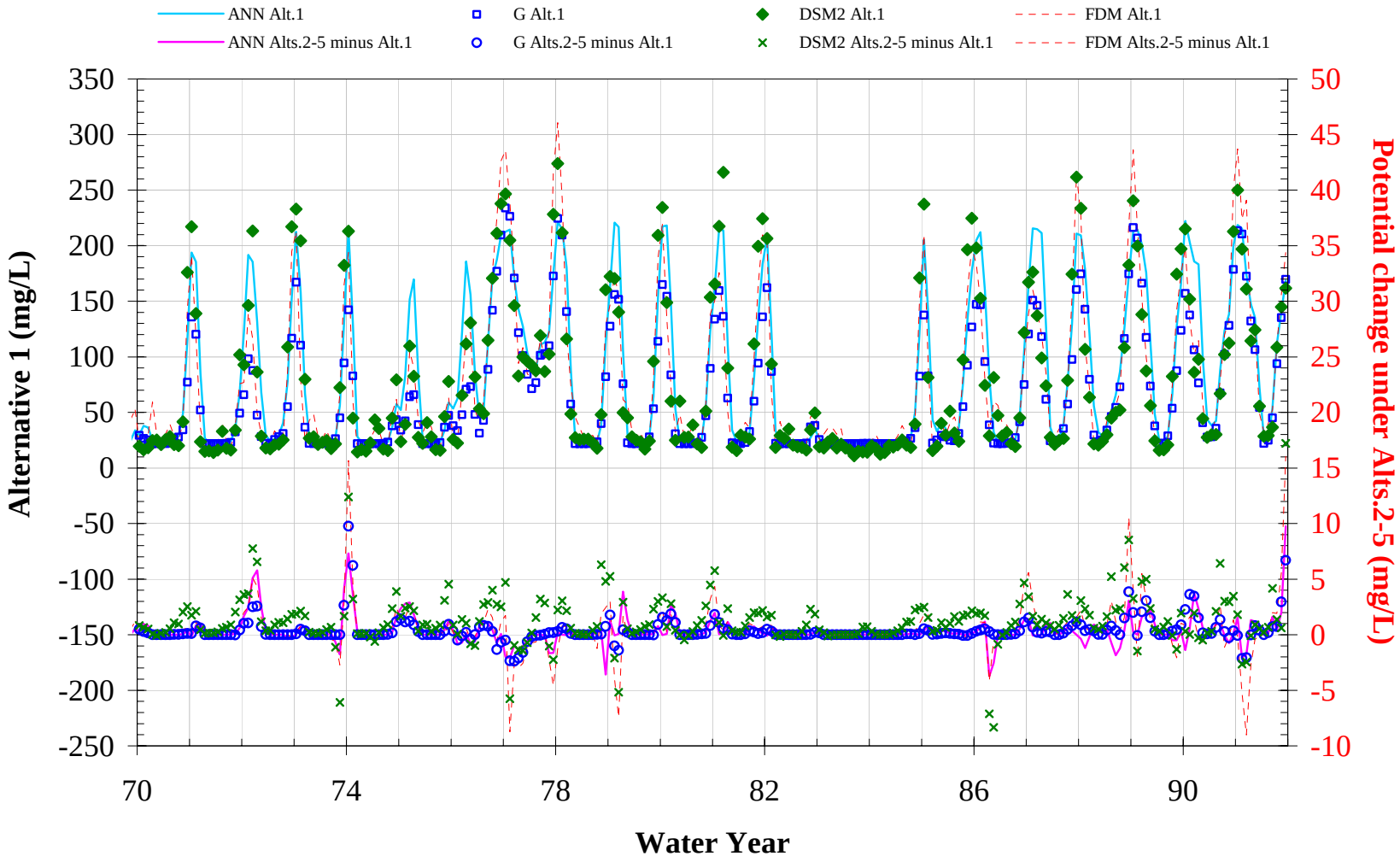


Figure 4.4.4-1c Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternatives 2-5 at 2001 LOD



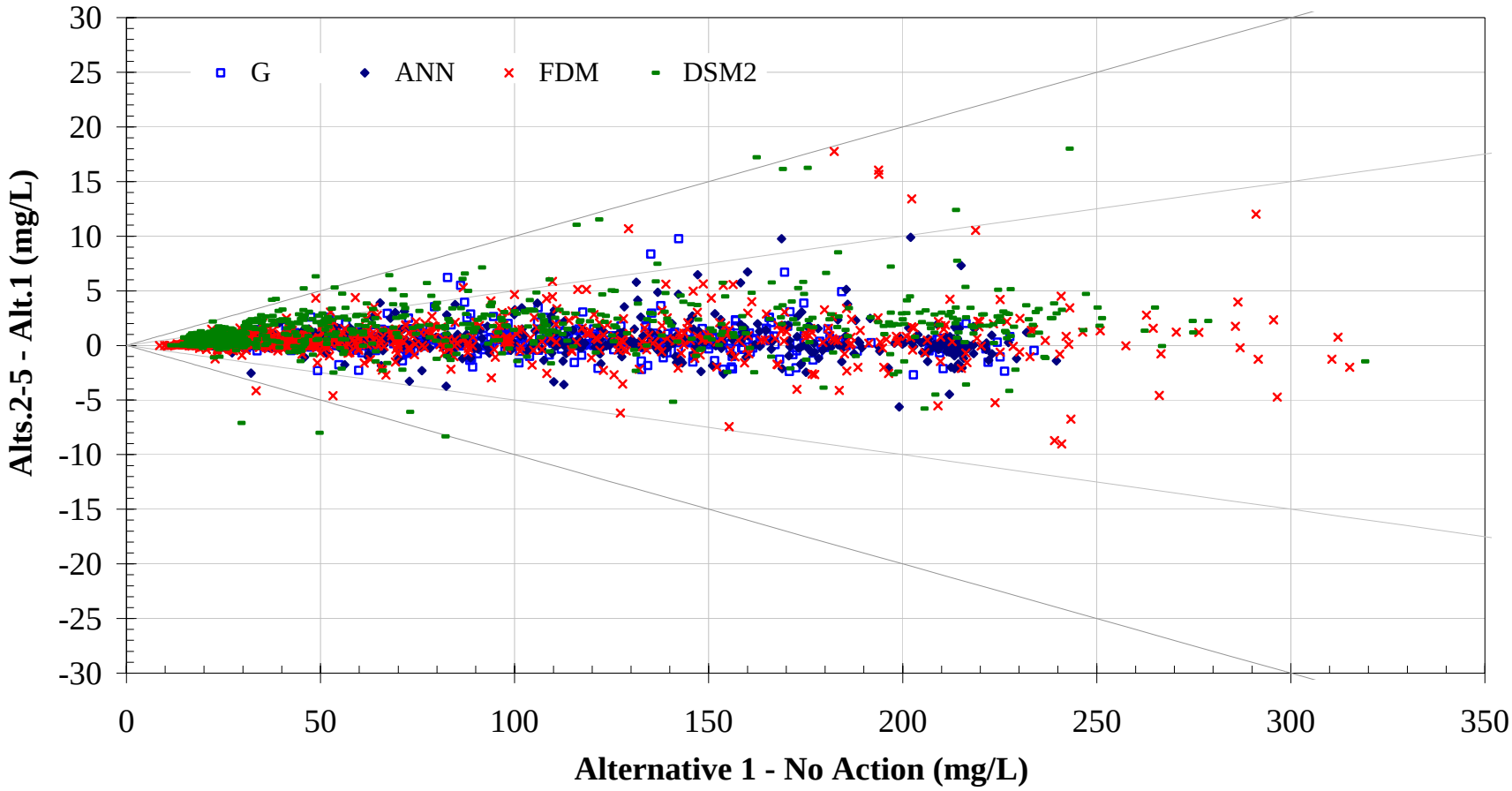


Figure 4.4.4-2 Potential change in monthly-average chloride concentration in Rock Slough at Old River under Alternaitves 2-5 at 2001 LOD For each data point (indicated by a square), the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alts.2-5 have same salinity). A positive y-value would indicate an increase in salinity under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases salinity in Rock Slough. The solid lines represent the limits for impacts to be within ±5% and ±10% of Alt.1 value.

Figure 4.4.4-3a Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternative 6 at 2001 LoD.

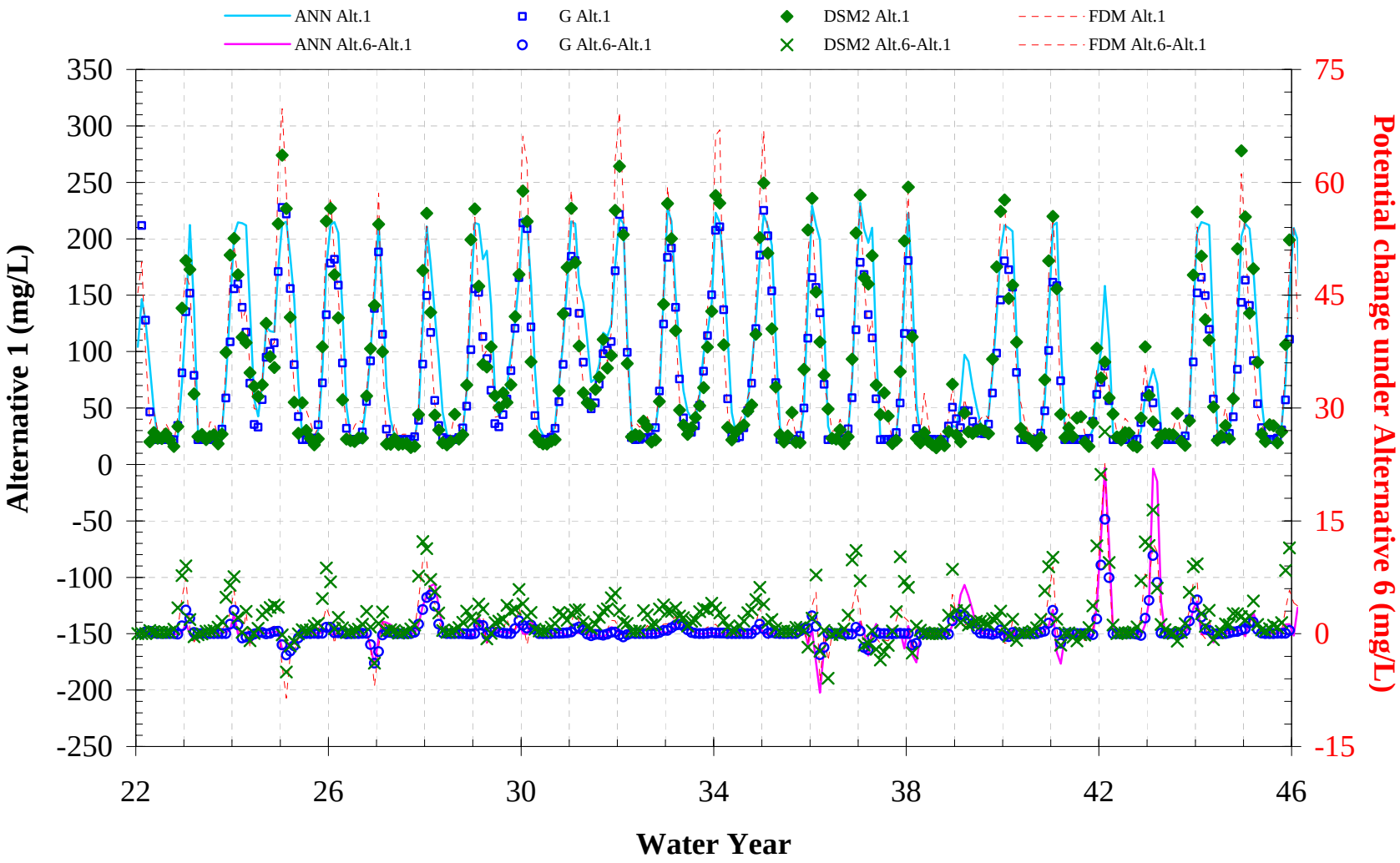


Figure 4.4.4-3b Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternative 6 at 2001 LoD.

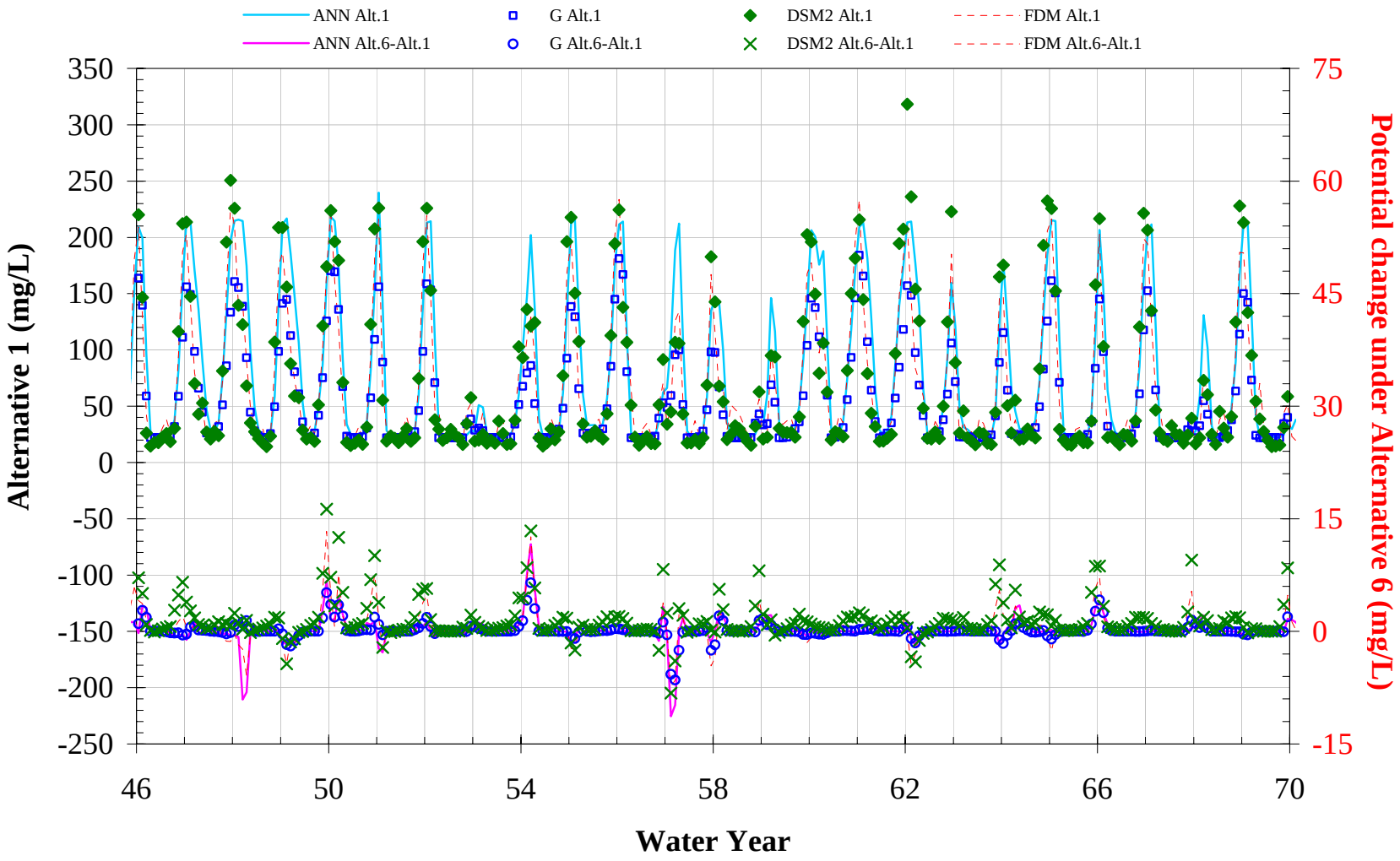
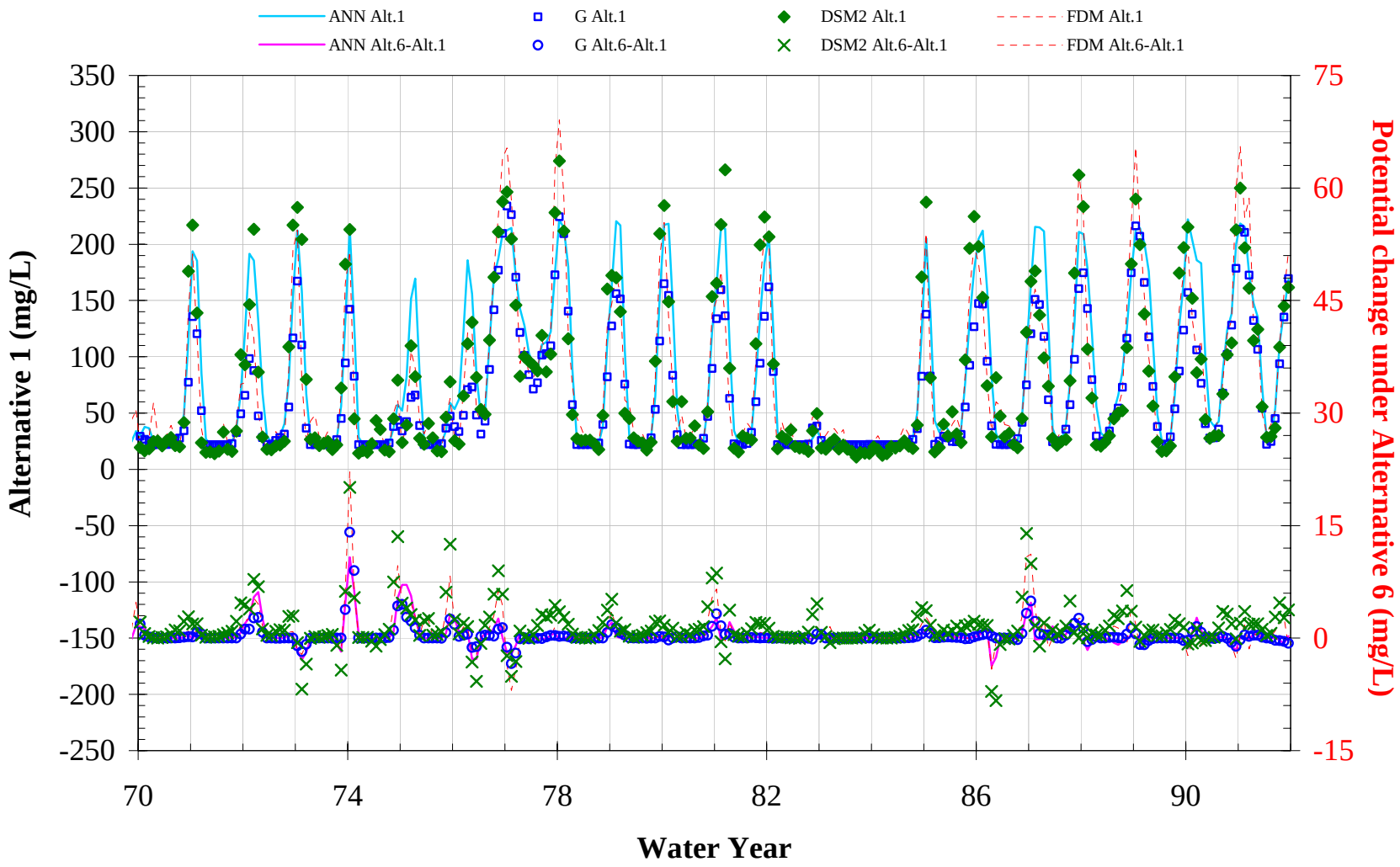


Figure 4.4.4-3c Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternative 1 and Alternative 6 at 2001 LoD.



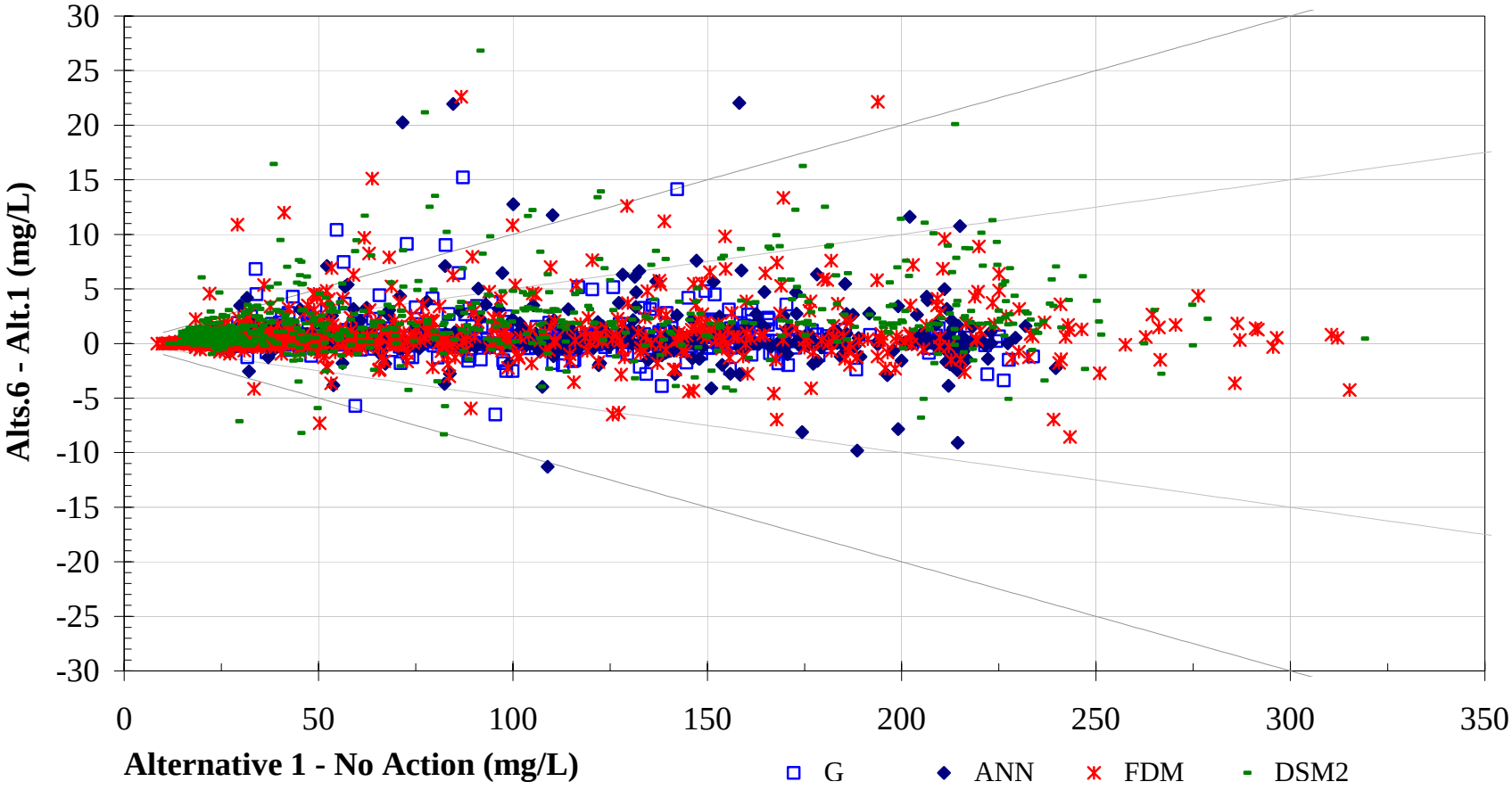


Figure 4.4.4-4 Potential change in monthly-average chloride concentration in Rock Slough at Old River under Alternaitve 6 at 2001 LOD For each data point (indicated by a square), the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alt.6 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alt.6 have same salinity). A positive y-value would indicate an increase in salinity under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases salinity in Rock Slough. The solid lines represent the limits for impacts to be within ±5% and ±10% of Alt.1 value.

Figure 4.4.4-5a Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1-5 at 2020 LoD

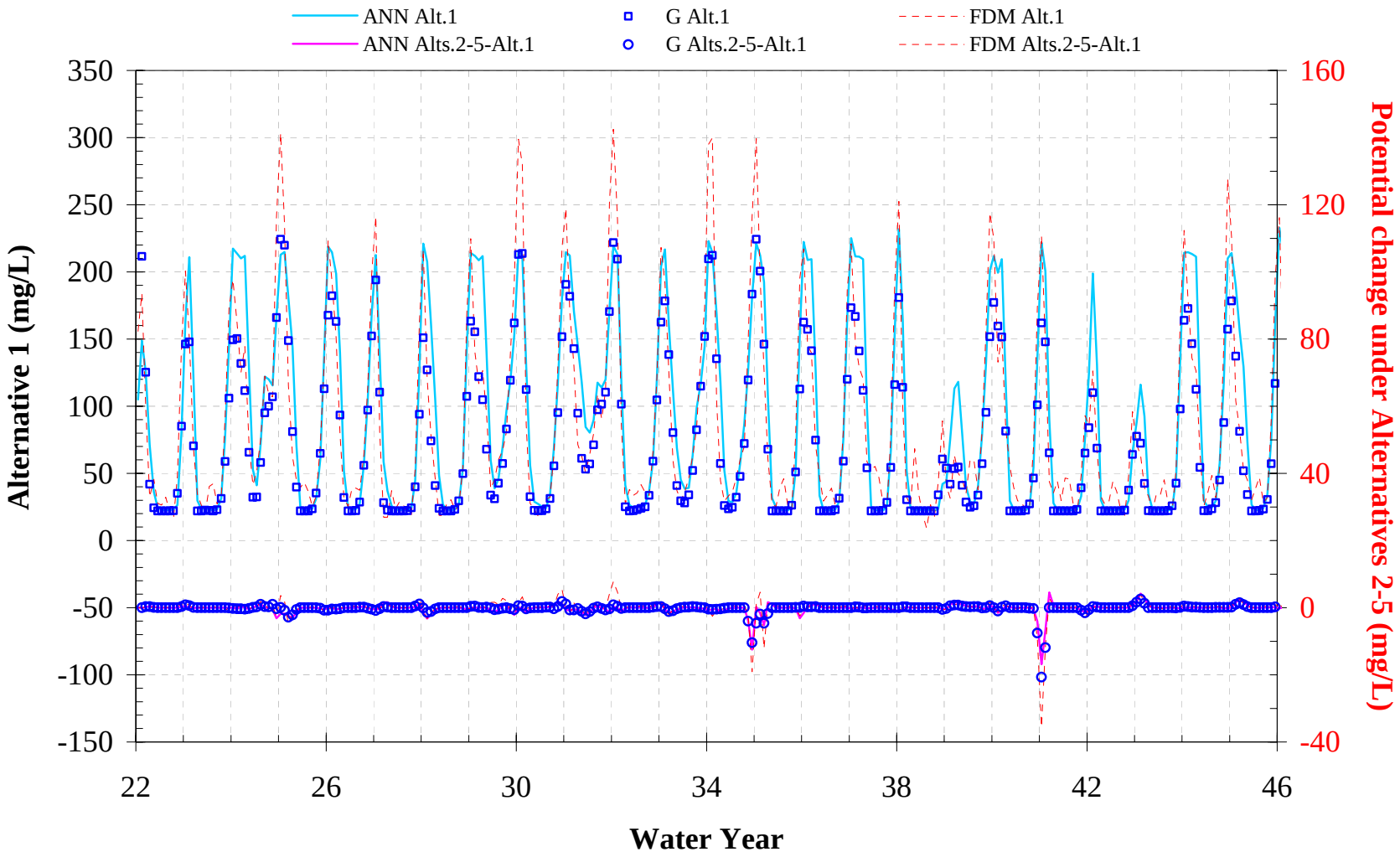


Figure 4.4.4-5b Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1-5 at 2020 LoD

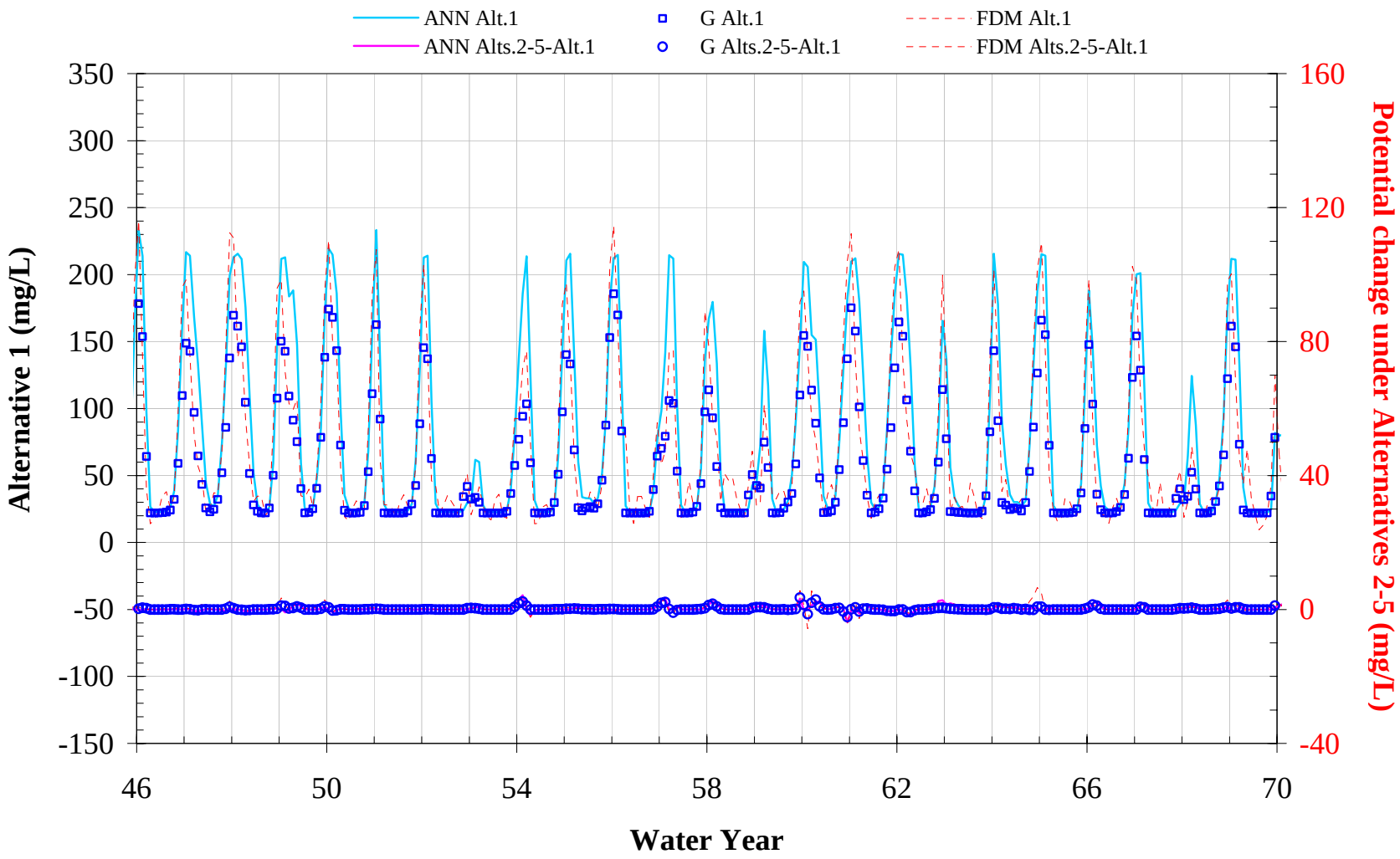
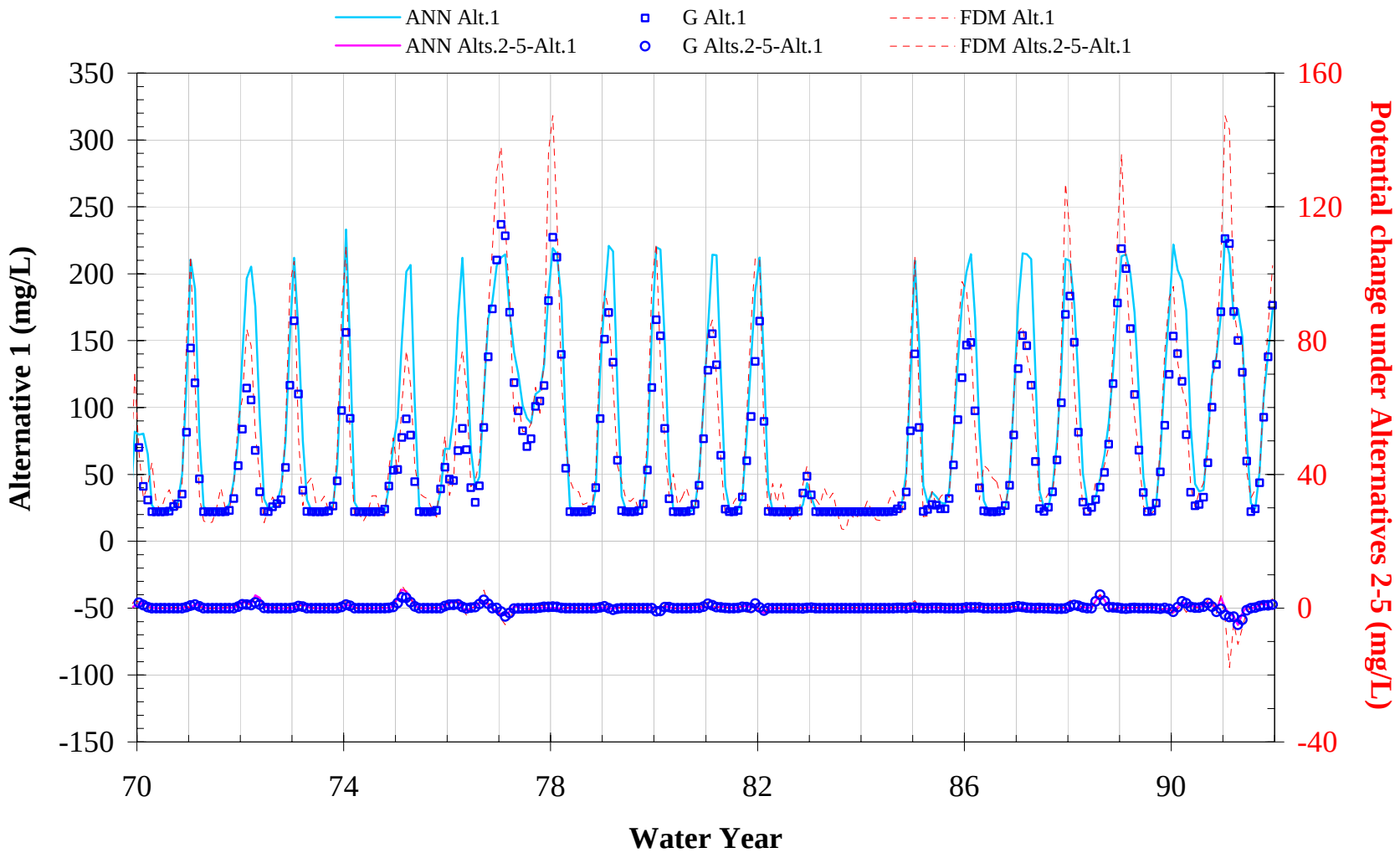


Figure 4.4.4-5c Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1-5 at 2020 LoD



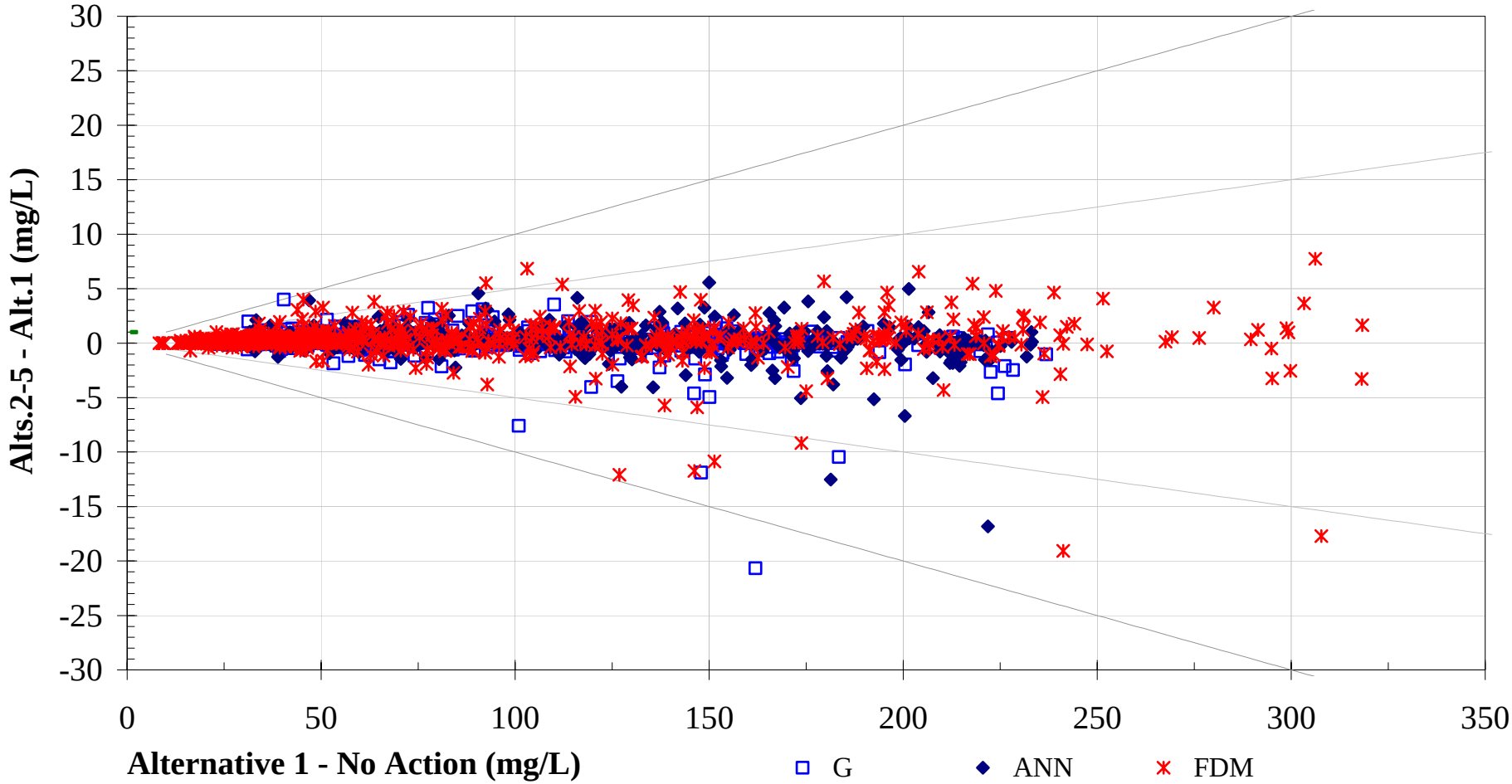


Figure 4.4.4-6 Potential change in monthly-average chloride concentration in Rock Slough at Old River under Alternaitves 2-5 at 2020 LOD For each data point (indicated by a square), the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alts.2-5 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alts.2-5 have same salinity). A positive y-value would indicate an increase in salinity under Alts.2-5 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases salinity in Rock Slough. The solid lines represent the limits for impacts to be within ±5% and ±10% of Alt.1 value.

Figure 4.4.4-7a Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1 and 6 at 2020 LoD

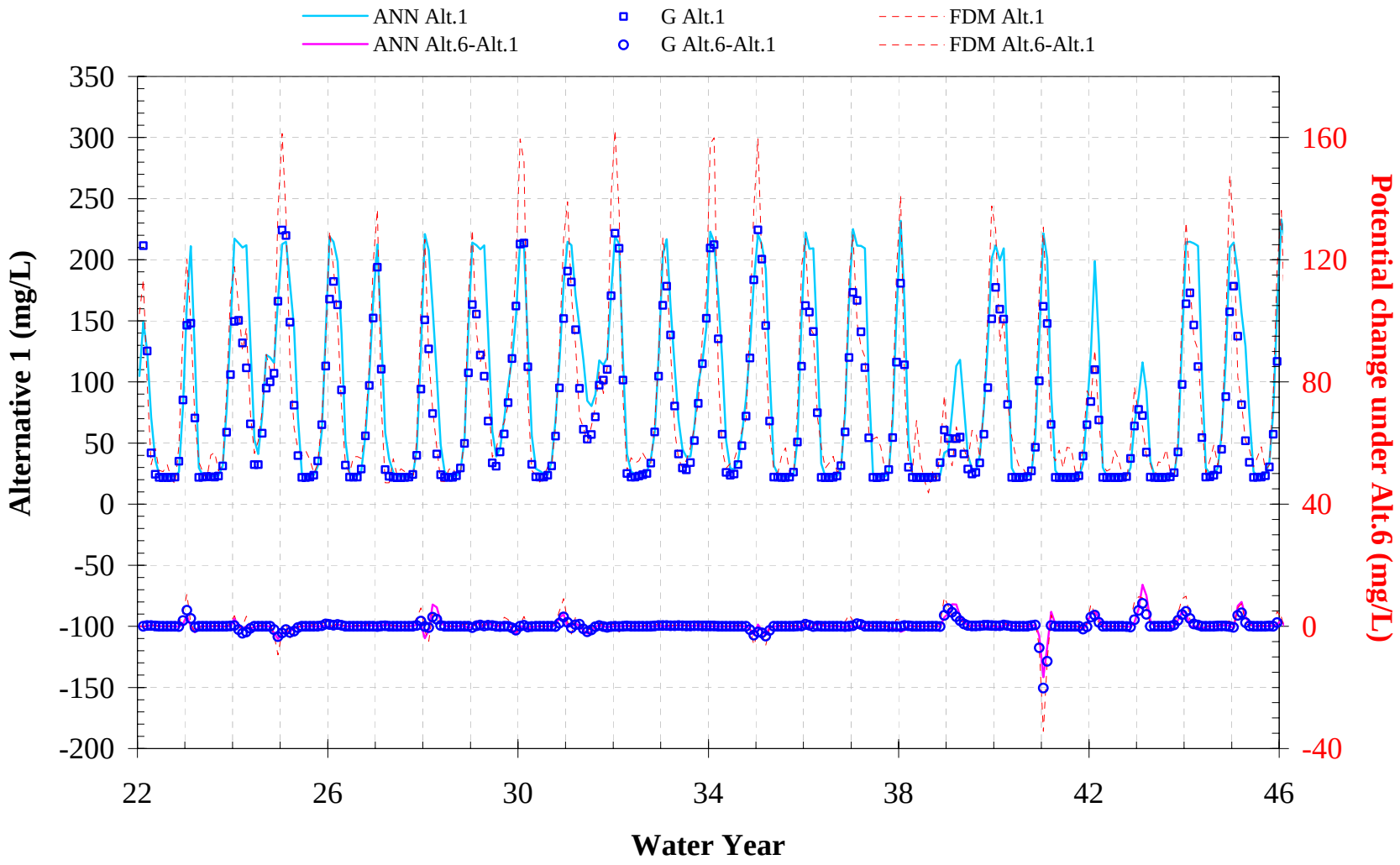


Figure 4.4.4-7b Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1 and 6 at 2020 LoD

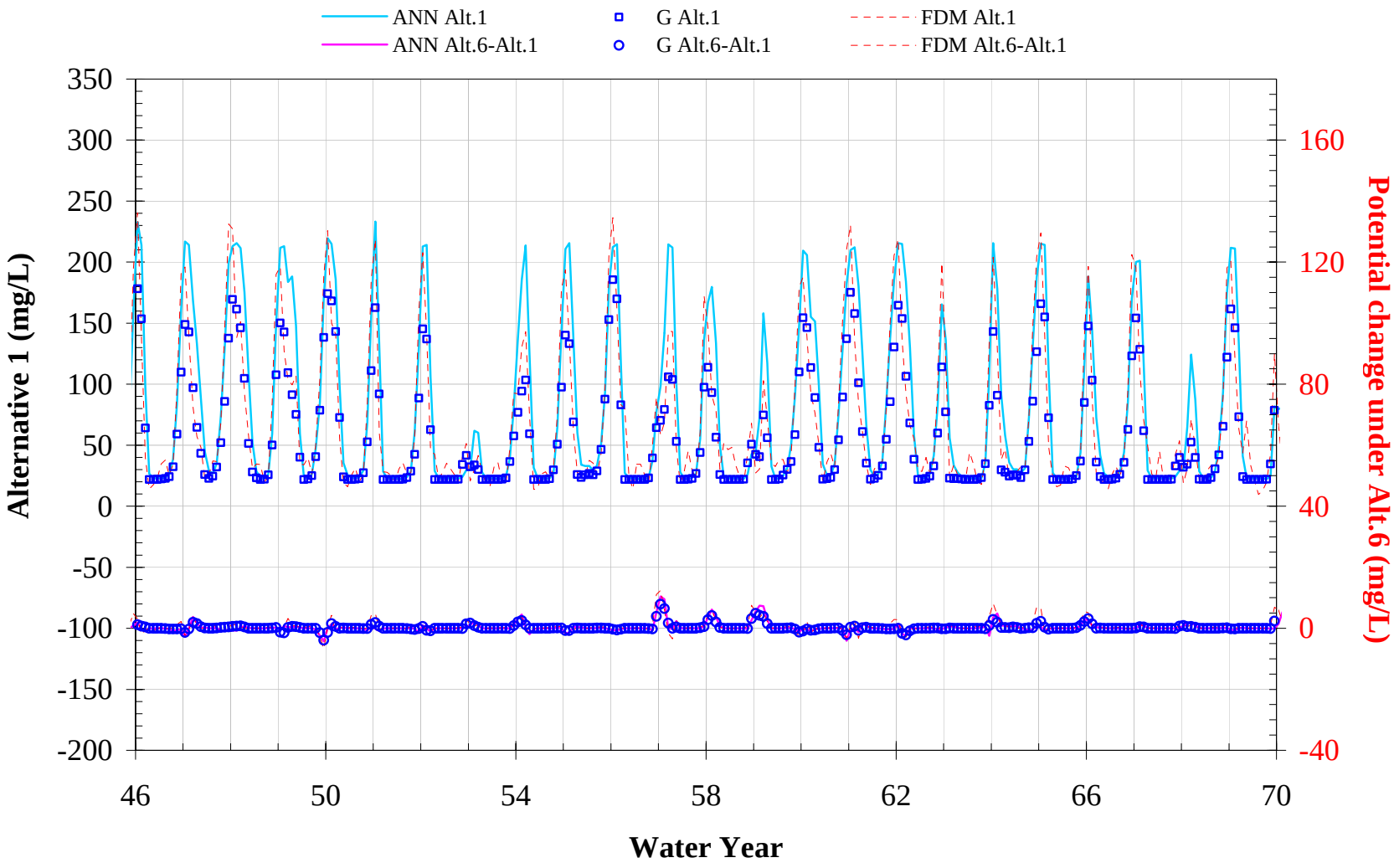
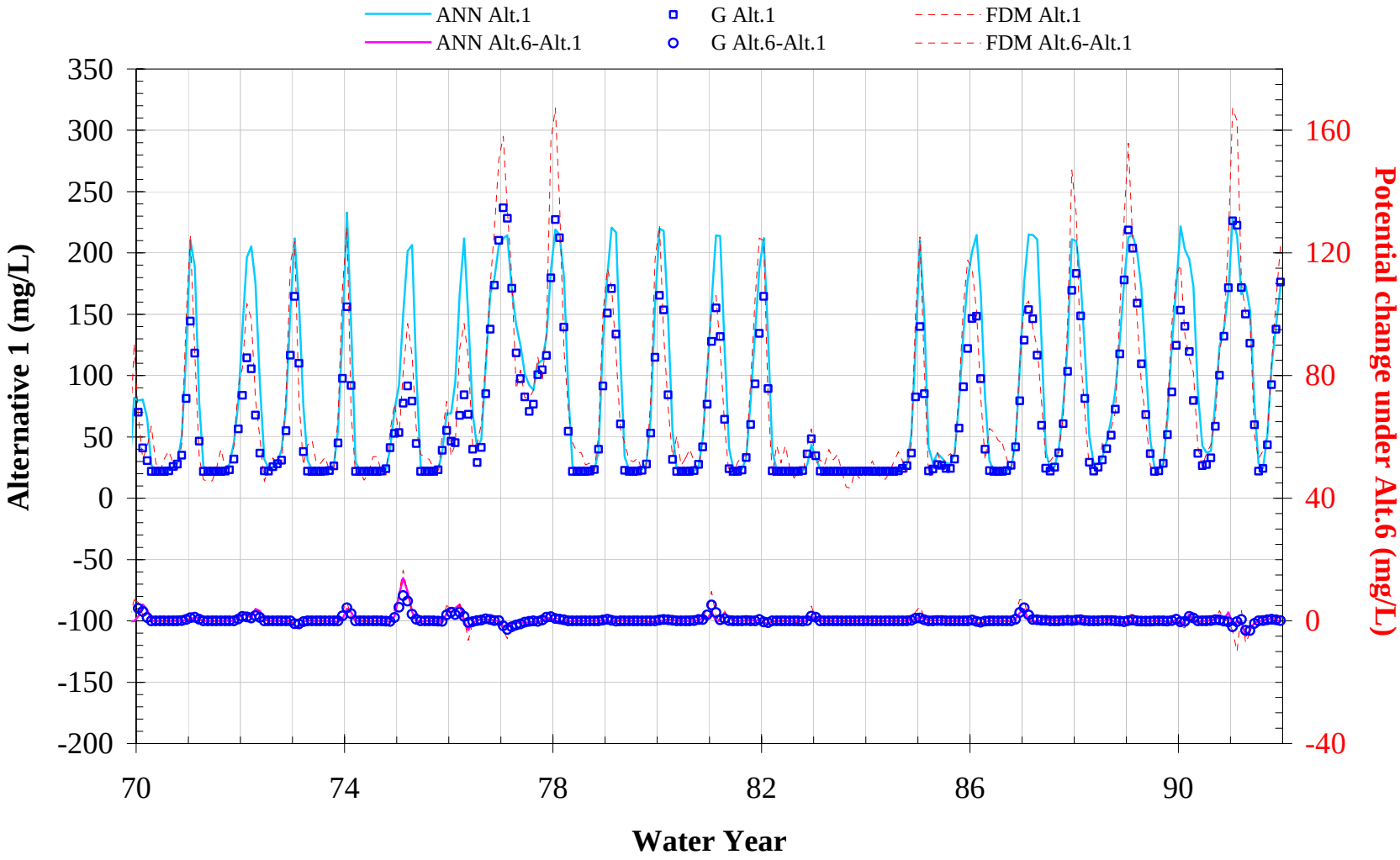


Figure 4.4.4-7c Simulated monthly-average chloride concentration in Rock Slough at Old River under Alternatives 1 and 6 at 2020 LoD



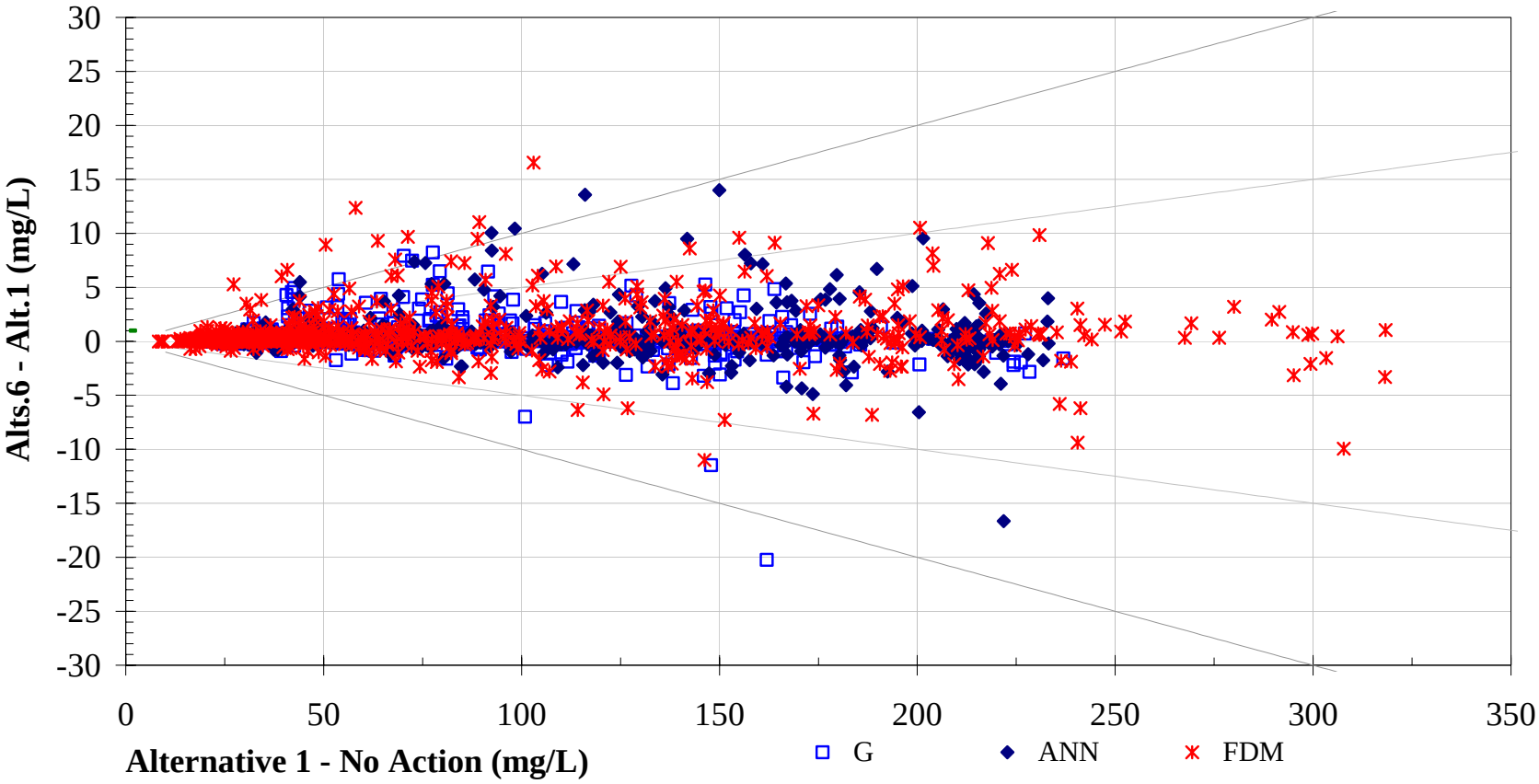
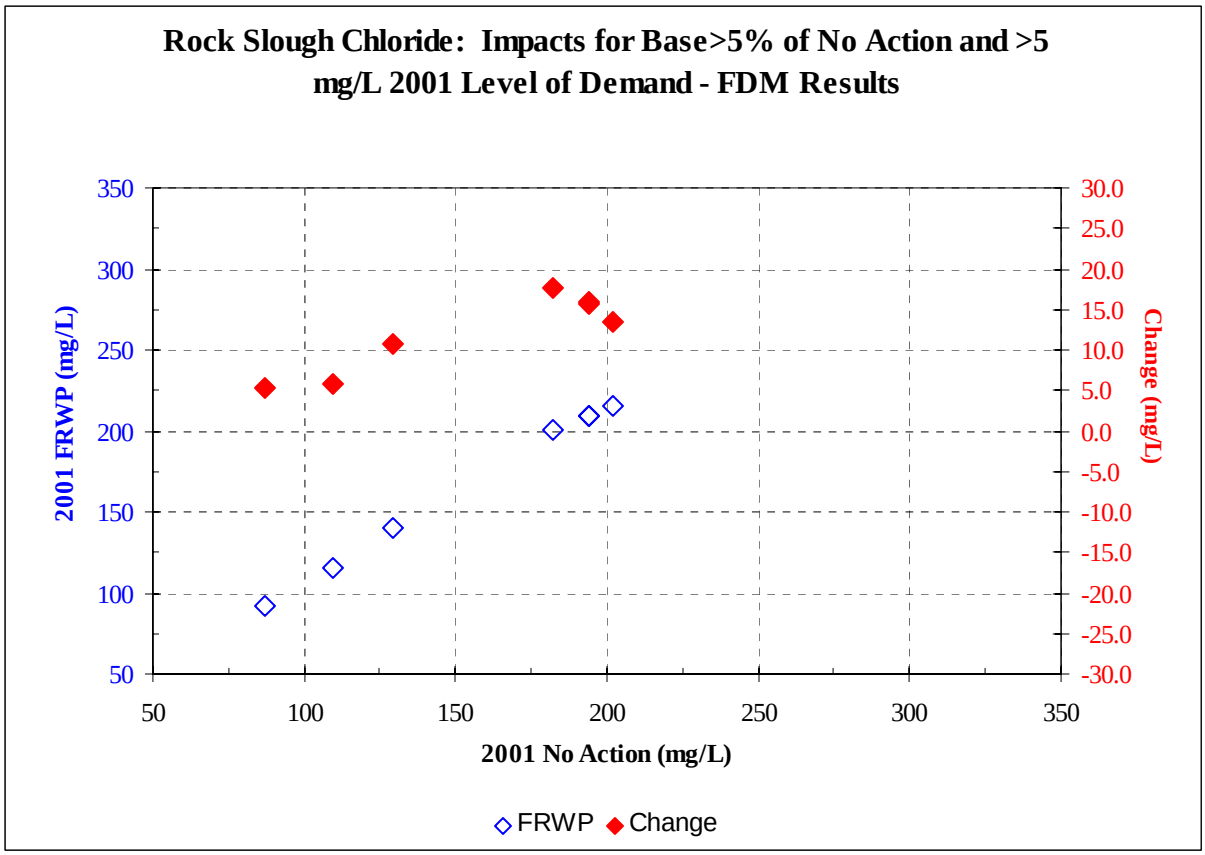
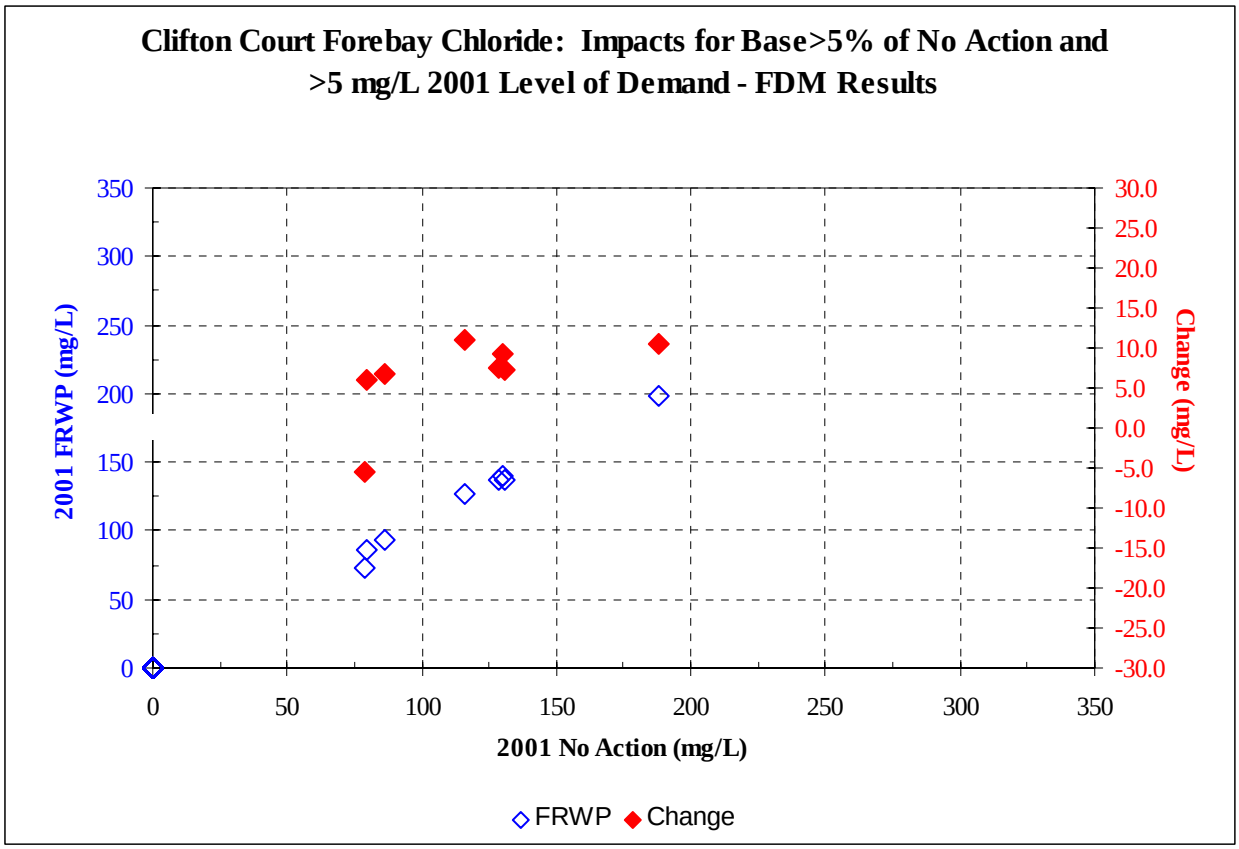


Figure 4.4.4-8 Potential change in monthly-average chloride concentration in Rock Slough at Old River under Alternaitve 6 at 2020 LOD For each data point (indicated by a square), the x-value is the salinity for Alt.1 for a particular month, and the y-value corresponds to the difference in simulated salinity between Alt.6 and Alt.1 for the same month. All data points on the horizontal line where the y-values are zero indicate that the project has no potential impact on salinity in that month (that is, Alt.1 and Alt.6 have same salinity). A positive y-value would indicate an increase in salinity under Alt.6 and a negative y-value would indicate a decrease. A comparison of the number of points above the y=0 line and the number below gives the frequencies the project increases and decreases salinity in Rock Slough. The solid lines represent the limits for impacts to be within ±5% and ±10% of Alt.1 value.



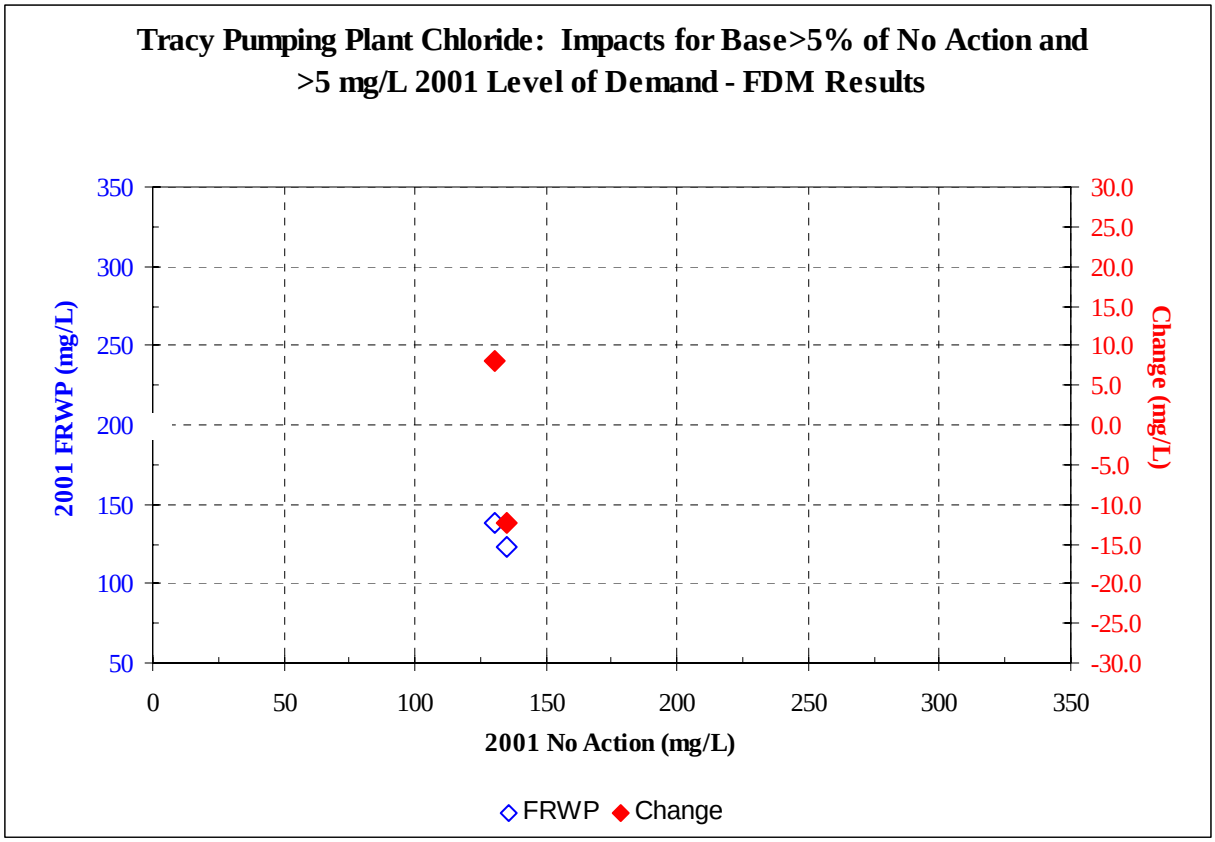
Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	0	0.0%	7	0.8%
Average Change (mg/L Cl^-)	0		12.1	
Distribution of Changes by Year Type				
YT 1 = Critical	0		2	
YT 2 = Dry	0		1	
YT 3 = Below Normal	0		0	
YT 4 = Above Normal	0		1	
YT 5 = Wet	0		3	

Figure 4.4.7.3.1-1. Potential changes in monthly-average chloride concentration in Rock Slough under Alternatives 2-5 at 2001 LOD. Only those months in which the difference is more than 5 mg/L and 5% of the Alternative 1 value are shown.



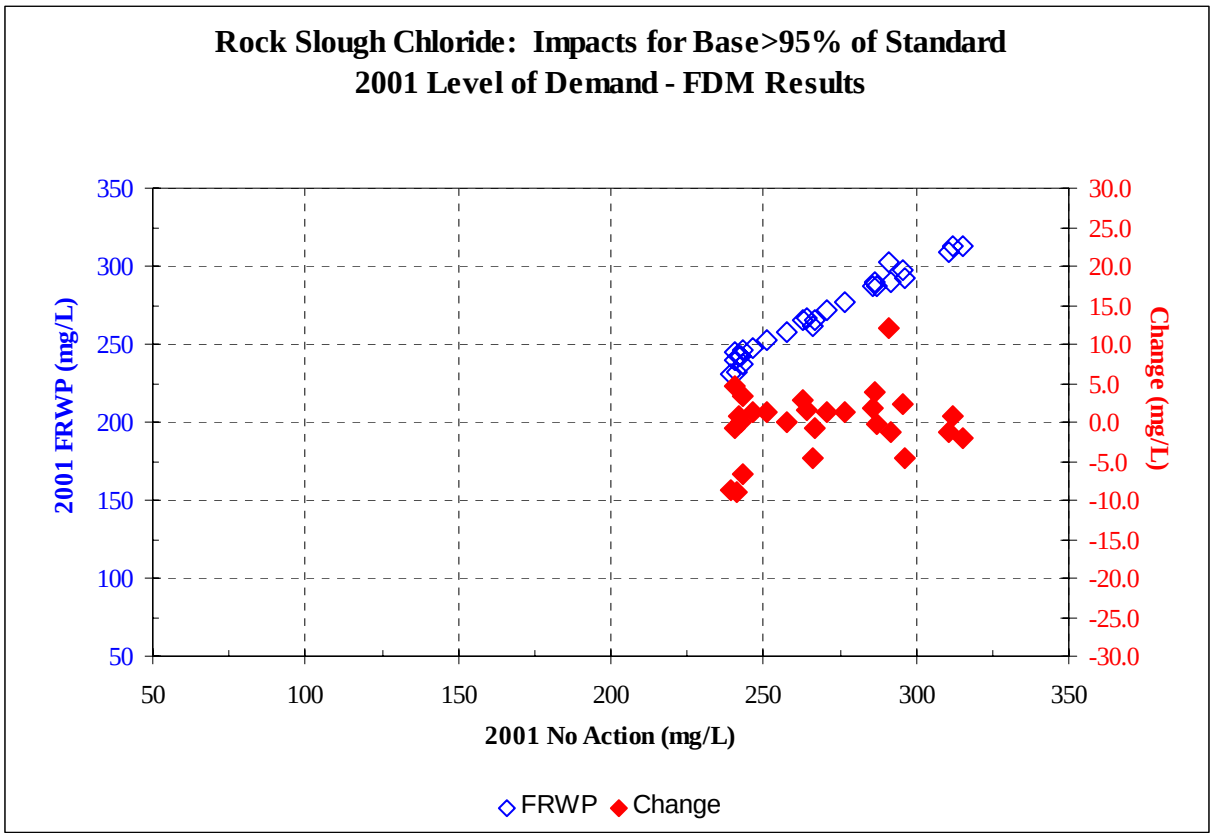
Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	1	0.1%	7	0.8%
Average Change (mg/L Cl^-)	-5.4		8.3	
Distribution of Changes by Year Type				
YT 1 = Critical	1		4	
YT 2 = Dry	0		1	
YT 3 = Below Normal	0		0	
YT 4 = Above Normal	0		1	
YT 5 = Wet	0		1	

Figure 4.4.7.3.1-2. Potential changes in monthly-average chloride concentration in Clifton Court Forebay under Alternatives 2-5 at 2001 LOD. Only those months in which the difference is more than 5 mg/L and 5% of the Alternative 1 value are shown.



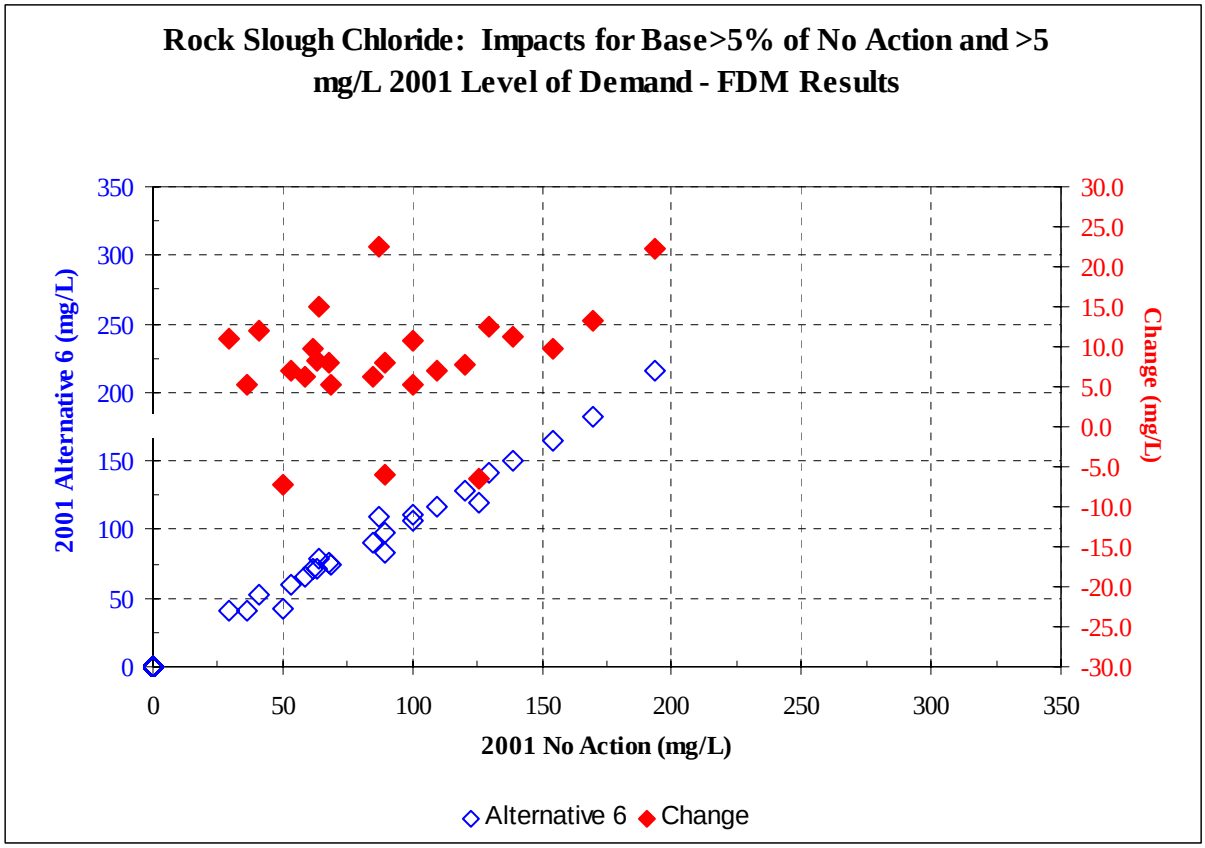
Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	1	0.1%	1	0.1%
Average Change (mg/L Cl^-)	-12.3		8.0	
Distribution of Changes by Year Type				
YT 1 = Critical	0		0	
YT 2 = Dry	1		1	
YT 3 = Below Normal	0		0	
YT 4 = Above Normal	0		0	
YT 5 = Wet	0		0	

Figure 4.4.7.3.1-3. Potential changes in monthly-average chloride concentration at Tracy Pumping Plant under Alternatives 2-5 at 2001 LOD. Only those months in which the difference is more than 5 mg/L and 5% of the Alternative 1 value are shown.



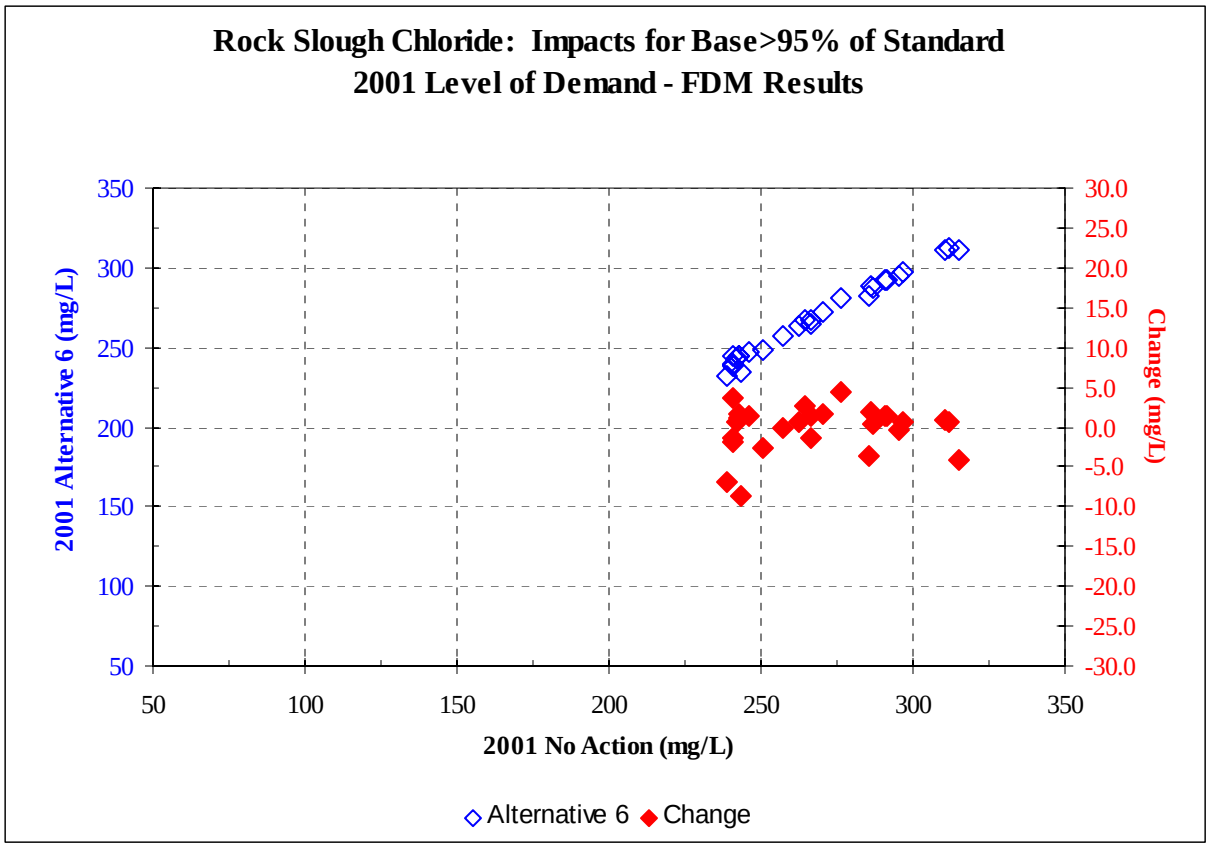
Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	12	1.4%	15	1.8%
Average Change (mg/L Cl^-)	-3.3		2.6	
Distribution of Changes by Year Type				
YT 1 = Critical	10		11	
YT 2 = Dry	2		3	
YT 3 = Below Normal	0		1	
YT 4 = Above Normal	0		0	
YT 5 = Wet	0		0	

Figure 4.4.7.3.1-4. Potential changes in monthly-average chloride concentration in Rock Slough under Alternatives 2-5 at 2001 LOD. Only those months in which the Alternative 1 value is 237.5 mg/L or higher (95% of the 250 mg/L standard) are shown.



Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	3	0.4%	22	2.6%
Average Change (mg/L Cl^-)	-6.6		10.2	
Distribution of Changes by Year Type				
YT 1 = Critical	0		0	
YT 2 = Dry	1		3	
YT 3 = Below Normal	0		0	
YT 4 = Above Normal	0		2	
YT 5 = Wet	2		17	

Figure 4.4.7.3.2-1. Potential changes in monthly-average chloride concentration in Rock Slough under Alternative 6 at 2001 LOD. Only those months in which the difference is more than 5 mg/L and 5% of the Alternative 1 value are shown.



Parameter	Months with Reduced Salinity	Percent of Total	Months with Increased Salinity	Percent of Total
Total Months	10	1.2%	17	2.0%
Average Change (mg/L Cl^-)	-3.1		1.5	
Distribution of Changes by Year Type				
YT 1 = Critical	8		13	
YT 2 = Dry	2		3	
YT 3 = Below Normal	0		1	
YT 4 = Above Normal	0		0	
YT 5 = Wet	0		0	

Figure 4.4.7.3.2-2. Potential changes in monthly-average chloride concentration in Rock Slough under Alternative 6 at 2001 LOD. Only those months in which the Alternative 1 value is 237.5 mg/L or higher (95% of the 250 mg/L standard) are shown.

5. Temperature and Salmon Mortality Modeling

The objective of the temperature and salmon mortality models is to assist in the fisheries impact evaluations for the project alternatives addressed in the DEIR/EIS.

USBR's temperature models were used to estimate monthly average temperatures in the Trinity, Sacramento, Feather, and American River systems. The joint DWR/USBR hydrologic simulation model CALSIM II provided monthly CVP/SWP project operations input to the temperature models for a 72-year hydrologic period (WY 1922-93). CALSIM II modeling is described in Section 3 of this appendix. Because of the complex structure of CALSIM II, flow arcs were combined at appropriate nodes to insure compatibility with the temperature models.

The USBR salmon mortality model computed salmon spawning losses for fall-run, winter-run, and spring-run chinook salmon in the four rivers, based on the temperature model estimates of water temperature.

Identical versions of the temperature and salmon mortality models were used for both the FRWP analyses and the preliminary working draft of the CVP OCAP.

5.1 TEMPERATURE MODELS

The USBR temperature models for the Sacramento, Feather, and American Rivers are documented in a 1990 USBR report (1). The Trinity River temperature model is documented in a 1979 USBR report (5). The models are also described in Appendix IX of the 1997 USBR Draft CVPIA-PEIS (2).

The reservoir temperature models simulate monthly mean vertical temperature profiles and release temperatures for Trinity, Whiskeytown, Shasta, Oroville and Folsom Reservoirs based on hydrologic and climatic input data. The temperature control devices (TCD) at Shasta, Oroville, and Folsom Dams can selectively withdraw water from different reservoir levels to provide downstream temperature control. The TCD's are generally operated to conserve cold water for the summer and fall months when river temperatures become critical for fisheries. The temperature models simulate the TCD operations by making upper level releases in the winter and spring, mid-level releases in the late spring and summer, and low level releases in the late summer and fall.

Temperature changes in the downstream regulating reservoirs: Lewiston, Keswick, Thermalito, and Natomas are computed from equilibrium temperature-decay equations in the reservoir models, which are similar to the river model equations.

The river temperature models simulate water temperatures at three locations on the Trinity River from Lewiston Dam to the North Fork, 12 locations on the Sacramento River from Keswick Dam to Freeport, 12 locations on the Feather River from Oroville Dam to the mouth, and nine locations on the American River from Nimbus Dam to the mouth. The river temperature calculations are based on regulating reservoir release temperatures, river flows, and climatic data. Monthly mean historical air temperatures for the 72-year period and other long-term average climatic data for Trinity, Shasta, Whiskeytown, Redding, Red Bluff, Colusa, Oroville, Marysville, Folsom and Sacramento were obtained from Weather Bureau records and used to represent climatic conditions for the four river systems.

5.2 SALMON MORTALITY MODEL

The USBR salmon mortality model is documented in a 1994 CVPIA-PEIS report (4). The model's generalized salmon loss calculation procedure is documented in Appendix A of the 1991 USBR Shasta TCD EIS (3).

The model uses DFG and FWS data on chinook salmon spawning distribution and timing in the river system (3)(4). Temperature units (TU), defined as the difference between river temperatures and 32° F, are calculated daily by the mortality model and used to track life-stage development. Eggs are assumed to hatch upon exposure to 750 TUs following fertilization. Fry are assumed to emerge from the gravel after exposure to 750 TUs following egg hatching into the pre-emergent fry stage.

Temperature-exposure mortality criteria for three life stages (pre-spawned eggs, fertilized eggs, and pre-emergent fry) are used along with the spawning distribution data and the results from the river temperature models to compute salmon spawning losses in percent. The temperature mortality rates for fertilized eggs, the most sensitive life stage, range from 8% in 24 days at 57° F to 100% in 7 days at 64° F or above (4).

Most salmon spawning generally occurs above the North Fork on the Trinity River, above Red Bluff on the Sacramento River for all four salmon runs, above Honcut Creek on the Feather River, and above Watt Ave on the American River. Fall-run salmon spawning usually occurs from mid-October thru December, peaking about mid-November. Winter-run salmon usually spawn on the Sacramento River during May-July, and spring-run salmon during August-October.

5.3 APPLICATION AND LIMITATIONS OF THE TEMPERATURE AND SALMON MORTALITY MODELING

Temperature and salmon mortality modeling was performed for each of the FRWP modeling scenarios described in Section 2.6. This involved three alternatives for both current (2001) and future (2020) conditions.

The temperature modeling results were used to calculate temperature suitability indices for chinook salmon and steelhead life stages, as described in Chapter 5 of the DEIR/EIS. The main limitation of the temperature models used for the FRWP EIR/EIS is the monthly time-step imposed by the CALSIM II results. Mean monthly flows and temperatures do not define daily variations that could occur in the rivers due to dynamic flow and climatic conditions. However, monthly results are still useful for general comparison of alternatives.

The salmon mortality model operates on a daily time-step. Therefore a procedure is required to utilize the monthly temperature model output. The salmon model computes daily temperatures based on linear interpolation between the monthly temperatures, which are assumed to occur on the 15th day of the month. The salmon mortality model is limited to temperature effects on early life stages of chinook salmon. It does not evaluate potential direct or indirect temperature impacts on later life stages, such as emergent fry, smelts, juvenile out-migrants, or adults. Also, it does not consider other

factors that may affect salmon mortality, such as in-stream flows, gravel sedimentation, diversion structures, predation, and ocean harvest.

5.4 SIMULATION RESULTS – 2001 LOD

The results of the modeling and salmon mortality modeling are presented in the following series of tables. Modeling of the project alternatives superimposed on current conditions (2001 level-of-development) are presented in this section.

5.4.1 Temperature modeling results

Temperature modeling results are included in Tables 5.4.1-1 through 5.4.1-30 for the Trinity River; the Sacramento River at three locations (Keswick Dam, Bend Bridge, and Red Bluff Diversion Dam), the Feather River below Thermolito, and the American River at Sunrise. At each location, the monthly-simulated water temperatures are listed for Alternative 1, followed by tables showing the change in water temperature for each of the action alternatives. A table is then included which displays frequency of change in water temperature for a range of water year types.

Table 5.4.1-1 Simulated Water Temperature Data for the Trinity River, Alternative 1, 2001 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				37.6	40.2	45.3	49.5	47.5	60.0	53.1	47.6	46.8
1923	45.3	42.0	37.5	36.6	43.9	48.9	49.1	46.1	48.8	47.6	48.4	50.5
1924	49.1	48.5	41.0	38.8	46.3	47.4	53.1	52.1	51.7	54.1	57.5	62.0
1925	52.5	44.4	35.5	38.8	42.6	48.6	52.5	46.3	53.2	52.1	52.3	52.2
1926	52.5	45.0	41.8	37.2	43.2	52.8	55.3	47.0	56.0	52.3	53.6	54.8
1927	54.5	47.8	38.3	38.1	41.7	47.3	52.9	46.8	60.8	53.0	50.8	45.8
1928	46.5	44.3	38.5	38.0	43.6	49.5	50.0	48.7	50.7	53.1	48.6	46.9
1929	46.5	43.7	38.8	40.6	41.3	49.2	47.0	49.5	48.7	48.5	47.8	51.1
1930	54.2	51.4	43.1	36.0	44.4	49.8	49.5	45.3	53.5	51.2	52.9	53.8
1931	53.5	48.4	41.1	40.0	44.4	50.3	54.3	53.4	56.1	57.9	61.6	63.8
1932	55.9	43.3	35.4	36.1	41.7	50.3	50.6	49.4	60.5	57.6	62.3	68.3
1933	56.4	48.9	34.4	34.1	38.7	47.2	53.7	48.9	59.4	58.8	62.0	63.2
1934	60.9	50.9	37.0	40.7	44.0	54.6	55.7	52.2	54.8	57.5	61.3	65.3
1935	56.2	44.2	40.0	36.8	42.6	44.0	51.3	47.3	59.3	52.5	58.3	60.6
1936	55.5	45.7	41.0	40.2	41.1	50.7	54.2	47.2	56.7	54.5	56.1	57.2
1937	56.6	51.1	40.7	30.7	38.2	46.6	50.5	45.4	53.1	53.4	54.9	54.6
1938	53.4	45.5	41.8	40.1	40.5	44.2	53.1	48.5	63.4	53.0	51.7	47.6
1939	45.3	43.5	42.4	42.6	41.4	48.9	52.8	48.9	50.2	49.6	48.6	47.1
1940	48.0	47.6	42.7	39.9	42.6	50.4	51.9	48.3	52.8	52.5	49.2	46.6
1941	47.3	44.5	41.3	39.1	43.5	45.2	46.5	46.1	47.3	48.7	51.6	49.4
1942	48.6	46.8	46.4	43.3	43.1	44.8	51.2	47.1	51.4	49.4	52.0	47.6
1943	46.8	43.6	41.4	41.4	44.0	45.4	50.9	48.0	56.2	53.1	51.0	47.8
1944	45.7	41.9	40.9	41.3	41.0	48.9	47.7	50.2	48.9	48.6	48.4	48.1
1945	48.0	43.5	41.9	38.7	43.8	44.9	52.4	47.1	59.2	53.8	48.6	48.9
1946	49.1	41.8	36.7	37.4	39.6	47.4	53.6	46.5	48.9	51.9	47.4	45.8
1947	44.6	43.3	39.6	38.0	45.3	49.5	52.5	47.7	50.3	48.8	48.1	49.0
1948	49.7	47.2	40.6	43.2	41.9	44.2	47.7	46.9	53.6	52.8	51.4	58.1
1949	51.7	43.3	35.5	34.2	37.9	45.8	55.3	44.6	48.9	50.1	44.8	45.0
1950	46.6	46.8	39.4	33.6	41.3	45.7	51.4	44.8	51.4	50.8	47.9	46.6
1951	46.8	45.5	38.3	35.4	41.2	47.6	51.6	46.6	50.6	51.8	47.6	46.5
1952	44.1	42.6	36.2	34.2	41.5	45.5	47.6	44.3	46.6	46.7	49.1	46.0
1953	46.4	43.6	39.8	43.8	44.3	48.8	52.0	47.3	50.4	49.0	50.9	48.4
1954	46.5	44.3	43.5	40.6	44.1	44.6	47.7	48.0	50.5	53.4	48.6	47.4
1955	48.3	43.3	38.1	41.2	42.1	48.2	49.8	47.4	50.8	48.4	48.5	47.2
1956	47.5	43.8	37.9	37.8	40.5	49.1	48.0	46.4	49.7	48.7	50.6	46.7
1957	45.2	46.1	42.4	39.0	45.3	46.9	49.3	47.9	62.5	53.2	48.6	47.5
1958	46.4	43.9	42.7	42.8	43.5	43.9	48.1	45.8	47.8	48.7	52.4	48.6
1959	48.1	45.8	45.6	45.3	43.3	47.6	52.2	49.5	54.1	51.6	50.4	48.9
1960	50.3	48.1	43.0	39.1	42.9	49.3	50.7	47.4	56.8	50.7	49.6	49.5
1961	49.5	45.6	39.4	39.1	45.0	47.5	54.0	47.4	56.6	54.2	49.4	48.4
1962	49.0	45.5	40.2	41.7	41.5	46.9	55.1	48.3	55.0	54.4	49.9	49.7
1963	52.8	45.9	40.9	38.3	48.1	47.6	50.7	48.5	60.6	51.4	52.4	48.6
1964	46.5	44.0	41.5	39.4	43.9	48.2	50.9	47.1	49.8	49.2	48.6	47.4
1965	48.8	43.5	38.9	38.8	44.5	45.7	53.3	48.0	59.9	53.4	48.7	46.6
1966	47.9	43.9	35.5	37.4	40.9	45.6	48.0	48.7	61.2	48.8	48.2	46.4
1967	46.1	44.8	37.8	38.6	44.9	45.1	47.6	49.1	49.4	50.2	53.6	48.8
1968	47.2	47.4	41.5	42.0	44.4	47.3	51.7	48.3	52.5	50.3	48.5	47.7
1969	47.7	44.1	37.1	34.0	38.3	49.3	54.5	44.2	47.6	47.6	51.0	46.1
1970	45.0	46.7	45.2	45.1	45.2	46.9	49.3	49.3	52.7	51.0	49.6	48.1
1971	47.8	44.7	35.9	37.4	42.7	45.4	52.5	46.6	50.4	49.1	52.5	47.1
1972	45.4	43.2	38.8	40.2	43.3	43.8	52.1	47.6	51.6	52.4	48.1	46.2
1973	45.3	42.2	32.9	35.0	44.2	45.3	50.9	46.8	59.1	48.4	46.7	44.9
1974	45.9	42.8	44.8	42.4	42.7	43.1	48.9	46.0	47.7	47.7	51.2	47.7
1975	47.3	43.8	40.7	42.2	41.2	44.9	49.2	48.6	49.0	49.4	51.7	49.0
1976	45.9	43.2	43.1	44.8	43.0	47.6	50.8	50.2	52.5	50.7	49.5	49.9
1977	49.9	47.4	42.9	40.2	46.8	47.1	52.8	50.1	52.9	51.0	57.8	61.3
1978	57.7	45.6	39.9	40.6	44.0	52.1	51.9	47.3	62.1	53.0	51.8	46.5
1979	50.2	43.4	37.0	38.4	41.4	49.1	49.1	48.0	58.7	52.0	47.6	46.8
1980	45.6	39.8	36.7	37.3	42.2	44.9	49.1	46.1	48.3	51.1	47.0	45.5
1981	45.2	42.9	40.6	38.7	43.1	47.5	52.7	47.6	51.7	49.1	48.4	46.6
1982	45.3	43.1	37.5	37.2	40.8	41.7	46.6	45.5	48.3	47.7	48.9	44.9
1983	43.3	40.6	41.2	41.2	41.7	42.3	46.9	44.0	44.7	46.5	50.3	50.2
1984	50.4	49.3	46.3	43.0	42.6	47.3	49.5	48.6	51.2	54.0	48.9	47.6
1985	48.3	42.4	40.7	40.6	42.9	44.6	51.6	45.9	50.2	47.3	46.2	45.3
1986	45.9	42.6	39.9	40.9	44.8	50.7	46.8	47.2	51.3	48.4	48.6	46.4
1987	47.2	44.8	38.7	37.7	41.9	46.0	51.7	46.0	47.5	47.0	48.6	51.0
1988	53.0	45.2	38.4	38.5	44.2	48.8	49.9	45.5	49.4	49.7	53.2	56.1
1989	55.5	44.3	38.6	37.2	39.7	46.3	52.7	45.9	52.9	50.2	49.9	51.3
1990	50.4	45.6	39.6	37.7	39.8	48.0	53.7	46.0	51.5	51.9	56.2	57.2
1991	54.8	45.0	34.9	37.5	44.3	43.9	49.2	49.0	56.2	56.2	57.7	64.0
1992	58.4	46.3	37.6	36.4	44.6	48.8	53.2	50.3	55.4	55.9	58.8	60.2
1993	56.3	44.6	36.4	35.8	40.1	49.1	52.4	45.0	57.9	66.2	51.4	55.9
1994	51.9	41.8	37.5									
Average	49.4	44.9	39.7	39.0	42.7	47.2	51.0	47.5	53.2	51.5	51.2	50.6
Minimum	43.3	39.8	32.9	30.7	37.9	41.7	46.5	44.0	44.7	46.5	44.8	44.9
Maximum	60.9	51.4	46.4	45.3	48.1	54.6	55.7	53.4	63.4	66.2	62.3	68.3

Table 5.4.1-2 Simulated Change in Water Temperature for the Trinity River, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				-0.1	-0.1	-0.1	0.0	-0.2	0.0	-0.1	-0.2	-0.1
1923	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	-0.1	0.1	0.3	0.3
1925	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	-0.9
1930	-0.6	-0.4	-0.1	1.3	0.0	0.0	0.1	0.1	0.0	-0.3	-0.5	-0.5
1931	-0.5	-0.2	0.1	0.0	0.0	-0.5	0.0	0.0	-1.7	-0.1	-0.2	-0.2
1932	0.1	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.3	0.5	0.5
1935	0.5	0.0	-0.1	-0.1	0.0	0.0	0.0	0.2	0.1	2.0	-1.1	-1.9
1936	-0.7	0.1	0.1	0.0	0.1	0.0	-1.0	0.2	-3.2	0.1	0.1	0.1
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1
1938	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.4	0.0	-0.2	-0.3	0.0	0.0	0.0
1940	0.1	0.3	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1941	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1948	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.3
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
1950	-0.4	-0.3	-0.2	-0.1	-0.3	0.0	0.0	0.0	0.0	-4.0	0.4	1.1
1951	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.1	0.1	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0
1953	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1955	-0.5	0.0	-1.6	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
1962	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	-0.1	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1
1965	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0
1973	0.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	-0.1	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	-0.3	0.0	-0.7	0.0	-0.1	0.1	0.7	0.3
1978	1.7	-0.3	0.0	0.0	-0.1	0.0	-0.1	-0.3	-0.1	-0.3	-0.2	0.3
1979	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	1.1	1.7	0.0	0.0	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1981	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.3	0.0
1982	0.1	0.0	0.0	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	-0.7	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.1	0.0	0.0
1987	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1988	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.1	0.1	0.2
1989	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1
1990	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.4	0.4
1991	0.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.7	0.9
1992	0.0	-0.8	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.3
1993	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1994	0.1	0.0	0.0									
Average	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
Minimum	-0.7	-0.8	-1.6	-1.5	-0.3	-0.5	-1.0	-0.3	-3.2	-4.0	-1.1	-2.3
Maximum	1.7	1.8	2.1	1.3	0.2	0.8	2.8	0.2	0.1	2.0	0.9	1.1

Table 5.4.1-3 Simulated Change in Water Temperature for the Trinity River, Alternative 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				-0.1	-0.1	-0.1	0.0	-0.2	0.0	-0.1	-0.2	-0.1
1923	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.1	0.2	0.2
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	0.3	0.2
1947	1.0	-0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.1	0.1
1948	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	-1.1
1949	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
1950	-0.4	-0.2	-0.1	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
1951	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1
1952	-0.1	0.0	0.0	0.0	0.0	0.0	-1.1	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
1955	-0.6	0.0	-1.6	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.1	0.3	0.2
1973	0.4	0.0	0.0	0.0	0.0	1.5	4.3	0.1	1.4	0.0	0.0	0.0
1974	-0.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	-1.1	0.0	0.0	-0.7	0.0	0.0	0.0	-0.1	0.0
1978	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
1982	0.1	0.0	0.0	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	-0.8	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.1	0.0	0.0
1987	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.4	0.4
1991	0.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.7	0.9
1992	0.0	-0.8	0.0	-0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.2
1993	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
1994	0.0	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0
Minimum	-0.6	-0.8	-1.6	-1.5	-0.3	-0.1	-1.1	-0.2	-0.1	-3.5	-0.3	-1.1
Maximum	1.0	0.1	0.9	0.1	0.0	1.5	4.3	0.1	5.5	0.3	0.7	2.3

Table 5.4.1-4 Frequency of Change in Water Temperature in the Trinity River According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+5.5	0	0	1	0	0
<+5.0	0	0	0	0	0
<+4.5	0	1	0	0	0
<+4.0	0	0	0	0	0
<+3.5	0	0	0	0	0
<+3.0	0	0	0	0	0
<+2.5	0	1	0	0	0
<+2.0	0	0	0	0	0
<+1.5	0	2	0	0	0
<+1.0	0	0	0	2	2
<+0.5	11	5	12	6	22
0.0	233	93	143	170	99
>-0.5	5	15	9	12	6
>-1.0	1	0	0	1	2
>-1.5	1	0	1	0	1
>-2.0	1	0	0	1	0
>-2.5	0	0	0	0	0
>-3.0	0	0	0	0	0
>-3.5	0	0	1	0	0
>-4.0	0	0	1	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-5 Frequency of Change in Water Temperature in the Trinity River According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+2.4	0	1	0	0	0
<+2.2	0	0	0	0	0
<+2.0	0	0	0	0	0
<+1.8	0	0	0	0	0
<+1.6	0	0	0	0	0
<+1.4	0	0	0	0	0
<+1.2	1	0	0	0	0
<+1.0	0	0	0	0	1
<+0.8	0	0	2	0	0
<+0.6	0	0	1	1	3
<+0.4	2	2	1	4	4
<+0.2	15	7	10	14	10
0.0	207	86	123	147	83
>-0.2	26	16	24	21	21
>-0.4	1	3	6	3	8
>-0.6	0	2	1	1	0
>-0.8	0	0	0	1	0
>-1.0	0	0	0	0	0
>-1.2	0	0	0	0	1
>-1.4	0	0	0	0	1
Total Number of Months	252	117	168	192	132

Table 5.4.1-6 Simulated Water Temperature Data for the Sacramento River at Keswick Dam, Alternative 1, 2001 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				44.8	45.2	49.3	49.7	48.2	47.2	48.6	49.6	48.5
1923	47.8	47.2	46.4	43.6	50.8	55.3	49.7	47.5	46.7	49.3	49.7	48.3
1924	49.3	52.9	49.6	45.6	47.2	48.4	49.4	48.6	47.9	54.9	64.9	65.1
1925	57.8	51.5	44.6	43.5	46.0	47.1	49.1	48.6	48.1	50.9	50.7	51.0
1926	54.8	53.3	49.9	45.1	45.6	55.5	50.4	48.5	48.2	50.4	51.1	50.1
1927	54.6	54.4	49.5	45.6	47.0	51.2	48.8	47.7	47.3	48.9	49.8	48.8
1928	50.5	51.4	49.0	45.4	49.3	53.3	49.6	48.3	47.3	48.9	50.3	49.3
1929	49.3	51.4	47.6	43.0	43.7	54.9	49.1	48.3	47.3	49.5	50.1	48.6
1930	50.4	56.6	53.0	44.7	44.8	54.2	49.9	47.8	47.3	49.9	50.7	47.5
1931	49.5	52.2	50.4	47.2	47.6	49.2	49.4	48.9	48.9	54.1	64.8	66.0
1932	60.6	52.2	44.3	42.7	43.8	50.9	49.3	49.7	48.6	50.8	57.2	63.5
1933	62.6	56.4	46.3	41.2	41.3	49.5	49.6	48.0	47.8	49.5	57.9	64.0
1934	63.6	57.5	47.6	46.0	50.2	56.6	50.4	48.5	47.8	54.7	64.3	66.4
1935	60.7	52.1	48.3	44.2	46.1	47.8	49.9	48.8	47.5	49.7	53.0	57.5
1936	59.2	54.6	49.6	47.4	46.6	54.9	50.1	48.3	47.5	49.3	50.8	50.8
1937	53.6	55.3	51.4	40.3	40.2	43.4	48.7	48.2	47.2	50.2	50.6	46.9
1938	45.2	47.3	51.2	48.1	46.5	47.1	48.5	48.2	48.0	49.5	50.0	50.7
1939	52.7	53.7	51.0	46.9	45.8	53.5	49.3	47.6	47.5	49.7	50.0	52.5
1940	54.4	56.0	51.3	45.9	47.9	53.1	49.7	48.4	48.3	49.4	50.3	49.0
1941	50.8	51.9	50.6	47.3	49.0	53.5	48.4	47.7	48.1	49.6	49.3	48.8
1942	52.2	54.0	49.8	46.2	46.9	49.2	49.2	47.1	47.7	50.1	49.5	47.9
1943	50.4	52.3	48.1	45.9	50.1	51.8	49.7	48.0	46.8	48.7	49.5	49.7
1944	49.3	50.1	49.7	45.9	46.0	53.8	48.8	48.0	47.3	49.4	49.8	50.1
1945	51.1	51.2	49.2	46.2	49.0	48.9	49.9	47.7	47.6	48.8	49.9	49.8
1946	50.1	50.3	47.6	44.9	44.5	51.0	49.5	47.8	46.7	49.1	49.7	48.3
1947	47.7	47.9	48.0	44.9	52.0	54.4	50.4	47.9	46.9	49.1	49.3	51.5
1948	54.9	53.4	48.4	46.7	46.1	47.0	48.6	47.6	47.4	49.4	49.8	48.1
1949	50.2	51.4	46.4	41.0	42.8	48.0	50.1	47.9	47.4	49.0	49.2	46.3
1950	44.5	43.3	48.5	40.3	46.7	50.3	50.2	48.2	47.1	49.3	50.1	47.0
1951	45.3	42.1	49.4	44.4	46.4	51.8	49.5	48.0	47.5	49.2	50.0	49.0
1952	48.3	44.9	47.2	42.8	46.5	48.4	48.4	48.0	47.9	49.6	49.0	45.4
1953	45.9	46.9	48.3	48.0	48.6	52.4	49.6	47.1	47.0	49.7	49.7	47.6
1954	49.7	51.7	49.7	46.4	50.8	49.2	48.8	48.0	48.0	48.9	50.2	49.8
1955	50.1	52.1	47.9	44.0	46.8	53.1	48.7	48.4	47.1	49.3	50.1	49.8
1956	49.1	50.0	48.6	45.6	45.8	53.0	49.6	47.6	48.8	50.1	49.2	46.7
1957	48.2	53.1	51.7	46.0	51.1	51.9	48.9	48.2	47.6	49.0	49.9	51.1
1958	48.7	51.8	48.5	46.0	49.0	48.4	48.6	48.6	48.0	49.7	49.5	50.4
1959	53.9	55.6	54.1	49.3	48.5	53.4	49.6	48.1	48.8	51.3	53.1	54.3
1960	56.0	57.5	51.8	45.7	45.9	53.5	49.6	47.9	47.8	49.9	50.3	50.7
1961	50.7	51.3	48.8	46.3	50.6	51.1	49.5	47.7	47.9	48.9	49.9	52.8
1962	54.3	54.5	48.4	46.3	46.9	50.1	50.3	47.9	47.7	49.2	50.6	50.9
1963	50.7	54.1	52.0	46.7	53.6	51.7	48.2	48.4	47.9	49.3	50.3	51.7
1964	50.8	51.7	47.9	45.0	49.2	52.7	48.9	47.8	47.6	49.7	50.0	49.8
1965	50.7	50.8	48.8	46.6	50.6	53.2	49.0	48.0	47.3	48.9	50.7	49.1
1966	48.6	50.5	47.7	44.9	46.2	52.2	49.2	48.5	46.6	49.2	50.1	49.2
1967	50.1	50.3	49.8	46.4	51.0	49.6	48.2	47.4	48.4	50.4	49.9	50.2
1968	52.9	55.5	50.9	45.2	52.6	52.7	49.4	48.2	47.4	50.3	50.3	50.1
1969	52.8	53.0	46.4	42.6	44.4	52.3	48.6	47.7	48.4	49.9	49.8	45.9
1970	46.1	50.5	51.5	47.8	52.5	52.4	48.9	48.5	48.0	49.6	51.0	50.1
1971	49.7	50.3	48.2	45.2	48.2	49.1	49.2	47.6	47.9	50.4	50.1	47.7
1972	49.5	52.7	47.4	44.0	48.8	53.3	49.0	48.2	46.9	49.6	50.4	50.1
1973	50.0	48.1	45.6	42.7	49.3	49.6	50.1	48.8	47.5	49.9	50.3	48.1
1974	46.1	48.8	47.8	45.3	48.2	51.5	48.9	49.1	49.2	49.8	49.4	47.1
1975	49.3	53.1	49.1	46.3	46.7	49.1	49.1	47.9	49.4	50.2	49.3	50.3
1976	52.3	52.9	49.7	46.7	48.3	52.0	49.3	49.8	49.7	51.4	52.1	53.2
1977	51.7	51.8	53.0	47.5	47.2	47.4	48.9	48.2	48.7	54.0	66.2	64.9
1978	60.7	51.8	47.7	44.5	49.0	54.8	49.1	48.0	47.3	49.1	50.5	50.5
1979	47.6	47.0	48.0	45.1	46.7	52.2	49.2	48.1	46.6	48.5	50.3	50.0
1980	48.6	47.0	46.3	45.0	48.6	50.0	49.4	47.7	46.9	49.0	49.9	48.8
1981	47.8	46.6	48.7	45.8	48.2	51.1	50.0	47.8	47.3	49.5	50.1	50.6
1982	49.3	50.6	48.0	43.3	47.2	46.2	48.1	48.1	47.9	49.6	49.7	45.6
1983	44.9	46.4	46.4	44.5	46.8	49.9	48.2	48.0	47.4	48.9	49.1	48.9
1984	54.2	52.8	47.6	46.2	48.1	54.2	49.0	48.1	47.4	49.2	50.7	50.3
1985	46.1	49.4	46.1	43.1	48.8	48.9	49.9	47.4	47.0	49.3	49.2	47.6
1986	48.6	49.3	46.2	45.6	49.5	53.8	49.5	47.9	47.5	49.9	49.9	49.4
1987	48.9	49.7	48.1	43.8	47.4	49.3	49.1	47.7	47.5	49.0	50.0	48.2
1988	52.2	53.9	47.4	44.3	44.8	46.6	48.7	48.1	47.0	50.8	51.4	55.3
1989	59.8	52.8	46.9	44.0	44.2	47.0	50.3	47.7	47.3	49.4	50.3	50.2
1990	50.2	52.1	48.4	44.9	44.3	46.6	47.5	48.4	47.2	49.9	51.6	55.7
1991	58.8	54.0	44.3	43.9	50.6	47.5	49.5	47.9	47.6	49.5	50.6	55.7
1992	60.5	55.5	47.8	44.1	48.5	48.7	50.3	48.5	47.1	50.8	60.7	64.9
1993	61.7	53.4	45.5	42.9	44.7	50.2	49.3	47.3	47.2	48.5	50.0	46.0
1994	49.2	51.1	47.6									
Average	51.6	51.5	48.6	45.1	47.5	50.9	49.3	48.1	47.6	49.8	51.4	51.2
Minimum	44.5	42.1	44.3	40.3	40.2	43.4	47.5	47.1	46.6	48.5	49.0	45.4
Maximum	63.6	57.5	54.1	49.3	53.6	56.6	50.4	49.8	49.7	54.9	66.2	66.4

Table 5.4.1-7 Simulated Change in Water Temperature for the Sacramento River at Keswick Dam, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
1925	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
1926	0.0	0.0	0.0	0.0	0.0	-0.7	0.0	0.0	-0.1	0.0	0.0	0.4
1927	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	-0.2	0.1
1930	1.1	0.7	0.0	0.0	-0.2	-1.4	0.0	0.0	0.0	0.0	0.0	-0.1
1931	0.7	0.8	0.0	0.0	0.0	0.2	-0.1	0.0	0.1	1.4	1.7	-0.6
1932	-0.3	0.1	-0.1	-0.1	-0.1	-0.9	0.0	0.0	0.5	0.4	0.6	0.8
1933	0.1	-0.1	-0.1	-0.1	0.0	-0.7	-0.1	0.0	0.0	1.1	1.5	1.0
1934	0.2	-0.3	-0.3	-1.2	-0.6	0.1	0.0	0.0	0.2	2.0	1.3	-0.7
1935	-0.2	-0.9	-0.4	-0.2	-1.0	0.0	0.0	0.0	0.1	0.1	0.4	0.3
1936	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.5	0.0	-0.2
1937	-0.5	-0.5	0.0	0.0	-0.1	-0.2	0.0	0.0	0.0	-0.2	0.0	0.0
1938	-0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.6	-0.4
1940	-0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.3
1948	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	0.0	0.2
1949	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.6
1950	0.0	0.1	0.0	0.1	-1.0	0.0	0.0	0.0	0.0	0.2	-0.2	0.2
1951	-1.4	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1952	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1955	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.2	0.1	0.0	0.0	-0.1	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1
1961	0.4	0.4	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1962	-0.1	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.1	0.2
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.2
1969	0.4	0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1
1973	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	-0.2	0.0	0.5
1974	0.5	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	0.0	0.0
1977	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.3	0.5	0.2
1978	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1980	-0.5	0.8	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1982	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0
1987	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1988	0.4	0.1	0.0	0.0	-0.1	0.1	0.2	0.0	-0.1	0.0	0.3	0.8
1989	0.8	0.0	-0.1	-0.1	0.2	-0.2	0.0	0.0	0.0	0.0	0.1	0.3
1990	-0.3	0.4	0.0	0.0	0.0	-0.5	-0.1	0.0	-0.1	0.1	-0.1	1.0
1991	0.5	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.4
1992	0.4	0.0	-0.1	0.0	0.3	0.2	0.1	0.1	0.0	0.2	0.6	0.3
1993	-0.1	-0.2	-0.1	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
1994	0.2	0.1	0.0									
Average	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.1	0.1
Minimum	-1.4	-0.9	-0.4	-1.2	-1.0	-1.4	-0.1	-0.1	-0.1	-0.2	-0.2	-0.7
Maximum	1.1	0.8	0.1	0.1	0.3	0.2	0.2	0.1	0.5	2.0	1.7	1.0

Table 5.4.1-8 Simulated Change in Water Temperature for the Sacramento River at Keswick Dam, Alternatives 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1923	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1925	0.0	-0.1	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.3
1926	0.1	0.0	0.0	0.0	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.2
1927	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1929	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0
1930	-0.1	-0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1932	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.3	0.0	0.2
1934	0.0	0.0	-0.1	-0.3	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.0
1935	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.2	-0.4	-0.7
1936	-1.1	-0.1	0.1	0.1	0.1	0.2	0.0	-0.1	0.0	-0.1	0.0	-0.1
1937	-0.6	-0.6	0.0	0.0	-0.1	0.2	0.0	0.0	0.0	-0.3	0.0	0.0
1938	-0.4	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1940	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1946	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
1947	-0.4	0.6	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.4
1948	0.2	0.0	-0.2	0.0	0.0	0.1	0.0	0.0	0.0	-0.4	-0.1	0.1
1949	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	-0.1	-0.1	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1951	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.1	0.0	0.0	0.0
1953	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1955	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1964	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1969	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.2	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	-0.1	-0.4	0.0	0.7
1974	0.9	-0.3	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
1977	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0
1987	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1990	0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.1	-0.6	0.7
1991	0.2	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.1	-0.2
1992	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.6	-0.5	0.1
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.6
1994	0.3	0.1	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	-1.1	-0.6	-0.2	-0.3	-0.6	-0.7	-0.1	-0.1	-0.1	-0.4	-0.6	-0.7
Maximum	0.9	0.6	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.6	0.2	0.7

Table 5.4.1-9 Frequency of Change in Water Temperature in the Sacramento River at Keswick Dam According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+2.0	0	0	0	0	1
<+1.8	0	0	0	0	1
<+1.6	0	0	0	0	1
<+1.4	0	0	0	0	2
<+1.2	0	0	0	1	1
<+1.0	0	0	0	1	3
<+0.8	0	1	0	3	2
<+0.6	2	1	1	4	3
<+0.4	3	0	5	6	12
<+0.2	16	7	13	18	24
0.0	220	90	124	132	57
>-0.2	10	14	14	20	15
>-0.4	0	2	6	3	4
>-0.6	1	1	2	1	2
>-0.8	0	0	0	1	3
>-1.0	0	0	1	1	0
>-1.2	0	0	2	0	0
>-1.4	0	0	0	0	1
>-1.6	0	1	0	1	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-10 Frequency of Change in Water Temperature in the Sacramento River at Keswick Dam According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.0	1	0	0	0	0
<+0.8	0	1	0	1	2
<+0.6	0	0	0	0	0
<+0.4	2	0	4	4	4
<+0.2	16	8	12	14	18
0.0	217	98	126	159	95
>-0.2	12	7	18	11	8
>-0.4	3	2	3	1	3
>-0.6	1	0	1	1	1
>-0.8	0	1	3	1	1
>-1.0	0	0	0	0	0
>-1.2	0	0	1	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-11 Simulated Water Temperature Data for the Sacramento River at Ben Bridge, Alternative 1, 2001 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.7	47.0	50.9	54.8	56.2	54.9	54.3	54.8	54.7
1923	51.7	48.2	45.2	43.8	49.9	54.8	54.5	52.8	52.2	54.6	55.2	55.0
1924	52.3	52.9	47.5	44.9	49.0	50.6	53.3	55.3	54.3	59.7	67.3	65.7
1925	57.2	51.1	43.9	44.1	48.1	50.4	55.4	56.7	56.0	57.5	56.5	55.6
1926	56.1	51.9	48.1	44.2	47.9	56.1	55.9	56.0	56.6	56.9	57.2	55.7
1927	57.2	53.1	46.4	45.1	47.5	51.9	53.1	54.4	54.7	54.7	55.3	53.8
1928	54.0	51.3	46.9	44.8	48.7	53.1	54.8	55.7	53.8	53.8	56.1	55.0
1929	52.6	51.0	45.9	42.8	46.4	54.3	52.4	55.1	54.4	55.1	55.8	55.6
1930	54.2	56.1	48.6	44.1	47.7	53.4	54.9	54.4	54.6	56.3	56.4	53.6
1931	53.6	52.2	48.2	45.8	48.7	52.3	53.1	55.8	54.9	59.2	67.5	66.0
1932	60.0	51.0	44.6	43.5	46.0	52.9	53.5	58.8	58.5	58.0	62.3	66.6
1933	61.7	55.2	44.4	42.4	44.1	51.5	54.0	54.7	56.4	57.0	62.8	64.7
1934	63.7	55.9	45.6	45.7	49.4	56.7	55.6	55.6	54.0	59.7	67.4	67.4
1935	60.1	51.5	46.8	44.5	47.6	50.3	55.8	57.8	55.3	55.8	58.3	61.1
1936	58.8	52.9	47.6	45.6	47.9	54.4	55.1	55.5	55.6	55.9	56.6	57.0
1937	56.7	55.0	48.8	39.7	45.5	50.1	54.1	56.5	55.3	56.6	56.5	53.6
1938	51.2	50.5	49.0	46.5	47.1	48.9	52.3	56.8	57.4	55.9	55.6	54.6
1939	53.9	52.4	48.9	46.0	46.3	53.6	53.1	52.7	52.7	54.5	54.7	57.2
1940	56.4	54.9	48.5	45.2	48.1	53.1	55.7	56.0	55.7	54.3	55.7	53.8
1941	53.8	51.3	48.1	46.5	48.8	53.2	53.0	53.2	54.8	55.4	54.2	52.3
1942	53.5	53.2	48.2	45.8	47.3	51.1	54.3	52.8	56.0	56.0	54.7	52.0
1943	53.0	51.6	46.6	45.4	49.4	52.1	54.4	55.0	53.6	54.1	54.4	55.5
1944	52.1	50.0	48.4	45.0	47.1	53.5	51.4	53.7	52.8	54.1	54.5	55.9
1945	54.3	50.6	47.2	45.3	48.7	50.6	54.8	53.7	54.6	54.4	54.9	55.2
1946	54.0	50.2	46.8	44.8	45.1	52.0	53.9	53.8	52.3	54.0	54.6	53.5
1947	50.3	48.5	46.5	44.1	50.4	53.7	55.5	53.3	52.8	53.2	53.6	56.4
1948	56.2	52.0	46.7	46.3	46.3	49.8	54.3	55.6	56.8	55.6	55.3	54.1
1949	52.8	51.1	44.9	40.8	44.8	50.5	56.0	54.3	54.1	53.7	54.0	52.9
1950	48.8	46.7	46.6	41.7	47.7	51.3	55.2	55.2	54.6	55.8	56.2	54.4
1951	50.5	45.1	48.0	44.5	47.0	52.2	53.5	55.0	54.2	54.2	55.4	55.9
1952	52.0	47.9	46.5	43.7	47.1	50.1	51.2	54.9	55.6	56.5	54.6	51.0
1953	50.3	48.4	46.7	47.1	49.0	52.6	54.1	52.7	54.5	55.5	55.3	52.6
1954	52.0	51.3	48.5	45.8	50.1	50.5	52.9	53.9	54.8	53.7	55.6	55.5
1955	53.3	51.6	46.4	44.1	47.3	53.3	51.6	56.3	53.3	54.0	55.9	56.5
1956	53.3	50.3	47.5	45.4	46.5	53.0	55.0	54.3	57.2	56.6	54.4	51.4
1957	50.7	52.8	49.5	44.6	50.5	52.2	52.3	56.0	56.1	54.2	54.9	57.5
1958	52.1	51.5	47.4	45.6	48.7	49.7	53.3	55.3	55.0	56.0	55.8	54.9
1959	55.8	54.2	51.8	47.9	48.5	54.0	53.9	53.5	53.6	56.4	57.4	58.8
1960	57.7	56.5	49.6	44.6	47.8	53.3	53.7	54.4	55.6	55.3	55.6	57.1
1961	53.7	50.7	46.6	45.3	49.7	51.7	53.7	53.7	55.2	54.3	54.9	57.7
1962	56.1	53.3	46.4	45.8	47.5	51.6	55.7	53.9	54.7	55.0	55.9	57.0
1963	54.6	53.3	49.7	45.3	51.6	51.9	51.0	56.5	55.9	54.8	56.6	57.8
1964	53.2	51.4	46.2	44.6	49.6	52.8	52.1	53.5	54.1	55.0	55.5	55.9
1965	54.7	50.5	47.5	46.1	49.7	53.6	54.3	54.9	55.1	54.5	57.1	54.9
1966	52.8	50.7	45.8	44.8	47.0	52.4	53.8	55.2	51.8	53.8	55.7	55.4
1967	53.3	51.0	48.3	45.7	50.1	50.3	51.9	53.6	55.3	56.7	55.6	54.0
1968	54.7	54.7	48.1	44.7	51.3	53.2	53.5	54.7	53.1	55.4	55.6	55.6
1969	55.1	52.0	45.2	43.5	45.9	52.6	52.4	53.9	55.9	56.0	56.1	51.2
1970	49.3	51.2	49.5	47.0	51.2	52.9	51.8	55.5	55.2	54.2	56.6	56.4
1971	53.8	51.1	46.9	45.1	48.4	50.2	53.8	54.0	55.3	56.9	56.7	52.7
1972	51.9	51.9	45.6	44.0	48.7	53.6	52.2	54.8	52.6	54.9	55.6	55.6
1973	53.7	49.3	44.8	43.6	49.0	51.0	55.6	56.8	55.3	55.7	56.7	54.7
1974	50.6	49.2	47.1	45.2	48.2	51.8	54.3	56.5	56.9	56.1	55.1	52.3
1975	52.1	52.2	46.9	45.4	47.5	50.2	53.9	55.2	56.2	56.0	54.4	54.9
1976	53.7	51.8	48.0	46.2	48.2	52.2	53.1	56.3	55.0	56.8	57.6	59.1
1977	54.9	52.6	51.2	45.9	48.9	49.7	52.3	53.7	54.5	57.4	68.1	65.5
1978	60.5	51.4	46.5	45.4	48.8	53.9	54.1	55.1	54.9	54.9	56.8	56.6
1979	52.5	48.2	46.4	44.8	47.8	53.0	53.8	55.7	52.2	53.7	55.9	56.7
1980	52.8	48.5	45.6	45.0	48.6	51.8	54.1	54.0	52.9	54.2	55.5	54.8
1981	52.1	47.6	47.3	45.3	48.6	51.8	55.0	54.0	53.2	54.8	56.1	56.5
1982	52.3	51.0	47.1	43.8	47.5	48.4	50.8	56.3	55.9	55.8	56.1	50.4
1983	48.1	47.7	45.9	44.7	47.4	50.7	52.7	55.2	54.3	54.7	54.1	52.9
1984	55.5	52.1	46.8	45.8	48.1	54.0	52.2	54.9	54.1	55.1	56.6	56.9
1985	49.8	49.9	45.4	43.4	49.0	50.5	54.9	52.5	53.3	54.6	54.0	53.0
1986	51.7	48.7	45.3	45.4	49.2	53.4	54.3	54.4	54.1	55.6	55.4	54.8
1987	52.9	50.0	46.5	43.7	48.0	51.4	52.5	53.3	52.9	53.7	56.0	53.8
1988	54.8	52.5	46.0	44.6	46.5	50.3	53.5	55.1	52.9	58.3	57.4	59.3
1989	60.5	51.4	45.6	44.0	45.4	51.2	55.7	53.4	54.4	55.2	56.0	56.0
1990	53.7	51.7	47.0	44.6	45.5	50.5	52.6	55.5	55.0	55.6	57.4	60.1
1991	59.2	52.4	42.7	43.9	50.5	50.4	54.2	53.9	54.9	57.3	56.6	61.7
1992	61.1	53.6	46.2	43.8	48.8	51.8	55.6	55.3	52.7	56.0	64.2	66.1
1993	61.2	52.2	44.7	44.4	47.3	52.4	54.2	53.3	56.7	53.9	56.0	53.7
1994	52.9	50.5	46.1									
Average	54.3	51.4	47.0	44.8	48.1	52.0	53.8	54.8	54.7	55.5	56.7	56.3
Minimum	48.1	45.1	42.7	39.7	44.1	48.4	50.8	52.5	51.8	53.2	53.6	50.4
Maximum	63.7	56.5	51.8	47.9	51.6	56.7	56.0	58.8	58.5	59.7	68.1	67.4

Table 5.4.1-12 Simulated Change in Water Temperature for the Sacramento River at Ben Bridge, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1923	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1924	0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.2	0.2	0.0
1925	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
1926	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.1	0.0	0.0	0.2
1927	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.2	0.0
1930	0.8	0.4	0.0	0.0	0.0	-0.4	-0.1	0.1	0.0	0.1	0.0	0.0
1931	0.4	0.5	0.0	0.0	0.0	0.1	-0.2	-0.1	-0.1	0.8	1.5	-0.4
1932	-0.2	0.0	0.0	0.0	0.0	-0.4	-0.1	0.0	0.4	0.3	0.4	0.5
1933	0.1	-0.1	0.0	-0.1	0.0	-0.2	-0.2	0.0	-0.1	0.7	1.1	0.7
1934	0.1	-0.2	-0.1	-0.4	-0.2	0.0	0.0	0.0	0.0	1.5	1.1	-0.3
1935	-0.1	-0.3	-0.2	-0.1	-0.3	0.0	0.0	0.0	0.5	0.3	0.6	0.5
1936	-0.2	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	0.2	0.0	-0.1
1937	-0.3	-0.3	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	-0.5	-0.1	0.0
1938	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	0.1	0.0	0.4	-0.3
1940	-0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2
1948	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2
1949	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	-0.4
1950	0.1	0.0	0.0	0.1	-0.3	0.0	0.0	0.0	0.0	0.1	-0.1	0.1
1951	-1.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0	0.1
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1
1955	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1958	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1960	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-0.1	0.1
1961	0.3	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1962	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1963	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.1	0.3
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
1965	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
1967	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	0.1
1969	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.5	-0.1	0.9
1974	0.7	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.1	-0.1	-0.2	0.1
1977	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	0.0	0.3	0.5	0.1
1978	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1980	-0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1981	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1
1982	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1988	0.2	0.0	0.0	0.0	-0.1	0.0	0.2	0.0	-0.1	-0.1	0.1	0.5
1989	0.5	-0.1	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.3
1990	-0.1	0.3	0.0	0.0	0.0	-0.2	-0.2	0.1	-0.2	0.0	-0.1	0.5
1991	0.4	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.3
1992	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.4	0.0	0.2	0.4	0.0
1993	0.0	-0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
1994	0.1	0.1	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Minimum	-1.1	-0.3	-0.2	-0.4	-0.3	-0.4	-0.2	-0.2	-0.2	-0.5	-0.2	-0.4
Maximum	0.8	0.5	0.1	0.1	0.2	0.1	0.4	0.4	0.5	1.5	1.5	0.9

Table 5.4.1-13 Simulated Change in Water Temperature for the Sacramento River at Ben Bridge, Alternative 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1923	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1924	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1925	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.2
1926	0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.1
1927	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1928	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.1	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1
1930	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.0
1932	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.2	0.0	0.1
1934	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
1935	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.4	0.4	0.0	-0.2
1936	-0.7	-0.2	0.1	0.0	0.0	0.0	-0.1	-0.2	0.0	-0.4	0.0	0.0
1937	-0.4	-0.4	0.0	0.0	-0.1	0.1	0.0	-0.1	-0.1	-0.8	-0.1	0.0
1938	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	-0.1
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1940	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1941	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
1946	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	-0.1
1947	-0.3	0.4	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.1	0.0	0.3
1948	0.1	0.0	-0.4	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.3	-0.1	0.1
1949	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	-0.1	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
1951	-0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1
1955	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.4	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1958	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.1
1962	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1963	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.3
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1965	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1969	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.2	0.1	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.7	-0.1	1.1
1974	1.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.2	0.0
1977	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1980	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
1981	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1982	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1
1983	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1989	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1990	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	-0.5	0.4
1991	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1
1992	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.4	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	-1.3
1994	0.2	0.1	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	-0.7	-0.4	-0.4	-0.1	-0.2	-0.2	-0.1	-0.2	-0.2	-0.8	-0.5	-1.3
Maximum	1.2	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.4	1.1

Table 5.4.1-14 Frequency of Change in Water Temperature in the Sacramento River at Bend Bridge According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.6	0	0	0	0	2
<+1.4	0	0	0	0	0
<+1.2	0	0	0	0	2
<+1.0	0	1	0	0	0
<+0.8	1	0	1	1	3
<+0.6	0	0	2	3	5
<+0.4	2	2	2	7	11
<+0.2	19	3	10	20	22
0.0	218	96	126	133	55
>-0.2	11	9	20	21	21
>-0.4	1	4	6	7	9
>-0.6	0	1	1	0	2
>-0.8	0	0	0	0	0
>-1.0	0	0	0	0	0
>-1.2	0	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-15 Frequency of Change in Water Temperature in the Sacramento River at Bend Bridge According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.2	1	1	0	0	0
<+1.0	0	0	0	0	0
<+0.8	0	0	0	0	0
<+0.6	0	0	2	0	0
<+0.4	2	1	1	2	3
<+0.2	18	6	7	17	14
0.0	210	95	125	158	100
>-0.2	17	9	23	12	13
>-0.4	3	3	6	3	0
>-0.6	1	0	2	0	2
>-0.8	0	1	1	0	0
>-1.0	0	0	1	0	0
>-1.2	0	0	0	0	0
>-1.4	0	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-16 Simulated Water Temperature Data for the Sacramento River at Red Bluff Diversion Dam, Alternative 1, 2001 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.5	46.9	50.9	55.1	57.3	56.5	55.8	56.1	56.2
1923	52.4	48.2	45.3	43.8	49.8	54.9	54.8	53.9	53.4	55.9	56.6	56.6
1924	52.9	53.0	47.1	44.6	49.2	51.1	54.2	57.0	56.0	61.0	68.0	66.0
1925	57.2	50.9	43.7	44.1	48.0	50.9	55.6	57.8	57.6	59.0	57.9	56.6
1926	56.4	51.5	47.9	44.0	47.9	56.4	56.5	57.4	58.5	58.5	58.6	56.9
1927	57.8	52.9	46.5	45.1	47.5	51.9	53.4	55.5	56.2	56.1	56.6	54.9
1928	54.7	51.2	46.7	44.7	48.6	53.0	55.1	57.1	55.4	55.1	57.5	56.3
1929	53.3	50.8	45.7	42.6	46.6	54.3	52.9	56.5	56.1	56.5	57.3	57.1
1930	55.1	55.8	48.5	44.0	48.0	53.4	55.7	55.5	56.3	57.9	57.8	55.0
1931	54.4	52.2	47.8	45.7	48.9	53.0	54.1	57.5	56.4	60.6	68.2	66.1
1932	59.8	50.7	44.8	43.6	46.2	53.3	54.2	60.2	60.6	59.7	63.6	67.4
1933	61.6	55.0	44.1	42.4	44.4	51.7	54.8	55.9	58.4	59.0	64.1	65.0
1934	63.8	55.5	45.5	45.8	49.4	57.0	56.7	57.2	55.6	61.1	68.3	67.8
1935	60.1	51.4	46.7	44.5	47.8	50.4	55.8	58.8	57.1	57.3	59.7	61.9
1936	58.8	52.5	47.4	45.5	47.8	54.4	55.6	56.9	57.3	57.5	58.0	58.3
1937	57.3	54.9	48.3	39.6	45.7	50.4	54.6	57.7	56.9	58.1	57.9	55.0
1938	52.4	50.6	48.8	46.4	47.1	49.1	52.7	57.8	59.0	57.4	56.9	55.5
1939	54.2	52.1	48.7	45.8	46.4	53.9	54.0	54.0	54.1	55.7	55.9	58.4
1940	56.8	54.7	48.2	45.2	48.1	53.1	55.9	57.4	57.4	55.5	57.1	55.0
1941	54.5	51.2	48.0	46.4	48.8	53.2	53.3	54.0	56.1	56.7	55.4	53.2
1942	53.9	52.9	48.1	45.8	47.4	51.3	54.6	53.7	57.6	57.4	55.9	53.0
1943	53.6	51.5	46.5	45.4	49.3	52.1	54.9	56.2	55.1	55.5	55.7	56.9
1944	52.8	50.2	48.1	44.9	47.1	53.7	52.0	55.0	54.2	55.3	55.8	57.4
1945	55.0	50.4	47.1	45.1	48.7	50.6	55.6	54.8	56.3	56.0	56.2	56.6
1946	55.1	50.1	46.8	44.8	45.2	52.1	54.6	55.2	53.7	55.5	56.0	54.9
1947	51.0	48.6	46.4	43.8	50.3	53.7	56.2	54.8	54.3	54.4	54.8	57.8
1948	56.6	51.6	46.4	46.1	46.2	50.0	54.3	56.4	58.4	57.1	56.7	55.4
1949	53.4	51.1	44.7	40.6	44.9	50.6	56.8	55.7	55.9	55.1	55.4	54.6
1950	49.9	47.4	46.2	41.8	47.7	51.4	55.9	56.6	56.4	57.5	57.9	56.1
1951	51.5	45.7	47.9	44.4	47.1	52.3	54.3	56.3	55.9	55.5	56.8	57.4
1952	52.8	48.2	46.5	43.8	47.1	50.2	51.6	56.0	56.9	58.1	56.1	52.4
1953	51.3	48.6	46.7	47.0	49.0	52.6	54.6	53.6	55.8	56.9	56.7	53.9
1954	52.6	51.3	48.3	45.7	50.0	50.6	53.4	55.0	56.3	55.0	56.9	56.7
1955	54.0	51.5	46.2	43.9	47.2	53.3	52.0	57.5	54.8	55.2	57.4	58.0
1956	54.2	50.2	47.4	45.4	46.5	52.9	55.5	55.2	58.8	58.0	55.7	52.4
1957	51.2	52.7	49.0	44.3	50.4	52.2	52.8	57.0	57.9	55.6	56.2	58.8
1958	52.7	51.3	47.2	45.6	48.7	49.8	53.7	56.3	56.4	57.4	57.3	56.0
1959	56.4	53.9	51.5	47.7	48.4	54.2	54.7	54.6	54.9	57.7	58.5	59.8
1960	58.3	56.2	49.2	44.4	47.8	53.3	54.3	55.5	57.5	56.8	56.9	58.5
1961	54.5	50.6	46.5	45.1	49.6	51.7	54.3	54.7	56.9	55.7	56.2	58.8
1962	56.4	53.1	46.3	45.6	47.5	51.5	56.4	55.0	56.3	56.4	57.2	58.2
1963	55.2	53.1	49.4	45.0	51.5	51.9	51.3	57.4	57.4	56.1	58.1	59.1
1964	53.7	51.2	45.9	44.5	49.6	52.7	52.7	54.7	55.6	56.3	56.8	57.2
1965	55.6	50.3	47.5	46.0	49.5	53.6	54.6	56.0	56.6	55.9	58.6	55.9
1966	53.5	50.7	45.4	44.7	47.0	52.4	54.5	56.5	53.2	55.0	57.1	56.9
1967	54.1	51.2	48.2	45.6	50.0	50.3	52.1	54.4	56.6	58.0	57.0	55.1
1968	55.1	54.5	47.8	44.5	51.2	53.3	54.2	55.9	54.4	56.7	56.9	56.8
1969	55.7	51.7	45.3	43.6	46.0	52.5	52.8	54.9	57.3	57.4	57.7	52.4
1970	50.0	51.2	49.3	46.9	51.0	52.9	52.3	56.9	56.9	55.5	58.0	57.8
1971	54.6	51.1	46.9	45.0	48.4	50.3	54.2	55.0	56.7	58.3	58.2	53.9
1972	52.3	51.8	45.4	43.9	48.7	53.6	52.7	56.0	54.1	56.2	57.0	56.9
1973	54.5	49.3	44.7	43.6	49.0	51.0	56.1	58.0	57.0	57.0	58.1	56.0
1974	51.7	49.3	47.1	45.2	48.1	51.8	54.5	57.5	58.3	57.5	56.4	53.5
1975	52.8	51.9	46.6	45.1	47.4	50.2	54.1	56.2	57.5	57.3	55.6	56.0
1976	54.1	51.5	47.7	46.0	48.1	52.2	53.6	57.7	56.3	58.3	59.0	60.6
1977	55.8	52.8	50.8	45.6	49.2	50.2	53.2	54.8	56.1	58.4	68.7	65.8
1978	60.5	51.4	46.6	45.4	48.8	53.9	54.4	56.3	56.5	56.3	58.4	58.0
1979	53.7	48.5	46.0	44.8	47.8	53.1	54.4	57.1	53.8	55.2	57.5	58.6
1980	54.0	48.7	45.9	45.1	48.6	51.8	54.8	55.3	54.3	55.6	57.0	56.4
1981	53.3	48.0	47.2	45.4	48.7	51.9	55.8	55.4	54.8	56.3	57.7	58.0
1982	53.4	51.0	47.1	43.9	47.6	48.6	51.1	57.5	57.6	57.2	57.7	51.7
1983	49.0	47.9	46.0	44.8	47.5	50.8	53.0	56.0	55.5	56.0	55.4	54.0
1984	55.9	52.0	46.8	45.7	48.0	54.0	52.7	56.3	55.7	56.6	58.2	58.6
1985	50.6	49.8	45.4	43.5	49.2	50.8	55.9	53.8	55.0	56.0	55.3	54.3
1986	52.6	48.6	45.2	45.5	49.2	53.4	54.9	55.7	55.7	57.0	56.9	56.1
1987	53.8	50.0	46.3	43.7	48.0	51.5	53.3	54.6	54.3	54.8	57.5	55.1
1988	55.5	52.2	46.0	44.6	46.8	51.1	54.6	56.4	54.5	60.1	59.0	60.5
1989	60.8	51.2	45.5	44.0	45.5	51.3	56.5	54.6	56.1	56.7	57.5	57.7
1990	54.5	51.7	46.8	44.6	45.7	51.2	53.8	56.8	56.6	57.1	59.0	61.3
1991	59.5	52.1	42.2	44.0	50.5	50.4	54.7	55.2	56.6	59.2	58.1	63.2
1992	61.5	53.4	46.0	43.7	48.9	52.1	56.3	56.9	54.2	57.3	65.1	66.5
1993	61.3	52.0	44.7	44.4	47.3	52.5	54.5	54.3	58.3	55.2	57.5	55.5
1994	53.7	50.4	46.0									
Average	54.9	51.3	46.8	44.7	48.1	52.1	54.3	56.0	56.2	56.9	58.0	57.5
Minimum	49.0	45.7	42.2	39.6	44.4	48.6	51.1	53.6	53.2	54.4	54.8	51.7
Maximum	63.8	56.2	51.5	47.7	51.5	57.0	56.8	60.2	60.6	61.1	68.7	67.8

Table 5.4.1-17 Simulated Change in Water Temperature for the Sacramento River at Red Bluff Diversion Dam, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.1	0.1	0.0
1925	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1
1926	0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.1	0.0	0.0	0.2
1927	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1929	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	-0.3	0.0
1930	0.7	0.4	0.0	0.0	-0.1	-0.3	-0.1	0.1	0.0	0.0	0.0	-0.1
1931	0.3	0.4	0.0	0.0	0.0	0.1	-0.3	0.0	-0.1	0.7	1.5	-0.3
1932	-0.1	0.1	0.0	-0.1	0.0	-0.3	0.0	0.0	0.3	0.3	0.3	0.4
1933	0.1	-0.1	-0.1	0.0	0.0	-0.2	-0.2	-0.1	-0.2	0.6	1.0	0.6
1934	0.1	-0.2	-0.1	-0.4	-0.2	0.1	0.0	0.0	0.0	1.3	1.0	-0.3
1935	-0.1	-0.2	-0.2	-0.1	-0.3	0.0	0.0	0.1	0.4	0.4	0.6	0.5
1936	-0.2	-0.3	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.1	0.0	-0.1
1937	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.0	0.0
1938	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.4	-0.3
1940	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	-0.1	0.0	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1
1948	0.1	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.3
1949	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.4
1950	0.1	0.0	0.0	0.1	-0.2	0.0	0.0	0.1	0.0	0.1	-0.1	0.1
1951	-1.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.1
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1955	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	0.1	0.0	0.0
1956	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1958	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.1	0.0	0.1
1961	0.2	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1962	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1
1963	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.1	0.3
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1965	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1
1969	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.6	0.0	0.9
1974	0.7	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	-0.1	-0.1	0.0
1977	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	-0.1	0.0	0.3	0.4	0.1
1978	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0
1980	-0.2	0.3	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1
1982	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	0.0
1988	0.2	0.1	0.0	0.0	-0.1	0.0	0.1	0.1	-0.2	-0.1	0.0	0.4
1989	0.5	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.1	0.2
1990	-0.1	0.3	0.0	0.0	0.0	-0.2	-0.2	0.0	-0.2	-0.1	-0.1	0.3
1991	0.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.2
1992	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.2	0.4	0.0
1993	0.0	-0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
1994	0.1	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Minimum	-1.1	-0.3	-0.2	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2	-0.6	-0.3	-0.4
Maximum	0.7	0.4	0.1	0.1	0.2	0.1	0.4	0.4	0.4	1.3	1.5	0.9

Table 5.4.1-18 Simulated Change in Water Temperature for the Sacramento River at Red Bluff Diversion Dam, Alternative 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1924	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1925	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1
1926	0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.1
1927	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1928	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	-0.1	-0.1	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	-0.1	-0.1
1930	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-0.1	0.1	0.0	0.1
1934	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.0
1935	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.4	0.4	0.0	-0.1
1936	-0.6	-0.3	0.0	0.1	0.1	0.1	0.0	-0.2	-0.1	-0.5	0.0	-0.1
1937	-0.3	-0.4	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	-0.9	0.0	0.0
1938	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1941	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1944	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	-0.1	0.0	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	-0.1
1947	-0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.2
1948	0.1	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.1	0.2
1949	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	-0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
1951	-0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1955	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.1	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.5	0.1
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1958	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.1	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.3
1964	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1967	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1969	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1971	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.2	0.1	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.8	-0.1	1.1
1974	1.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.2	0.0
1977	-0.1	-0.1	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	-0.1
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
1981	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.1
1983	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1989	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1990	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	-0.5	0.3
1991	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	-0.1
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.3	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.5	0.0	-1.4
1994	0.2	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	-0.6	-0.4	-0.4	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.9	-0.5	-1.4
Maximum	1.2	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.5	1.1

Table 5.4.1-19 Frequency of Change in Water Temperature in the Sacramento River at Red Bluff Diversion Dam According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.6	0	0	0	0	1
<+1.4	0	0	0	0	1
<+1.2	0	0	0	0	0
<+1.0	0	1	0	0	2
<+0.8	1	0	0	1	2
<+0.6	0	0	3	2	2
<+0.4	2	2	2	7	14
<+0.2	18	1	14	21	20
0.0	221	98	118	131	57
>-0.2	10	8	24	25	22
>-0.4	0	5	6	5	11
>-0.6	0	0	1	0	0
>-0.8	0	1	0	0	0
>-1.0	0	0	0	0	0
>-1.2	0	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-20 Frequency of Change in Water Temperature in the Sacramento River at Red Bluff Diversion Dam According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.2	1	1	0	0	0
<+1.0	0	0	0	0	0
<+0.8	0	0	0	0	0
<+0.6	1	1	1	0	1
<+0.4	2	0	3	2	3
<+0.2	18	5	10	17	12
0.0	213	97	119	156	99
>-0.2	16	8	25	16	15
>-0.4	1	3	7	1	1
>-0.6	0	0	2	0	1
>-0.8	0	1	0	0	0
>-1.0	0	0	1	0	0
>-1.2	0	0	0	0	0
>-1.4	0	0	0	0	0
>-1.6	0	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-21 Simulated Water Temperature Data for the Feather River below Thermolito, Alternative 1, 2001 LOD

YEAR	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				41.1	47.0	50.6	55.8	57.8	65.8	72.9	65.5	66.4
1923	58.9	49.6	47.8	44.7	48.3	55.1	57.5	62.4	63.5	68.3	67.1	66.8
1924	59.5	55.1	46.3	44.5	52.7	53.5	58.7	64.7	68.2	70.3	69.1	64.6
1925	55.6	50.7	42.5	45.0	48.5	52.9	55.4	60.5	64.8	72.4	66.3	61.0
1926	58.7	52.1	45.8	43.4	51.3	57.4	59.5	62.7	68.4	69.5	67.1	61.2
1927	60.0	55.5	47.3	46.8	49.1	51.6	56.0	62.0	68.2	70.7	66.1	62.5
1928	61.0	53.0	45.9	46.4	50.3	50.8	57.0	64.2	66.3	69.3	67.2	64.4
1929	58.8	51.6	44.3	43.0	48.6	53.6	53.9	62.9	67.3	71.1	68.8	66.1
1930	60.7	54.2	48.2	44.3	52.0	55.0	58.5	60.5	66.1	67.6	66.4	60.9
1931	58.1	53.2	44.7	47.4	52.2	55.2	61.0	70.4	69.3	72.7	73.0	66.0
1932	59.6	52.8	47.9	45.7	49.1	56.5	56.0	61.9	66.5	72.0	70.4	65.5
1933	60.4	56.4	44.3	44.4	48.1	53.0	55.3	59.0	66.0	73.9	72.4	65.0
1934	62.9	54.6	45.7	47.9	52.3	59.0	61.4	66.5	68.2	73.3	72.4	67.2
1935	60.7	53.9	49.2	47.2	50.6	52.0	58.0	63.0	65.2	67.5	68.6	64.7
1936	58.5	51.6	48.2	48.9	50.7	55.4	58.7	64.0	68.5	69.4	69.0	66.0
1937	60.7	54.3	46.1	40.9	48.4	55.0	56.4	64.0	64.8	70.2	69.0	64.9
1938	61.0	53.9	48.6	46.1	48.5	49.3	52.7	57.5	64.6	72.9	68.3	66.2
1939	57.8	51.6	47.6	47.4	48.8	54.0	59.8	63.6	67.4	69.6	67.4	65.6
1940	59.2	55.8	51.3	48.0	51.6	50.4	57.5	65.0	67.5	66.7	67.0	62.5
1941	60.6	51.6	48.5	48.5	49.3	52.0	57.2	60.1	65.9	73.0	67.1	62.9
1942	59.3	53.8	50.1	49.0	48.9	54.3	53.2	59.0	64.5	69.2	70.0	63.4
1943	60.7	52.4	47.9	48.6	50.0	50.8	56.9	63.2	63.2	69.8	65.9	65.0
1944	57.7	52.4	46.8	46.9	49.7	55.3	55.9	63.3	63.4	67.7	67.3	65.5
1945	60.0	51.1	47.9	45.7	51.7	52.0	57.1	61.6	65.0	69.1	67.1	65.0
1946	61.8	52.0	46.3	46.6	48.5	52.2	57.7	64.0	64.0	68.1	67.0	65.4
1947	56.7	51.0	45.6	44.1	51.0	55.9	58.9	66.2	65.5	66.8	65.8	65.7
1948	58.7	50.1	45.7	48.4	48.2	50.9	55.5	60.4	65.8	66.7	65.6	63.5
1949	58.9	52.3	43.8	40.7	46.7	52.8	58.3	62.2	66.8	70.8	67.3	63.3
1950	58.0	55.7	45.7	43.7	49.7	52.7	58.5	64.1	65.3	68.3	66.7	63.9
1951	60.3	54.2	48.8	47.6	49.0	52.7	57.6	65.0	66.1	68.5	67.6	63.9
1952	56.2	52.4	46.2	46.3	48.0	49.7	52.5	57.1	61.7	73.5	70.2	65.3
1953	59.2	52.2	48.1	49.5	51.6	52.5	55.7	60.2	63.6	71.5	67.3	65.5
1954	59.1	53.4	47.7	48.9	50.1	51.4	57.7	62.1	65.3	69.3	65.9	62.9
1955	57.4	51.6	44.1	42.9	48.2	54.7	55.2	63.2	65.7	70.6	71.0	65.0
1956	60.4	52.1	48.4	47.0	46.5	51.7	56.9	59.0	67.1	67.8	70.2	64.2
1957	59.3	52.8	45.5	44.8	48.1	52.5	56.6	62.1	66.7	69.4	67.7	66.8
1958	57.7	51.1	45.0	46.1	48.9	49.6	54.9	60.0	64.6	72.3	74.3	66.5
1959	59.2	54.0	49.9	50.1	51.7	57.3	60.9	62.5	65.6	69.1	66.9	64.6
1960	59.8	55.1	49.3	46.8	50.7	55.8	58.4	61.9	69.3	71.0	71.2	65.5
1961	59.8	53.4	46.3	44.8	52.0	54.4	59.1	62.1	71.4	70.0	68.6	64.7
1962	60.0	54.1	46.8	46.2	49.4	53.0	59.1	63.2	67.3	69.1	67.8	64.3
1963	60.4	54.8	46.6	43.7	50.6	51.1	52.1	62.9	67.4	69.7	68.2	66.2
1964	61.3	52.1	42.6	46.2	51.4	53.2	56.7	62.2	65.7	68.8	68.1	63.5
1965	62.2	51.1	49.2	46.7	49.0	53.5	55.0	62.2	66.0	70.1	69.5	62.9
1966	62.4	54.0	44.6	46.6	49.0	53.9	60.4	64.3	66.2	67.6	70.1	66.1
1967	59.0	54.6	46.4	46.8	49.5	50.3	54.6	60.1	63.4	75.0	74.6	67.2
1968	58.7	55.5	47.0	47.8	51.7	54.4	59.4	63.1	67.0	70.3	66.7	65.2
1969	58.7	52.4	45.0	46.2	46.8	51.8	54.8	59.6	66.9	74.3	71.2	66.8
1970	58.1	53.5	49.1	47.9	49.6	55.2	56.2	64.9	67.9	71.3	67.9	64.3
1971	58.0	54.4	45.8	46.6	49.8	51.1	55.9	59.0	65.4	69.8	71.4	65.7
1972	58.5	52.8	45.6	45.0	50.2	54.6	57.0	64.7	68.5	71.2	69.8	64.6
1973	59.9	51.1	42.3	46.4	48.5	50.9	58.9	66.9	67.0	69.9	68.4	64.2
1974	60.6	52.2	48.4	47.3	48.9	49.3	54.0	62.0	66.4	73.1	72.4	67.1
1975	59.9	52.4	46.1	45.5	49.8	51.1	55.3	60.9	65.8	68.5	70.3	65.8
1976	59.5	51.8	47.2	48.1	52.2	53.7	56.3	64.6	67.2	70.2	66.6	65.2
1977	62.2	55.3	49.0	45.0	53.6	53.6	60.7	60.9	71.0	71.1	75.4	70.8
1978	65.1	56.3	48.5	48.0	50.9	56.7	57.2	62.8	67.4	72.1	68.3	64.8
1979	62.0	51.6	44.1	45.7	47.4	54.5	58.3	64.5	65.2	69.8	67.4	66.1
1980	61.1	53.3	47.4	47.5	48.8	52.6	57.4	61.6	64.7	72.2	67.8	64.6
1981	62.9	56.2	48.2	47.4	52.3	53.3	59.1	63.6	69.5	68.5	68.0	65.9
1982	58.0	54.6	50.3	46.6	48.5	49.4	51.7	60.8	64.9	70.0	69.1	65.2
1983	57.3	51.3	48.2	47.3	48.5	48.9	53.5	58.9	61.9	69.8	70.9	63.5
1984	58.6	52.1	51.1	48.2	50.2	54.0	56.2	63.4	66.2	70.9	67.9	64.6
1985	57.1	52.2	46.3	43.5	51.7	53.2	58.4	60.9	67.9	68.5	65.8	61.5
1986	57.0	50.3	42.9	48.0	47.5	49.4	56.8	62.6	67.9	67.1	67.0	60.0
1987	59.0	53.9	46.0	45.3	50.6	55.2	60.8	65.0	67.8	66.2	67.2	62.0
1988	60.1	53.6	47.2	47.2	53.9	57.8	57.5	63.3	70.3	77.5	71.7	65.2
1989	60.6	51.9	47.2	46.0	49.6	55.4	58.7	63.1	67.8	67.0	65.3	64.0
1990	56.2	52.8	45.7	46.0	47.9	54.7	58.6	62.9	65.0	72.0	68.7	62.8
1991	60.3	51.7	43.1	46.2	52.9	50.8	56.0	60.6	67.3	73.3	69.4	66.5
1992	60.8	53.3	46.2	44.7	52.7	55.7	57.9	64.9	67.6	70.6	71.2	64.1
1993	61.5	53.5	45.9	46.0	49.5	52.0	57.4	60.7	66.1	70.4	66.4	63.7
1994	60.1	52.0	45.2									
Average	59.6	53.0	46.7	46.2	49.9	53.1	57.0	62.4	66.4	70.3	68.6	64.7
Minimum	55.6	49.6	42.3	40.7	46.5	48.9	51.7	57.1	61.7	66.2	65.3	60.0
Maximum	65.1	56.4	51.3	50.1	53.9	59.0	61.4	70.4	71.4	77.5	75.4	70.8

Table 5.4.1-22 Simulated Change in Water Temperature for the Feather River below Thermolito, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
1924	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	-0.2	-0.1	0.0	0.0	0.5
1925	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1927	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
1928	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.2	-0.1
1930	0.1	0.0	0.0	0.0	0.0	-0.1	0.2	0.2	0.2	0.1	0.1	-0.3
1931	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	-0.1	0.1
1932	0.0	-0.5	0.0	0.0	0.1	0.0	-0.6	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1934	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.3	-1.2	-1.0	0.1
1935	0.1	0.5	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.8
1936	0.0	0.0	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
1937	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	0.1
1938	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.1
1940	0.2	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	-0.1	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.1
1945	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1948	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.2	0.0	0.0	0.0
1951	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
1952	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.1
1958	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1959	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	-0.1	0.0	-0.2	-0.1	-0.3

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.1	0.3	0.0	0.0	-0.1	-0.1	0.0	0.0	0.4	0.0	0.0	0.1
1961	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.1	0.0	0.0	-0.1
1962	-0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.1	-0.1
1963	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	-0.1	-0.1	0.0	1.1
1964	0.0	0.0	0.0	-0.3	0.0	0.0	-0.1	-0.3	-0.1	0.0	0.0	-0.1
1965	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.2	0.0	0.0	0.0
1966	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.0	-0.1
1969	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1970	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1972	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	0.1
1973	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.4	2.4	0.0	0.0
1974	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
1975	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0
1976	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.1	0.0
1977	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.2	0.5	0.2	0.0
1978	-0.1	-0.3	-0.3	-0.1	0.0	0.0	-0.5	0.0	-0.1	-0.2	-0.1	0.0
1979	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
1980	-0.1	0.0	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1983	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.0
1988	0.3	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	-0.4	-0.1	-0.1	0.0
1989	0.0	0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.1
1991	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.1	0.3
1992	0.0	-0.1	0.2	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0
1994	0.0	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	-0.3	-0.5	-0.3	-0.3	-0.1	-0.1	-0.6	-0.6	-0.4	-1.2	-1.0	-0.3
Maximum	0.3	0.5	0.2	0.2	0.2	0.7	0.2	0.2	0.4	2.4	0.2	1.1

Table 5.4.1-23 Simulated Change in Water Temperature for the Feather River below Thermolito, Alternative 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	0.0
1923	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.0
1926	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0
1927	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	-0.2	0.0
1928	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.2	0.0	-0.1	0.1	-0.1
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-0.1
1930	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.1	0.0	0.0	-0.2
1931	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
1932	0.0	0.1	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	0.0
1933	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9
1936	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	-0.2	0.0	-0.1	0.9
1937	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
1938	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0
1939	0.4	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1941	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
1942	0.2	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	-1.0	-0.2	0.0
1943	0.0	0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	0.3	-0.1	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.2
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2
1947	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
1948	0.1	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1950	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	-0.1	-0.1	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0
1952	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	-0.1
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	-2.2	0.0
1957	-0.5	0.0	0.2	0.0	0.1	0.0	-0.1	0.0	0.2	0.3	0.0	-0.4
1958	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2	0.1
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0	-0.1

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	-0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1
1962	-0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	-0.4	-0.7	-0.1	1.0
1964	0.0	0.0	0.0	-0.7	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.3
1965	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	0.2	-0.2	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1969	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.4
1970	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1972	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	0.1
1973	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.3	2.3	-0.1	0.0
1974	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.1
1975	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.2	0.0	0.0
1976	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	-0.1	0.0
1977	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
1978	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.2	0.0	-0.1	0.1	-0.1	0.0
1979	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0
1980	0.0	0.0	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	-0.2	0.0
1981	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	0.0
1983	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.1	0.0	0.2	0.1
1988	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.5	-0.2	0.0
1989	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.3
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	0.0	0.0
1994	0.0	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Minimum	-0.5	-0.1	-0.2	-0.7	-0.1	-0.2	-0.6	-0.2	-0.4	-3.4	-2.2	-0.4
Maximum	0.4	0.2	0.2	0.2	0.1	0.4	0.1	0.2	0.2	2.8	0.3	1.0

Table 5.4.1-24 Frequency of Change in Water Temperature in the Feather River below Thermolito According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+2.4	0	1	0	0	0
<+2.2	0	0	0	0	0
<+2.0	0	0	0	0	0
<+1.8	0	0	0	0	0
<+1.6	0	0	0	0	0
<+1.4	0	0	0	0	0
<+1.2	1	0	0	0	0
<+1.0	0	0	0	0	1
<+0.8	0	0	2	0	0
<+0.6	0	0	1	1	3
<+0.4	2	2	1	4	4
<+0.2	15	7	10	14	10
0.0	207	86	123	147	83
>-0.2	26	16	24	21	21
>-0.4	1	3	6	3	8
>-0.6	0	2	1	1	0
>-0.8	0	0	0	1	0
>-1.0	0	0	0	0	0
>-1.2	0	0	0	0	1
>-1.4	0	0	0	0	1
Total Number of Months	252	117	168	192	132

Table 5.4.1-25 Frequency of Change in Water Temperature in the Feather River below Thermolito According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+3.0	1	0	0	0	0
<+2.5	0	1	0	0	0
<+2.0	0	0	0	0	0
<+1.5	0	0	0	0	0
<+1.0	1	0	2	0	0
<+0.5	22	12	14	17	10
0.0	194	80	127	153	106
>-0.5	30	22	25	20	15
>-1.0	2	1	0	2	1
>-1.5	1	0	0	0	0
>-2.0	0	0	0	0	0
>-2.5	1	0	0	0	0
>-3.0	0	0	0	0	0
>-3.5	0	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.4.1-26 Simulated Water Temperature Data for the American River, Alternative 1, 2001 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.8	46.0	51.3	54.7	58.6	63.4	66.0	67.1	65.6
1923	56.8	51.7	47.7	44.2	45.1	50.3	56.3	59.6	62.8	66.1	67.0	65.3
1924	57.6	57.3	51.5	47.0	51.3	53.3	60.8	68.6	68.8	68.6	69.3	68.1
1925	61.8	54.5	46.2	47.1	48.3	51.5	56.5	60.6	64.6	66.1	65.6	64.6
1926	58.7	56.4	49.3	44.5	49.4	56.7	60.4	64.4	66.4	68.8	68.2	66.5
1927	59.3	58.5	50.7	47.8	48.8	52.2	54.7	59.4	63.8	65.9	66.6	64.4
1928	57.3	54.7	49.4	47.2	49.0	53.3	55.4	62.6	66.0	66.0	66.9	65.4
1929	57.8	56.0	48.3	43.8	47.8	53.2	54.6	62.5	66.6	67.7	68.1	66.1
1930	60.4	58.4	51.4	46.5	50.5	54.9	59.0	61.1	66.5	66.4	67.5	66.3
1931	58.3	57.8	50.0	48.0	52.6	56.9	62.4	68.6	67.2	70.6	70.8	67.8
1932	64.3	54.3	47.2	45.2	46.8	54.0	57.2	61.3	65.0	65.6	65.6	65.3
1933	60.1	60.3	48.7	43.3	46.7	54.3	57.8	60.8	65.3	68.1	67.4	65.6
1934	66.0	58.6	48.7	47.0	50.4	57.8	59.9	65.3	67.2	69.1	70.5	67.3
1935	64.1	55.2	49.3	47.2	48.8	50.6	55.4	59.6	65.0	65.6	66.2	65.1
1936	57.3	55.0	49.9	48.2	48.0	53.8	56.6	60.7	64.4	66.2	66.7	65.6
1937	58.5	58.0	49.9	42.9	45.2	53.0	54.9	60.5	64.5	66.3	66.6	65.6
1938	57.8	55.0	51.4	46.9	48.1	50.6	54.6	59.1	63.9	65.9	66.6	64.7
1939	56.6	55.6	50.5	47.6	47.8	52.0	61.3	66.2	66.6	67.2	70.0	68.1
1940	61.8	58.2	52.0	48.2	48.7	52.9	56.4	61.8	66.6	65.6	67.5	65.1
1941	57.9	56.0	51.7	48.8	49.5	54.4	55.4	59.5	63.6	66.0	66.7	64.5
1942	56.4	54.8	50.2	46.2	46.3	51.0	54.6	57.6	62.8	66.9	65.6	64.3
1943	57.3	55.0	49.2	46.2	47.4	52.0	55.8	61.4	63.8	65.7	66.9	65.0
1944	56.6	55.6	51.7	48.3	48.3	53.8	56.0	63.7	65.6	66.5	67.6	65.8
1945	59.0	55.0	49.5	46.2	48.1	50.0	56.8	59.5	64.0	66.1	67.5	64.9
1946	57.6	55.9	49.3	45.7	46.0	50.5	57.1	60.2	64.0	65.7	67.4	64.9
1947	56.5	54.0	49.0	45.1	48.7	54.2	59.9	66.4	68.0	67.1	66.8	66.1
1948	58.0	52.2	47.4	48.0	47.5	50.0	54.2	57.8	62.6	65.6	66.5	64.8
1949	56.8	54.4	48.3	42.3	44.3	50.6	58.1	61.0	65.1	66.0	66.2	65.8
1950	57.1	54.7	49.4	45.1	47.3	52.1	56.9	60.4	64.0	66.1	67.5	64.8
1951	57.2	56.1	49.4	45.3	47.2	50.6	57.2	60.8	64.8	65.2	67.6	65.6
1952	57.0	56.4	49.8	45.3	47.2	50.2	54.8	58.8	62.3	65.9	65.6	64.8
1953	57.9	56.4	50.8	48.5	48.5	52.6	56.4	58.7	62.3	66.0	65.8	65.0
1954	56.9	57.0	51.8	48.0	48.0	51.2	57.6	62.4	65.8	67.2	66.3	65.1
1955	57.3	54.7	47.3	44.2	45.9	51.1	53.5	63.0	66.0	66.7	67.4	67.9
1956	58.1	55.3	48.8	45.9	46.9	52.0	57.5	59.8	64.1	66.9	65.3	64.7
1957	57.6	58.5	52.0	47.6	49.3	54.3	58.9	60.8	65.1	65.5	66.5	65.6
1958	58.0	57.1	50.7	47.7	50.4	51.5	54.9	59.3	63.6	65.6	67.8	64.8
1959	58.2	58.9	55.5	51.2	50.1	54.3	62.9	63.7	66.5	66.0	69.8	66.9
1960	65.6	59.2	52.1	47.6	49.1	54.9	58.4	63.3	67.0	69.0	67.4	68.1
1961	59.5	56.7	49.8	45.4	50.5	52.9	57.4	60.0	68.8	68.2	69.6	66.2
1962	64.3	55.6	47.2	43.8	47.1	51.4	59.2	60.7	65.8	65.6	66.6	65.4
1963	56.9	58.0	51.0	45.7	48.4	51.7	53.6	57.5	63.0	65.5	67.3	65.4
1964	57.2	55.0	47.0	44.8	47.5	50.7	55.7	61.8	65.6	67.2	67.1	65.0
1965	60.4	54.4	48.2	45.0	47.9	52.1	55.6	60.0	62.9	65.0	67.3	64.4
1966	57.9	57.0	48.9	46.4	47.6	51.2	61.8	65.4	67.3	65.9	69.8	67.6
1967	59.6	57.5	49.8	46.7	47.0	51.5	52.0	58.4	62.6	66.6	66.4	64.9
1968	57.6	59.9	51.5	46.6	51.5	55.3	59.6	63.4	67.6	66.4	69.8	67.9
1969	58.5	55.7	48.2	45.1	45.5	51.3	55.1	59.0	63.0	65.9	68.2	64.9
1970	56.7	56.7	52.3	46.8	49.4	52.7	56.6	64.6	65.5	66.3	68.0	65.4
1971	60.0	56.2	49.3	45.8	46.3	50.7	55.1	58.2	62.2	65.8	67.8	64.8
1972	56.7	55.1	48.8	44.4	47.2	56.2	58.1	62.7	65.3	66.5	69.3	66.9
1973	57.3	53.4	46.0	44.7	47.9	50.8	57.8	61.9	65.2	65.8	68.3	65.1
1974	57.2	54.9	49.4	46.2	47.4	51.0	54.8	59.5	64.2	65.6	66.7	64.8
1975	58.0	56.6	50.4	45.8	47.2	51.1	53.4	59.8	63.6	66.9	65.5	64.9
1976	56.6	53.6	49.9	48.3	50.9	53.6	57.4	65.5	68.0	68.8	68.7	67.4
1977	62.8	59.4	53.0	45.3	53.0	53.8	64.7	62.9	69.3	73.9	74.5	69.6
1978	65.0	55.9	49.8	48.2	48.5	55.3	55.9	60.5	64.2	65.7	67.5	64.6
1979	58.1	56.6	49.1	46.7	47.6	54.1	57.3	61.1	64.6	66.0	67.0	66.2
1980	58.2	56.4	52.2	47.2	48.1	51.1	57.7	60.2	63.0	65.7	66.6	64.5
1981	57.4	57.8	53.0	49.4	50.8	54.0	59.0	65.3	68.8	66.3	68.5	67.0
1982	62.3	56.3	50.4	45.1	47.5	50.2	54.0	58.9	62.8	65.5	66.8	64.3
1983	56.7	55.7	49.0	45.4	48.3	51.4	54.4	58.3	63.2	65.1	65.6	64.7
1984	57.9	56.9	49.1	46.9	48.9	53.5	57.6	63.1	65.6	65.3	68.8	66.4
1985	58.6	56.5	49.9	45.6	48.4	52.1	59.7	63.8	67.0	68.1	66.6	65.3
1986	58.9	54.3	46.3	47.1	47.5	51.6	58.4	61.5	65.1	65.6	67.2	64.1
1987	57.6	59.1	52.5	48.1	50.6	53.2	63.4	67.0	65.9	66.8	70.5	67.5
1988	62.9	57.5	50.2	48.2	53.3	57.0	61.3	63.2	68.3	70.4	69.4	71.1
1989	65.9	56.3	49.9	46.0	47.9	51.6	59.6	62.6	65.7	66.1	66.3	66.5
1990	58.7	58.7	50.6	47.8	48.4	55.2	60.3	64.9	67.8	69.5	69.0	67.3
1991	65.6	57.4	48.0	47.3	54.8	52.5	55.9	62.3	67.9	66.1	66.1	66.4
1992	66.7	60.1	51.0	46.4	53.1	54.7	58.4	65.2	68.6	69.1	68.6	70.2
1993	65.4	55.1	45.5	45.0	47.1	54.8	57.0	59.8	64.1	65.6	66.8	64.9
1994	57.5	55.9	49.5									
Average	59.2	56.3	49.8	46.3	48.5	52.7	57.3	61.6	65.3	66.7	67.6	65.9
Minimum	56.4	51.7	45.5	42.3	44.3	50.0	52.0	57.5	62.2	65.0	65.3	64.1
Maximum	66.7	60.3	55.5	51.2	54.8	57.8	64.7	68.6	69.3	73.9	74.5	71.1

Table 5.4.1-27 Simulated Change in Water Temperature for the American River, Alternatives 2-5, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1925	-0.2	-0.1	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.2
1927	0.6	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1	0.0
1929	0.2	0.2	0.0	0.0	0.1	0.1	-0.1	-0.6	-0.3	0.1	-0.1	0.2
1930	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	-0.2	0.3	0.2	0.0
1931	0.4	0.0	0.0	-0.1	-1.2	-0.6	1.4	0.0	0.5	0.0	-0.3	1.1
1932	-0.4	-1.0	-1.2	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.2	-0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	0.1	0.2	0.1	0.2
1934	0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	0.1	-0.1	-2.3	0.9
1935	0.3	-0.3	-0.4	-0.2	0.3	0.0	0.2	0.0	0.0	0.0	-0.3	0.3
1936	-0.2	0.3	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1938	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	0.5	0.0
1940	0.3	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	-0.1	0.0
1941	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1945	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1946	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1947	-0.1	-0.1	0.0	-0.1	-0.1	0.3	0.0	0.0	0.0	-0.1	0.0	0.0
1948	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.6	0.0
1950	0.0	0.4	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
1952	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1958	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-0.3	0.0	-0.1
1961	0.2	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.2	-0.1	-0.1	0.3
1962	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	0.0	0.0
1965	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1980	-0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.2	-0.1	0.0
1982	0.3	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1985	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1
1988	0.7	0.0	-0.1	-0.1	0.2	0.1	0.1	0.0	0.0	0.0	-0.1	0.2
1989	0.0	0.0	-0.3	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	-0.1
1990	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	-0.3	0.0
1992	0.8	-0.5	-0.1	0.0	0.0	0.1	0.4	0.5	-0.1	0.0	0.8	0.3
1993	0.9	0.9	0.4	0.3	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1994	0.0	0.1	0.0									
Average	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Minimum	-0.4	-1.0	-1.2	-0.2	-1.2	-0.6	-0.1	-0.6	-0.3	-0.3	-2.3	-0.2
Maximum	0.9	0.9	0.4	0.3	0.3	0.3	1.4	0.5	0.5	0.3	0.8	1.1

Table 5.4.1-28 Simulated Change in Water Temperature for the American River, Alternative 6, 2001 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	0.1
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1925	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1926	0.4	-0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.1
1927	0.6	-0.2	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	0.1	0.0	0.0
1929	0.0	0.0	-0.1	-0.1	0.1	0.1	0.0	-0.2	0.0	0.0	0.0	0.2
1930	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.4	0.0	-0.1
1931	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1932	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.3	-0.1	-0.1	-0.1	-0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0
1934	0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
1935	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.3
1936	0.3	0.4	-0.1	-0.3	0.0	-0.1	0.1	0.0	0.0	0.0	-0.2	0.2
1937	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
1938	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
1941	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1945	0.1	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	-0.5	-0.1
1946	0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1947	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
1948	0.0	0.0	-0.2	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.5	0.0
1950	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.1
1951	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	1.2	0.0
1957	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0
1958	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1962	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.3	0.0	0.0
1965	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0
1966	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-1.0	0.1
1973	-0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0
1974	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
1982	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
1985	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1986	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
1990	0.2	0.0	-0.1	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.1	0.0	0.0
1991	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1993	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.1
1994	0.0	0.0	0.0									
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Minimum	-0.3	-0.2	-0.4	-0.3	-0.1	-0.1	-0.1	-0.2	-0.2	-1.2	-1.0	-0.1
Maximum	0.6	0.4	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.4	1.2	0.3

Table 5.4.1-29 Frequency of Change in Water Temperature in the American River at Sunrise According to Water Year Type (Comparison of Alternatives 2-5, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.4	0	0	0	0	1
<+1.2	0	0	0	0	1
<+1.0	0	2	0	0	2
<+0.8	1	0	0	0	2
<+0.6	0	0	0	1	3
<+0.4	3	4	6	10	10
<+0.2	3	4	6	13	18
0.0	233	96	136	131	68
>-0.2	9	10	16	24	18
>-0.4	3	1	4	9	4
>-0.6	0	0	0	1	1
>-0.8	0	0	0	1	2
>-1.0	0	0	0	0	0
>-1.2	0	0	0	1	0
>-1.4	0	0	0	1	1
>-1.6	0	0	0	0	0
>-1.8	0	0	0	0	0
>-2.0	0	0	0	0	0
>-2.2	0	0	0	0	0
>-2.4	0	0	0	0	1
Total Number of Months	252	117	168	192	132

Table 5.4.1-30 Frequency of Change in Water Temperature in the American River at Sunrise According to Water Year Type (Comparison of Alternative 6, 2001 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+1.2	1	0	0	0	0
<+1.0	0	0	0	0	0
<+0.8	1	0	0	0	0
<+0.6	0	0	1	0	1
<+0.4	3	2	4	2	2
<+0.2	6	7	14	8	11
0.0	228	102	124	155	101
>-0.2	7	0	16	23	16
>-0.4	3	6	7	2	1
>-0.6	2	0	1	2	0
>-0.8	0	0	0	0	0
>-1.0	0	0	0	0	0
>-1.2	0	0	1	0	0
>-1.4	1	0	0	0	0
Total Number of Months	252	117	168	192	132

5.4.2 Salmon mortality modeling results

Salmon mortality modeling results are displayed in Tables 5.4.2-1 through 5.4.2-4 as percent egg mortality for each year and as change from Alternative 1. A separate table is included for each of the four rivers evaluated. Results are provided for fall-run chinook salmon on all four rivers. For the Sacramento river, results are also shown for late-fall, winter, and spring runs of chinook salmon.

Table 5.4.2-1 Simulated Chinook Salmon Egg Mortality (%) in the Trinity River for Alternative 1 and Change in Percentage for Alternatives 2-5 and Alternative 6, 2001 LOD

Year	Fall Run Chinook Salmon		
	Alternative 1 (%)	Alternatives 2-5 Change (%)	Alternative 6 Change (%)
1922	0.5	0.0	0.0
1923	0.9	0.0	0.0
1924	6.8	0.3	0.2
1925	0.8	0.0	0.0
1926	2.8	0.0	0.0
1927	0.3	0.0	0.0
1928	0.4	0.0	0.0
1929	2.5	-0.6	0.0
1930	1.6	-0.3	0.0
1931	11.2	-0.1	0.0
1932	18.4	0.0	0.0
1933	28.7	0.0	0.0
1934	14.0	1.1	0.1
1935	8.6	-2.2	0.1
1936	9.6	0.1	0.0
1937	2.9	-0.1	0.0
1938	0.6	0.0	0.0
1939	0.5	0.0	0.0
1940	0.2	0.0	0.0
1941	0.5	0.0	0.0
1942	0.6	0.0	0.0
1943	0.8	0.0	0.0
1944	0.9	0.0	0.0
1945	1.0	0.0	0.0
1946	0.2	0.0	0.0
1947	0.6	0.0	0.0
1948	4.0	-1.3	-0.7
1949	0.2	0.0	0.0
1950	0.4	0.1	0.0
1951	0.6	0.0	0.0
1952	0.9	0.0	0.0
1953	0.8	0.0	0.0
1954	0.3	0.0	0.0
1955	0.7	0.0	0.0
1956	0.5	0.0	0.0
1957	0.5	0.0	0.0
1958	1.1	0.0	0.0
1959	0.8	0.0	0.0
1960	0.9	0.0	0.0
1961	0.7	0.0	0.0
1962	1.5	0.0	0.0
1963	1.0	0.0	0.0
1964	0.8	0.0	0.0
1965	0.6	0.0	0.0
1966	0.7	0.0	0.0
1967	1.4	0.0	0.0
1968	0.7	0.0	0.0
1969	0.7	0.0	0.0
1970	0.8	0.0	0.0
1971	0.7	0.0	0.0
1972	0.4	0.0	0.0
1973	0.4	0.0	0.0
1974	1.1	0.0	0.0
1975	1.3	0.0	0.0
1976	0.9	0.0	0.0
1977	11.3	3.9	-0.2
1978	1.0	0.1	0.0
1979	0.3	0.0	0.0
1980	0.1	0.0	0.0
1981	0.3	0.0	0.0
1982	0.2	0.0	0.0
1983	1.0	0.0	0.0
1984	0.4	0.0	0.0
1985	0.0	0.0	0.0
1986	0.1	0.0	0.0
1987	1.4	0.0	0.0
1988	5.6	0.2	0.0
1989	0.6	0.0	0.0
1990	4.9	0.6	0.6
1991	18.6	0.8	0.8
1992	8.8	0.4	0.3
1993	2.8	0.0	1.4
Median	0.8	0.0	0.0
Minimum	0.0	-2.2	-0.7
Maximum	28.7	3.9	1.4

Table 5.4.2-2 Simulated Chinook Salmon Egg Mortality (%) in the Sacramento River for Alternative 1 and Change in Percentage for Alternatives 2-5 and Alternative 6, 2001 LOD

Year	Fall Run			Late-Fall Run			Winter Run			Spring Run		
	Alt. 1 (%)	Alt. 2-5 Change (%)	Alt. 6 Change (%)	Alt. 1 (%)	Alt. 2-5 Change (%)	Alt. 6 Change (%)	Alt. 1 (%)	Alt. 2-5 Change (%)	Alt. 6 Change (%)	Alt. 1 (%)	Alt. 2-5 Change (%)	Alt. 6 Change (%)
1922	3.4	0.0	0.0	0.4	0.0	0.0	1.2	0.0	0.0	2.6	0.0	0.0
1923	4.4	0.1	0.0	0.2	0.0	0.0	2.7	0.0	0.0	2.7	0.0	0.0
1924	28.6	-0.1	0.0	1.0	0.0	0.0	92.8	0.7	0.1	96.0	0.0	0.0
1925	9.9	0.2	0.4	0.7	0.0	0.0	2.3	0.0	-0.1	5.2	0.1	0.1
1926	13.5	0.8	0.6	1.7	0.0	-0.1	5.5	-0.8	-0.8	6.0	0.2	0.2
1927	4.3	0.0	0.1	0.2	0.0	0.0	0.8	0.0	0.0	2.5	0.0	0.0
1928	4.2	0.0	0.0	0.5	0.0	0.0	1.3	0.0	0.0	3.0	-0.1	-0.1
1929	9.7	2.6	-0.2	2.5	0.6	-0.1	1.9	0.0	0.0	3.6	0.0	-0.1
1930	4.5	0.4	0.0	0.3	0.0	0.0	2.1	-0.7	0.0	3.6	0.0	0.0
1931	34.3	-0.4	-0.1	1.5	-0.1	0.0	88.6	6.0	0.3	98.6	-0.2	0.0
1932	39.0	0.0	0.0	4.1	0.0	0.0	26.0	3.7	0.1	99.8	0.0	0.0
1933	41.4	-0.2	0.0	3.7	-0.2	0.0	31.6	14.3	0.5	100.0	0.0	0.0
1934	35.0	-0.4	-0.1	3.2	0.0	0.1	96.5	3.5	0.8	98.7	-0.2	0.0
1935	27.1	-0.1	-2.9	2.0	-0.1	-0.2	3.1	0.4	-0.2	47.7	1.1	-15.3
1936	14.5	-1.2	-1.4	1.8	-0.3	-0.4	3.4	0.0	0.0	5.9	-0.2	-0.3
1937	3.3	-0.1	-0.1	0.6	0.0	0.0	1.7	-0.1	-0.2	4.0	-0.2	-0.3
1938	5.0	0.0	0.0	0.9	0.0	0.0	1.9	0.0	0.0	3.7	0.0	0.0
1939	14.2	-0.9	-0.1	1.7	0.0	0.0	0.7	0.1	0.0	4.2	-0.2	-0.1
1940	4.3	0.0	0.1	0.6	0.0	0.0	1.7	0.0	0.0	2.9	0.0	0.0
1941	3.0	0.0	0.0	0.3	0.0	0.0	0.8	0.0	0.0	2.0	0.0	0.0
1942	2.2	0.0	0.0	0.1	0.0	0.0	1.0	0.0	0.0	2.6	0.0	0.0
1943	4.1	0.0	0.0	0.3	0.0	0.0	0.8	0.0	0.0	2.4	0.0	0.0
1944	6.6	0.0	0.0	0.1	0.0	0.0	0.7	0.0	0.0	2.8	0.0	0.0
1945	6.2	0.0	0.0	0.3	0.0	0.0	0.9	0.0	0.0	2.9	0.0	0.0
1946	2.5	0.0	-0.1	0.3	0.0	0.0	0.5	0.0	0.0	1.8	0.0	0.0
1947	11.3	0.5	0.6	0.9	0.0	0.0	2.2	-0.1	-0.1	3.1	0.1	0.3
1948	3.8	0.2	0.1	0.2	0.0	0.0	1.5	0.0	-0.1	3.3	0.1	-0.1
1949	2.1	-0.1	0.0	0.7	0.0	0.0	1.0	0.0	0.0	1.7	0.0	0.0
1950	3.6	-0.2	-0.1	0.6	0.0	0.0	1.5	0.0	0.0	3.6	0.0	-0.1
1951	4.9	0.1	0.0	0.3	0.0	0.0	0.8	0.0	0.0	3.2	0.0	0.0
1952	1.6	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.0	2.8	0.0	0.0
1953	2.4	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	2.5	0.0	0.0
1954	5.2	0.0	0.0	0.2	0.0	0.0	0.6	0.0	0.0	2.9	-0.1	-0.1
1955	6.5	0.0	0.0	0.4	0.0	0.0	0.9	0.0	0.0	3.8	0.0	0.0
1956	1.2	0.0	0.1	0.3	0.0	0.0	2.0	0.0	-0.1	3.0	0.0	0.0
1957	5.8	0.1	0.1	0.3	0.0	0.0	1.2	0.0	0.0	4.2	0.0	0.0
1958	10.5	0.0	0.0	3.1	0.0	0.0	1.1	0.0	0.0	3.7	0.0	0.0
1959	23.7	0.7	0.0	3.1	0.1	0.0	1.5	0.0	0.0	13.9	0.6	0.0
1960	7.3	0.3	0.0	0.2	0.0	0.0	1.5	0.0	0.0	4.6	0.1	0.0
1961	12.8	-0.1	0.0	0.7	0.0	0.0	0.8	0.0	0.0	4.9	0.2	0.1
1962	9.0	0.2	0.1	0.8	0.0	0.0	1.1	0.0	0.0	4.6	0.0	0.0
1963	7.5	0.4	0.3	0.6	0.0	0.0	1.5	0.0	0.0	5.8	0.5	0.4
1964	7.1	0.2	0.1	0.1	0.0	0.0	0.6	0.0	0.0	3.5	0.0	0.0
1965	4.6	0.0	0.0	0.2	0.0	0.0	1.5	0.1	0.0	3.8	0.0	0.0
1966	5.7	0.0	0.0	0.4	0.0	0.0	0.7	0.0	0.0	3.0	0.0	0.0
1967	8.0	0.0	0.0	1.1	0.0	0.0	1.0	0.0	0.0	3.5	0.0	0.0
1968	7.7	0.6	0.1	0.4	0.1	0.0	1.0	0.0	0.0	3.4	0.0	0.0
1969	1.6	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.0	3.3	0.0	0.0
1970	6.7	-0.1	-0.1	0.5	0.0	0.0	1.1	0.0	0.0	4.4	0.0	0.0
1971	2.3	0.0	0.0	0.1	0.0	0.0	1.3	0.0	0.0	3.9	0.0	0.0
1972	5.4	0.0	0.0	0.2	0.0	0.0	0.8	0.0	0.0	3.2	0.0	0.0
1973	3.5	0.9	1.3	0.9	0.0	0.0	1.8	-0.1	-0.1	4.0	0.1	0.1
1974	2.4	0.0	0.0	0.5	0.0	0.0	1.8	0.0	0.0	3.2	0.0	0.0
1975	4.5	0.0	0.0	0.3	0.0	0.0	1.3	0.0	0.0	3.0	0.0	0.0
1976	12.3	0.1	0.0	0.9	0.0	0.0	1.9	-0.1	0.0	10.5	-0.1	0.2
1977	35.2	-0.5	0.0	0.8	-0.1	0.0	91.8	1.7	-0.1	98.7	-0.2	0.0
1978	6.8	0.0	0.0	0.3	0.0	0.0	2.5	0.0	0.0	4.8	0.0	0.0
1979	6.8	-0.1	0.0	0.4	0.0	0.0	1.0	0.0	0.0	4.3	-0.1	-0.1
1980	4.6	0.0	0.0	0.2	0.0	0.0	0.6	0.0	0.0	2.7	0.0	0.0
1981	6.4	-0.1	-0.1	0.4	0.0	0.0	1.0	0.0	0.0	4.3	-0.2	-0.1
1982	1.5	0.0	0.0	0.7	0.0	0.0	1.5	0.0	0.0	3.4	0.0	0.0
1983	6.6	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.0	2.0	0.0	0.0
1984	5.7	0.0	0.0	0.4	0.0	0.0	1.7	0.0	0.0	5.2	0.0	0.0
1985	2.3	0.0	0.0	0.3	0.0	0.0	0.6	0.0	0.0	1.7	0.0	0.0
1986	4.4	0.0	0.0	0.2	0.0	0.0	1.5	0.0	0.0	3.1	0.0	0.0
1987	6.5	0.4	0.0	0.4	0.0	0.0	0.4	0.0	0.0	2.5	-0.1	0.0
1988	27.9	2.3	0.3	1.1	0.1	0.0	2.2	0.1	0.0	41.5	19.8	2.0
1989	6.8	0.2	0.1	0.4	0.0	0.0	1.1	0.1	0.0	4.1	0.3	0.1
1990	25.8	1.8	0.7	1.3	0.0	0.0	1.6	0.1	0.0	29.5	11.7	4.8
1991	32.6	1.0	-0.1	1.9	0.1	0.0	2.3	0.2	0.0	63.0	10.9	-0.7
1992	36.9	-0.1	0.0	1.9	0.1	0.0	66.9	8.5	-10.4	99.3	0.0	0.0
1993	4.5	0.1	-0.7	0.1	0.0	0.0	1.2	0.0	0.0	3.2	0.0	-0.1
Median	6.3	0.0	0.0	0.4	0.0	0.0	1.3	0.0	0.0	3.6	0.0	0.0
Minimum	1.2	-1.2	-2.9	0.0	-0.3	-0.4	0.4	-0.8	-10.4	1.7	-0.2	-15.3
Maximum	41.4	2.6	1.3	4.1	0.6	0.1	96.5	14.3	0.8	100.0	19.8	4.8

Table 5.4.2-3 Simulated Chinook Salmon Egg Mortality (%) in the Feather River for Alternative 1 and Change in Percentage for Alternatives 2-5 and Alternative 6, 2001 LOD

Year	Fall Run Chinook Salmon		
	Alternative 1 (%)	Alternatives 2-5 Change (%)	Alternative 6 Change (%)
1922	0.6	0.0	0.0
1923	2.8	0.0	0.0
1924	0.3	0.0	0.0
1925	1.3	0.0	0.0
1926	3.8	-0.1	0.1
1927	2.1	0.0	0.0
1928	0.9	0.0	0.0
1929	3.0	0.0	0.0
1930	1.4	0.0	0.0
1931	2.3	-0.7	0.3
1932	4.3	0.0	0.0
1933	4.5	0.0	0.0
1934	3.1	1.0	0.1
1935	0.9	0.0	0.0
1936	2.7	-0.1	-0.2
1937	2.8	0.0	0.0
1938	0.7	0.0	0.1
1939	4.9	0.4	0.0
1940	1.5	0.0	-0.1
1941	1.9	0.0	0.1
1942	1.9	0.0	0.0
1943	1.0	0.0	0.0
1944	1.2	0.0	0.0
1945	2.1	0.0	0.0
1946	0.4	0.0	0.0
1947	0.6	0.0	0.0
1948	1.2	0.0	0.0
1949	3.4	0.0	0.0
1950	2.7	0.0	0.0
1951	0.6	0.0	0.0
1952	1.3	0.0	0.0
1953	1.7	0.0	0.0
1954	0.7	0.0	0.0
1955	1.6	0.0	0.0
1956	1.6	0.0	-0.2
1957	0.6	0.0	0.0
1958	2.1	0.0	0.0
1959	5.4	1.4	0.8
1960	2.1	0.0	0.0
1961	4.4	0.3	0.2
1962	3.8	0.0	0.0
1963	2.0	0.0	0.0
1964	1.9	0.0	0.0
1965	3.4	0.1	0.0
1966	2.4	0.0	0.0
1967	3.0	0.0	0.0
1968	1.2	0.0	0.0
1969	1.4	0.0	0.0
1970	1.9	0.0	0.0
1971	1.3	0.0	0.0
1972	1.2	0.0	0.0
1973	1.8	0.0	0.0
1974	1.6	0.0	0.0
1975	1.3	-0.1	-0.1
1976	4.3	0.0	0.0
1977	13.5	-1.2	-0.2
1978	2.2	0.0	0.0
1979	2.4	0.0	0.0
1980	5.4	0.0	0.0
1981	2.3	0.0	0.0
1982	0.6	0.0	0.0
1983	1.1	0.0	0.0
1984	0.8	0.0	0.0
1985	0.4	0.0	0.0
1986	2.0	0.0	0.0
1987	2.8	0.3	0.0
1988	1.7	0.1	0.0
1989	0.7	0.1	0.0
1990	1.4	0.0	0.0
1991	2.8	0.0	0.0
1992	2.6	0.0	0.0
1993	1.7	0.0	0.0
Median	1.9	0.0	0.0
Minimum	0.3	-1.2	-0.2
Maximum	13.5	1.4	0.8

Table 5.4.2-4 Simulated Chinook Salmon Egg Mortality (%) in the American River for Alternative 1 and Change in Percentage for Alternatives 2-5 and Alternative 6, 2001 LOD

Year	Fall Run Chinook Salmon		
	Alternative 1 (%)	Alternatives 2-5 Change (%)	Alternative 6 Change (%)
1922	6.8	0.0	0.0
1923	12.5	0.0	0.0
1924	14.5	-0.3	-0.1
1925	12.1	0.0	0.6
1926	20.2	1.3	1.3
1927	7.8	0.0	0.0
1928	10.0	0.6	0.0
1929	21.9	0.9	-0.1
1930	14.7	0.9	0.8
1931	17.0	-1.1	-0.1
1932	27.0	-0.1	0.1
1933	25.4	0.0	0.0
1934	18.2	-0.1	0.0
1935	8.1	-0.1	0.7
1936	15.8	0.3	0.4
1937	9.2	0.0	0.4
1938	7.4	0.0	0.0
1939	22.6	-0.1	0.0
1940	10.2	-0.6	-0.5
1941	6.6	0.0	0.0
1942	7.9	0.0	0.0
1943	7.6	0.0	0.0
1944	11.1	0.1	0.1
1945	9.5	0.1	-0.1
1946	6.7	-0.2	-0.2
1947	8.4	0.0	0.0
1948	7.0	0.0	0.0
1949	7.9	0.2	0.1
1950	9.0	0.0	-0.4
1951	9.3	-0.2	-0.2
1952	10.9	0.2	0.0
1953	10.4	0.0	0.0
1954	7.8	0.0	0.0
1955	10.2	0.0	0.0
1956	15.8	0.0	0.4
1957	12.4	0.7	0.7
1958	22.6	0.0	0.0
1959	27.8	0.0	0.0
1960	14.9	0.6	0.0
1961	18.6	-0.1	-0.1
1962	12.9	0.0	0.0
1963	8.0	0.0	0.0
1964	12.9	0.1	0.1
1965	11.9	0.0	0.2
1966	17.2	0.0	0.0
1967	27.0	0.0	1.3
1968	11.2	0.1	0.0
1969	9.4	0.0	0.0
1970	14.6	0.0	0.1
1971	7.2	0.0	0.0
1972	7.8	0.0	-0.3
1973	7.9	0.0	0.0
1974	11.3	0.0	0.0
1975	6.7	0.0	0.0
1976	27.8	0.0	0.0
1977	19.7	0.0	0.0
1978	11.4	-0.2	-0.2
1979	11.6	0.0	0.2
1980	13.4	0.3	0.3
1981	17.9	0.2	0.2
1982	7.4	0.0	0.0
1983	11.8	0.0	0.0
1984	12.6	0.2	0.2
1985	10.2	0.1	0.1
1986	18.7	0.0	0.0
1987	21.1	0.5	0.1
1988	20.8	0.0	0.0
1989	19.1	0.0	0.4
1990	22.3	0.0	0.0
1991	31.0	-1.6	0.0
1992	18.9	1.7	0.2
1993	9.3	0.1	0.0
Median	11.8	0.0	0.0
Minimum	6.6	-1.6	-0.5
Maximum	31.0	1.7	1.3

5.5 SIMULATION RESULTS – 2020 LOD

Modeling of the project alternatives superimposed on future conditions (2020 level-of-development) are presented in this section. Except as noted, the format of the tables is the same as used in Section 5.4.

5.5.1 Temperature modeling results

Temperature modeling results for future conditions are presented in Tables 5.5.1-1 through 5.5.1-30.

Table 5.5.1-1 Simulated Water Temperature Data for the Trinity River, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				37.6	40.2	45.3	49.5	47.5	54.2	53.1	50.4	48.0
1923	45.1	41.7	37.3	36.6	43.9	49.6	49.1	45.5	50.7	47.0	47.0	51.1
1924	49.2	47.0	38.9	42.5	45.6	47.1	49.1	52.5	51.7	54.2	59.2	58.5
1925	50.7	44.7	37.3	39.9	42.8	48.7	53.5	44.9	51.3	54.6	54.1	53.2
1926	52.5	44.9	41.8	37.2	43.3	52.8	55.4	47.1	57.7	52.7	53.2	53.6
1927	53.6	47.6	38.4	38.2	41.7	47.3	53.6	45.3	50.2	50.8	51.1	47.5
1928	48.9	44.5	38.9	38.1	43.7	49.5	50.4	47.3	49.4	51.0	48.3	49.5
1929	48.1	44.2	39.2	39.9	41.3	48.9	47.0	50.1	50.4	49.1	50.8	50.8
1930	50.5	50.3	42.6	36.1	44.4	49.8	49.6	45.5	52.8	51.9	53.3	51.0
1931	51.5	47.1	41.4	40.1	44.5	49.8	53.6	53.1	51.5	55.5	60.2	58.9
1932	54.2	43.9	35.8	38.6	41.6	50.2	49.9	47.5	57.2	56.3	59.0	62.6
1933	56.8	49.8	35.5	34.2	38.6	47.0	52.9	46.2	56.0	58.1	59.8	58.5
1934	59.1	50.3	36.7	40.9	44.2	51.2	48.4	51.3	53.2	57.6	63.3	61.1
1935	58.2	44.4	39.5	36.2	42.6	44.1	51.4	46.8	59.1	54.0	56.2	59.7
1936	52.4	44.9	40.5	39.9	41.1	50.1	52.8	46.5	50.8	55.3	57.8	56.9
1937	56.3	50.5	39.5	29.4	38.1	46.6	50.5	45.1	55.6	52.7	56.2	53.3
1938	51.8	45.0	41.8	40.2	40.5	44.2	53.9	46.8	48.3	58.2	52.1	50.1
1939	45.4	43.6	42.6	42.9	41.4	49.3	52.4	49.4	50.3	50.5	48.7	48.8
1940	46.2	47.3	41.7	39.0	42.6	50.4	52.5	46.7	50.3	49.5	50.9	48.7
1941	48.6	44.7	41.3	39.1	43.5	45.5	46.5	46.1	47.3	48.7	51.6	49.4
1942	48.6	46.8	46.4	43.3	43.1	44.8	51.7	45.8	50.7	54.7	52.0	47.6
1943	46.8	43.5	41.4	41.4	44.0	45.4	51.2	46.7	49.6	51.0	51.0	49.0
1944	47.1	42.6	41.0	38.4	41.0	48.9	47.7	50.2	50.1	48.8	49.2	50.0
1945	48.8	42.9	41.4	39.5	43.8	44.9	51.6	46.0	51.1	51.5	50.7	50.2
1946	51.5	42.2	36.7	37.4	39.6	47.4	54.5	45.0	47.0	49.8	48.4	47.2
1947	46.5	43.3	40.6	38.6	44.8	48.6	52.4	47.7	52.3	48.2	48.0	50.0
1948	50.2	44.8	39.2	43.0	41.5	44.3	47.9	46.2	49.6	50.9	51.6	56.2
1949	51.8	43.4	35.6	34.3	37.8	45.8	55.9	43.2	47.2	47.9	47.8	48.5
1950	48.3	47.5	38.1	32.0	41.3	45.7	51.2	44.8	51.4	49.7	48.8	47.6
1951	48.8	45.4	38.3	35.4	41.2	47.6	52.3	44.9	47.2	49.6	49.2	47.8
1952	46.4	42.6	36.2	34.2	41.5	45.5	46.5	44.2	46.9	46.7	49.1	46.0
1953	46.4	43.6	39.8	43.9	44.3	48.8	52.6	46.1	50.0	52.3	50.9	48.4
1954	46.5	44.3	43.3	41.0	44.1	44.6	47.7	47.3	48.0	51.4	48.8	48.6
1955	48.3	44.3	36.6	37.8	41.9	48.2	49.8	47.4	53.9	50.0	50.2	49.1
1956	48.2	42.9	37.9	41.0	41.3	45.9	47.7	45.7	46.9	50.7	51.0	49.0
1957	45.2	46.1	42.4	39.0	45.3	46.9	50.0	46.9	53.1	51.2	48.7	48.7
1958	50.1	43.8	42.7	42.8	43.5	43.9	48.1	45.8	47.5	49.1	52.4	48.6
1959	48.1	45.8	45.5	45.3	43.3	47.7	52.5	48.7	52.6	51.4	50.9	49.1
1960	51.5	48.3	42.0	37.9	42.7	49.3	51.0	46.5	51.5	51.6	51.2	51.6
1961	51.2	43.5	40.3	38.5	45.0	47.5	54.0	46.4	53.2	52.0	50.1	50.5
1962	50.0	45.4	38.8	41.7	41.5	46.9	55.5	47.2	50.7	52.2	52.3	51.4
1963	51.7	46.1	40.9	38.4	48.1	47.6	51.1	47.1	51.0	51.0	52.4	49.4
1964	49.2	43.1	38.1	38.4	43.9	47.3	48.2	47.1	51.2	49.2	49.1	49.2
1965	49.0	42.1	38.9	41.6	44.0	45.8	54.0	46.3	50.3	51.2	50.2	47.7
1966	50.4	43.9	35.5	37.4	40.9	49.3	49.4	47.2	51.8	47.9	48.3	47.6
1967	47.8	45.0	37.8	38.6	45.0	45.1	47.9	47.5	51.8	50.5	53.6	48.8
1968	47.2	47.4	41.5	42.0	44.4	47.3	51.1	47.0	49.5	49.9	50.0	48.6
1969	49.0	44.4	37.2	34.0	38.3	49.3	55.4	45.0	45.1	49.7	51.2	47.5
1970	44.8	46.7	45.0	45.1	45.2	46.9	50.2	47.7	49.5	49.9	50.5	50.8
1971	49.1	45.2	36.0	37.4	43.0	45.9	53.2	45.3	49.7	53.6	52.5	47.1
1972	45.4	43.2	38.8	40.2	43.3	43.8	52.6	46.2	48.4	50.8	49.6	47.5
1973	46.8	43.1	32.9	35.0	44.2	46.8	53.2	45.1	49.8	50.0	46.7	46.2
1974	45.1	43.2	44.8	42.5	42.7	43.1	48.9	45.7	47.0	49.2	51.2	47.6
1975	47.3	43.8	40.8	42.1	41.2	45.0	49.5	47.3	51.0	49.4	51.7	49.0
1976	45.9	43.2	43.1	44.8	43.0	47.8	50.7	50.2	55.1	50.7	50.6	50.7
1977	49.6	46.9	42.6	40.0	46.8	47.1	48.4	50.1	52.7	51.0	57.5	59.7
1978	55.1	48.0	43.6	40.6	44.0	52.1	52.9	45.5	46.8	51.9	54.2	51.3
1979	53.0	43.8	37.4	38.5	41.4	49.2	50.5	48.1	58.8	52.1	48.8	48.9
1980	46.8	41.5	37.6	37.3	43.3	44.9	49.2	44.6	45.8	49.1	48.4	46.6
1981	46.9	43.0	39.5	38.8	43.1	47.5	52.7	47.6	54.9	50.7	47.7	48.7
1982	45.1	43.0	40.6	38.2	40.8	41.7	46.6	44.3	44.7	48.0	49.3	56.4
1983	44.1	40.6	41.1	41.2	41.7	42.2	46.5	43.9	44.7	46.5	50.3	50.2
1984	50.5	49.3	46.3	43.0	42.6	47.3	49.9	47.1	48.5	51.8	50.3	48.7
1985	46.4	40.9	36.6	39.4	42.9	44.9	50.5	45.9	50.8	47.3	46.0	45.4
1986	47.2	39.9	38.9	40.5	44.8	50.7	45.8	46.0	49.1	48.2	49.0	48.4
1987	48.4	45.0	39.9	37.7	41.8	45.9	51.7	46.0	47.4	47.2	49.5	52.0
1988	54.0	44.8	38.4	37.8	44.7	48.8	49.9	45.4	49.6	50.4	52.4	54.1
1989	53.8	43.8	38.6	37.2	39.7	46.3	53.2	44.8	48.5	50.4	52.8	52.4
1990	50.1	45.3	39.6	37.7	39.8	47.9	51.0	46.1	54.3	53.1	53.4	54.8
1991	53.4	43.7	34.0	37.3	44.9	44.0	49.3	48.5	53.8	54.1	56.3	60.3
1992	55.8	45.4	38.2	36.6	44.6	48.7	52.7	48.1	50.9	52.7	57.4	59.2
1993	54.5	44.7	35.8	35.4	40.2	49.2	53.2	43.3	49.5	58.2	52.5	58.4
1994	51.9	42.1	37.7									
Average	49.6	44.7	39.6	39.0	42.7	47.2	50.9	46.7	50.7	51.2	51.7	51.1
Minimum	44.1	39.9	32.9	29.4	37.8	41.7	45.8	43.2	44.7	46.5	46.0	45.4
Maximum	59.1	50.5	46.4	45.3	48.1	52.8	55.9	53.1	59.1	58.2	63.3	62.6

Table 5.5.1-2 Simulated Change in Water Temperature for the Trinity River, Alternatives 2-5, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	-5.8	0.0	2.8	1.2
1923	-0.2	-0.3	-0.2	0.0	0.0	0.7	0.0	-0.6	1.9	-0.6	-1.4	0.6
1924	0.1	-1.5	-2.1	3.7	-0.7	-0.2	-4.0	0.4	-0.1	0.1	1.6	-3.6
1925	-1.8	0.4	1.8	1.2	0.2	0.1	1.0	-1.4	-1.9	2.5	1.7	1.0
1926	0.0	-0.1	0.0	0.0	0.1	0.0	0.1	0.1	1.6	0.3	-0.3	-1.1
1927	-0.9	-0.2	0.1	0.1	0.0	0.0	0.7	-1.6	-10.6	-2.2	0.3	1.7
1928	2.4	0.2	0.4	0.1	0.0	0.0	0.4	-1.4	-1.3	-2.1	-0.2	2.6
1929	1.6	0.6	0.4	-0.9	0.0	-0.3	0.0	0.6	1.7	0.0	2.9	0.0
1930	-2.8	-1.0	-0.5	0.1	0.0	0.0	0.1	0.1	-0.7	0.7	0.5	-2.6
1931	-1.9	-1.2	0.3	0.1	0.1	-0.5	-0.7	-0.7	-4.7	-2.2	-0.9	-4.6
1932	-1.5	0.5	0.4	2.4	-0.1	-0.1	-0.7	-1.8	-2.9	-1.3	-3.3	-5.3
1933	0.9	0.8	1.1	0.1	-0.1	-0.2	-0.8	-2.5	-3.3	-0.6	-1.9	-4.4
1934	-1.8	-0.6	-0.3	0.2	0.1	-4.1	-7.3	-0.8	-1.3	0.4	0.9	-1.5
1935	1.4	0.0	-0.6	-0.6	0.0	0.0	0.0	0.1	0.1	2.0	5.5	-1.4
1936	-3.5	-1.0	-0.5	-0.3	0.0	-0.6	-1.4	-0.7	-6.1	0.5	1.4	-0.5
1937	-0.5	-0.7	-1.2	-1.3	-0.1	0.0	0.0	-0.3	2.4	-1.0	1.1	-1.5
1938	-1.7	-0.5	0.0	0.1	0.0	0.0	0.8	-1.7	-15.1	5.2	0.4	1.6
1939	0.2	0.1	0.2	0.4	0.0	0.4	-0.4	0.5	0.0	0.9	0.1	1.7
1940	-1.7	-0.1	-1.0	-0.9	0.0	0.0	0.6	-1.6	-2.5	-3.0	1.8	2.2
1941	1.3	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	-0.1	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-1.3	-0.7	5.3	0.0	0.0
1943	0.0	-0.1	0.0	0.0	0.0	0.0	0.3	-1.3	-6.6	-2.1	0.0	1.2
1944	1.4	0.7	0.1	-2.9	0.0	0.0	0.0	0.0	1.2	0.2	0.8	1.9
1945	0.8	-0.6	-0.5	-0.1	0.0	0.0	-0.8	-1.1	-8.1	-2.3	2.1	1.3
1946	0.3	0.0	0.0	0.0	0.0	0.0	0.9	-1.5	-1.9	-2.1	1.4	1.4
1947	1.9	0.0	1.0	0.6	-0.5	-0.9	-0.1	0.0	2.0	-0.6	-0.1	1.0
1948	0.5	-2.4	-1.3	-0.2	-0.4	0.1	0.2	-0.7	-4.0	-1.9	0.2	-2.8
1949	0.1	0.1	0.1	0.1	-0.1	0.0	0.6	-1.4	-1.7	-2.2	3.1	3.6
1950	1.8	0.8	-1.2	-1.6	0.0	0.0	-0.2	0.0	0.0	-1.1	0.9	1.1
1951	2.1	-0.1	0.0	0.0	0.0	0.0	0.7	-1.7	-3.4	-2.2	1.6	1.3
1952	2.3	0.1	0.0	0.0	0.0	0.0	-0.7	-0.1	0.3	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.1	0.0	0.0	0.6	-1.2	-0.4	3.3	0.0	0.0
1954	0.0	0.0	-0.2	0.4	0.0	0.0	0.0	-0.7	-2.5	-2.0	0.2	1.2
1955	0.0	1.0	-1.5	-3.4	-0.2	0.0	0.0	0.0	3.1	1.6	1.7	1.9
1956	0.7	-0.9	0.0	3.2	0.8	-3.2	-0.3	-0.7	-2.8	2.0	0.4	2.3
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.7	-1.0	-9.4	-2.0	0.1	1.2
1958	3.7	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.4	0.0	0.0
1959	0.0	0.0	-0.1	0.0	0.0	0.1	0.3	-0.8	-1.5	-0.2	0.5	0.2
1960	0.7	0.3	-0.9	-1.2	-0.2	-0.1	0.3	-0.9	-5.3	0.9	1.5	2.3
1961	1.8	-2.1	0.9	-0.6	0.0	0.0	0.0	-1.0	-3.4	-2.2	1.0	2.1
1962	1.0	0.0	-1.4	0.1	0.0	0.0	0.4	-1.1	-4.3	-2.2	2.4	1.8
1963	-1.0	0.2	0.1	0.1	0.0	0.0	0.4	-1.4	-9.6	-0.4	0.0	0.8
1964	3.3	-0.9	-3.5	-1.0	0.0	-0.5	-2.9	0.0	1.4	-0.2	0.4	1.8
1965	0.3	-1.3	0.0	2.6	-0.5	0.1	0.7	-1.7	-9.6	-2.2	1.5	1.1
1966	2.5	0.0	0.0	0.0	0.0	3.7	1.4	-1.5	-9.4	-0.9	0.1	1.2
1967	1.7	0.2	0.0	0.0	0.1	-0.1	0.3	-1.6	2.4	0.3	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-1.3	-3.0	-0.6	1.5	1.0
1969	1.4	0.3	0.1	0.0	0.0	0.0	0.9	0.9	-2.5	2.1	0.2	1.6
1970	-0.2	0.0	-0.2	0.0	0.0	0.0	0.9	-1.6	-3.2	-1.1	0.9	2.7
1971	1.3	0.5	0.1	0.0	0.3	0.5	0.7	-1.3	-0.7	4.5	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-1.4	-3.2	-1.6	1.5	1.3
1973	1.5	0.9	0.0	0.0	0.0	1.5	2.3	-1.7	-9.3	1.6	0.0	1.3
1974	-0.8	0.4	0.0	0.1	0.0	0.0	0.0	-0.3	-0.7	1.5	0.0	-0.1
1975	0.0	0.0	0.1	-0.1	0.0	0.1	0.3	-1.3	2.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.2	-0.1	0.0	2.6	0.0	1.1	0.8
1977	-0.3	-0.5	0.2	-0.2	0.0	0.0	-4.5	0.0	-0.3	0.1	0.4	-1.2
1978	0.3	-0.7	0.0	0.0	0.0	0.0	1.0	-1.8	-15.3	-1.3	2.2	4.6
1979	2.6	0.4	0.4	0.1	0.0	0.1	1.4	0.1	0.1	0.1	1.3	2.1
1980	1.1	1.7	0.8	0.0	0.5	0.0	0.1	-1.5	-2.5	-2.0	1.4	1.2
1981	1.7	0.1	-1.1	0.1	0.0	0.0	0.0	0.0	3.2	1.6	-0.7	2.1
1982	-0.4	-0.1	2.4	1.0	0.0	0.0	0.0	-1.2	-3.6	0.3	0.4	11.5
1983	0.8	0.0	-0.1	0.0	0.0	-0.1	-0.4	-0.1	0.0	0.0	0.0	0.0
1984	0.1	0.0	0.0	0.0	0.0	0.0	0.4	-1.5	-2.7	-2.2	1.4	1.1
1985	-1.9	-1.5	-4.1	-1.2	0.0	0.3	-1.1	0.0	0.6	0.0	-0.2	0.1
1986	1.3	-2.7	-1.0	-0.4	0.0	0.0	-1.0	-1.2	-2.2	-0.2	0.4	2.0
1987	1.2	0.2	1.2	0.0	-0.1	-0.1	0.0	0.0	-0.1	0.2	0.8	1.1
1988	1.0	-0.4	0.0	-0.7	0.5	0.0	0.0	-0.1	0.1	0.8	-0.4	-2.1
1989	-1.6	-0.5	0.0	0.0	0.0	0.0	0.5	-1.1	-4.4	0.2	3.0	1.0
1990	-0.4	-0.4	0.1	0.0	0.0	-0.1	-2.7	0.1	2.6	1.1	-2.8	-2.4
1991	-1.4	-1.3	-0.9	-0.2	0.6	0.1	0.1	-0.5	-2.6	-2.1	-1.4	-3.7
1992	-2.6	-0.9	0.6	0.2	0.0	-0.1	-0.5	-2.2	-4.5	-3.2	-1.3	-0.8
1993	-1.8	0.3	-0.6	-0.4	0.1	0.9	-0.2	-1.7	-8.4	-8.0	1.1	2.5
1994	0.2	0.3	0.2									
Average	0.3	-0.2	-0.2	0.0	0.0	0.0	-0.1	-0.8	-2.5	-0.3	0.6	0.6
Minimum	-3.5	-2.7	-4.1	-3.4	-0.7	-4.1	-7.3	-2.5	-15.3	-8.0	-3.3	-5.3
Maximum	3.7	1.7	2.4	3.7	0.8	3.7	2.3	0.9	3.2	5.3	5.5	11.5

Table 5.5.1-3 Simulated Change in Water Temperature for the Trinity River, Alternative 6, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.0	0.0	-5.8	0.0	2.8	1.2
1923	-0.2	-0.3	-0.2	0.0	0.0	0.7	0.0	-0.6	1.9	-0.6	-1.4	0.6
1924	0.1	-1.5	-2.1	3.7	-0.7	-0.3	-4.0	0.4	0.0	0.1	1.7	-3.5
1925	-1.8	0.3	1.8	1.1	0.2	0.1	1.0	-1.4	-1.9	2.5	1.8	1.0
1926	0.0	-0.1	0.0	0.0	0.1	0.0	0.1	0.1	1.7	0.4	-0.4	-1.2
1927	-0.9	-0.2	0.1	0.1	0.0	0.0	0.7	-1.5	-10.6	-2.2	0.3	1.7
1928	2.4	0.2	0.4	0.1	0.1	0.0	0.4	-1.4	-1.3	-2.1	-0.3	2.6
1929	1.6	0.5	0.4	-0.7	0.0	-0.3	0.0	0.6	1.7	0.6	3.0	-0.3
1930	-3.7	-1.1	-0.5	0.1	0.0	0.0	0.1	0.2	-0.7	0.7	0.4	-2.8
1931	-2.0	-1.3	0.3	0.1	0.1	-0.5	-0.7	-0.3	-4.6	-2.4	-1.4	-4.9
1932	-1.7	0.6	0.4	2.5	-0.1	-0.1	-0.7	-1.9	-3.3	-1.3	-3.3	-5.7
1933	0.4	0.9	1.1	0.1	-0.1	-0.2	-0.8	-2.7	-3.4	-0.7	-2.2	-4.7
1934	-1.8	-0.6	-0.3	0.2	0.2	-3.4	-7.3	-0.9	-1.6	0.1	2.0	-4.2
1935	2.0	0.2	-0.5	-0.6	0.0	0.1	0.1	-0.5	-0.2	1.5	-2.1	-0.9
1936	-3.1	-0.8	-0.5	-0.3	0.0	-0.6	-1.4	-0.7	-5.9	0.8	1.7	-0.3
1937	-0.3	-0.6	-1.2	-1.3	-0.1	0.0	0.0	-0.3	2.5	-0.7	1.3	-1.3
1938	-1.6	-0.5	0.0	0.1	0.0	0.0	0.8	-1.7	-15.1	5.2	0.4	2.5
1939	0.1	0.1	0.2	0.3	0.0	0.4	-0.4	0.5	0.1	0.9	0.1	1.7
1940	-1.8	-0.3	-1.0	-0.9	0.0	0.0	0.6	-1.6	-2.5	-3.0	1.7	2.1
1941	1.3	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-1.3	-0.7	5.3	0.0	0.0
1943	0.0	-0.1	0.0	0.0	0.0	0.0	0.3	-1.3	-6.6	-2.1	0.0	1.2
1944	1.4	0.7	0.1	-2.9	0.0	0.0	0.0	0.0	1.2	0.2	0.8	1.9
1945	0.8	-0.6	-0.5	0.8	0.0	0.0	-0.8	-1.1	-8.1	-2.3	2.1	1.3
1946	2.4	0.4	0.0	0.0	0.0	0.0	0.9	-1.5	-1.9	-2.1	1.0	1.4
1947	1.9	0.0	1.0	0.6	-0.5	-0.9	-0.1	0.0	2.0	-0.6	-0.1	1.0
1948	0.5	-2.4	-1.4	-0.2	-0.4	0.1	0.2	-0.7	-4.0	-1.9	0.2	-1.9
1949	0.1	0.1	0.1	0.1	-0.1	0.0	0.6	-1.4	-1.7	-2.2	3.0	3.5
1950	1.7	0.7	-1.3	-1.6	0.0	0.0	-0.2	0.0	0.0	-1.1	0.9	1.0
1951	2.0	-0.1	0.0	0.0	0.0	0.0	0.7	-1.7	-3.4	-2.2	1.6	1.3
1952	2.3	0.0	0.0	0.0	0.0	0.0	-1.1	-0.1	0.3	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.1	0.0	0.0	0.6	-1.2	-0.4	3.3	0.0	0.0
1954	0.0	0.0	-0.2	0.4	0.0	0.0	0.0	-0.7	-2.5	-2.0	0.2	1.2
1955	0.0	1.0	-1.5	-3.4	-0.2	0.0	0.0	0.0	3.1	1.6	1.7	1.9
1956	0.7	-0.9	0.0	3.2	0.8	-3.2	-0.3	-0.7	-2.8	2.0	0.4	2.3
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.7	-1.0	-9.4	-2.0	0.1	1.2
1958	3.7	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.4	0.0	0.0
1959	0.0	0.0	-0.1	0.0	0.0	0.1	0.3	-0.8	-1.5	-0.2	0.5	0.2
1960	1.2	0.2	-1.0	-1.2	-0.2	0.0	0.3	-0.9	-5.3	0.9	1.6	2.1
1961	1.7	-2.1	0.9	-0.6	0.0	0.0	0.0	-1.0	-3.4	-2.2	0.7	2.1
1962	1.0	-0.1	-1.4	0.0	0.0	0.0	0.4	-1.1	-4.3	-2.2	2.4	1.7
1963	-1.1	0.2	0.0	0.1	0.0	0.0	0.4	-1.4	-9.6	-0.4	0.0	0.8
1964	2.7	-0.9	-3.4	-1.0	0.0	-0.9	-2.7	0.0	1.4	0.0	0.5	1.8
1965	0.2	-1.4	0.0	2.8	-0.5	0.1	0.7	-1.7	-9.6	-2.2	1.5	1.1
1966	2.5	0.0	0.0	0.0	0.0	3.7	1.4	-1.5	-9.4	-0.9	0.1	1.2
1967	1.7	0.2	0.0	0.0	0.1	0.0	0.3	-1.6	2.4	0.3	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-1.3	-3.0	-0.4	1.5	0.9
1969	1.3	0.3	0.1	0.0	0.0	0.0	0.9	0.8	-2.5	2.1	0.2	1.4
1970	-0.2	0.0	-0.2	0.0	0.0	0.0	0.9	-1.6	-3.2	-1.1	0.9	2.7
1971	1.3	0.5	0.1	0.0	0.3	0.5	0.7	-1.3	-0.7	4.5	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-1.4	-3.2	-1.6	1.5	1.3
1973	1.5	0.9	0.0	0.0	0.0	1.5	2.3	-1.7	-9.3	1.6	0.0	1.3
1974	-0.8	0.4	0.0	0.1	0.0	0.0	0.0	-0.3	-0.7	1.5	0.0	-0.1
1975	0.0	0.0	0.1	-0.1	0.0	0.1	0.3	-1.3	2.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.2	-0.1	0.0	2.6	0.0	1.1	0.8
1977	-0.3	-0.5	-0.3	-0.2	0.0	0.0	-4.4	0.0	-0.2	0.0	-0.3	-1.6
1978	-2.6	2.4	3.7	0.0	0.0	0.0	1.0	-1.8	-15.3	-1.1	2.4	4.8
1979	2.8	0.4	0.4	0.1	0.0	0.1	1.4	0.1	0.1	0.1	1.2	2.1
1980	1.2	1.7	0.9	0.0	1.1	0.0	0.1	-1.5	-2.5	-2.0	1.4	1.1
1981	1.7	0.1	-1.1	0.1	0.0	0.0	0.0	0.0	3.2	1.6	-0.7	2.1
1982	-0.2	-0.1	3.1	1.0	0.0	0.0	0.0	-1.2	-3.6	0.3	0.4	11.5
1983	0.8	0.0	-0.1	0.0	0.0	-0.1	-0.4	-0.1	0.0	0.0	0.0	0.0
1984	0.1	0.0	0.0	0.0	0.0	0.0	0.4	-1.5	-2.7	-2.2	1.4	1.1
1985	-1.9	-1.5	-4.1	-1.2	0.0	0.3	-1.1	0.0	0.6	0.0	-0.2	0.1
1986	1.3	-2.7	-1.0	-0.4	0.0	0.0	-1.0	-1.2	-2.2	-0.2	0.4	2.0
1987	1.2	0.2	1.2	0.0	-0.1	-0.1	0.0	0.0	-0.1	0.2	0.9	1.0
1988	1.0	-0.4	0.0	-0.7	0.5	0.0	0.0	-0.1	0.2	0.7	-0.8	-2.0
1989	-1.7	-0.5	0.0	0.0	0.0	0.0	0.5	-1.1	-4.4	0.2	2.9	1.1
1990	-0.3	-0.3	0.0	0.0	0.0	-0.1	-2.7	0.1	2.8	1.2	-2.8	-2.4
1991	-1.4	-1.3	-0.9	-0.2	0.6	0.1	0.1	-0.5	-2.4	-2.1	-1.4	-3.7
1992	-2.6	-0.9	0.6	0.2	0.0	-0.1	-0.5	-2.2	-4.5	-3.2	-1.4	-1.0
1993	-1.8	0.1	-0.6	-0.4	0.1	0.1	0.8	-1.7	-8.4	-8.0	1.1	2.5
1994	0.0	0.3	0.2									
Average	0.2	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.8	-2.5	-0.3	0.5	0.5
Minimum	-3.7	-2.7	-4.1	-3.4	-0.7	-3.4	-7.3	-2.7	-15.3	-8.0	-3.3	-5.7
Maximum	3.7	2.4	3.7	3.7	1.1	3.7	2.3	0.8	3.2	5.3	3.0	11.5

Table 5.5.1-4 Frequency of Change in Water Temperature in the Trinity River According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+12.0	1	0	0	0	0
<+10.0	0	0	0	0	0
<+8.0	0	0	0	0	0
<+6.0	3	1	1	0	0
<+4.0	10	8	7	11	4
<+2.0	72	34	49	77	38
0.0	96	35	45	38	20
>-2.0	53	23	53	50	47
>-4.0	12	10	8	12	15
>-6.0	0	1	2	4	7
>-8.0	1	0	1	0	1
>-10.0	2	4	2	0	0
>-12.0	1	0	0	0	0
>-14.0	0	0	0	0	0
>-16.0	1	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-5 Frequency of Change in Water Temperature in the Trinity River According to Water Year Type (Comparison of 2020 Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+12.0	1	0	0	0	0
<+10.0	0	0	0	0	0
<+8.0	0	0	0	0	0
<+6.0	3	1	0	0	0
<+4.0	11	9	8	11	4
<+2.0	69	36	50	78	35
0.0	100	33	41	39	21
>-2.0	51	21	56	48	46
>-4.0	12	11	8	12	18
>-6.0	0	1	3	4	7
>-8.0	1	0	0	0	1
>-10.0	2	4	2	0	0
>-12.0	1	0	0	0	0
>-14.0	0	0	0	0	0
>-16.0	1	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-6 Simulated Water Temperature Data for the Sacramento River at Keswick Dam, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				44.8	45.2	49.4	49.7	48.2	47.0	49.3	49.4	48.1
1923	48.3	47.7	46.5	43.6	50.8	55.6	49.7	47.4	46.7	49.3	49.5	47.3
1924	49.1	54.0	49.5	45.3	47.1	48.3	49.3	48.6	48.0	53.6	64.5	66.3
1925	57.4	51.4	44.8	43.0	45.8	46.9	49.1	48.6	47.5	49.7	50.3	53.8
1926	57.5	53.5	49.8	45.1	45.9	48.5	50.4	48.6	48.1	50.1	50.8	53.9
1927	57.3	54.4	49.3	45.5	47.2	51.2	48.8	47.7	47.2	48.9	49.6	48.6
1928	51.3	51.9	49.0	45.4	49.3	53.3	49.6	48.1	47.2	48.8	50.2	48.9
1929	50.1	52.0	47.7	43.4	43.6	49.0	49.1	48.4	47.3	49.6	50.0	48.0
1930	53.1	57.3	53.1	44.5	44.7	52.5	50.0	47.8	47.5	49.6	50.0	47.8
1931	50.4	53.6	50.4	47.2	47.7	49.6	49.4	48.9	49.1	53.9	62.8	66.7
1932	60.8	52.3	44.4	43.3	43.6	51.9	49.2	49.4	48.4	50.7	57.5	64.0
1933	63.0	56.0	46.1	41.1	41.3	48.3	49.9	47.9	47.7	50.6	59.3	65.4
1934	63.9	56.9	46.8	44.7	48.2	55.9	50.6	48.5	48.5	55.8	65.4	65.0
1935	60.4	51.3	47.9	43.7	45.2	47.8	49.9	48.7	47.6	50.0	53.3	57.9
1936	59.6	54.3	49.6	47.4	46.6	55.0	50.1	48.3	47.5	49.2	49.9	51.5
1937	54.9	56.6	51.4	40.1	40.7	44.5	48.1	48.4	47.5	49.9	50.0	45.7
1938	46.0	48.9	51.2	48.1	46.5	47.1	48.5	48.2	48.0	49.2	49.4	50.9
1939	52.9	53.7	51.0	46.9	45.8	53.7	49.4	47.8	47.4	49.6	50.2	53.9
1940	52.3	55.1	51.4	46.1	47.9	53.1	49.7	48.5	47.6	49.4	50.0	49.2
1941	53.2	53.4	50.4	47.3	48.9	53.4	48.4	47.7	47.5	49.9	49.2	48.8
1942	52.2	54.2	49.8	46.2	46.9	49.2	49.2	47.1	47.4	49.1	49.6	48.0
1943	50.5	52.3	48.1	45.9	50.1	51.8	49.7	48.0	46.8	48.7	49.3	49.2
1944	50.4	51.1	49.7	46.2	46.1	54.1	48.9	48.2	47.2	49.5	49.9	49.8
1945	52.1	51.6	49.3	46.2	49.1	48.9	49.8	47.7	47.5	48.8	49.6	49.6
1946	51.4	50.9	47.7	44.9	44.5	50.9	49.5	47.8	46.7	48.7	49.7	48.0
1947	48.0	50.4	48.0	44.8	49.3	53.9	50.6	47.9	46.9	49.1	49.4	53.2
1948	56.3	53.8	48.2	47.0	46.1	46.9	48.7	47.6	47.5	49.3	49.7	48.5
1949	50.1	51.3	46.4	41.0	42.9	48.1	50.4	48.0	47.2	48.7	49.2	45.2
1950	44.0	44.5	48.7	40.3	42.0	50.3	50.2	48.3	47.3	49.7	50.1	46.2
1951	44.5	42.5	49.5	44.4	46.4	51.8	49.5	48.0	47.2	48.9	49.7	48.1
1952	47.3	47.8	47.3	42.9	46.5	48.4	48.3	48.0	47.1	49.8	49.3	45.6
1953	46.1	47.5	48.3	48.0	48.6	52.4	49.6	47.1	46.9	48.8	49.9	47.8
1954	49.8	51.7	49.7	46.4	50.8	49.2	48.8	47.6	47.6	48.7	50.1	50.0
1955	52.5	52.5	47.9	44.5	47.5	53.4	48.9	48.5	46.9	49.2	50.3	49.3
1956	49.9	51.5	48.6	45.6	45.8	51.5	49.5	47.5	47.6	49.5	49.8	46.6
1957	48.8	53.3	51.8	46.1	51.1	51.9	48.9	48.1	47.5	48.9	49.9	50.7
1958	48.8	52.5	48.6	46.0	49.0	48.4	48.6	48.7	47.3	49.6	49.6	50.4
1959	53.9	55.6	54.1	49.3	48.5	53.4	49.6	48.0	48.5	51.0	53.6	54.6
1960	57.2	57.4	51.9	45.7	45.8	53.7	49.8	47.9	47.9	49.3	49.9	50.9
1961	53.4	53.0	49.0	46.1	50.5	51.1	49.9	47.7	47.9	48.5	50.2	53.0
1962	56.4	54.3	48.4	46.4	46.9	50.3	50.4	47.8	47.7	49.0	50.1	50.8
1963	52.7	54.0	52.0	46.7	53.6	51.7	48.2	48.3	48.0	48.8	50.2	52.2
1964	52.1	52.7	48.4	45.3	49.4	52.4	48.7	47.7	47.6	49.9	50.1	49.6
1965	53.0	52.3	48.9	46.6	50.0	53.3	48.9	47.9	47.2	48.8	50.4	48.5
1966	49.8	50.9	47.8	44.9	46.2	52.7	49.3	48.4	46.6	49.2	50.0	49.3
1967	51.9	53.2	49.7	46.4	51.1	49.6	48.2	47.4	47.5	49.9	50.0	50.2
1968	53.0	55.5	50.9	45.2	52.6	52.7	49.4	48.1	47.6	49.9	50.4	50.5
1969	52.6	53.2	46.4	42.6	44.4	52.3	48.6	47.8	47.4	49.3	50.3	47.8
1970	45.9	49.1	51.5	47.8	52.5	52.4	49.0	48.4	47.7	49.5	50.6	48.6
1971	51.7	52.2	48.2	45.2	49.1	49.2	49.1	47.6	47.4	49.0	50.9	48.0
1972	50.0	53.0	47.5	44.1	48.8	53.3	49.1	48.3	46.9	49.1	50.5	49.8
1973	49.8	49.6	45.7	42.7	49.3	49.7	50.1	48.7	47.3	49.0	50.3	48.2
1974	47.8	49.1	47.9	45.3	48.2	51.5	48.8	48.4	47.8	50.2	50.1	47.2
1975	49.6	53.2	49.1	46.3	46.7	49.1	49.1	47.9	48.1	50.4	49.5	50.4
1976	52.3	52.9	49.7	46.7	48.3	52.1	49.4	50.0	49.7	51.3	51.9	53.0
1977	52.1	52.2	53.1	47.5	47.3	47.5	48.9	48.3	48.8	53.1	64.7	65.7
1978	61.0	52.1	47.9	44.2	49.7	54.8	49.0	48.0	47.2	49.0	50.3	50.0
1979	48.9	47.5	48.1	45.1	46.7	52.6	49.4	48.1	46.6	48.5	50.0	49.1
1980	49.5	49.4	46.2	45.0	48.6	49.9	49.4	47.7	46.9	49.1	49.7	48.2
1981	47.3	47.5	48.9	46.0	48.3	51.2	50.0	47.8	47.2	49.1	50.0	50.8
1982	51.5	51.1	48.1	43.2	47.2	46.2	48.1	48.2	47.3	49.1	49.8	44.6
1983	45.0	46.3	46.4	44.5	46.9	49.9	48.2	48.1	47.4	48.9	49.1	48.9
1984	54.2	52.8	47.7	46.2	48.1	54.2	49.0	48.1	47.3	49.1	50.3	49.4
1985	47.8	49.6	46.3	43.9	49.0	49.0	49.8	47.3	46.9	49.3	49.0	48.0
1986	49.6	50.2	46.3	45.5	49.8	53.8	49.3	47.8	47.1	49.3	49.8	48.5
1987	50.2	52.0	48.3	43.8	46.5	49.2	49.2	47.7	47.5	49.2	50.3	47.8
1988	52.4	53.9	47.5	44.4	44.8	48.0	49.7	48.1	47.0	50.7	50.5	54.6
1989	59.4	52.8	46.9	44.0	44.1	46.9	50.3	47.6	47.3	48.9	49.7	50.4
1990	52.1	53.1	48.4	44.9	44.3	46.1	47.8	48.4	47.3	49.5	52.1	56.9
1991	59.3	53.8	44.2	44.0	51.3	47.5	49.6	48.0	47.6	49.7	49.8	56.1
1992	61.3	55.6	47.5	44.0	48.4	49.2	50.5	48.5	47.8	51.9	59.4	65.3
1993	61.6	52.7	45.0	43.0	44.9	49.8	49.4	47.6	47.2	48.6	50.1	45.3
1994	49.9	51.3	47.6									
Average	52.4	52.1	48.6	45.1	47.4	50.7	49.3	48.1	47.5	49.7	51.3	51.3
Minimum	44.0	42.5	44.2	40.1	40.7	44.5	47.8	47.1	46.6	48.5	49.0	44.6
Maximum	63.9	57.4	54.1	49.3	53.6	55.9	50.6	50.0	49.7	55.8	65.4	66.7

Table 5.5.1-7 Simulated Change in Water Temperature for the Sacramento River at Keswick Dam, Alternatives 2-5, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.1	0.0	0.0	-0.2	0.7	-0.2	-0.4
1923	0.5	0.5	0.1	0.0	0.0	0.3	0.0	-0.1	0.0	0.0	-0.2	-1.0
1924	-0.2	1.1	-0.1	-0.3	-0.1	-0.1	-0.1	0.0	0.1	-1.0	0.0	1.3
1925	-0.5	-0.1	0.2	-0.6	-0.2	-0.2	0.1	0.0	-0.6	-1.2	-0.1	2.7
1926	2.8	0.2	-0.1	0.0	0.3	-7.0	-0.2	0.1	-0.1	-0.3	-0.1	3.8
1927	2.9	-0.1	-0.1	-0.1	0.2	0.0	0.0	0.0	-0.1	0.0	-0.2	-0.3
1928	0.8	0.5	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.1	-0.4
1929	0.8	0.6	0.1	0.4	-0.1	-6.3	0.0	0.1	-0.1	0.0	-0.2	-0.5
1930	3.7	1.1	0.1	-0.2	-0.1	-2.5	0.1	0.0	0.2	-0.3	-0.7	0.3
1931	1.6	2.3	0.0	-0.1	0.1	0.7	0.0	0.0	0.2	0.5	-0.8	0.6
1932	-0.5	0.4	0.0	0.4	-0.2	0.6	-0.1	-0.3	-0.2	0.2	0.6	0.9
1933	0.3	-0.5	-0.3	-0.1	0.0	-1.3	0.3	0.0	-0.1	1.7	2.3	1.9
1934	0.3	-0.8	-1.1	-1.4	-3.0	-1.0	0.2	0.1	1.3	2.3	1.0	-0.2
1935	-0.3	-0.9	-0.4	-0.5	-1.3	0.0	0.0	0.0	0.1	-0.2	0.9	1.6
1936	1.0	-0.4	-0.1	0.0	-0.1	0.2	0.1	0.0	0.1	-0.1	-0.9	1.2
1937	1.9	1.9	0.0	-0.3	1.1	1.9	-0.6	0.2	0.3	-0.3	-0.6	-1.2
1938	1.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.6	0.3
1939	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.2	-0.1	-0.1	0.4	1.5
1940	-1.8	-1.2	0.1	0.2	0.0	0.0	0.0	0.1	-0.7	0.0	-0.3	0.3
1941	2.4	1.5	-0.2	0.0	-0.1	-0.1	0.0	0.0	-0.6	0.3	-0.1	0.0
1942	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-1.0	0.1	0.1
1943	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.5
1944	1.1	1.1	0.0	0.3	0.1	0.3	0.1	0.2	-0.1	0.1	0.1	-0.3
1945	1.1	0.4	0.1	0.0	0.1	0.0	-0.1	0.0	-0.1	0.0	-0.3	-0.2
1946	1.3	0.6	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.4	0.0	-0.3
1947	0.3	2.5	0.0	-0.1	-3.1	-0.5	0.2	0.0	0.0	0.0	0.2	1.7
1948	1.4	0.4	-0.2	0.3	0.0	-0.1	0.1	0.0	0.1	-0.1	-0.1	0.5
1949	-0.1	-0.1	0.0	0.0	0.1	0.1	0.3	0.1	-0.2	-0.3	0.0	-1.1
1950	-0.5	1.3	0.2	0.0	-4.7	0.0	0.0	0.1	0.2	0.4	0.0	-0.8
1951	-0.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.9
1952	-1.0	3.0	0.1	0.1	0.0	0.0	-0.1	0.0	-0.8	0.2	0.3	0.2
1953	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.9	0.2	0.2
1954	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.2	-0.1	0.2
1955	2.4	0.4	0.0	0.5	0.7	0.3	0.2	0.1	-0.2	-0.1	0.2	-0.5
1956	0.8	1.5	0.0	0.0	0.0	-1.5	-0.1	-0.1	-1.2	-0.6	0.6	-0.1
1957	0.6	0.2	0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.4
1958	0.1	0.8	0.1	0.0	0.0	0.0	0.0	0.1	-0.7	-0.1	0.1	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.3	0.6	0.3
1960	1.5	-0.2	0.1	-0.1	-0.1	0.2	0.2	0.0	0.0	-0.6	-0.4	0.4
1961	3.4	1.8	0.2	-0.2	-0.2	0.0	0.4	0.0	0.0	-0.3	0.0	0.8
1962	2.0	-0.1	0.0	0.1	0.0	0.2	0.1	-0.1	0.0	-0.2	-0.5	-0.1
1963	2.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.5	-0.1	0.5
1964	1.4	1.0	0.4	0.4	0.2	-0.2	-0.3	0.0	0.0	0.2	0.1	-0.1
1965	2.6	1.6	0.1	0.0	-0.6	0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.6
1966	1.2	0.4	0.1	0.0	0.0	0.5	0.1	-0.1	0.0	0.0	-0.1	0.1
1967	1.9	2.9	-0.1	0.0	0.1	0.0	0.0	0.0	-0.9	-0.5	0.1	0.0
1968	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	-0.4	0.1	0.4
1969	0.1	0.3	0.0	-0.1	0.0	0.0	0.0	0.1	-1.0	-0.6	0.5	2.0
1970	-0.2	-1.4	0.0	0.0	0.0	0.0	0.1	-0.1	-0.3	-0.1	-0.4	-1.5
1971	2.1	2.0	0.0	0.0	0.9	0.1	-0.1	0.0	-0.5	-1.4	0.8	0.3
1972	0.6	0.4	0.1	0.1	0.0	0.0	0.1	0.1	0.0	-0.5	0.0	-0.3
1973	-0.1	1.5	0.1	0.0	0.0	0.1	0.1	-0.1	-0.2	-0.9	0.0	0.1
1974	1.7	0.3	0.1	0.0	0.0	0.0	-0.1	-0.7	-1.4	0.4	0.7	0.1
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.2	0.2	0.1
1976	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	-0.2	-0.3	-0.1
1977	0.4	0.6	0.1	0.0	0.1	0.1	0.1	0.1	0.0	-0.3	-0.5	0.5
1978	-0.2	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.6
1979	1.2	0.4	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	-0.3	-0.9
1980	0.9	2.4	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	-0.2	-0.6
1981	-0.5	0.8	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.4	-0.2	0.4
1982	2.0	0.5	0.1	-0.1	0.0	0.0	0.0	0.1	-0.6	-0.5	0.1	-1.0
1983	0.1	-0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.4	-0.9
1985	1.8	0.3	0.2	0.8	0.2	0.1	-0.1	-0.1	0.0	0.0	-0.2	0.4
1986	1.1	0.9	0.1	-0.1	0.3	0.0	-0.3	-0.1	-0.4	-0.6	-0.1	-0.9
1987	1.3	2.3	0.2	0.0	-0.9	0.0	0.1	0.0	0.0	0.1	0.4	-0.4
1988	0.9	0.1	0.1	0.1	0.0	-0.1	0.1	0.0	0.1	-0.2	-0.7	0.0
1989	-0.2	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.5	-0.6	0.2
1990	1.9	1.0	0.0	0.0	0.0	-0.5	0.2	0.0	0.1	-0.5	0.5	1.6
1991	0.8	-0.1	-0.1	0.1	0.9	0.0	0.2	0.1	0.0	0.2	-0.5	1.1
1992	1.1	0.1	-0.3	-0.2	-0.4	0.8	0.2	0.0	0.7	1.1	-0.3	0.6
1993	-0.3	-0.5	-0.5	0.0	0.2	-0.2	0.1	0.3	0.0	0.1	0.1	-0.7
1994	0.8	0.3	0.0									
Average	0.8	0.6	0.0	0.0	-0.1	-0.2	0.0	0.0	-0.2	-0.1	0.0	0.2
Minimum	-1.8	-1.4	-1.1	-1.4	-4.7	-7.0	-0.6	-0.7	-1.4	-1.4	-0.9	-1.5
Maximum	3.7	3.0	0.4	0.8	1.1	1.9	0.4	0.3	1.3	2.3	2.3	3.8

Table 5.5.1-8 Simulated Change in Water Temperature for the Sacramento River at Keswick Dam, Alternatives 6, 2020 LOD

YEAR	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.1	0.0	0.0	-0.2	0.7	-0.2	-0.4
1923	0.5	0.5	0.1	0.0	0.0	0.3	0.0	-0.1	0.0	0.0	-0.2	-1.0
1924	-0.1	1.1	-0.1	-0.3	-0.1	-0.1	-0.1	0.0	0.1	-0.9	0.1	1.2
1925	-0.4	-0.2	0.2	-0.6	-0.2	-0.2	0.1	0.0	-0.5	-1.2	-0.3	2.7
1926	2.7	0.2	-0.1	0.0	0.3	-7.0	-0.1	0.1	-0.1	-0.3	-0.2	3.8
1927	2.8	0.0	-0.1	-0.1	0.2	0.0	0.0	0.0	-0.1	0.0	-0.2	-0.3
1928	1.0	0.6	-0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.4
1929	0.8	0.6	0.1	0.4	-0.1	-6.1	0.0	0.1	-0.1	0.1	-0.1	-0.6
1930	2.9	0.7	0.1	-0.2	-0.1	-1.7	0.1	0.0	0.2	-0.3	-0.7	0.3
1931	1.0	1.6	0.0	-0.1	0.1	0.4	-0.1	-0.1	0.2	0.0	-1.6	0.7
1932	0.0	0.1	0.1	0.6	-0.2	0.8	-0.1	-0.3	-0.2	-0.2	0.6	0.6
1933	0.4	-0.4	-0.2	-0.1	0.0	-1.3	0.3	-0.1	-0.1	1.3	1.5	1.5
1934	0.3	-0.6	-0.9	-1.3	-2.0	-0.7	0.2	0.1	1.4	0.8	1.1	-1.3
1935	-0.3	-0.8	-0.4	-0.5	-1.1	0.0	0.0	-0.1	0.1	0.1	0.7	0.4
1936	0.5	-0.4	-0.1	0.0	0.0	0.1	0.0	0.0	0.1	-0.1	-0.9	0.7
1937	1.3	1.3	0.0	-0.2	0.5	1.2	-0.6	0.2	0.3	-0.3	-0.6	-1.1
1938	0.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.6	0.2
1939	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.2	-0.1	-0.1	0.3	1.5
1940	-2.1	-0.9	0.1	0.2	0.0	0.0	0.0	0.1	-0.7	0.0	-0.3	0.5
1941	2.5	1.5	-0.2	0.0	-0.1	-0.1	0.0	0.0	-0.6	0.3	-0.1	0.0
1942	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-1.0	0.1	0.1
1943	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.5
1944	1.0	1.0	0.0	0.3	0.1	0.3	0.1	0.2	-0.1	0.0	0.1	-0.3
1945	1.0	0.5	0.1	0.1	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.3	-0.2
1946	0.8	0.8	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.4	-0.1	-0.3
1947	0.5	2.6	0.0	-0.1	-3.6	-0.5	0.2	0.0	0.0	0.0	0.1	1.8
1948	1.5	0.4	-0.2	0.3	0.0	-0.1	0.1	0.0	0.1	-0.1	-0.1	0.4
1949	0.0	-0.1	0.0	0.0	0.1	0.1	0.3	0.1	-0.2	-0.3	0.0	-1.1
1950	-0.5	1.3	0.2	0.0	-4.8	0.0	0.0	0.1	0.2	0.4	0.0	-0.8
1951	-0.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.9
1952	-0.9	3.2	0.1	0.1	0.0	0.0	-0.1	0.0	-0.8	0.2	0.3	0.2
1953	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.9	0.2	0.2
1954	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.2	-0.1	0.2
1955	2.4	0.4	0.0	0.5	0.7	0.3	0.2	0.1	-0.2	-0.1	0.2	-0.5
1956	0.8	1.5	0.0	0.0	0.0	-1.5	-0.1	-0.1	-1.2	-0.7	0.6	-0.1
1957	0.5	0.2	0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.4
1958	0.1	0.7	0.1	0.0	0.0	0.0	0.0	0.1	-0.7	-0.1	0.1	0.0
1959	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.3	0.5	0.3
1960	1.3	-0.1	0.1	0.0	-0.1	0.2	0.2	0.0	0.0	-0.6	-0.4	0.2
1961	2.9	1.7	0.2	-0.2	-0.1	0.0	0.4	0.0	0.0	-0.3	-0.1	0.8
1962	2.0	-0.1	0.0	0.1	0.0	0.2	0.1	-0.1	0.0	-0.2	-0.5	-0.1
1963	2.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.5	-0.1	0.5
1964	1.4	1.0	0.4	0.4	0.2	-0.3	-0.2	0.0	0.0	0.3	0.1	-0.1
1965	2.5	1.5	0.1	0.0	-0.6	0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.6
1966	1.2	0.4	0.1	0.0	0.0	0.5	0.1	-0.1	0.0	0.0	-0.1	0.1
1967	1.9	2.9	-0.1	0.0	0.1	0.0	0.0	0.0	-0.9	-0.5	0.1	0.0
1968	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	-0.4	0.1	0.4
1969	-0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	-1.0	-0.6	0.5	2.1
1970	-0.2	-1.5	0.0	0.0	0.0	0.0	0.1	-0.1	-0.3	-0.1	-0.4	-1.5
1971	2.2	2.0	0.0	0.0	0.9	0.1	-0.1	0.0	-0.5	-1.4	0.8	0.3
1972	0.6	0.4	0.1	0.1	0.0	0.0	0.1	0.1	0.0	-0.5	0.0	-0.3
1973	-0.1	1.5	0.1	0.0	0.0	0.1	0.1	-0.1	-0.2	-0.9	0.0	0.2
1974	1.7	0.2	0.1	0.0	0.0	0.0	-0.1	-0.7	-1.4	0.4	0.7	0.1
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.2	0.2	0.1
1976	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	-0.2	-0.2	-0.1
1977	0.3	0.5	0.1	0.0	0.1	0.1	0.0	0.1	0.1	-0.8	-1.4	0.7
1978	0.3	0.2	0.2	-0.3	0.7	0.0	-0.1	0.0	-0.1	-0.1	-0.2	-0.5
1979	1.3	0.5	0.1	0.0	0.0	0.4	0.2	0.0	0.0	0.0	-0.3	-0.9
1980	0.9	2.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.6
1981	-0.5	0.9	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.4	-0.1	0.2
1982	2.2	0.5	0.1	-0.1	0.0	0.0	0.0	0.1	-0.6	-0.5	0.1	-1.0
1983	0.1	-0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.4	-0.9
1985	1.8	0.3	0.2	0.8	0.2	0.1	-0.1	-0.1	0.0	0.0	-0.2	0.4
1986	1.1	0.9	0.1	-0.1	0.3	0.0	-0.3	-0.1	-0.4	-0.6	-0.1	-0.9
1987	1.3	2.3	0.2	0.0	-0.9	0.0	0.1	0.0	0.0	0.2	0.3	-0.4
1988	0.3	0.0	0.1	0.1	0.0	1.0	1.0	0.0	0.0	-0.1	-0.8	-0.6
1989	-0.3	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.5	-0.7	0.2
1990	2.0	1.0	0.0	0.0	0.0	-0.5	0.2	0.0	0.1	-0.5	0.3	1.6
1991	0.6	-0.1	-0.1	0.1	0.8	0.0	0.1	0.1	0.0	0.2	-0.8	0.9
1992	0.9	0.1	-0.3	-0.1	-0.1	0.6	0.2	0.0	0.7	0.9	-0.8	0.5
1993	-0.1	-0.6	-0.5	0.0	0.2	-0.4	0.1	0.3	0.0	0.1	0.1	-0.7
1994	0.8	0.2	0.0									
Average	0.8	0.5	0.0	0.0	-0.1	-0.2	0.0	0.0	-0.2	-0.2	-0.1	0.1
Minimum	-2.1	-1.5	-0.9	-1.3	-4.8	-7.0	-0.6	-0.7	-1.4	-1.4	-1.6	-1.5
Maximum	2.9	3.2	0.4	0.8	0.9	1.2	1.0	0.3	1.4	1.3	1.5	3.8

Table 5.5.1-9 Frequency of Change in Water Temperature in the Sacramento River at Keswick Dam According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.0	0	0	0	2	0
<+3.5	0	0	0	1	0
<+3.0	4	0	0	2	0
<+2.5	4	1	0	3	3
<+2.0	6	0	5	3	5
<+1.5	4	1	8	7	6
<+1.0	8	4	5	8	13
<+0.5	51	24	44	63	36
0.0	98	43	56	38	27
>-0.5	46	33	36	48	26
>-1.0	20	9	10	12	9
>-1.5	9	1	3	2	5
>-2.0	2	1	0	0	0
>-2.5	0	0	0	0	0
>-3.0	0	0	0	1	0
>-3.5	0	0	0	1	1
>-4.0	0	0	0	0	0
>-4.5	0	0	0	0	0
>-5.0	0	0	1	0	0
>-5.5	0	0	0	0	0
>-6.0	0	0	0	0	0
>-6.5	0	0	0	0	1
>-7.0	0	0	0	0	0
>-7.5	0	0	0	1	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-10 Frequency of Change in Water Temperature in the Sacramento River at Keswick Dam According to Water Year Type (Comparison of Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	WATER YEAR TYPE				
	wet	above normal	below normal	dry	critical
<+4.0	0	0	0	1	0
<+3.5	1	0	0	0	0
<+3.0	2	0	0	5	0
<+2.5	6	1	0	2	0
<+2.0	4	0	1	3	3
<+1.5	4	1	7	4	7
<+1.0	8	5	6	12	16
<+0.5	52	28	48	61	37
0.0	98	38	55	40	24
>-0.5	46	33	37	49	26
>-1.0	21	10	10	10	12
>-1.5	7	0	3	2	4
>-2.0	3	0	0	1	1
>-2.5	0	1	0	0	1
>-3.0	0	0	0	0	0
>-3.5	0	0	0	0	0
>-4.0	0	0	0	1	0
>-4.5	0	0	0	0	0
>-5.0	0	0	1	0	0
>-5.5	0	0	0	0	0
>-6.0	0	0	0	0	0
>-6.5	0	0	0	0	1
>-7.0	0	0	0	0	0
>-7.5	0	0	0	1	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-11 Simulated Water Temperature Data for the Sacramento River at Ben Bridge, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.7	47.0	50.9	54.9	56.3	54.8	55.8	54.6	54.4
1923	52.0	48.5	45.2	43.8	49.9	54.9	54.5	52.7	52.2	55.0	55.0	54.4
1924	52.3	53.6	47.5	44.7	48.9	50.5	53.2	55.3	54.4	59.0	67.1	66.5
1925	57.1	51.0	44.0	43.8	48.0	50.0	55.4	56.8	55.5	56.5	56.2	57.5
1926	57.8	52.0	47.8	44.2	48.0	53.4	56.0	56.2	56.6	56.9	56.9	58.0
1927	58.8	53.0	46.4	45.1	47.6	51.9	53.1	54.5	54.5	54.9	55.1	53.6
1928	54.6	51.6	46.8	44.8	48.7	53.1	54.8	54.8	53.9	54.2	55.9	54.9
1929	53.3	51.4	45.9	43.0	46.4	51.6	52.5	55.2	55.1	55.7	56.3	55.1
1930	56.2	56.5	48.6	44.0	47.7	52.9	54.9	54.5	55.1	56.0	56.2	54.4
1931	54.1	53.0	48.2	45.8	48.7	52.5	53.1	55.8	55.2	59.9	66.3	66.4
1932	60.1	51.1	44.6	43.7	45.9	53.3	53.3	58.3	58.0	57.6	62.3	66.8
1933	61.9	54.9	44.3	42.3	44.1	51.1	54.7	54.7	56.3	57.8	63.6	65.6
1934	63.8	55.5	45.3	45.3	48.7	56.4	55.7	55.4	54.7	60.6	68.2	66.5
1935	60.0	51.3	46.6	44.3	47.3	50.3	55.8	57.9	55.7	56.3	58.8	61.6
1936	59.0	52.6	47.6	45.6	47.9	54.4	55.1	55.6	55.7	56.0	55.9	57.4
1937	57.5	55.8	48.7	39.7	45.6	50.4	53.9	56.8	55.9	57.2	56.3	53.2
1938	52.0	50.9	48.8	46.5	47.1	48.9	52.3	56.9	57.5	56.5	55.2	55.1
1939	54.1	52.4	48.9	46.0	46.4	53.7	53.2	53.1	52.6	54.5	54.9	58.2
1940	55.0	54.3	48.4	45.2	48.1	53.1	55.7	56.2	55.2	54.5	55.4	53.9
1941	55.4	52.2	47.6	46.5	48.8	53.2	53.0	53.6	56.1	56.1	53.9	52.3
1942	53.6	53.4	48.1	45.8	47.3	51.1	54.3	52.9	56.5	56.1	55.3	52.1
1943	53.0	51.6	46.6	45.4	49.4	52.1	54.4	55.1	53.5	54.2	54.2	55.1
1944	53.3	50.6	48.3	45.2	47.1	53.7	51.8	54.3	53.1	54.3	54.8	56.1
1945	55.2	50.8	47.2	45.3	48.7	50.6	54.7	53.7	54.4	54.6	54.6	54.9
1946	55.0	50.5	46.9	44.8	45.3	51.9	54.0	53.9	52.2	53.8	54.5	53.1
1947	50.5	50.0	46.5	44.0	49.4	53.5	55.8	53.4	53.0	53.3	53.9	57.9
1948	57.2	52.2	46.4	46.3	46.3	49.6	54.2	55.5	57.1	55.7	55.2	55.2
1949	52.8	51.1	44.9	40.8	44.8	50.5	55.9	54.4	54.0	53.5	54.0	52.1
1950	48.6	47.6	46.8	41.8	46.4	51.4	55.3	55.5	54.9	56.9	56.3	53.9
1951	51.4	46.2	48.0	44.5	47.0	52.3	53.6	55.2	53.9	53.9	55.1	54.7
1952	51.5	49.1	46.3	43.8	47.1	50.1	51.1	55.7	55.4	57.3	55.2	51.2
1953	50.4	48.7	46.6	47.1	49.0	52.6	54.1	52.8	55.4	55.3	55.8	52.9
1954	52.1	51.4	48.4	45.8	50.1	50.5	52.9	53.4	54.5	53.6	55.6	55.6
1955	54.9	51.5	46.3	44.3	47.6	53.4	52.2	56.4	53.2	54.5	56.5	56.2
1956	54.0	51.1	47.4	45.4	46.5	52.5	55.0	54.3	56.6	57.0	55.8	51.8
1957	51.2	52.9	49.6	44.6	50.5	52.2	52.5	56.0	55.9	54.1	54.9	57.4
1958	53.0	51.9	47.4	45.7	48.7	49.7	53.4	55.9	56.4	56.2	56.0	54.9
1959	55.8	54.2	51.8	47.9	48.5	54.1	54.0	53.3	53.5	56.1	57.8	59.4
1960	58.4	56.1	49.6	44.7	47.8	53.3	54.1	54.4	55.8	54.9	54.8	57.4
1961	55.6	51.5	46.6	45.3	49.4	51.7	54.6	53.8	55.4	53.5	55.1	57.6
1962	57.4	52.8	46.4	45.8	47.6	51.5	55.8	53.9	54.8	54.8	55.5	56.9
1963	56.9	53.2	49.7	45.3	51.6	52.0	50.8	56.4	56.2	54.1	56.4	58.4
1964	55.2	52.0	46.6	44.8	49.7	52.6	51.3	53.4	54.2	55.5	55.6	55.7
1965	56.3	51.1	47.4	46.1	49.4	53.6	54.0	54.8	54.9	54.6	56.8	54.3
1966	54.8	51.0	45.9	44.8	47.0	52.8	54.1	55.1	51.8	53.9	55.6	55.8
1967	54.6	52.4	48.0	45.7	50.2	50.3	52.0	53.7	56.4	56.7	55.8	54.1
1968	54.7	54.7	48.1	44.7	51.3	53.2	53.4	54.5	53.6	55.1	56.2	56.7
1969	55.0	52.0	45.2	43.5	45.9	52.6	52.4	54.9	55.5	55.6	56.5	54.9
1970	49.2	50.4	49.5	47.0	51.2	52.9	52.2	55.6	55.0	54.3	56.3	55.4
1971	55.0	51.7	46.8	45.1	49.0	50.2	53.8	54.3	55.9	55.9	57.8	53.1
1972	52.3	52.2	45.6	44.1	48.7	53.6	52.6	55.1	52.6	54.2	56.0	55.6
1973	53.7	50.2	44.9	43.6	49.0	51.0	55.6	56.8	55.0	54.8	56.4	55.2
1974	52.5	49.5	47.1	45.2	48.2	51.8	54.3	56.3	57.0	57.7	56.3	52.4
1975	52.4	52.3	46.9	45.4	47.5	50.2	54.0	55.5	56.2	57.0	54.6	55.0
1976	53.8	51.8	48.0	46.2	48.2	52.3	53.3	56.8	55.0	56.8	57.5	59.1
1977	55.3	52.8	51.4	45.9	49.0	49.8	52.3	54.2	54.5	56.9	66.9	66.1
1978	60.7	51.6	46.5	45.3	49.2	53.9	54.1	55.2	54.7	54.9	56.6	56.5
1979	54.3	48.6	46.4	44.8	47.7	53.0	53.8	55.8	52.2	53.7	55.6	56.1
1980	53.6	49.6	45.5	45.0	48.6	51.8	54.1	54.1	52.8	55.1	55.3	54.3
1981	51.9	48.2	47.3	45.4	48.6	51.9	55.0	54.0	53.1	54.6	55.7	56.7
1982	53.8	51.3	47.2	43.8	47.5	48.4	50.8	56.4	55.7	56.2	56.2	52.1
1983	48.5	47.7	46.0	44.7	47.4	50.7	52.7	55.3	54.3	54.8	54.2	53.0
1984	55.6	52.1	46.8	45.8	48.1	53.9	52.2	54.8	54.0	55.0	56.3	56.3
1985	51.5	50.1	45.5	43.8	49.1	50.6	55.0	52.4	53.3	54.5	53.7	53.7
1986	52.8	49.3	45.4	45.4	49.4	53.4	54.2	54.4	53.9	55.1	55.2	54.3
1987	53.8	51.5	46.6	43.7	47.7	51.4	52.8	53.4	53.0	54.3	57.0	53.8
1988	55.1	52.3	45.9	44.7	46.6	51.3	54.2	54.9	53.1	58.3	56.0	58.7
1989	60.2	51.4	45.6	44.0	45.3	51.2	55.6	53.2	54.3	54.6	55.4	56.6
1990	54.9	52.3	47.0	44.6	45.3	50.3	53.0	55.7	55.2	55.6	57.7	61.0
1991	59.6	52.3	42.7	44.0	50.9	50.5	54.4	54.2	55.2	57.6	56.0	62.1
1992	61.6	53.9	46.0	43.8	48.8	52.0	55.9	55.2	53.5	56.9	63.3	66.0
1993	61.1	51.6	44.6	44.4	47.4	52.3	54.6	54.3	56.8	54.3	56.2	52.7
1994	53.4	50.6	46.1									
Average	54.9	51.6	46.9	44.8	48.0	51.9	53.9	54.9	54.8	55.6	56.7	56.5
Minimum	48.5	46.2	42.7	39.7	44.1	48.4	50.8	52.4	51.8	53.3	53.7	51.2
Maximum	63.8	56.5	51.8	47.9	51.6	56.4	56.0	58.3	58.0	60.6	68.2	66.8

Table 5.5.1-12 Simulated Change in Water Temperature for the Sacramento River at Ben Bridge, Alternatives 2-5, 2020 LOD

YEAR	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.1	-0.1	1.5	-0.2	-0.3
1923	0.3	0.3	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.3	-0.2	-0.6
1924	0.0	0.7	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.6	0.0	0.8
1925	-0.2	-0.1	0.1	-0.3	-0.1	-0.4	0.0	0.1	-0.5	-1.0	-0.1	1.8
1926	1.8	0.1	-0.3	0.0	0.1	-2.7	0.0	0.2	0.0	-0.1	-0.1	2.4
1927	1.7	-0.1	0.0	0.0	0.1	0.0	0.0	0.1	-0.2	0.2	-0.2	-0.2
1928	0.6	0.3	-0.1	0.0	0.0	0.0	0.0	-0.9	0.2	0.4	-0.2	0.0
1929	0.7	0.4	0.0	0.3	0.0	-2.9	0.1	0.1	0.3	0.5	0.3	-0.5
1930	2.6	0.6	0.0	-0.1	0.0	-0.7	0.0	0.2	0.5	-0.4	-0.3	0.9
1931	0.7	1.3	0.0	0.0	0.0	0.4	0.0	0.0	0.3	1.1	-0.3	0.4
1932	-0.3	0.2	0.0	0.2	-0.1	0.3	-0.2	-0.5	-0.5	-0.2	0.2	0.3
1933	0.2	-0.3	-0.1	-0.1	0.0	-0.4	0.7	0.1	-0.2	1.2	1.4	1.3
1934	0.2	-0.5	-0.4	-0.4	-1.0	-0.4	0.1	-0.1	1.0	1.7	0.8	-0.1
1935	-0.1	-0.3	-0.2	-0.2	-0.4	0.0	0.0	0.2	0.5	0.1	0.9	1.2
1936	0.5	-0.4	-0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.1	-0.7	0.7
1937	1.2	1.1	-0.1	0.0	0.3	0.5	-0.2	0.3	0.7	0.6	-0.2	-0.4
1938	1.0	0.6	-0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.6	-0.4	0.5
1939	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.4	-0.1	-0.1	0.3	1.1
1940	-1.2	-0.8	-0.1	0.0	0.0	0.0	0.0	0.2	-0.5	0.1	-0.3	0.2
1941	1.6	1.0	-0.5	0.0	0.0	0.0	0.0	0.4	1.3	0.7	-0.3	0.0
1942	0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.6	0.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.1	-0.2	-0.4
1944	1.2	0.7	-0.1	0.2	0.0	0.2	0.4	0.6	0.3	0.2	0.3	0.2
1945	1.0	0.2	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	0.2	-0.4	-0.3
1946	1.0	0.3	0.1	0.0	0.2	-0.1	0.1	0.1	-0.1	-0.2	-0.1	-0.4
1947	0.2	1.5	0.0	-0.1	-1.2	-0.2	0.3	0.1	0.2	0.1	0.3	1.5
1948	1.0	0.2	-0.3	0.0	0.0	-0.2	-0.1	-0.1	0.3	0.1	-0.1	1.2
1949	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.1	-0.2	0.0	-0.8
1950	-0.2	1.0	0.2	0.1	-1.3	0.1	0.1	0.3	0.3	1.1	0.1	-0.5
1951	0.9	1.2	0.0	0.0	0.0	0.1	0.1	0.2	-0.3	-0.3	-0.3	-1.2
1952	-0.5	1.2	-0.2	0.1	0.0	0.0	0.0	0.8	-0.2	0.7	0.6	0.2
1953	0.1	0.3	-0.1	0.0	0.0	0.0	0.0	0.1	0.9	-0.2	0.5	0.3
1954	0.1	0.1	-0.1	0.0	0.0	0.0	0.0	-0.5	-0.3	-0.1	0.0	0.1
1955	1.6	-0.1	-0.1	0.2	0.3	0.1	0.6	0.1	-0.1	0.5	0.6	-0.3
1956	0.6	0.8	-0.1	0.0	0.0	-0.5	0.0	0.0	-0.6	0.4	1.4	0.4
1957	0.5	0.1	0.1	0.0	0.0	0.0	0.2	0.0	-0.2	-0.1	0.0	-0.1
1958	0.9	0.4	0.0	0.1	0.0	0.0	0.1	0.6	1.4	0.2	0.2	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.2	-0.2	-0.3	0.5	0.6
1960	0.9	-0.6	0.0	0.0	0.0	0.0	0.4	0.0	0.0	-0.4	-0.9	0.4
1961	2.3	0.8	0.0	0.0	-0.4	0.0	0.9	0.1	0.2	-0.6	-0.1	0.3
1962	1.3	-0.4	0.0	0.0	0.1	-0.1	0.1	0.0	0.1	-0.2	-0.4	-0.1
1963	2.3	-0.1	0.0	0.0	0.0	0.1	-0.2	-0.1	0.3	-0.7	-0.2	0.6
1964	2.0	0.6	0.4	0.2	0.1	-0.1	-0.9	-0.1	0.1	0.4	0.0	-0.1
1965	1.8	0.6	-0.1	0.0	-0.3	0.0	-0.3	-0.1	-0.2	0.1	-0.3	-0.6
1966	2.0	0.3	0.1	0.0	0.0	0.4	0.3	-0.1	0.0	0.1	-0.1	0.4
1967	1.3	1.4	-0.3	0.0	0.1	0.0	0.1	0.1	1.1	0.0	0.2	0.1
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	0.4	-0.3	0.5	1.1
1969	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.0	-0.4	-0.5	0.4	3.8
1970	-0.1	-0.8	0.0	0.0	0.0	0.0	0.3	0.1	-0.3	0.1	-0.3	-1.0
1971	1.3	0.6	-0.1	0.0	0.6	0.1	-0.1	0.3	0.6	-1.0	1.1	0.4
1972	0.4	0.3	0.0	0.1	0.0	0.0	0.4	0.3	0.0	-0.7	0.4	0.0
1973	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	-0.3	-1.0	-0.3	0.5
1974	1.9	0.3	0.0	0.0	0.0	0.0	0.0	-0.2	0.1	1.6	1.2	0.1
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.0	1.0	0.2	0.1
1976	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	-0.1	-0.2	-0.2	0.0
1977	0.3	0.3	0.1	0.0	0.1	0.1	0.0	0.4	-0.1	-0.1	-0.5	0.4
1978	-0.1	0.0	-0.1	0.0	0.1	0.0	0.0	0.1	-0.2	0.0	-0.2	-0.2
1979	1.8	0.5	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	0.0	-0.3	-0.7
1980	0.8	1.1	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.9	-0.2	-0.5
1981	-0.2	0.6	0.0	0.1	0.0	0.1	0.0	0.0	-0.2	-0.2	-0.6	0.3
1982	1.4	0.3	0.1	0.0	0.0	0.0	0.0	0.1	-0.2	0.4	0.1	1.7
1983	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1
1984	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	-0.1	-0.3	-0.6
1985	1.8	0.2	0.1	0.4	0.1	0.1	0.1	-0.1	-0.1	-0.1	-0.3	0.7
1986	1.2	0.6	0.1	0.0	0.2	0.0	-0.1	0.0	-0.2	-0.5	-0.1	-0.5
1987	0.9	1.5	0.1	0.0	-0.4	0.0	0.3	0.0	0.1	0.5	0.9	-0.1
1988	0.8	-0.1	-0.1	0.1	0.1	0.2	0.2	-0.1	0.2	-0.1	-0.8	-0.1
1989	-0.1	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.2	-0.1	-0.6	-0.6	0.6
1990	1.2	0.6	0.0	0.0	-0.1	-0.2	0.3	0.2	0.1	-0.2	0.3	1.1
1991	0.6	0.0	0.0	0.1	0.5	0.1	0.3	0.3	0.3	0.3	-0.4	0.8
1992	0.7	0.3	-0.2	-0.1	-0.1	0.3	0.3	-0.1	0.8	0.9	-0.1	0.1
1993	-0.2	-0.4	-0.1	0.0	0.1	0.0	0.4	1.1	0.1	0.5	0.2	-1.2
1994	0.6	0.2	0.0									
Average	0.7	0.3	0.0	0.0	0.0	-0.1	0.1	0.1	0.1	0.1	0.0	0.3
Minimum	-1.2	-0.8	-0.5	-0.4	-1.3	-2.9	-0.9	-0.9	-0.6	-1.0	-0.9	-1.2
Maximum	2.6	1.5	0.4	0.4	0.6	0.5	0.9	1.1	1.4	1.7	1.4	3.8

Table 5.5.1-13 Simulated Change in Water Temperature for the Sacramento River at Ben Bridge, Alternative 6, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.1	-0.1	1.5	-0.2	-0.3
1923	0.3	0.3	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.3	-0.2	-0.6
1924	0.0	0.7	0.0	-0.2	-0.1	-0.2	-0.1	0.0	0.1	-0.5	0.1	0.8
1925	-0.1	-0.1	0.1	-0.3	-0.1	-0.4	0.0	0.1	-0.3	-1.0	-0.2	1.8
1926	1.7	0.1	-0.3	0.0	0.1	-2.7	0.1	0.2	0.0	0.0	-0.2	2.3
1927	1.6	-0.1	0.0	0.0	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.2
1928	0.7	0.3	-0.2	0.0	0.0	0.0	0.0	-0.7	0.1	0.3	-0.2	-0.1
1929	0.7	0.4	0.1	0.2	0.0	-2.8	0.1	0.1	0.6	0.6	0.5	-0.5
1930	2.1	0.4	0.0	-0.1	0.0	-0.5	0.0	0.1	0.5	-0.3	-0.3	0.8
1931	0.5	0.9	0.0	0.0	0.0	0.2	-0.1	-0.1	0.3	0.8	-0.9	0.4
1932	0.0	0.1	0.0	0.2	-0.1	0.3	-0.2	-0.5	-0.5	-0.4	0.2	0.2
1933	0.2	-0.3	-0.1	-0.1	0.0	-0.4	0.7	0.0	-0.1	1.0	0.9	1.0
1934	0.1	-0.4	-0.3	-0.4	-0.7	-0.3	0.1	-0.2	1.1	0.6	0.9	-0.8
1935	-0.1	-0.2	-0.2	-0.2	-0.4	0.0	0.0	0.1	0.4	0.3	0.8	0.5
1936	0.2	-0.4	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	-0.7	0.4
1937	0.8	0.8	-0.1	0.0	0.1	0.3	-0.2	0.3	0.6	0.6	-0.2	-0.4
1938	0.6	0.5	-0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.6	-0.4	0.6
1939	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.4	-0.1	0.0	0.2	1.1
1940	-1.4	-0.6	-0.1	0.0	0.0	0.0	0.0	0.2	-0.5	0.1	-0.3	0.3
1941	1.6	1.0	-0.5	0.0	0.0	0.0	0.0	0.4	1.3	0.7	-0.3	0.0
1942	0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.6	0.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.2	-0.2	-0.4
1944	1.1	0.6	-0.1	0.2	0.0	0.2	0.4	0.6	0.3	0.1	0.3	0.2
1945	0.8	0.2	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.2	0.1	-0.3	-0.3
1946	0.7	0.4	0.0	0.0	0.2	-0.1	0.0	0.1	-0.1	-0.3	-0.1	-0.4
1947	0.2	1.6	0.0	-0.1	-1.4	-0.2	0.3	0.1	0.2	0.2	0.3	1.6
1948	1.1	0.2	-0.3	0.0	0.0	-0.2	-0.1	-0.1	0.2	0.1	-0.1	1.1
1949	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	-0.1	-0.2	-0.1	-0.8
1950	-0.2	1.0	0.2	0.1	-1.3	0.1	0.1	0.3	0.3	1.1	0.1	-0.5
1951	0.9	1.2	0.0	0.0	0.0	0.1	0.1	0.2	-0.3	-0.4	-0.3	-1.3
1952	-0.4	1.3	-0.2	0.1	0.0	0.0	-0.1	0.8	-0.2	0.7	0.7	0.2
1953	0.1	0.3	-0.1	0.0	0.0	0.0	0.0	0.1	0.9	-0.2	0.5	0.3
1954	0.1	0.1	-0.1	0.0	0.0	0.0	0.0	-0.5	-0.3	-0.1	0.0	0.1
1955	1.6	-0.1	-0.1	0.2	0.3	0.1	0.6	0.1	-0.1	0.5	0.6	-0.3
1956	0.6	0.8	-0.1	0.0	0.0	-0.5	0.0	0.0	-0.6	0.2	1.4	0.6
1957	0.4	0.1	0.1	0.0	0.0	0.0	0.2	0.0	-0.2	-0.1	0.0	-0.1
1958	1.0	0.4	0.0	0.1	0.0	0.0	0.1	0.6	1.4	0.2	0.2	0.0
1959	0.0	-0.1	0.0	0.0	0.0	0.1	0.1	-0.2	-0.1	-0.3	0.4	0.6
1960	0.8	-0.4	0.0	0.1	0.0	0.0	0.4	0.0	0.1	-0.4	-0.8	0.3
1961	2.0	0.8	0.0	0.0	-0.3	0.0	0.9	0.1	0.2	-0.6	-0.2	0.3
1962	1.3	-0.4	0.0	0.0	0.1	-0.1	0.1	0.0	0.1	-0.2	-0.4	-0.1
1963	2.3	-0.1	0.0	0.0	0.0	0.1	-0.2	-0.1	0.3	-0.7	-0.2	0.6
1964	2.1	0.6	0.4	0.2	0.1	-0.2	-0.9	-0.1	0.1	0.6	0.1	-0.2
1965	1.7	0.6	-0.1	0.0	-0.3	0.0	-0.3	-0.1	-0.2	0.1	-0.3	-0.6
1966	2.0	0.3	0.1	0.0	0.0	0.4	0.3	-0.1	0.0	0.1	-0.1	0.4
1967	1.3	1.4	-0.3	0.0	0.1	0.0	0.1	0.1	1.1	0.0	0.2	0.1
1968	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	0.4	-0.3	0.5	1.1
1969	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.0	-0.4	-0.5	0.4	4.0
1970	-0.1	-0.9	0.0	0.0	0.0	0.0	0.3	0.1	-0.3	0.1	-0.3	-1.0
1971	1.3	0.6	-0.1	0.0	0.6	0.1	-0.1	0.3	0.6	-1.0	1.1	0.4
1972	0.4	0.3	0.0	0.1	0.0	0.0	0.4	0.3	0.0	-0.7	0.4	0.0
1973	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	-0.3	-1.0	-0.3	0.7
1974	1.9	0.3	0.0	0.0	0.0	0.0	0.0	-0.2	0.1	1.6	1.2	0.1
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.0	1.0	0.2	0.1
1976	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.0	-0.1	-0.2	0.0
1977	0.3	0.2	0.2	0.0	0.1	0.2	0.0	0.4	0.0	-0.3	-1.2	0.5
1978	0.2	0.1	0.0	-0.1	0.4	0.0	0.0	0.1	-0.2	0.0	-0.2	-0.1
1979	1.8	0.4	0.0	0.0	-0.1	0.0	0.0	0.1	0.1	0.0	-0.3	-0.7
1980	0.8	1.1	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.9	-0.2	-0.5
1981	-0.2	0.6	0.0	0.1	0.0	0.1	0.0	0.0	-0.1	-0.2	-0.5	0.2
1982	1.5	0.3	0.1	0.0	0.0	0.0	0.0	0.1	-0.2	0.4	0.1	1.7
1983	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1
1984	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	-0.1	-0.3	-0.6
1985	1.8	0.2	0.1	0.4	0.1	0.1	0.1	-0.1	0.0	-0.1	-0.3	0.7
1986	1.2	0.6	0.1	0.0	0.2	0.0	-0.1	0.0	-0.2	-0.5	-0.1	-0.5
1987	0.9	1.5	0.1	0.0	-0.4	0.0	0.3	0.1	0.1	0.6	1.0	-0.1
1988	0.4	-0.2	-0.1	0.1	0.1	0.8	0.7	-0.2	0.2	0.0	-1.3	-0.4
1989	-0.2	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.2	-0.1	-0.6	-0.7	0.6
1990	1.3	0.6	0.0	0.0	-0.2	-0.2	0.3	0.2	0.2	-0.1	0.2	1.2
1991	0.4	0.0	0.0	0.1	0.4	0.1	0.2	0.3	0.3	0.3	-0.7	0.7
1992	0.5	0.3	-0.2	0.0	0.0	0.2	0.3	-0.1	0.7	0.8	-0.5	0.0
1993	-0.1	-0.5	-0.1	0.0	0.1	-0.1	0.4	1.1	0.1	0.4	0.2	-0.9
1994	0.6	0.1	0.0									
Average	0.7	0.3	0.0	0.0	0.0	-0.1	0.1	0.1	0.1	0.1	0.0	0.2
Minimum	-1.4	-0.9	-0.5	-0.4	-1.4	-2.8	-0.9	-0.7	-0.6	-1.0	-1.3	-1.3
Maximum	2.3	1.6	0.4	0.4	0.6	0.8	0.9	1.1	1.4	1.6	1.4	4.0

Table 5.5.1-14 Frequency of Change in Water Temperature in the Sacramento River at Bend Bridge According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	WATER YEAR TYPE				
	wet	above normal	below normal	dry	critical
<+4.0	1	0	0	0	0
<+3.5	0	0	0	0	0
<+3.0	0	0	0	1	0
<+2.5	1	0	0	2	0
<+2.0	6	0	2	5	1
<+1.5	12	4	7	5	7
<+1.0	22	5	9	15	14
<+0.5	69	28	54	60	45
0.0	85	42	47	41	24
>-0.5	43	29	43	48	34
>-1.0	11	5	5	12	5
>-1.5	2	4	1	2	1
>-2.0	0	0	0	0	0
>-2.5	0	0	0	0	0
>-3.0	0	0	0	1	1
Total Number of Months	252	117	168	192	132

Table 5.5.1-15 Frequency of Change in Water Temperature in the Sacramento River at Bend Bridge According to Water Year Type (Comparison of Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.0	1	0	0	0	0
<+3.5	0	0	0	0	0
<+3.0	0	0	0	0	0
<+2.5	1	0	0	3	0
<+2.0	6	0	2	7	0
<+1.5	12	4	5	3	3
<+1.0	23	6	9	16	19
<+0.5	68	29	54	65	46
0.0	84	39	47	38	26
>-0.5	45	29	45	47	28
>-1.0	10	7	5	10	7
>-1.5	2	3	1	2	2
>-2.0	0	0	0	0	0
>-2.5	0	0	0	0	0
>-3.0	0	0	0	1	1
Total Number of Months	252	117	168	192	132

Table 5.5.1-16 Simulated Water Temperature Data for the Sacramento River at Red Bluff Diversion Dam, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.5	46.9	50.9	55.2	57.4	56.4	57.4	55.9	55.8
1923	52.7	48.5	45.3	43.8	49.8	55.0	54.8	53.8	53.4	56.3	56.4	56.0
1924	52.9	53.6	47.1	44.5	49.1	51.1	54.2	57.0	56.1	60.3	67.8	66.7
1925	57.1	50.8	43.8	43.8	48.0	50.4	55.7	57.9	57.2	58.2	57.6	58.2
1926	57.9	51.6	47.5	44.0	48.0	54.2	56.6	57.6	58.5	58.5	58.4	58.9
1927	59.2	52.9	46.4	45.0	47.6	51.9	53.4	55.6	56.1	56.4	56.4	54.7
1928	55.3	51.4	46.6	44.7	48.6	53.1	55.1	56.2	55.6	55.5	57.3	56.3
1929	54.0	51.2	45.7	42.8	46.5	52.0	53.1	56.6	56.8	57.3	57.9	56.6
1930	56.9	56.1	48.4	43.9	48.0	53.0	55.7	55.6	56.8	57.6	57.7	55.8
1931	54.8	52.9	47.8	45.7	48.9	53.2	54.1	57.5	56.8	61.4	67.3	66.5
1932	60.0	50.8	44.8	43.8	46.1	53.7	54.0	59.6	60.0	59.3	63.5	67.4
1933	61.8	54.7	44.0	42.4	44.4	51.4	55.5	55.9	58.2	59.7	64.8	65.8
1934	63.9	55.2	45.3	45.4	48.8	56.8	56.7	57.0	56.3	61.9	69.1	67.0
1935	60.0	51.2	46.5	44.4	47.5	50.4	55.8	59.0	57.5	57.8	60.2	62.4
1936	59.0	52.1	47.3	45.5	47.8	54.5	55.7	57.1	57.4	57.5	57.4	58.6
1937	58.0	55.5	48.2	39.6	45.8	50.7	54.4	58.0	57.6	58.8	57.8	54.8
1938	53.1	50.9	48.7	46.4	47.1	49.1	52.7	57.9	59.1	58.1	56.6	56.2
1939	54.4	52.1	48.7	45.8	46.4	53.9	54.2	54.4	54.0	55.7	56.1	59.3
1940	55.5	54.1	48.2	45.2	48.1	53.1	56.0	57.5	56.9	55.7	56.7	55.1
1941	55.9	52.0	47.5	46.4	48.8	53.2	53.3	54.5	57.6	57.4	55.1	53.2
1942	53.9	53.1	48.0	45.8	47.4	51.3	54.6	53.8	58.1	57.7	56.7	53.1
1943	53.6	51.5	46.5	45.4	49.3	52.1	54.9	56.3	55.0	55.6	55.5	56.5
1944	53.9	50.7	48.1	45.0	47.2	53.8	52.4	55.6	54.6	55.5	56.2	57.6
1945	55.9	50.6	47.1	45.1	48.6	50.7	55.5	54.8	56.1	56.2	55.9	56.3
1946	55.9	50.4	46.8	44.8	45.3	52.1	54.7	55.2	53.7	55.3	55.9	54.6
1947	51.2	49.9	46.3	43.7	49.4	53.6	56.6	54.9	54.5	54.5	55.1	59.3
1948	57.5	51.8	46.0	46.2	46.3	49.8	54.3	56.4	58.6	57.2	56.5	56.6
1949	53.4	51.1	44.7	40.6	45.0	50.6	56.7	55.7	55.8	54.8	55.3	53.9
1950	49.7	48.3	46.4	41.9	46.6	51.5	56.0	57.0	56.6	58.8	58.0	55.7
1951	52.5	46.8	48.0	44.4	47.1	52.3	54.4	56.4	55.6	55.2	56.5	56.2
1952	52.5	49.2	46.3	43.8	47.1	50.2	51.6	56.9	56.8	59.0	56.7	52.6
1953	51.4	48.8	46.6	47.0	49.0	52.6	54.6	53.6	56.8	56.9	57.2	54.1
1954	52.6	51.3	48.2	45.7	49.9	50.6	53.4	54.5	56.0	54.9	56.9	56.8
1955	55.4	51.4	46.2	44.1	47.6	53.4	52.6	57.6	54.6	55.9	58.0	57.7
1956	54.8	50.9	47.4	45.4	46.5	52.5	55.5	55.2	58.2	58.6	57.2	53.0
1957	51.7	52.8	49.1	44.3	50.4	52.2	53.1	56.9	57.7	55.4	56.2	58.7
1958	53.6	51.6	47.3	45.6	48.7	49.8	53.7	56.9	58.0	57.7	57.5	56.0
1959	56.4	53.9	51.5	47.7	48.4	54.2	54.8	54.5	54.8	57.5	59.0	60.4
1960	58.8	55.8	49.2	44.5	47.8	53.3	54.7	55.6	57.8	56.3	56.1	58.8
1961	56.1	51.3	46.6	45.0	49.2	51.7	55.2	54.8	57.1	54.8	56.4	58.6
1962	57.7	52.5	46.3	45.6	47.5	51.5	56.6	55.0	56.3	56.2	56.9	58.1
1963	57.5	53.0	49.4	45.0	51.4	51.9	51.1	57.4	57.8	55.3	57.8	59.7
1964	55.7	51.8	46.2	44.6	49.7	52.6	51.8	54.5	55.6	56.8	56.9	57.0
1965	57.0	50.8	47.4	46.0	49.3	53.7	54.3	55.9	56.4	55.9	58.3	55.4
1966	55.6	50.9	45.5	44.7	47.0	52.8	54.7	56.4	53.1	55.0	57.0	57.3
1967	55.2	52.4	47.9	45.6	50.0	50.3	52.2	54.5	57.9	58.2	57.2	55.1
1968	55.1	54.5	47.8	44.5	51.1	53.3	54.0	55.7	55.1	56.4	57.6	58.0
1969	55.6	51.8	45.3	43.6	46.0	52.5	52.8	56.0	57.0	57.0	58.0	56.4
1970	49.9	50.5	49.3	46.9	51.0	52.9	52.6	56.9	56.6	55.6	57.7	56.8
1971	55.7	51.5	46.8	45.1	48.9	50.4	54.1	55.3	57.4	57.5	59.4	54.3
1972	52.7	51.9	45.4	43.9	48.7	53.6	53.2	56.4	54.1	55.5	57.4	57.0
1973	54.5	50.0	44.7	43.6	49.0	51.0	56.1	58.1	56.7	56.1	57.8	56.5
1974	53.5	49.6	47.1	45.2	48.1	51.8	54.5	57.4	58.7	59.2	57.7	53.7
1975	53.1	52.0	46.6	45.1	47.4	50.2	54.1	56.6	57.7	58.5	55.8	56.1
1976	54.2	51.5	47.7	46.0	48.1	52.2	53.8	58.2	56.4	58.3	59.0	60.5
1977	56.1	52.9	51.0	45.5	49.4	50.3	53.2	55.3	56.0	58.0	67.5	66.3
1978	60.8	51.5	46.7	45.4	49.1	53.9	54.4	56.4	56.3	56.4	58.1	57.9
1979	55.6	48.8	46.0	44.8	47.7	53.2	54.4	57.2	53.8	55.2	57.2	57.9
1980	54.7	49.7	45.8	45.1	48.6	51.8	54.8	55.3	54.2	56.7	56.8	55.9
1981	53.1	48.6	47.3	45.4	48.7	52.0	55.9	55.3	54.7	56.1	57.2	58.2
1982	54.8	51.3	47.2	43.8	47.5	48.7	51.1	57.6	57.4	57.7	57.8	53.8
1983	49.5	47.9	46.0	44.8	47.5	50.8	53.0	56.2	55.6	56.0	55.5	54.1
1984	56.0	52.0	46.8	45.7	48.0	54.0	52.8	56.2	55.6	56.5	57.9	58.0
1985	52.3	50.0	45.4	43.8	49.2	50.8	55.9	53.7	55.0	56.0	55.1	55.0
1986	53.6	49.1	45.3	45.5	49.4	53.4	54.9	55.6	55.4	56.6	56.8	55.7
1987	54.6	51.3	46.3	43.8	47.8	51.5	53.6	54.7	54.3	55.4	58.6	55.1
1988	55.9	52.0	45.9	44.7	47.0	52.1	55.1	56.3	54.7	60.2	57.5	59.9
1989	60.6	51.2	45.5	44.0	45.4	51.2	56.4	54.4	56.1	56.1	56.9	58.3
1990	55.6	52.3	46.8	44.6	45.5	51.0	54.2	56.9	56.9	57.2	59.2	62.1
1991	59.8	52.0	42.2	44.1	50.8	50.5	54.8	55.4	56.9	59.5	57.6	63.6
1992	62.0	53.7	45.9	43.6	48.8	52.2	56.6	56.8	54.9	58.2	64.4	66.4
1993	61.2	51.5	44.6	44.4	47.3	52.5	54.9	55.3	58.4	55.7	57.7	54.4
1994	54.2	50.5	46.0									
Average	55.5	51.5	46.8	44.7	48.1	52.1	54.4	56.1	56.4	57.1	58.0	57.7
Minimum	49.5	46.8	42.2	39.6	44.4	48.7	51.1	53.6	53.1	54.5	55.1	52.6
Maximum	63.9	56.1	51.5	47.7	51.4	56.8	56.7	59.6	60.0	61.9	69.1	67.4

Table 5.5.1-17 Simulated Change in Water Temperature for the Sacramento River at Red Bluff Diversion Dam, Alternatives 2-5, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.1	-0.1	1.6	-0.2	-0.4
1923	0.3	0.3	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.4	-0.2	-0.6
1924	0.0	0.6	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	-0.5	0.0	0.7
1925	-0.2	-0.1	0.1	-0.3	0.0	-0.5	0.1	0.2	-0.4	-0.8	-0.1	1.6
1926	1.6	0.1	-0.4	0.0	0.1	-2.2	0.0	0.2	0.0	0.0	0.0	2.0
1927	1.5	0.0	-0.1	-0.1	0.1	0.0	0.0	0.1	-0.1	0.3	-0.2	-0.2
1928	0.6	0.3	-0.1	0.0	0.0	0.0	0.0	-0.9	0.2	0.4	-0.2	0.0
1929	0.7	0.4	0.0	0.2	-0.1	-2.5	0.2	0.1	0.3	0.6	0.3	-0.5
1930	2.4	0.5	-0.1	-0.1	0.0	-0.6	0.0	0.2	0.5	-0.5	-0.2	0.8
1931	0.5	1.1	0.0	-0.1	0.0	0.3	0.0	0.1	0.4	1.3	-0.1	0.4
1932	-0.2	0.3	0.0	0.1	-0.1	0.2	-0.2	-0.5	-0.6	-0.2	0.1	0.2
1933	0.2	-0.3	-0.1	0.0	0.0	-0.3	0.6	0.0	-0.3	1.0	1.2	1.1
1934	0.1	-0.4	-0.3	-0.4	-0.9	-0.3	0.0	-0.2	1.0	1.5	0.7	-0.1
1935	-0.1	-0.2	-0.2	-0.1	-0.4	0.0	0.0	0.2	0.4	0.2	0.9	1.1
1936	0.4	-0.5	-0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.1	-0.6	0.6
1937	1.0	1.0	-0.1	-0.1	0.3	0.4	-0.1	0.4	0.7	0.7	-0.1	-0.2
1938	0.9	0.5	-0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.7	-0.3	0.7
1939	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.4	-0.2	0.0	0.3	0.9
1940	-1.1	-0.8	0.0	0.0	0.0	0.0	0.1	0.1	-0.5	0.1	-0.4	0.1
1941	1.4	0.8	-0.5	0.0	0.0	0.0	0.0	0.5	1.5	0.7	-0.3	0.0
1942	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.3	0.8	0.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	-0.2	-0.4
1944	1.1	0.6	0.0	0.1	0.1	0.1	0.4	0.6	0.3	0.2	0.4	0.2
1945	1.0	0.2	0.0	0.0	-0.1	0.1	-0.1	0.0	-0.2	0.2	-0.3	-0.3
1946	0.8	0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.0	-0.3	-0.1	-0.3
1947	0.1	1.3	0.0	-0.1	-1.1	-0.1	0.4	0.1	0.2	0.1	0.4	1.4
1948	0.9	0.2	-0.4	0.1	0.1	-0.2	0.0	0.0	0.2	0.1	-0.2	1.3
1949	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	-0.1	-0.3	-0.1	-0.7
1950	-0.3	0.9	0.2	0.1	-1.1	0.1	0.1	0.4	0.2	1.3	0.1	-0.4
1951	1.1	1.1	0.1	0.0	0.0	0.0	0.1	0.1	-0.3	-0.3	-0.3	-1.2
1952	-0.3	1.1	-0.2	0.0	0.0	0.0	0.0	0.9	-0.1	0.9	0.6	0.2
1953	0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	0.3
1954	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.5	-0.3	-0.1	0.0	0.1
1955	1.4	-0.1	-0.1	0.2	0.4	0.1	0.5	0.1	-0.2	0.7	0.7	-0.3
1956	0.6	0.8	0.0	0.0	0.0	-0.4	0.0	0.0	-0.6	0.6	1.5	0.6
1957	0.5	0.1	0.1	0.0	0.0	0.0	0.3	-0.1	-0.2	-0.2	0.0	-0.1
1958	0.9	0.4	0.1	0.0	0.0	0.0	0.0	0.6	1.6	0.3	0.2	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.2	-0.3	0.5	0.6
1960	0.7	-0.6	0.0	0.0	0.0	0.0	0.4	0.1	0.0	-0.5	-0.9	0.5
1961	2.0	0.7	0.1	-0.1	-0.4	0.0	0.9	0.2	0.2	-0.7	-0.1	0.1
1962	1.2	-0.5	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.2	-0.3	0.0
1963	2.3	-0.1	0.0	0.0	-0.1	0.0	-0.2	0.0	0.4	-0.8	-0.3	0.6
1964	2.1	0.6	0.3	0.1	0.1	-0.1	-1.0	-0.2	0.1	0.4	0.1	-0.2
1965	1.6	0.5	-0.1	0.0	-0.2	0.1	-0.3	-0.2	-0.2	0.0	-0.3	-0.5
1966	2.1	0.2	0.1	0.0	0.0	0.4	0.3	-0.1	-0.1	0.0	-0.1	0.3
1967	1.1	1.2	-0.4	0.0	0.0	0.0	0.1	0.1	1.3	0.2	0.2	0.0
1968	0.0	0.0	0.0	0.0	-0.1	0.0	-0.3	-0.2	0.5	-0.3	0.6	1.2
1969	0.1	0.2	0.0	0.0	0.0	0.0	0.0	1.2	-0.3	-0.4	0.3	4.1
1970	-0.1	-0.7	0.0	0.0	0.0	0.0	0.3	0.0	-0.3	0.0	-0.3	-1.0
1971	1.1	0.4	-0.1	0.1	0.5	0.1	-0.1	0.3	0.7	-0.9	1.2	0.4
1972	0.4	0.2	0.0	0.0	0.0	0.0	0.5	0.4	0.0	-0.6	0.4	0.1
1973	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-0.9	-0.3	0.6
1974	1.8	0.3	0.0	0.0	0.0	0.0	0.0	-0.1	0.4	1.7	1.3	0.2
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.2	1.2	0.2	0.1
1976	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0	-0.2	-0.2	0.0
1977	0.2	0.2	0.1	-0.1	0.2	0.1	0.0	0.4	-0.2	0.0	-0.5	0.4
1978	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	0.1	-0.3	-0.1
1979	1.8	0.4	0.0	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	-0.3	-0.7
1980	0.7	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	1.1	-0.2	-0.5
1981	-0.2	0.5	0.1	0.0	0.0	0.1	0.1	-0.1	-0.2	-0.2	-0.6	0.3
1982	1.3	0.3	0.1	-0.1	-0.1	0.1	0.0	0.1	-0.2	0.5	0.1	2.1
1983	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.1
1984	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	-0.1	-0.3	-0.6
1985	1.7	0.2	0.0	0.3	0.0	0.0	0.0	-0.1	0.0	0.0	-0.3	0.7
1986	1.1	0.5	0.1	0.0	0.2	0.0	0.0	-0.1	-0.3	-0.4	-0.1	-0.4
1987	0.8	1.3	0.0	0.1	-0.3	0.0	0.2	0.0	0.0	0.5	1.0	0.0
1988	0.8	-0.1	-0.1	0.1	0.2	0.3	0.1	-0.1	0.1	-0.1	-0.8	-0.1
1989	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	0.0	-0.6	-0.6	0.6
1990	1.1	0.6	-0.1	0.0	-0.1	-0.2	0.3	0.1	0.1	-0.1	0.2	0.9
1991	0.5	0.0	0.0	0.1	0.4	0.1	0.2	0.2	0.3	0.3	-0.4	0.7
1992	0.6	0.3	-0.1	-0.1	-0.1	0.2	0.3	-0.1	0.7	0.9	0.0	0.0
1993	-0.2	-0.3	-0.1	0.0	0.0	0.0	0.4	1.2	0.1	0.6	0.2	-1.3
1994	0.6	0.1	0.0									
Average	0.6	0.3	0.0	0.0	0.0	-0.1	0.1	0.1	0.1	0.2	0.1	0.2
Minimum	-1.1	-0.8	-0.5	-0.4	-1.1	-2.5	-1.0	-0.9	-0.6	-0.9	-0.9	-1.3
Maximum	2.4	1.3	0.3	0.3	0.5	0.4	0.9	1.2	1.6	1.7	1.5	4.1

Table 5.5.1-18 Simulated Change in Water Temperature for the Sacramento River at Red Bluff Diversion Dam, Alternative 6, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.1	-0.1	1.6	-0.2	-0.4
1923	0.3	0.3	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	0.4	-0.3	-0.5
1924	0.1	0.6	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0	-0.5	0.1	0.7
1925	-0.1	-0.1	0.1	-0.3	0.0	-0.5	0.1	0.1	-0.3	-0.8	-0.2	1.6
1926	1.6	0.1	-0.4	0.0	0.1	-2.2	0.0	0.2	0.0	0.0	-0.1	2.0
1927	1.4	0.0	-0.1	-0.1	0.1	0.0	0.0	0.1	-0.1	0.2	-0.2	-0.2
1928	0.7	0.3	-0.2	0.0	0.1	0.1	0.0	-0.7	0.2	0.4	-0.2	0.0
1929	0.7	0.4	0.0	0.2	-0.1	-2.4	0.2	0.1	0.6	0.8	0.5	-0.4
1930	1.9	0.3	-0.1	-0.1	0.0	-0.4	0.0	0.1	0.5	-0.4	-0.2	0.8
1931	0.4	0.8	0.0	-0.1	0.0	0.2	-0.1	0.0	0.4	1.0	-0.7	0.4
1932	0.0	0.1	0.0	0.2	-0.1	0.3	-0.2	-0.6	-0.6	-0.4	0.1	0.1
1933	0.2	-0.3	-0.1	0.0	0.0	-0.3	0.7	0.0	-0.2	0.8	0.7	0.9
1934	0.1	-0.3	-0.2	-0.4	-0.6	-0.2	0.0	-0.2	1.1	0.5	0.8	-0.7
1935	-0.1	-0.2	-0.2	-0.1	-0.4	0.0	0.0	0.2	0.4	0.3	0.7	0.5
1936	0.2	-0.5	-0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.0	-0.6	0.3
1937	0.7	0.6	-0.1	0.0	0.1	0.3	-0.2	0.3	0.7	0.7	-0.1	-0.2
1938	0.5	0.4	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.7	-0.3	0.7
1939	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.4	-0.1	0.0	0.2	0.9
1940	-1.2	-0.6	0.0	0.0	0.0	0.0	0.1	0.1	-0.5	0.1	-0.4	0.2
1941	1.5	0.8	-0.5	0.0	0.0	0.0	0.0	0.5	1.5	0.7	-0.3	0.0
1942	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.3	0.8	0.1
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.2	-0.2	-0.4
1944	1.0	0.5	0.0	0.1	0.1	0.1	0.4	0.6	0.3	0.2	0.3	0.2
1945	0.7	0.2	0.0	0.0	-0.1	0.1	-0.1	0.0	-0.2	0.1	-0.3	-0.3
1946	0.6	0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.0	-0.3	-0.1	-0.4
1947	0.2	1.4	0.0	-0.1	-1.2	-0.1	0.4	0.1	0.2	0.2	0.4	1.5
1948	1.0	0.2	-0.4	0.1	0.1	-0.2	0.0	0.0	0.2	0.1	-0.2	1.2
1949	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.0	-0.1	-0.3	-0.1	-0.7
1950	-0.2	0.9	0.2	0.1	-1.1	0.1	0.1	0.4	0.2	1.3	0.1	-0.4
1951	1.1	1.2	0.1	0.0	0.0	0.0	0.1	0.1	-0.3	-0.3	-0.3	-1.3
1952	-0.3	1.1	-0.2	0.0	0.0	0.0	0.0	0.9	-0.1	0.8	0.8	0.2
1953	0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	0.3
1954	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.5	-0.3	-0.1	0.0	0.1
1955	1.4	-0.1	-0.1	0.2	0.4	0.1	0.5	0.1	-0.2	0.6	0.6	-0.3
1956	0.6	0.7	0.0	0.0	0.0	-0.4	0.0	0.0	-0.6	0.4	1.5	0.8
1957	0.4	0.1	0.1	0.0	0.0	0.0	0.3	-0.1	-0.2	-0.2	0.0	0.0
1958	1.0	0.3	0.1	0.0	0.0	0.0	0.0	0.6	1.6	0.2	0.3	0.0
1959	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	-0.2	0.4	0.6
1960	0.6	-0.4	0.0	0.1	0.0	0.0	0.4	0.1	0.2	-0.5	-0.8	0.4

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1961	1.7	0.7	0.1	-0.1	-0.4	0.0	0.9	0.1	0.2	-0.7	-0.2	0.1
1962	1.2	-0.5	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.2	-0.3	-0.1
1963	2.3	-0.1	0.0	0.0	-0.1	0.0	-0.2	0.0	0.4	-0.8	-0.3	0.6
1964	2.1	0.5	0.3	0.1	0.1	-0.1	-1.0	-0.2	0.1	0.7	0.1	-0.2
1965	1.5	0.5	-0.1	0.0	-0.2	0.1	-0.3	-0.2	-0.2	0.0	-0.3	-0.5
1966	2.1	0.2	0.1	0.0	0.0	0.4	0.2	-0.1	-0.1	0.0	-0.1	0.3
1967	1.2	1.2	-0.3	0.0	0.0	0.0	0.1	0.1	1.3	0.2	0.2	0.0
1968	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	-0.2	0.6	-0.3	0.7	1.2
1969	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.1	-0.3	-0.5	0.3	4.4
1970	-0.1	-0.8	0.0	0.0	0.0	0.0	0.3	0.0	-0.3	0.0	-0.3	-1.0
1971	1.2	0.4	-0.1	0.1	0.5	0.1	-0.1	0.3	0.7	-0.9	1.2	0.4
1972	0.4	0.2	0.0	0.0	0.0	0.0	0.5	0.4	0.0	-0.6	0.4	0.1
1973	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-0.9	-0.3	0.7
1974	1.8	0.2	0.0	0.0	0.0	0.0	0.0	-0.1	0.4	1.7	1.3	0.2
1975	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.2	1.2	0.2	0.1
1976	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.1	-0.1	-0.1	0.0
1977	0.2	0.2	0.2	-0.1	0.2	0.1	0.0	0.5	-0.1	-0.3	-1.2	0.5
1978	0.3	0.1	0.1	0.0	0.3	0.0	0.0	0.1	-0.2	0.1	-0.3	-0.1
1979	1.9	0.3	0.0	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	-0.3	-0.7
1980	0.7	1.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	1.1	-0.2	-0.5
1981	-0.2	0.6	0.1	0.0	0.0	0.1	0.1	-0.1	-0.1	-0.2	-0.5	0.2
1982	1.4	0.3	0.1	-0.1	-0.1	0.1	0.0	0.1	-0.2	0.5	0.1	2.1
1983	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.1
1984	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	-0.1	-0.3	-0.6
1985	1.7	0.2	0.0	0.3	0.0	0.0	0.0	-0.1	0.0	0.0	-0.3	0.7
1986	1.1	0.5	0.1	0.0	0.2	0.0	0.0	-0.1	-0.3	-0.4	-0.1	-0.4
1987	0.8	1.3	0.0	0.1	-0.3	0.0	0.3	0.1	0.0	0.6	1.0	0.0
1988	0.5	-0.1	-0.1	0.1	0.2	0.8	0.5	-0.1	0.2	0.1	-1.4	-0.4
1989	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	0.0	-0.6	-0.7	0.6
1990	1.1	0.5	-0.1	0.0	-0.2	-0.2	0.3	0.1	0.2	0.0	0.1	1.0
1991	0.4	0.0	0.0	0.1	0.3	0.1	0.1	0.2	0.3	0.3	-0.6	0.6
1992	0.5	0.3	-0.1	-0.1	-0.1	0.2	0.3	-0.1	0.7	0.7	-0.3	-0.1
1993	-0.1	-0.4	-0.1	0.0	0.0	0.0	0.4	1.1	0.1	0.5	0.2	-1.0
1994	0.5	0.1	0.0									
Average	0.6	0.2	0.0	0.0	0.0	-0.1	0.1	0.1	0.1	0.1	0.0	0.2
Minimum	-1.2	-0.8	-0.5	-0.4	-1.2	-2.4	-1.0	-0.7	-0.6	-0.9	-1.4	-1.3
Maximum	2.3	1.4	0.3	0.3	0.5	0.8	0.9	1.1	1.6	1.7	1.5	4.4

Table 5.5.1-19 Frequency of Change in Water Temperature in the Sacramento River at Red Bluff Diversion Dam According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.5	1	0	0	0	0
<+4.0	0	0	0	0	0
<+3.5	0	0	0	0	0
<+3.0	0	0	0	0	0
<+2.5	2	0	1	2	0
<+2.0	4	1	1	5	0
<+1.5	15	4	5	5	6
<+1.0	18	6	12	14	15
<+0.5	64	23	52	61	43
0.0	92	45	50	46	28
>-0.5	48	29	40	42	34
>-1.0	7	6	6	14	5
>-1.5	1	3	1	2	0
>-2.0	0	0	0	0	0
>-2.5	0	0	0	1	0
>-3.0	0	0	0	0	1
Total Number of Months	251	117	168	192	132

Table 5.5.1-20 Frequency of Change in Water Temperature in the Sacramento River at Red Bluff Diversion Dam According to Water Year Type (Comparison of Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.5	1	0	0	0	0
<+4.0	0	0	0	0	0
<+3.5	0	0	0	0	0
<+3.0	0	0	0	0	0
<+2.5	2	0	1	1	0
<+2.0	3	1	1	6	0
<+1.5	16	4	4	4	2
<+1.0	16	5	12	16	17
<+0.5	66	30	52	64	48
0.0	91	41	50	42	23
>-0.5	48	27	41	45	34
>-1.0	8	6	6	11	5
>-1.5	1	3	1	2	2
>-2.0	0	0	0	0	0
>-2.5	0	0	0	1	1
Total Number of Months	252	117	168	192	132

Table 5.5.1-21 Simulated Water Temperature Data for the Feather River below Thermolito, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				41.1	47.0	50.6	55.9	57.8	65.8	68.2	65.5	66.3
1923	58.8	49.8	47.0	44.7	48.3	55.1	57.5	62.4	63.6	67.3	66.7	67.2
1924	58.4	55.1	46.6	44.5	52.7	53.6	58.7	64.8	68.1	70.6	69.5	65.0
1925	55.6	51.3	43.4	45.1	48.5	52.8	55.4	60.5	64.8	72.7	68.4	61.0
1926	59.0	52.1	45.8	43.4	51.3	57.3	61.6	62.8	68.4	69.5	67.3	62.5
1927	59.9	55.5	47.3	46.8	49.1	51.6	56.0	62.0	67.5	69.7	66.2	62.4
1928	59.2	53.0	45.9	46.4	50.7	50.9	57.0	62.7	65.8	69.2	68.3	64.1
1929	58.6	51.6	44.3	43.0	48.6	53.6	53.9	62.9	67.4	71.1	71.2	65.8
1930	60.9	54.3	48.4	44.3	52.1	55.0	56.9	60.1	66.9	67.6	66.8	62.3
1931	57.5	53.1	44.7	47.4	52.2	55.2	60.9	70.4	69.2	71.7	73.1	66.3
1932	59.5	52.5	47.7	45.8	49.2	56.5	55.2	62.0	68.9	69.3	70.0	65.5
1933	60.4	56.4	44.2	44.3	48.0	53.5	55.3	59.0	66.0	73.9	72.4	65.1
1934	62.8	54.6	46.1	47.8	52.2	58.9	61.5	66.5	68.2	73.3	73.0	68.0
1935	61.0	53.9	49.2	47.2	50.7	52.0	58.1	62.7	65.1	67.3	68.4	65.5
1936	58.4	51.6	48.4	48.9	50.7	56.6	58.7	64.0	68.5	69.3	68.7	66.8
1937	60.3	54.3	45.9	40.9	48.4	55.0	56.4	64.0	67.0	69.8	68.0	65.2
1938	60.7	53.9	48.6	46.2	48.5	49.3	52.7	57.5	64.6	68.4	68.8	66.1
1939	58.7	51.6	47.6	47.5	48.8	54.0	60.4	64.0	65.5	68.6	67.5	66.1
1940	59.4	56.2	51.3	48.0	51.6	50.4	57.5	64.9	67.0	66.6	66.7	62.5
1941	59.4	51.6	48.5	48.4	49.2	51.9	57.3	60.1	63.9	68.6	68.1	62.8
1942	59.5	54.2	49.9	48.9	48.8	54.3	53.2	59.0	64.5	68.5	67.6	63.3
1943	60.7	52.5	47.9	48.6	50.1	50.8	56.9	63.2	63.3	70.5	65.8	64.9
1944	57.7	52.4	47.0	46.9	49.8	55.4	56.0	63.3	63.5	67.6	67.0	66.6
1945	59.9	51.1	47.9	46.0	51.7	52.0	57.1	61.6	65.0	69.0	66.7	65.0
1946	61.7	52.0	46.1	46.4	48.4	53.5	57.8	64.0	64.0	68.0	67.0	64.4
1947	56.5	51.0	45.6	44.1	50.9	55.9	58.1	66.2	66.6	66.7	65.7	66.5
1948	58.8	50.0	44.9	48.5	48.2	51.0	55.5	60.4	65.8	66.6	65.5	63.5
1949	58.5	52.3	43.8	40.7	46.7	52.8	58.3	62.2	65.6	70.4	68.3	63.2
1950	57.4	55.7	45.7	43.7	49.7	53.0	59.2	63.4	63.3	68.2	67.0	63.9
1951	60.3	54.9	48.8	47.5	49.0	52.6	57.6	65.0	69.1	67.4	67.7	64.7
1952	55.5	52.4	45.9	46.2	48.0	49.7	52.5	57.1	61.7	73.5	70.2	65.2
1953	59.2	52.2	48.1	49.5	51.6	52.5	55.7	60.2	63.6	70.7	66.4	65.4
1954	59.1	53.6	47.4	48.8	50.1	51.3	57.7	60.8	64.7	69.4	65.7	63.0
1955	57.4	51.7	44.4	42.9	48.2	54.7	55.2	63.3	66.0	70.9	72.4	65.0
1956	60.4	52.1	48.3	47.0	46.5	51.7	56.9	59.0	67.1	67.7	67.0	64.2
1957	59.3	52.8	46.5	43.9	48.1	52.5	56.8	62.1	66.7	69.8	66.8	65.7
1958	57.7	51.1	45.0	46.0	48.8	49.6	54.9	60.0	64.6	72.3	73.9	66.5
1959	59.2	54.0	49.9	50.0	51.7	57.3	60.4	62.4	65.8	68.8	66.8	65.6
1960	59.6	54.4	48.4	46.8	50.7	55.9	58.5	61.9	67.9	70.8	68.3	66.2
1961	59.8	53.4	46.4	44.9	51.9	54.3	57.2	61.8	70.4	71.5	69.3	64.7
1962	59.7	53.9	46.9	46.2	49.4	53.0	59.1	63.2	65.2	69.7	67.5	65.3
1963	60.4	54.8	46.8	43.7	50.8	51.1	52.1	62.9	65.3	68.7	68.3	66.2
1964	61.3	52.1	42.6	45.5	51.4	54.0	55.2	62.2	65.7	68.7	68.0	63.5
1965	63.0	51.1	49.2	46.7	49.0	53.5	55.0	62.2	66.2	70.2	69.7	62.8
1966	62.4	53.9	44.6	46.6	49.0	53.9	60.5	64.3	66.5	67.9	70.1	65.8
1967	59.0	54.6	46.4	46.8	49.5	50.3	54.6	60.1	63.4	75.0	74.6	67.2
1968	58.7	55.5	47.0	47.8	51.7	54.4	58.1	63.1	68.4	70.5	66.3	65.3
1969	58.8	52.4	45.0	46.2	46.8	51.8	54.8	59.6	66.9	74.4	71.0	66.8
1970	58.1	53.5	48.9	47.8	49.6	55.1	56.2	64.9	67.6	71.1	67.8	63.9
1971	57.8	54.4	45.9	46.6	49.7	51.4	55.9	59.0	65.4	68.8	70.2	65.6
1972	58.5	52.7	44.4	43.9	50.1	54.6	57.1	64.5	68.1	70.8	69.3	64.9
1973	59.9	51.1	42.3	46.2	48.4	50.9	59.0	66.9	66.5	69.9	68.2	64.2
1974	60.6	52.2	48.4	47.3	48.9	49.4	54.0	62.0	65.9	73.2	71.4	66.2
1975	62.8	52.4	46.1	45.5	49.7	51.0	55.3	60.9	65.8	68.0	71.3	65.8
1976	59.5	51.8	47.3	48.0	52.1	53.6	56.3	64.9	67.5	70.0	67.5	66.3
1977	62.4	55.5	48.7	44.9	53.4	53.4	60.7	60.4	71.1	71.9	71.9	69.6
1978	65.4	57.2	49.7	48.3	50.9	57.4	55.5	62.8	67.1	72.5	68.3	64.7
1979	62.0	51.6	46.6	45.3	48.2	54.5	57.9	64.5	65.3	69.7	67.1	65.9
1980	61.0	53.3	47.4	47.4	48.9	52.7	57.4	61.6	64.7	68.3	66.9	64.6
1981	62.9	56.2	48.2	47.2	52.2	53.1	59.1	63.6	69.3	68.4	67.7	65.5
1982	58.6	54.6	50.2	46.6	48.5	49.4	51.7	60.8	64.9	67.2	69.5	65.2
1983	58.7	51.3	48.2	47.4	48.5	48.9	53.5	58.9	61.9	69.8	70.9	63.5
1984	58.6	52.1	51.1	48.2	50.2	54.0	56.3	63.4	66.1	70.6	67.7	64.6
1985	56.9	52.2	46.3	43.3	51.7	53.2	58.8	61.2	67.5	68.3	65.7	60.8
1986	57.1	50.3	42.9	48.0	47.6	49.6	56.9	62.6	66.9	67.0	67.3	60.0
1987	59.0	53.9	46.0	45.3	50.5	55.1	60.9	65.2	67.4	66.4	67.4	62.4
1988	60.1	53.3	47.2	47.2	53.9	57.2	57.5	63.4	70.7	76.1	71.7	65.2
1989	60.5	51.7	47.2	46.0	49.6	55.9	58.7	62.9	66.8	66.9	65.2	63.6
1990	56.2	52.8	46.1	46.0	47.8	54.7	58.6	63.0	65.3	72.0	68.6	63.8
1991	60.3	51.7	43.1	46.5	52.3	50.8	56.0	60.6	67.3	73.3	69.5	66.4
1992	60.8	53.3	46.0	44.6	52.7	55.7	57.9	65.2	67.6	70.6	71.1	63.8
1993	60.9	53.4	45.7	46.0	49.5	51.8	57.4	60.7	66.1	66.8	66.3	64.1
1994	60.1	52.0	45.7									
Average	59.6	53.0	46.8	46.1	49.9	53.2	57.0	62.4	66.3	69.8	68.5	64.8
Minimum	55.5	49.8	42.3	40.7	46.5	48.9	51.7	57.1	61.7	66.4	65.2	60.0
Maximum	65.4	57.2	51.3	50.0	53.9	58.9	61.6	70.4	71.1	76.1	74.6	69.6

Table 5.5.1-22 Simulated Change in Water Temperature for the Feather River below Thermolito, Alternatives 2-5, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.0	0.0	-4.7	0.0	-0.1
1923	-0.1	0.2	-0.8	0.0	0.0	0.0	0.0	0.0	0.1	-1.0	-0.4	0.3
1924	-1.1	0.0	0.3	0.0	0.0	0.1	0.0	-0.1	-0.3	0.3	0.5	0.7
1925	0.1	0.7	1.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.3	2.0	0.0
1926	0.4	0.0	0.0	0.0	0.0	-0.1	2.0	0.0	0.0	0.0	0.2	1.3
1927	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.5	-0.9	0.1	-0.1
1928	-1.8	0.0	0.0	0.0	0.4	0.1	0.0	-1.5	-0.5	-0.1	1.1	-0.3
1929	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.1	2.4	-0.3
1930	0.2	0.2	0.2	0.0	0.1	0.0	-1.6	-0.2	0.7	-0.1	0.4	1.4
1931	-0.6	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-1.0	0.1	0.2
1932	-0.1	0.0	-0.2	0.1	0.1	0.0	-0.8	0.1	2.4	-2.7	-0.4	0.0
1933	0.0	0.0	0.0	-0.1	-0.1	0.5	0.0	0.0	-0.1	0.0	0.1	0.2
1934	0.0	0.0	0.4	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	1.0	1.2
1935	0.3	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-0.1	-0.2	-0.1	0.9
1936	-0.1	0.0	0.1	0.0	0.0	1.1	0.0	0.0	0.0	-0.1	-0.4	0.9
1937	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	2.2	-0.4	-1.0	0.2
1938	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-4.5	0.4	-0.1
1939	1.0	0.0	0.0	0.2	0.0	0.0	0.6	0.3	-2.0	-1.0	0.1	0.4
1940	-0.1	0.8	0.1	0.0	-0.1	0.0	0.0	-0.1	-0.6	-0.1	-0.3	-0.1
1941	-1.8	0.0	0.1	-0.1	0.0	-0.2	0.1	0.0	-2.0	-4.4	0.8	-0.1
1942	0.2	0.4	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	-0.7	-2.4	-0.1
1943	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.7	-0.2	-0.1
1944	0.0	0.0	0.2	0.0	0.1	0.2	0.1	0.0	0.1	-0.2	-0.3	1.1
1945	-0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.4	0.0
1946	-0.1	0.0	-0.2	-0.2	-0.1	1.3	0.1	0.0	0.0	-0.1	0.0	-1.0
1947	-0.2	0.0	0.0	0.0	-0.1	0.0	-0.8	0.0	1.1	-0.1	-0.1	0.8
1948	0.1	-0.1	-0.8	0.1	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0
1949	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-0.4	1.0	-0.1
1950	-0.6	0.0	0.0	0.0	0.0	0.3	0.7	-0.7	-2.0	-0.1	0.3	0.0
1951	0.0	0.7	0.0	-0.1	0.0	-0.1	0.0	0.0	2.9	-1.1	0.1	0.8
1952	-0.7	0.0	-0.3	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-1.0	-0.1
1954	0.0	0.2	-0.3	-0.1	0.0	-0.1	0.0	-1.3	-0.6	0.0	-0.2	0.0
1955	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.3	0.3	1.4	0.0
1956	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-3.2	0.0
1957	0.0	0.0	1.1	-0.9	0.1	0.0	0.2	0.0	-0.1	0.4	-0.8	-1.1
1958	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.5	0.0
1959	0.0	0.0	0.0	-0.1	0.0	0.0	-0.5	-0.2	0.1	-0.3	-0.1	0.3

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	-0.4	-0.6	-0.9	0.0	0.0	0.0	0.1	0.0	-1.4	-0.2	-3.0	1.0
1961	0.0	0.0	0.1	0.1	-0.1	-0.1	-1.9	-0.2	-0.8	1.1	0.6	0.0
1962	-0.1	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-2.1	0.6	-0.5	0.9
1963	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.0	-2.2	-1.0	0.1	0.0
1964	0.0	0.0	0.0	-0.7	-0.1	0.8	-1.6	0.0	-0.2	-0.1	-0.1	0.1
1965	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	-0.1
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.3	0.0	-0.3
1967	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	0.0	1.3	0.3	-0.4	0.0
1969	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.3
1970	0.0	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.4	-0.2	-0.1	-0.4
1971	-0.2	0.0	0.1	0.0	-0.1	0.3	0.0	0.0	0.0	-1.0	-1.3	-0.1
1972	0.0	-0.1	-1.2	-1.2	-0.1	0.0	0.1	0.0	-0.4	-0.3	-0.5	0.3
1973	0.0	0.0	0.0	-0.2	-0.1	0.0	0.1	0.0	-0.5	0.0	-0.2	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.5	0.1	-1.1	-0.9
1975	2.9	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.5	1.0	0.0
1976	0.0	0.0	0.1	-0.1	-0.1	-0.1	0.0	0.3	0.3	-0.2	0.8	1.1
1977	0.2	0.2	-0.3	-0.2	-0.2	-0.1	0.0	-0.3	0.0	0.6	-3.3	-0.4
1978	0.4	0.8	1.0	0.3	0.0	0.0	-1.5	0.0	-0.3	0.5	-0.1	-0.1
1979	0.0	0.0	2.5	-0.4	0.9	0.0	-0.4	0.0	0.0	-0.1	-0.3	0.5
1980	-0.4	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-3.9	-1.0	0.0
1981	0.0	0.0	0.0	-0.2	-0.1	-0.3	-0.1	0.0	-0.2	-0.2	-0.3	-0.3
1982	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	0.3	0.0
1983	1.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	-0.3	-0.3	0.0
1985	-0.3	0.0	0.0	-0.2	0.0	0.0	0.4	0.3	-0.4	-0.2	-0.1	-0.7
1986	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	-1.1	-0.1	0.3	0.0
1987	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.4	-0.5	0.2	0.2	0.3
1988	0.0	-0.2	0.0	0.0	0.0	-0.5	0.0	-0.1	0.2	-1.5	-0.1	0.0
1989	0.0	0.2	0.0	0.0	0.0	0.1	0.0	-0.2	-1.1	-0.1	-0.1	-0.5
1990	0.1	0.0	0.3	0.0	-0.1	-0.1	0.0	0.1	0.6	-0.1	0.0	1.0
1991	0.0	0.1	0.0	0.3	-0.7	-0.1	0.0	0.0	0.0	-0.1	0.0	-0.1
1992	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.1	-0.3
1993	-0.1	-0.1	-0.2	0.0	0.0	-0.2	0.0	0.0	0.0	-3.5	-0.1	0.7
1994	0.0	0.0	0.5									
Average	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.5	-0.1	0.1
Minimum	-1.8	-0.6	-1.2	-1.2	-0.7	-0.5	-1.9	-1.5	-2.2	-4.7	-3.3	-1.1
Maximum	2.9	0.8	2.5	0.3	0.9	1.3	2.0	0.4	2.9	1.1	2.4	1.4

Table 5.5.1-23 Simulated Change in Water Temperature for the Feather River below Thermolito, Alternative 6, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				0.0	0.0	0.0	0.1	0.0	0.0	-4.8	-0.2	-0.1
1923	-0.1	0.2	-0.9	0.0	0.0	0.0	0.0	0.0	0.3	-1.1	-0.4	0.3
1924	-1.2	0.0	0.4	0.0	0.0	0.1	0.0	0.0	-0.2	0.4	0.4	0.6
1925	0.1	0.8	1.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.3	2.1	0.0
1926	0.3	0.0	0.0	0.0	0.0	-0.1	1.5	0.1	0.0	-0.1	0.2	1.3
1927	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.7	-1.5	-0.1	-0.1
1928	-1.8	0.0	0.0	0.0	0.4	0.2	0.0	-1.4	-0.6	-0.2	1.1	-0.3
1929	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	2.4	-0.3
1930	0.2	0.2	0.2	0.0	0.1	0.0	-1.6	-0.3	0.8	0.0	0.4	1.4
1931	-0.6	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-1.0	0.1	0.3
1932	-0.2	-0.2	-0.2	0.1	0.1	0.0	-0.8	0.1	2.4	-2.7	-0.4	0.0
1933	0.0	0.0	-0.1	-0.1	-0.1	0.5	0.0	0.0	-0.1	0.0	0.1	0.1
1934	-0.1	0.0	0.4	-0.1	-0.1	-0.1	0.1	0.0	0.0	0.0	0.8	0.8
1935	0.2	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-0.1	-0.2	-0.2	0.8
1936	-0.1	0.0	0.3	-0.1	0.0	1.2	0.0	0.0	0.0	-0.1	-0.4	1.0
1937	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	2.2	-0.4	-1.0	0.1
1938	-0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-4.5	0.0	-0.1
1939	1.1	0.0	0.0	0.1	0.0	0.0	0.5	0.4	-1.9	-0.9	0.2	0.5
1940	0.2	0.4	0.0	0.0	-0.1	0.0	0.0	0.0	-0.5	-0.1	-0.4	-0.2
1941	-1.8	0.0	0.1	-0.1	0.0	-0.2	0.1	0.0	-1.9	-4.6	0.6	-0.1
1942	0.2	0.4	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	-1.4	-2.9	-0.1
1943	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.9	-0.3	-0.1
1944	0.0	0.0	0.2	0.0	0.1	0.1	0.1	0.0	0.1	-0.2	-0.3	1.0
1945	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	-0.2	-0.4	0.0
1946	-0.3	0.0	-0.2	-0.3	-0.1	1.6	0.1	0.0	0.0	-0.1	-0.1	-1.2
1947	-0.2	0.0	0.0	0.0	-0.1	0.0	-0.8	0.0	1.3	-0.1	-0.1	0.8
1948	0.1	0.0	-0.8	0.1	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0
1949	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-0.2	1.1	-0.1
1950	-0.6	0.0	0.0	0.0	0.0	0.0	0.8	-0.7	-1.8	-0.2	0.2	0.0
1951	0.0	0.7	0.0	-0.1	0.0	-0.1	0.0	0.0	2.8	-1.5	0.0	0.8
1952	-0.7	0.0	-0.5	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
1953	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-1.0	-0.1
1954	0.0	0.2	-0.3	-0.1	0.0	-0.1	0.0	-1.3	-0.6	0.0	-0.2	0.0
1955	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.3	1.4	0.0
1956	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-3.4	0.0
1957	0.0	0.0	1.0	-0.9	0.0	0.0	0.2	0.0	-0.1	0.5	-0.8	-1.1
1958	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.8	-0.7
1959	0.0	0.0	0.0	-0.1	0.0	0.0	-0.5	-0.1	0.2	-0.3	-0.1	1.0
1960	0.1	-0.7	-0.9	0.0	0.0	0.0	0.1	0.0	-1.4	-0.2	-3.1	1.0
1961	0.0	0.0	0.1	0.1	-0.1	-0.1	-1.9	-0.2	-0.9	1.1	0.7	0.0
1962	-0.3	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	-2.1	0.6	-0.2	0.9
1963	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	-2.3	-2.0	-0.2	0.0
1964	0.0	0.0	0.0	-0.7	0.0	0.9	-1.6	0.0	0.0	-0.1	-0.1	0.3
1965	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.4	0.0	-0.1
1966	0.0	-0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.3	0.0	-0.3
1967	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	0.0	1.4	0.3	-0.4	0.1
1969	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.5	-0.4
1970	0.2	0.0	-0.2	-0.1	0.0	-0.1	0.0	0.0	-0.4	-0.2	-0.1	-0.3
1971	-0.2	0.0	0.1	0.0	-0.1	0.3	0.0	0.0	0.0	-1.0	-1.3	-0.1
1972	0.0	-0.1	-1.2	-1.2	-0.1	0.0	0.1	0.0	-0.4	-0.4	-0.5	0.3
1973	0.0	0.0	0.0	-0.2	-0.1	0.0	0.1	0.0	-0.5	0.0	-0.2	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.5	0.0	-1.3	-0.9
1975	3.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.5	0.9	0.0
1976	0.0	0.0	0.1	-0.1	-0.1	-0.1	0.0	0.3	0.3	-0.1	0.9	1.1
1977	0.3	0.2	-0.3	-0.2	-0.3	-0.2	-0.1	-0.4	0.1	0.8	-3.8	-1.4
1978	0.3	0.9	1.2	0.3	0.0	1.0	-1.7	0.0	-0.3	0.4	-0.1	-0.1
1979	0.0	0.0	2.5	-0.4	0.8	0.0	-0.4	0.0	0.1	-0.1	-0.3	0.0
1980	-0.1	0.0	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	-3.9	-1.0	0.0
1981	0.0	0.0	0.0	-0.2	0.1	-0.3	-0.1	0.0	-0.2	-0.2	-0.3	-0.4
1982	0.4	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	0.1	0.0
1983	1.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	-0.2	-0.3	0.1
1985	-0.3	0.0	0.0	-0.2	0.0	0.0	0.4	0.3	-0.4	-0.2	-0.1	-0.7
1986	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	-0.8	-0.1	0.2	0.0
1987	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.3	-0.4	0.2	0.2	0.4
1988	0.0	-0.3	0.0	0.0	0.0	-0.6	0.0	0.1	0.4	-1.3	0.0	0.0
1989	-0.1	-0.2	0.0	0.0	0.0	0.6	0.0	-0.2	-1.0	-0.1	-0.1	-0.4
1990	0.0	0.0	0.4	0.0	-0.1	0.0	0.0	0.1	0.4	-0.1	0.0	1.0
1991	0.0	0.0	0.0	0.3	-0.7	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1
1992	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.4	0.0	0.0	-0.1	-0.3
1993	-0.4	0.0	-0.2	0.0	0.0	-0.2	0.0	0.0	0.0	-3.6	-0.1	0.3
1994	0.0	0.0	0.6									
Average	0.0	0.0	0.0	-0.1	0.0	0.1	-0.1	0.0	-0.1	-0.5	-0.2	0.1
Minimum	-1.8	-0.7	-1.2	-1.2	-0.7	-0.6	-1.9	-1.4	-2.3	-4.8	-3.8	-1.4
Maximum	3.0	0.9	2.5	0.3	0.8	1.6	1.5	0.4	2.8	1.1	2.4	1.4

Table 5.5.1-24 Frequency of Change in Water Temperature in the Feather River below Thermolito According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+3.0	1	1	0	0	0
<+2.5	0	0	2	1	1
<+2.0	0	0	0	2	0
<+1.5	1	2	3	6	2
<+1.0	4	6	6	10	6
<+0.5	33	13	23	39	23
0.0	147	50	79	73	55
>-0.5	43	29	40	42	38
>-1.0	9	6	7	9	3
>-1.5	6	4	6	4	2
>-2.0	1	3	0	3	1
>-2.5	3	0	2	1	0
>-3.0	1	0	0	1	0
>-3.5	1	0	0	1	1
>-4.0	0	2	0	0	0
>-4.5	1	0	0	0	0
>-5.0	1	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-25 Frequency of Change in Water Temperature in the Feather River below Thermolito According to Water Year Type (Comparison of Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (°F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+3.0	1	1	0	0	0
<+2.5	0	0	2	2	1
<+2.0	1	0	1	0	0
<+1.5	0	2	2	8	1
<+1.0	4	5	7	9	6
<+0.5	30	15	24	42	26
0.0	145	51	76	71	57
>-0.5	45	27	42	42	33
>-1.0	11	6	6	9	3
>-1.5	5	4	6	3	4
>-2.0	3	3	1	4	0
>-2.5	2	0	1	0	0
>-3.0	2	0	0	1	0
>-3.5	1	0	0	1	0
>-4.0	0	2	0	0	1
>-4.5	0	0	0	0	0
>-5.0	2	1	0	0	0
Total Number of Months	252	117	168	192	132

Table 5.5.1-26 Simulated Water Temperature Data for the American River, Alternative 1, 2020 LOD

Year	Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				43.7	46.0	51.4	54.8	58.6	63.7	67.1	68.3	66.9
1923	56.6	53.2	47.7	44.2	45.1	50.4	56.2	59.8	63.0	66.7	68.3	66.4
1924	58.2	59.5	51.0	46.9	51.4	53.3	60.8	68.8	69.4	68.9	69.5	68.9
1925	61.7	54.4	46.0	46.5	48.6	51.5	56.5	61.2	65.4	67.0	69.4	65.1
1926	59.6	56.3	49.3	44.6	48.8	55.4	60.7	64.5	67.5	69.5	70.7	67.0
1927	59.9	58.5	51.1	47.8	48.8	52.2	54.8	59.4	64.2	66.6	67.6	65.7
1928	58.1	55.4	49.4	47.2	49.1	53.4	55.5	62.7	65.9	67.3	69.5	68.7
1929	59.1	56.6	48.2	43.6	48.2	53.4	55.3	64.0	67.6	68.7	68.5	67.3
1930	61.0	58.3	51.4	46.5	50.7	54.9	59.0	61.2	67.1	67.6	67.9	66.3
1931	60.1	57.4	49.6	47.6	52.6	56.9	62.4	69.0	68.4	70.9	71.0	68.8
1932	63.5	54.5	47.3	45.2	46.8	53.8	57.2	61.8	65.7	66.3	66.9	65.8
1933	63.2	59.6	46.7	42.8	46.7	54.8	57.6	61.1	65.8	69.3	68.4	66.0
1934	66.3	58.5	48.4	47.0	50.4	58.1	60.2	65.5	67.7	69.8	70.6	67.5
1935	64.3	55.3	49.3	47.1	49.0	50.6	55.4	59.7	65.8	66.3	66.7	66.1
1936	58.3	55.0	49.7	48.1	48.0	53.8	56.7	60.8	64.8	66.9	67.9	66.6
1937	58.7	58.5	49.7	42.9	45.2	53.0	55.0	60.7	64.9	67.0	68.2	66.5
1938	58.4	56.7	51.4	46.9	48.1	50.6	54.7	59.1	64.1	68.0	66.7	65.4
1939	57.5	56.0	50.4	47.5	47.8	51.9	62.4	67.6	68.3	68.1	71.6	68.1
1940	62.1	58.0	52.0	48.1	48.6	52.9	56.5	62.0	67.3	66.4	69.6	65.7
1941	58.5	56.7	51.5	48.7	49.5	54.4	55.4	59.6	63.9	68.4	67.1	64.9
1942	56.4	55.6	50.3	46.2	46.3	50.9	54.8	57.7	62.9	67.4	67.6	65.0
1943	57.4	56.0	49.2	46.3	47.5	52.1	55.9	61.4	64.4	66.5	68.8	66.7
1944	57.2	56.9	51.4	48.3	48.3	53.8	56.1	63.9	66.2	66.9	69.0	66.3
1945	60.5	55.0	49.5	46.1	47.8	50.0	57.1	59.9	64.7	66.8	69.2	66.5
1946	58.3	56.7	49.3	45.7	46.0	50.6	57.2	60.4	64.5	66.4	69.0	66.1
1947	57.2	54.9	48.8	44.8	49.0	54.2	60.0	67.3	68.8	68.1	68.1	66.3
1948	59.6	52.3	47.1	48.0	47.5	50.0	54.3	57.9	62.8	66.3	67.8	66.1
1949	56.8	55.4	48.1	42.3	44.0	50.8	58.2	61.1	66.4	67.2	66.6	66.6
1950	57.4	57.2	49.1	44.5	47.3	52.1	57.0	60.6	64.4	66.8	68.7	66.1
1951	58.0	56.3	49.4	45.3	47.2	50.7	57.4	61.2	65.3	65.9	68.4	66.2
1952	58.9	57.2	49.4	45.3	47.2	50.2	54.8	58.8	62.4	66.4	66.4	65.9
1953	58.4	57.9	50.8	48.5	48.5	52.6	56.5	58.8	62.8	66.6	67.3	65.6
1954	57.8	57.8	51.7	48.0	48.0	51.2	57.6	62.5	66.6	68.5	67.1	65.5
1955	57.9	55.3	47.1	43.7	46.1	51.4	53.6	63.0	65.4	68.2	69.9	68.5
1956	59.4	55.8	48.7	45.9	46.9	52.0	57.3	60.1	64.5	66.4	67.6	65.5
1957	58.6	59.4	51.9	47.6	49.3	54.3	58.9	60.9	66.3	66.1	67.9	65.9
1958	61.5	57.1	49.7	47.5	50.4	51.5	54.9	59.3	63.7	66.3	69.3	65.8
1959	59.0	59.7	55.5	51.3	50.1	53.9	62.7	62.1	68.0	66.5	70.1	68.5
1960	65.4	58.8	51.3	47.0	50.0	54.6	58.4	63.1	67.9	69.4	68.3	67.8
1961	61.1	56.5	49.6	45.1	51.4	53.2	58.0	60.7	70.3	71.1	69.5	67.8
1962	64.6	55.8	47.3	43.8	47.1	51.3	59.4	61.0	66.9	66.8	68.7	66.0
1963	57.6	58.2	50.9	45.7	48.4	51.6	53.7	57.6	63.2	66.2	68.4	66.8
1964	57.6	55.9	47.1	44.8	47.6	50.9	55.5	61.9	68.1	67.9	67.3	65.4
1965	61.2	54.5	48.2	45.0	47.9	52.1	55.6	60.1	63.2	65.5	68.0	65.2
1966	58.7	58.1	48.8	46.4	47.6	51.3	61.6	65.9	69.1	66.2	72.6	67.8
1967	61.5	57.2	49.2	46.6	47.0	51.5	52.0	58.5	62.7	67.7	67.4	65.5
1968	58.5	60.7	51.4	46.5	51.2	55.4	59.7	63.6	70.2	66.4	70.6	68.1
1969	60.1	55.3	48.1	45.0	45.5	51.3	55.1	59.1	63.2	66.6	69.1	66.3
1970	57.1	58.0	52.3	46.8	49.4	52.8	56.6	65.1	66.9	66.9	69.4	67.8
1971	61.3	56.5	49.2	45.8	46.3	50.7	55.1	58.3	62.4	66.5	68.7	66.1
1972	56.7	56.3	48.9	44.4	47.3	56.2	58.2	63.0	65.9	67.4	70.0	67.5
1973	58.2	54.0	45.7	44.7	47.9	50.8	58.0	62.3	65.8	67.1	70.1	65.8
1974	57.6	55.3	49.4	46.2	47.4	51.0	54.9	59.6	64.6	66.2	68.2	65.6
1975	58.4	57.7	50.3	45.7	47.4	51.1	53.5	60.1	63.8	66.6	68.1	66.0
1976	56.6	54.9	50.0	48.3	51.0	53.7	57.5	65.8	68.5	69.1	68.9	67.1
1977	64.8	59.4	52.5	44.6	53.4	53.8	65.2	63.2	73.5	73.9	74.5	69.6
1978	65.1	55.7	49.9	48.2	48.5	55.4	56.0	61.1	64.6	66.5	68.5	65.9
1979	59.4	57.0	48.6	46.8	47.6	54.1	57.3	61.5	65.3	67.0	68.5	66.7
1980	60.1	57.1	51.7	47.1	48.1	51.2	57.8	60.3	63.8	66.9	67.5	65.5
1981	58.6	59.0	52.9	49.4	50.7	54.1	59.0	65.9	68.4	66.5	70.0	68.4
1982	62.6	55.6	50.3	45.1	47.5	50.2	54.0	59.0	63.1	67.5	66.8	64.7
1983	57.7	56.1	49.0	45.4	48.3	51.4	54.4	58.3	63.3	65.9	66.5	65.2
1984	58.8	57.2	49.1	46.9	48.9	53.5	58.1	63.1	66.0	65.8	70.5	66.8
1985	60.7	56.4	49.9	45.6	48.6	51.7	60.1	64.2	69.1	69.2	67.6	66.4
1986	59.9	54.2	46.3	47.1	47.5	51.6	58.6	61.8	65.7	66.3	68.0	65.0
1987	58.6	59.9	52.3	48.1	50.4	53.1	63.4	68.2	67.1	68.6	71.2	68.1
1988	62.1	57.6	50.4	48.3	53.0	56.8	60.2	63.6	69.0	70.6	73.6	71.2
1989	65.7	55.3	49.4	45.9	47.9	51.6	59.9	63.0	66.2	68.1	67.7	66.3
1990	61.0	58.3	50.0	47.7	48.4	54.3	59.7	64.2	68.0	70.3	69.9	68.0
1991	65.2	57.5	47.9	47.3	55.0	52.5	56.2	60.5	68.4	67.4	66.9	67.2
1992	68.1	59.6	50.5	46.1	53.1	54.8	58.8	65.6	69.3	69.6	69.8	70.6
1993	66.1	55.7	45.6	45.1	47.2	54.8	57.2	59.9	64.5	66.3	67.2	66.7
1994	57.9	56.9	49.5									
Average	60.0	56.8	49.6	46.3	48.5	52.7	57.4	61.8	66.0	67.5	68.8	66.7
Minimum	56.4	52.3	45.6	42.3	44.0	50.0	52.0	57.6	62.4	65.5	66.4	64.7
Maximum	68.1	60.7	55.5	51.3	55.0	58.1	65.2	69.0	73.5	73.9	74.5	71.2

Table 5.5.1-27 Simulated Change in Water Temperature for the American River, Alternatives 2-5, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				-0.1	0.0	0.1	0.1	0.0	0.3	1.1	1.2	1.4
1923	-0.2	1.5	0.0	0.0	0.0	0.1	-0.1	0.2	0.2	0.6	1.3	1.1
1924	0.6	2.1	-0.5	-0.1	0.1	0.0	0.0	0.2	0.6	0.3	0.2	0.8
1925	-0.9	0.0	-0.1	0.0	0.2	0.0	0.0	0.6	0.8	0.9	3.8	0.5
1926	0.9	-0.1	0.0	0.1	-0.6	-1.5	0.3	0.1	0.7	0.7	1.9	0.3
1927	1.3	-0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.4	0.7	1.0	1.3
1928	0.8	0.7	0.0	0.0	0.1	0.1	0.1	0.1	-0.1	1.3	2.6	3.3
1929	1.3	0.6	-0.1	-0.2	0.4	0.2	0.5	0.3	0.6	1.2	0.4	1.5
1930	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.4	1.0	0.1	0.0
1931	2.2	-0.6	-0.5	-0.4	0.1	0.0	-0.1	0.4	1.2	0.3	0.4	1.0
1932	-0.4	0.0	-0.1	0.0	0.0	-0.2	0.0	0.5	0.7	0.7	1.3	0.5
1933	3.1	-0.7	-2.0	-0.5	0.0	0.5	-0.3	0.2	0.6	1.2	1.0	0.5
1934	0.2	-0.2	-0.3	0.0	0.0	0.3	0.2	0.1	0.6	0.7	-1.5	1.3
1935	0.2	-0.1	-0.3	-0.2	0.5	0.0	0.0	0.1	0.8	0.7	0.4	1.0
1936	1.1	0.0	-0.2	-0.2	0.0	0.0	0.1	0.1	0.4	0.7	1.1	1.0
1937	0.2	0.4	-0.2	0.0	0.0	0.0	0.1	0.2	0.4	0.7	1.7	0.9
1938	0.6	1.7	0.0	0.0	0.0	0.0	0.1	0.0	0.2	2.1	0.2	0.7
1939	0.9	0.4	-0.1	-0.1	0.0	-0.1	1.1	1.4	1.6	0.9	1.5	-0.1
1940	0.6	-0.3	0.0	-0.1	0.0	0.0	0.1	0.2	0.6	0.8	2.0	0.6
1941	1.0	0.6	-0.2	-0.1	0.0	0.0	0.0	0.1	0.3	2.4	0.4	0.4
1942	0.0	0.8	0.1	0.0	0.0	-0.1	0.2	0.1	0.1	0.4	2.1	0.7
1943	0.1	1.0	0.0	0.0	0.1	0.1	0.1	0.0	0.6	0.8	1.9	1.7
1944	0.6	1.3	-0.3	0.0	0.0	0.0	0.1	0.2	0.6	0.4	1.4	0.5
1945	1.5	0.0	0.0	-0.1	-0.3	0.0	0.3	0.4	0.7	0.7	1.6	1.6
1946	0.7	0.8	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.7	1.5	1.2
1947	0.6	0.8	-0.2	-0.3	0.3	0.0	0.1	0.9	0.8	1.0	1.3	0.2
1948	1.6	0.1	-0.3	0.0	0.0	0.0	0.1	0.1	0.3	0.6	1.3	1.3
1949	0.0	1.0	-0.2	0.0	-0.3	0.2	0.1	0.1	1.3	1.2	0.4	0.8
1950	0.3	2.5	-0.3	-0.6	-0.1	0.0	0.1	0.2	0.4	0.7	1.2	1.3
1951	0.8	0.2	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	0.6
1952	1.9	0.8	-0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.8	1.1
1953	0.5	1.4	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.6	1.5	0.6
1954	0.9	0.8	-0.1	0.0	0.0	0.0	0.0	0.1	0.8	1.3	0.8	0.4
1955	0.6	0.6	-0.2	-0.5	0.2	0.3	0.1	0.0	-0.6	1.5	2.5	0.6
1956	1.3	0.4	-0.1	0.0	0.0	0.0	-0.2	0.3	0.4	-0.5	2.3	0.8
1957	1.0	0.9	-0.1	0.0	0.0	0.0	0.0	0.1	1.2	0.6	1.4	0.3
1958	3.5	0.0	-1.0	-0.2	0.0	0.0	0.0	0.0	0.1	0.7	1.5	1.0
1959	0.8	0.9	0.0	0.1	0.0	-0.4	-0.2	-1.6	1.5	0.5	0.3	1.6

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	-0.2	-0.4	-0.8	-0.6	0.9	-0.3	0.0	-0.1	1.0	0.1	1.0	-0.4
1961	2.1	-0.2	-0.2	-0.3	1.0	0.3	0.7	0.7	1.6	2.8	0.2	1.8
1962	0.3	0.1	0.0	0.0	0.1	-0.1	0.2	0.3	1.1	1.2	0.9	0.5
1963	0.9	0.2	-0.1	0.0	0.0	-0.1	0.1	0.1	0.2	0.6	1.1	1.4
1964	0.4	0.9	0.1	0.0	0.1	0.2	-0.2	0.1	2.5	0.7	0.2	0.3
1965	0.9	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.7	0.8
1966	0.8	1.1	-0.2	0.0	0.0	0.1	-0.2	0.5	1.9	0.3	2.8	0.2
1967	2.0	-0.4	-0.6	-0.1	0.0	0.0	0.0	0.1	0.1	1.1	1.0	0.6
1968	0.9	0.8	-0.1	-0.1	-0.3	0.1	0.1	0.2	2.6	0.0	0.8	0.2
1969	1.6	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.1	0.2	0.7	0.9	1.4
1970	0.4	1.3	0.0	0.0	0.0	0.1	0.0	0.5	1.4	0.6	1.5	2.4
1971	1.3	0.3	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.7	0.9	1.3
1972	0.0	1.2	0.1	0.0	0.1	0.0	0.1	0.3	0.6	0.5	0.9	0.6
1973	1.1	0.6	-0.3	0.0	0.0	0.0	0.2	0.4	0.6	1.3	1.7	0.7
1974	0.4	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.6	1.5	0.8
1975	0.4	1.1	-0.1	-0.1	0.2	0.0	0.1	0.3	0.2	-0.3	2.6	1.1
1976	0.0	1.2	0.1	0.0	0.1	0.1	0.1	0.3	0.5	0.3	0.2	-0.3
1977	2.0	0.0	-0.5	-0.7	0.4	0.0	0.5	0.3	4.2	0.0	0.0	0.0
1978	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.6	0.4	0.8	1.0	1.3
1979	1.3	0.5	-0.5	0.1	0.0	0.0	0.0	0.4	0.7	1.2	1.3	0.5
1980	1.8	0.6	-0.6	-0.1	0.0	0.1	0.1	0.1	0.8	1.2	0.8	1.1
1981	1.2	1.2	-0.1	0.0	-0.1	0.1	0.0	0.6	-0.4	0.1	1.5	1.5
1982	0.3	-0.8	-0.1	0.0	0.0	0.0	0.0	0.1	0.3	2.0	0.0	0.4
1983	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.5
1984	0.9	0.3	0.0	0.0	0.0	0.0	0.5	0.0	0.4	0.5	1.7	0.4
1985	2.1	-0.1	0.0	0.0	0.2	-0.4	0.4	0.4	2.1	1.1	1.0	1.1
1986	1.0	-0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.7	0.8	0.9
1987	0.9	0.8	-0.2	0.0	-0.2	-0.1	0.0	1.1	1.1	1.8	0.7	0.6
1988	-0.7	0.1	0.1	0.1	-0.3	-0.1	0.0	-0.3	0.6	0.5	0.8	0.1
1989	-0.4	-1.1	-0.5	-0.1	0.1	0.0	0.3	0.4	0.5	2.0	1.4	-0.4
1990	2.3	-0.4	-0.7	-0.2	-0.1	-0.9	-0.7	-0.7	0.3	0.9	0.8	0.6
1991	-0.2	0.1	-0.1	0.0	0.2	0.0	0.3	-1.9	0.1	1.5	0.9	0.7
1992	1.3	-0.5	-0.5	-0.3	0.0	0.1	0.5	0.5	0.7	0.5	1.2	0.7
1993	0.9	0.8	0.2	0.1	0.1	0.0	0.2	0.1	0.4	0.7	0.7	1.6
1994	0.4	1.0	0.0									
Average	0.8	0.4	-0.2	-0.1	0.0	0.0	0.1	0.2	0.7	0.8	1.1	0.8
Minimum	-0.9	-1.1	-2.0	-0.7	-0.6	-1.5	-0.7	-1.9	-0.6	-0.5	-1.5	-0.4
Maximum	3.5	2.5	0.2	0.1	1.0	0.5	1.1	1.4	4.2	2.8	3.8	3.3

Table 5.5.1-28 Simulated Change in Water Temperature for the American River, Alternative 6, 2020 LOD

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922				-0.1	0.0	0.1	0.1	0.0	0.3	0.9	1.2	1.6
1923	-0.2	1.5	0.0	0.0	0.0	0.1	-0.1	0.2	0.2	0.6	1.3	1.1
1924	1.1	2.2	-0.5	-0.1	0.3	0.2	0.0	0.2	0.6	0.3	0.2	0.9
1925	-0.9	0.0	-0.1	0.1	0.2	0.0	0.0	0.6	0.8	0.9	3.8	0.5
1926	0.9	-0.1	0.0	0.1	-0.6	-1.1	0.3	0.1	0.9	0.7	2.4	0.5
1927	0.6	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.4	0.7	1.0	1.3
1928	0.8	0.7	0.0	0.0	0.1	0.1	0.1	0.2	-0.2	1.3	2.5	3.3
1929	1.3	0.6	0.0	-0.2	0.3	0.2	0.6	1.4	0.9	1.0	0.4	1.1
1930	0.6	-0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.6	1.3	0.3	0.0
1931	1.8	-0.5	-0.4	-0.4	-0.1	0.1	0.1	0.4	1.2	0.3	0.3	0.9
1932	-0.7	0.1	0.1	0.0	0.0	-0.1	0.0	0.5	0.7	0.7	1.3	0.5
1933	3.1	-0.7	-2.0	-0.5	-0.1	0.5	-0.2	0.3	0.5	1.2	1.0	0.4
1934	0.3	-0.1	-0.3	0.0	0.0	0.3	0.3	0.2	0.5	0.7	-0.3	0.4
1935	0.2	0.1	-0.1	-0.1	0.2	0.0	0.1	0.1	0.8	0.7	0.4	1.0
1936	0.9	0.1	-0.2	-0.1	0.0	0.0	0.1	0.1	0.4	0.7	0.9	1.0
1937	0.7	0.4	-0.3	0.0	0.0	0.0	0.1	0.2	0.4	0.7	1.5	0.9
1938	0.6	1.8	0.0	0.0	0.0	0.0	0.1	0.0	0.2	1.8	0.4	0.7
1939	0.9	0.4	-0.1	-0.1	0.0	-0.1	1.1	1.4	1.7	0.9	1.6	-0.1
1940	0.4	-0.3	0.0	-0.1	-0.1	0.0	0.1	0.2	0.7	0.8	1.6	0.6
1941	1.0	0.6	-0.2	-0.1	0.0	0.0	0.0	0.1	0.3	2.4	0.3	0.4
1942	0.0	0.8	0.1	0.0	0.0	-0.1	0.2	0.1	0.1	0.1	2.7	0.7
1943	0.1	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.8	1.9	1.7
1944	0.6	1.3	-0.3	0.0	0.0	0.0	0.1	0.2	0.6	0.4	1.3	0.5
1945	1.2	-0.5	0.1	0.1	0.1	0.0	0.3	0.4	0.7	0.7	1.2	1.6
1946	0.7	0.9	0.0	0.0	0.0	0.1	0.2	0.2	0.5	0.7	1.3	1.2
1947	0.6	0.8	-0.3	-0.3	0.3	0.0	0.1	0.9	0.8	1.0	1.3	0.2
1948	1.5	0.1	-0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.6	1.3	1.3
1949	0.0	1.0	-0.2	0.0	-0.3	0.2	0.1	0.1	1.3	1.2	0.4	0.9
1950	0.3	2.5	-0.3	-0.6	0.0	0.0	0.1	0.2	0.4	0.7	1.0	1.4
1951	0.8	0.2	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	0.5
1952	2.0	0.8	-0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6	1.3
1953	0.5	1.4	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.6	1.5	0.6
1954	0.9	0.8	-0.1	0.0	0.0	0.0	0.0	0.1	0.8	1.3	0.8	0.4
1955	0.6	0.6	-0.2	-0.5	0.2	0.3	0.1	0.0	-0.6	1.5	2.5	0.6
1956	1.3	0.4	-0.1	0.0	0.0	0.0	-0.2	0.3	0.4	-0.5	2.3	0.8
1957	1.0	0.9	-0.1	0.0	0.0	0.0	0.0	0.1	1.2	0.6	1.4	0.3
1958	3.4	0.0	-1.0	-0.2	0.0	0.0	0.0	0.0	0.1	0.7	1.5	1.0
1959	0.8	0.9	0.0	0.1	0.0	-0.4	-0.2	-1.6	1.5	0.5	0.3	1.6

Year	Change in Water Temperature by Month (°F)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1960	-0.2	-0.4	-0.8	-0.6	0.9	-0.3	0.0	-0.2	0.9	0.4	0.9	-0.3
1961	1.7	-0.2	-0.2	-0.3	0.9	0.3	0.6	0.7	1.5	2.9	-0.1	1.6
1962	0.3	0.1	0.1	0.0	0.0	-0.1	0.2	0.3	1.1	1.2	1.6	0.6
1963	0.8	0.2	-0.1	0.0	0.0	-0.1	0.1	0.1	0.2	0.5	1.1	1.4
1964	0.4	1.0	0.1	0.0	0.1	0.2	-0.2	0.1	2.5	0.7	0.2	0.4
1965	0.9	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.7	0.8
1966	1.2	1.0	-0.2	0.0	0.0	0.1	-0.2	0.5	1.8	0.3	2.8	0.1
1967	2.0	-0.4	-0.6	-0.1	0.0	0.0	0.0	0.1	0.1	1.1	1.0	0.6
1968	0.9	0.8	-0.1	-0.1	-0.3	0.1	0.1	0.2	2.6	0.0	0.8	0.2
1969	1.6	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.1	0.2	0.7	0.9	1.4
1970	0.4	1.4	0.0	0.0	0.0	0.1	0.0	0.5	1.4	0.6	1.4	2.4
1971	1.3	0.3	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.7	0.9	1.3
1972	0.0	1.2	0.1	0.0	0.1	0.0	0.1	0.3	0.6	0.5	0.9	0.6
1973	1.1	0.6	-0.3	0.0	0.0	0.0	0.2	0.4	0.7	1.2	1.5	0.7
1974	0.4	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.6	1.5	0.8
1975	0.4	1.1	-0.1	-0.1	0.2	0.0	0.1	0.3	0.2	-0.4	2.6	1.2
1976	0.0	1.2	0.1	0.0	0.1	0.1	0.1	0.3	0.5	0.3	0.2	-0.3
1977	2.0	0.0	-0.5	-0.7	0.4	0.0	0.5	0.3	4.2	0.0	0.0	0.0
1978	0.1	-0.2	0.1	0.0	0.0	0.1	0.1	0.6	0.4	0.8	1.0	1.3
1979	1.3	0.4	-0.5	0.1	0.0	0.0	0.0	0.4	0.7	1.0	1.5	0.5
1980	1.9	0.7	-0.5	-0.1	0.0	0.1	0.1	0.1	0.8	1.0	0.6	1.4
1981	1.3	1.2	-0.1	0.0	-0.1	0.1	0.0	0.6	-0.4	0.2	1.4	1.4
1982	0.3	-0.7	-0.1	0.0	0.0	0.0	0.0	0.1	0.3	1.8	0.1	0.4
1983	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.5
1984	0.9	0.3	0.0	0.0	0.0	0.0	0.5	0.0	0.4	0.5	1.7	0.4
1985	2.1	-0.1	0.0	0.0	0.2	-0.4	0.4	0.4	2.1	1.1	1.0	1.1
1986	1.0	-0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.7	0.8	0.9
1987	0.9	0.8	-0.2	0.0	-0.2	-0.1	0.0	1.2	1.2	1.8	0.7	0.6
1988	-0.8	0.1	0.2	0.1	-0.3	-0.2	-1.1	0.4	0.7	0.2	4.2	0.1
1989	-0.2	-1.0	-0.5	-0.1	0.1	0.0	0.3	0.4	0.5	2.1	1.4	-0.3
1990	2.3	-0.4	-0.6	-0.1	0.0	-0.9	-0.7	-0.7	0.2	0.8	0.9	0.7
1991	-0.4	0.1	-0.1	0.0	0.2	0.0	0.3	-1.8	0.4	1.0	0.8	1.2
1992	1.3	-0.5	-0.5	-0.3	0.0	0.1	0.5	0.5	0.7	0.5	1.2	0.5
1993	0.7	0.6	0.1	0.1	0.1	0.0	0.2	0.1	0.4	0.7	0.3	1.8
1994	0.8	0.9	0.0									
Average	0.8	0.4	-0.2	-0.1	0.0	0.0	0.1	0.2	0.7	0.8	1.2	0.8
Minimum	-0.9	-1.0	-2.0	-0.7	-0.6	-1.1	-1.1	-1.8	-0.6	-0.5	-0.3	-0.3
Maximum	3.4	2.5	0.4	0.1	0.9	0.5	1.1	1.4	4.2	2.9	4.2	3.3

Table 5.5.1-29 Frequency of Change in Water Temperature in the American River at Sunrise According to Water Year Type (Comparison of Alternatives 2-5, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.5	0	0	0	0	1
<+4.0	0	0	0	1	0
<+3.5	1	1	0	0	1
<+3.0	1	1	2	1	0
<+2.5	5	0	1	5	3
<+2.0	8	4	6	6	1
<+1.5	19	12	20	19	10
<+1.0	41	30	26	38	19
<+0.5	70	33	55	46	45
0.0	81	26	34	32	17
>-0.5	22	9	21	35	18
>-1.0	3	1	2	7	14
>-1.5	1	0	0	1	0
>-2.0	0	0	1	1	2
>-2.5	0	0	0	0	1
Total Number of Months	252	117	168	192	132

Table 5.5.1-30 Frequency of Change in Water Temperature in the American River at Sunrise According to Water Year Type (Comparison of Alternative 6, 2020 LOD and Alternative 1, 2001 LOD)

Change in Water Temperature (^{o}F)	Water Year Type				
	wet	above normal	below normal	dry	critical
<+4.5	0	0	0	0	2
<+4.0	0	0	0	1	0
<+3.5	1	1	0	0	1
<+3.0	2	0	2	1	0
<+2.5	3	1	1	6	2
<+2.0	9	4	4	5	2
<+1.5	18	10	19	20	10
<+1.0	41	29	31	38	16
<+0.5	72	37	58	47	50
0.0	81	24	32	29	15
>-0.5	21	10	17	35	18
>-1.0	3	1	3	8	13
>-1.5	1	0	0	2	1
>-2.0	0	0	1	0	1
>-2.5	0	0	0	0	1
Total Number of Months	252	117	168	192	132

5.5.2 Salmon mortality modeling results

The tables in this section, Tables 5.5.2-1 through 5.5.2-4, include an additional column that lists the difference between results of the Alternative 1 studies for 2020 LOD and 2001 LOD. This difference represents the impact of future development other than the FRWP project.

Table 5.5.2-1 Simulated Chinook Salmon Egg Mortality (%) in the Trinity River for Alternative 1, 2001 LOD and Change in Percentage for Alternative 1, Alternatives 2-5, and Alternative 6, 2020 LOD

Year	Fall Run Chinook Salmon			
	2001 Alt. 1 (%)	2020 Alt. 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)
1922	0.5	0.1	0.1	0.1
1923	0.9	0.1	0.1	0.1
1924	6.8	-3.2	-3.1	-3.0
1925	0.8	0.3	0.3	0.3
1926	2.8	-0.9	-0.8	-0.9
1927	0.3	0.1	0.1	0.1
1928	0.4	0.3	0.3	0.3
1929	2.5	-1.2	-1.0	-1.2
1930	1.6	-1.0	-1.0	-1.0
1931	11.2	-5.9	-5.5	-5.8
1932	18.4	-3.9	-2.7	-3.9
1933	28.7	-12.8	-11.9	-12.4
1934	14.0	-1.5	0.6	-1.1
1935	8.6	-2.7	-2.9	-2.5
1936	9.6	-1.0	-1.2	-0.8
1937	2.9	-1.0	-1.0	-0.9
1938	0.6	0.2	0.2	0.3
1939	0.5	0.1	0.1	0.1
1940	0.2	0.1	0.1	0.1
1941	0.5	0.0	0.0	0.0
1942	0.6	0.0	0.0	0.0
1943	0.8	0.2	0.2	0.2
1944	0.9	0.3	0.3	0.3
1945	1.0	0.2	0.2	0.4
1946	0.2	0.1	0.1	0.1
1947	0.6	0.1	0.1	0.1
1948	4.0	-1.3	-1.5	-1.1
1949	0.2	0.3	0.3	0.2
1950	0.4	0.1	0.1	0.1
1951	0.6	0.2	0.2	0.2
1952	0.9	0.0	0.0	0.0
1953	0.8	0.0	0.0	0.0
1954	0.3	0.1	0.1	0.1
1955	0.7	0.3	0.3	0.3
1956	0.5	0.2	0.2	0.2
1957	0.5	0.2	0.2	0.2
1958	1.1	0.0	0.0	0.0
1959	0.8	0.1	0.1	0.1
1960	0.9	0.5	0.6	0.5
1961	0.7	0.3	0.3	0.3
1962	1.5	0.3	0.3	0.3
1963	1.0	0.3	0.3	0.2
1964	0.8	0.2	0.2	0.2
1965	0.6	0.3	0.3	0.3
1966	0.7	0.2	0.2	0.2
1967	1.4	0.0	0.0	0.0
1968	0.7	0.2	0.2	0.2
1969	0.7	0.1	0.2	0.1
1970	0.8	0.4	0.4	0.4
1971	0.7	0.0	0.0	0.0
1972	0.4	0.1	0.1	0.1
1973	0.4	0.1	0.1	0.1
1974	1.1	0.0	0.0	0.0
1975	1.3	0.0	0.0	0.0
1976	0.9	0.1	0.1	0.1
1977	11.3	-4.7	-0.9	-4.5
1978	1.0	1.4	1.3	1.4
1979	0.3	0.2	0.2	0.2
1980	0.1	0.1	0.1	0.1
1981	0.3	0.1	0.1	0.1
1982	0.2	1.5	1.5	1.5
1983	1.0	0.0	0.0	0.0
1984	0.4	0.1	0.1	0.1
1985	0.0	0.0	0.0	0.0
1986	0.1	0.1	0.1	0.1
1987	1.4	0.5	0.6	0.6
1988	5.6	-2.2	-2.1	-2.2
1989	0.6	0.2	0.2	0.2
1990	4.9	-2.0	-2.0	-2.0
1991	18.6	-8.4	-8.2	-8.2
1992	8.8	-2.5	-2.3	-2.4
1993	2.8	1.6	1.6	1.5
Median	0.8	0.1	0.1	0.1
Minimum	0.0	-12.8	-11.9	-12.4
Maximum	28.7	1.6	1.6	1.5

Table 5.5.2-2 Simulated Chinook Salmon Egg Mortality (%) in the Sacramento River for Alternative 1, 2001 LOD and Change in Percentage for Alternative 1, Alternatives 2-5, and Alternative 6, 2020 LOD

Year	Fall Run Chinook Salmon				Late-Fall Run Chinook Salmon			
	2001 Alt. 1 (%)	2020 Alt 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)	2001 Alt. 1 (%)	2020 Alt 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)
1922	3.4	-0.1	-0.1	-0.1	0.4	0.0	0.0	0.0
1923	4.4	-0.1	-0.1	-0.1	0.2	0.2	0.2	0.2
1924	28.6	-0.1	-0.1	-0.1	1.0	0.0	-0.1	0.0
1925	9.9	7.1	7.4	7.1	0.7	0.3	0.3	0.3
1926	13.5	7.7	8.1	7.9	1.7	0.1	0.1	0.1
1927	4.3	0.6	0.6	0.7	0.2	0.0	0.0	0.0
1928	4.2	0.5	0.5	0.5	0.5	-0.2	-0.2	-0.1
1929	9.7	4.9	7.7	5.3	2.5	0.7	1.1	0.7
1930	4.5	1.2	1.9	1.3	0.3	0.2	0.4	0.2
1931	34.3	0.4	-0.4	0.1	1.5	0.0	0.0	0.0
1932	39.0	0.0	0.0	0.0	4.1	-0.4	-0.4	-0.4
1933	41.4	-0.4	-0.5	-0.4	3.7	-0.3	-0.4	-0.3
1934	35.0	-0.5	-0.4	-0.5	3.2	-0.8	-1.0	-0.8
1935	27.1	1.2	3.2	1.2	2.0	0.0	0.1	0.0
1936	14.5	3.7	6.5	3.8	1.8	0.8	1.3	0.8
1937	3.3	0.2	0.4	0.2	0.6	0.1	0.1	0.1
1938	5.0	0.8	0.8	0.9	0.9	0.1	0.0	0.1
1939	14.2	-2.4	-2.1	-2.3	1.7	-0.6	-0.7	-0.6
1940	4.3	2.6	2.7	2.8	0.6	0.2	0.2	0.2
1941	3.0	0.2	0.2	0.2	0.3	0.1	0.1	0.1
1942	2.2	0.3	0.3	0.3	0.1	0.0	0.0	0.0
1943	4.1	0.4	0.4	0.3	0.3	0.0	0.0	0.0
1944	6.6	1.6	1.7	1.3	0.1	0.1	0.1	0.1
1945	6.2	0.7	0.7	0.5	0.3	0.0	0.0	0.0
1946	2.5	-0.1	-0.1	-0.2	0.3	0.0	0.0	0.0
1947	11.3	4.8	4.7	5.1	0.9	0.2	0.2	0.2
1948	3.8	0.8	0.9	0.9	0.2	0.0	0.0	0.0
1949	2.1	-0.3	-0.3	-0.3	0.7	0.0	0.0	0.0
1950	3.6	0.2	0.2	0.2	0.6	0.1	0.1	0.1
1951	4.9	-1.1	-1.1	-1.2	0.3	0.0	0.0	0.0
1952	1.6	0.3	0.3	0.3	0.2	0.1	0.1	0.1
1953	2.4	0.3	0.3	0.3	0.0	0.0	0.0	0.0
1954	5.2	1.9	1.9	1.9	0.2	0.0	0.0	0.0
1955	6.5	0.5	0.5	0.5	0.4	0.0	0.0	0.0
1956	1.2	0.7	0.7	0.7	0.3	0.0	0.0	0.0
1957	5.8	0.6	0.6	0.7	0.3	0.0	0.0	0.0
1958	10.5	0.1	0.1	-0.1	3.1	0.2	0.2	0.1
1959	23.7	2.4	2.6	2.6	3.1	0.1	0.0	0.1
1960	7.3	3.1	4.3	3.4	0.2	0.1	0.2	0.1
1961	12.8	3.3	3.7	3.7	0.7	0.2	0.2	0.2
1962	9.0	3.9	4.0	4.0	0.8	0.1	0.2	0.2
1963	7.5	3.4	3.5	3.5	0.6	0.1	0.1	0.1
1964	7.1	2.5	2.9	2.8	0.1	0.1	0.1	0.1
1965	4.6	1.5	1.5	1.5	0.2	0.0	0.0	0.0
1966	5.7	1.9	2.0	2.0	0.4	0.1	0.1	0.1
1967	8.0	0.1	0.1	0.1	1.1	0.1	0.1	0.1
1968	7.7	1.1	1.5	1.2	0.4	0.0	0.0	0.0
1969	1.6	2.0	2.1	2.2	0.2	0.1	0.1	0.1
1970	6.7	0.6	0.6	0.7	0.5	0.0	0.0	0.0
1971	2.3	0.7	0.7	0.7	0.1	0.1	0.1	0.1
1972	5.4	0.2	0.2	0.2	0.2	0.0	0.0	0.0
1973	3.5	1.1	1.2	1.3	0.9	0.0	0.0	0.0
1974	2.4	0.6	0.6	0.6	0.5	0.0	0.0	0.0
1975	4.5	0.3	0.3	0.3	0.3	0.1	0.1	0.1
1976	12.3	0.5	0.5	0.5	0.9	0.2	0.3	0.2
1977	35.2	0.6	-0.2	0.6	0.8	0.1	0.0	0.1
1978	6.8	1.5	1.4	1.5	0.3	0.0	0.0	0.0
1979	6.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0
1980	4.6	-0.5	-0.5	-0.5	0.2	0.0	0.0	0.0
1981	6.4	1.3	1.3	1.3	0.4	0.0	0.0	0.0
1982	1.5	0.9	0.9	0.9	0.7	0.0	0.0	0.0
1983	6.6	0.2	0.2	0.2	0.3	0.0	0.0	0.0
1984	5.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0
1985	2.3	0.9	0.9	0.9	0.3	0.0	0.0	0.0
1986	4.4	0.4	0.4	0.4	0.2	0.0	0.0	0.0
1987	6.5	0.8	1.6	0.9	0.4	0.0	0.1	0.0
1988	27.9	-1.8	-0.6	-1.3	1.1	0.0	0.0	0.0
1989	6.8	2.1	2.1	2.2	0.4	0.0	0.0	0.0
1990	25.8	2.2	3.2	2.8	1.3	0.1	0.2	0.1
1991	32.6	2.0	2.9	2.4	1.9	0.2	0.3	0.2
1992	36.9	-0.3	-0.5	-0.3	1.9	-0.1	-0.1	-0.1
1993	4.5	-0.2	-0.3	-0.2	0.1	0.1	0.1	0.1
Median	6.3	0.6	0.6	0.6	0.4	0.0	0.0	0.0
Minimum	1.2	-2.4	-2.1	-2.3	0.0	-0.8	-1.0	-0.8
Maximum	41.4	7.7	8.1	7.9	4.1	0.8	1.3	0.8

(continued)

Year	Winter Run Chinook Salmon				Spring Run Chinook Salmon			
	2001 Alt. 1 (%)	2020 Alt 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)	2001 Alt. 1 (%)	2020 Alt 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)
1922	1.2	0.2	0.2	0.2	2.6	0.3	0.3	0.3
1923	2.7	0.4	0.4	0.4	2.7	-0.2	-0.2	-0.2
1924	92.8	-3.1	-2.0	-1.2	96.0	0.3	0.2	0.3
1925	2.3	-0.4	-0.4	-0.4	5.2	4.1	4.4	4.0
1926	5.5	-2.9	-2.9	-2.9	6.0	7.0	7.9	7.4
1927	0.8	0.0	0.0	0.0	2.5	-0.1	-0.1	-0.1
1928	1.3	-0.1	-0.1	-0.1	3.0	-0.1	-0.1	-0.1
1929	1.9	-0.8	-0.9	-0.8	3.6	0.7	0.7	0.7
1930	2.1	-0.7	-0.8	-0.7	3.6	0.0	-0.1	-0.1
1931	88.6	-8.6	-1.6	-6.7	98.6	0.1	-0.2	0.0
1932	26.0	2.5	4.0	4.1	99.8	0.0	0.0	0.0
1933	31.6	13.4	22.9	14.7	100.0	0.0	0.0	0.0
1934	96.5	1.7	3.1	-0.5	98.7	-0.3	-0.2	-0.2
1935	3.1	0.6	2.2	0.7	47.7	11.2	36.5	11.9
1936	3.4	0.1	0.2	0.1	5.9	0.7	1.9	0.7
1937	1.7	0.4	0.4	0.4	4.0	0.1	0.1	0.1
1938	1.9	0.2	0.2	0.2	3.7	0.2	0.2	0.2
1939	0.7	0.2	0.2	0.2	4.2	1.6	1.8	1.8
1940	1.7	0.0	0.0	0.0	2.9	-0.2	-0.2	-0.1
1941	0.8	0.4	0.4	0.4	2.0	0.4	0.4	0.4
1942	1.0	0.2	0.2	0.2	2.6	0.4	0.4	0.4
1943	0.8	0.0	0.0	0.0	2.4	-0.2	-0.2	-0.2
1944	0.7	0.3	0.3	0.3	2.8	0.5	0.5	0.4
1945	0.9	0.0	0.0	0.0	2.9	-0.1	-0.1	-0.2
1946	0.5	0.0	0.0	0.0	1.8	-0.1	-0.1	-0.1
1947	2.2	-0.4	-0.4	-0.4	3.1	3.7	3.6	3.9
1948	1.5	0.1	0.1	0.1	3.3	0.4	0.4	0.3
1949	1.0	0.0	0.0	0.0	1.7	-0.1	-0.1	-0.1
1950	1.5	0.4	0.4	0.4	3.6	0.3	0.4	0.4
1951	0.8	0.0	0.0	0.0	3.2	-0.7	-0.7	-0.8
1952	1.2	0.5	0.5	0.5	2.8	0.6	0.6	0.6
1953	0.7	0.2	0.2	0.2	2.5	0.3	0.3	0.3
1954	0.6	-0.1	-0.1	-0.1	2.9	0.1	0.1	0.1
1955	0.9	0.2	0.2	0.2	3.8	0.3	0.3	0.3
1956	2.0	0.0	0.0	-0.1	3.0	0.6	0.6	0.6
1957	1.2	0.0	0.0	0.0	4.2	0.0	0.0	0.0
1958	1.1	0.4	0.4	0.4	3.7	0.4	0.4	0.4
1959	1.5	0.1	0.1	0.1	13.9	5.2	6.4	5.5
1960	1.5	0.1	0.1	0.1	4.6	0.3	0.6	0.4
1961	0.8	0.1	0.1	0.1	4.9	1.1	1.8	1.7
1962	1.1	0.0	0.0	0.0	4.6	0.4	0.4	0.4
1963	1.5	0.0	0.0	0.0	5.8	1.3	1.3	1.3
1964	0.6	0.0	0.0	0.0	3.5	0.4	0.4	0.4
1965	1.5	-0.1	-0.1	-0.1	3.8	-0.3	-0.3	-0.3
1966	0.7	0.1	0.1	0.1	3.0	0.3	0.3	0.3
1967	1.0	0.3	0.3	0.3	3.5	0.3	0.3	0.3
1968	1.0	0.0	0.0	0.0	3.4	0.9	0.9	0.9
1969	1.2	0.0	0.0	0.0	3.3	0.6	0.6	0.7
1970	1.1	-0.1	-0.1	-0.1	4.4	-0.6	-0.6	-0.6
1971	1.3	0.2	0.2	0.2	3.9	0.5	0.5	0.5
1972	0.8	0.1	0.1	0.1	3.2	0.1	0.1	0.1
1973	1.8	-0.1	-0.1	-0.1	4.0	-0.3	-0.3	-0.2
1974	1.8	0.7	0.7	0.7	3.2	1.2	1.2	1.2
1975	1.3	0.4	0.4	0.4	3.0	0.5	0.5	0.5
1976	1.9	0.1	0.1	0.1	10.5	-0.4	-0.3	-0.3
1977	91.8	-4.2	-1.6	-3.8	98.7	0.2	-0.1	0.2
1978	2.5	0.0	0.0	0.0	4.8	0.1	0.0	0.1
1979	1.0	0.0	0.0	0.0	4.3	-0.6	-0.6	-0.6
1980	0.6	0.1	0.1	0.1	2.7	-0.1	-0.1	-0.1
1981	1.0	-0.1	-0.1	-0.1	4.3	0.0	0.1	0.0
1982	1.5	0.1	0.1	0.1	3.4	0.3	0.3	0.3
1983	0.7	0.0	0.0	0.0	2.0	0.1	0.1	0.1
1984	1.7	-0.1	-0.1	-0.1	5.2	-0.7	-0.7	-0.7
1985	0.6	0.0	0.0	0.0	1.7	0.0	0.0	0.0
1986	1.5	-0.1	-0.1	-0.1	3.1	-0.4	-0.3	-0.3
1987	0.4	0.2	0.1	0.2	2.5	0.8	0.8	0.8
1988	2.2	-0.1	-0.1	-0.1	41.5	-11.0	-5.4	-8.9
1989	1.1	-0.1	-0.1	-0.1	4.1	0.1	0.1	0.1
1990	1.6	0.4	0.5	0.5	29.5	14.3	22.7	18.8
1991	2.3	0.5	1.0	0.8	63.0	19.3	28.0	24.1
1992	66.9	-23.8	-10.4	-17.1	99.3	-0.1	-0.2	-0.1
1993	1.2	0.3	0.3	0.3	3.2	0.1	0.1	0.1
Median	1.3	0.0	0.0	0.0	3.6	0.2	0.2	0.2
Minimum	0.4	-23.8	-10.4	-17.1	1.7	-11.0	-5.4	-8.9
Maximum	96.5	13.4	22.9	14.7	100.0	19.3	36.5	24.1

Table 5.5.2-3 Simulated Chinook Salmon Egg Mortality (%) in the Feather River for Alternative 1, 2001 LOD and Change in Percentage for Alternative 1, Alternatives 2-5, and Alternative 6, 2020 LOD

Year	Fall Run Chinook Salmon			
	2001 Alt. 1 (%)	2020 Alt. 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)
1922	0.6	0.0	0.0	0.0
1923	2.8	-0.4	-0.4	-0.4
1924	0.3	0.2	0.3	0.3
1925	1.3	0.0	0.0	0.0
1926	3.8	-0.1	-0.1	-0.1
1927	2.1	-0.6	-0.6	-0.6
1928	0.9	0.0	0.0	-0.1
1929	3.0	0.0	0.0	0.0
1930	1.4	-0.1	-0.1	-0.1
1931	2.3	-0.7	-0.3	-0.6
1932	4.3	0.1	0.1	0.1
1933	4.5	0.0	0.0	0.0
1934	3.1	0.2	0.2	0.1
1935	0.9	0.0	0.0	0.0
1936	2.7	-0.1	-0.1	-0.1
1937	2.8	-0.2	-0.2	-0.1
1938	0.7	0.2	0.2	0.3
1939	4.9	1.2	2.6	1.2
1940	1.5	-0.4	-0.5	-0.5
1941	1.9	0.3	0.3	0.3
1942	1.9	0.0	0.0	0.0
1943	1.0	0.0	0.0	0.0
1944	1.2	0.0	0.0	0.0
1945	2.1	-0.1	-0.1	-0.2
1946	0.4	0.0	0.0	0.0
1947	0.6	0.1	0.1	0.1
1948	1.2	-0.1	-0.1	-0.2
1949	3.4	-0.1	-0.1	-0.1
1950	2.7	0.6	0.6	0.6
1951	0.6	-0.2	-0.2	-0.2
1952	1.3	0.0	0.0	0.0
1953	1.7	0.1	0.1	0.1
1954	0.7	0.0	0.0	0.0
1955	1.6	0.0	0.0	0.0
1956	1.6	0.0	0.0	0.0
1957	0.6	0.0	0.0	0.0
1958	2.1	0.0	0.0	0.0
1959	5.4	-1.9	-1.8	-1.7
1960	2.1	0.0	0.0	0.0
1961	4.4	-0.4	-0.5	-0.2
1962	3.8	0.0	0.0	0.0
1963	2.0	0.0	0.0	0.0
1964	1.9	0.3	0.3	0.3
1965	3.4	0.0	0.0	-0.1
1966	2.4	0.0	0.0	0.0
1967	3.0	0.0	0.0	0.0
1968	1.2	0.0	0.0	0.0
1969	1.4	0.0	0.0	0.1
1970	1.9	0.0	0.0	0.0
1971	1.3	-0.1	-0.1	-0.1
1972	1.2	0.0	0.0	0.0
1973	1.8	0.0	0.0	0.0
1974	1.6	1.1	1.1	1.2
1975	1.3	0.0	0.0	0.0
1976	4.3	0.3	0.3	0.3
1977	13.5	5.0	4.5	4.9
1978	2.2	0.0	0.0	0.0
1979	2.4	-0.1	-0.3	-0.1
1980	5.4	0.0	0.0	0.0
1981	2.3	0.2	0.1	0.1
1982	0.6	0.3	0.3	0.3
1983	1.1	0.0	0.0	0.0
1984	0.8	-0.1	-0.1	-0.1
1985	0.4	0.0	0.0	0.0
1986	2.0	0.0	0.0	0.0
1987	2.8	-0.5	-0.3	-0.5
1988	1.7	-0.2	0.1	-0.2
1989	0.7	0.0	0.0	0.0
1990	1.4	0.0	0.1	0.1
1991	2.8	0.1	0.1	0.1
1992	2.6	0.0	0.0	0.0
1993	1.7	0.0	0.0	0.0
Median	1.9	0.0	0.0	0.0
Minimum	0.3	-1.9	-1.8	-1.7
Maximum	13.5	5.0	4.5	4.9

Table 5.5.2-4 Simulated Chinook Salmon Egg Mortality (%) in the American River for Alternative 1, 2001 LOD and Change in Percentage for Alternative 1, Alternatives 2-5, and Alternative 6, 2020 LOD

Year	Fall Run Chinook Salmon			
	2001 Alt. 1 (%)	2020 Alt. 1 Change (%)	2020 Alt. 2-5 Change (%)	2020 Alt. 6 Change (%)
1922	6.8	0.3	0.4	0.4
1923	12.5	11.1	10.0	12.9
1924	14.5	-0.2	-1.1	-1.1
1925	12.1	1.8	1.8	1.8
1926	20.2	2.4	1.7	2.4
1927	7.8	2.0	2.0	2.0
1928	10.0	3.7	3.7	3.7
1929	21.9	0.0	0.7	0.0
1930	14.7	3.1	2.9	3.0
1931	17.0	-0.6	-0.3	-0.5
1932	27.0	0.0	0.0	0.0
1933	25.4	-0.1	-0.4	-0.1
1934	18.2	0.3	0.1	0.3
1935	8.1	1.7	1.9	1.7
1936	15.8	2.3	1.9	3.1
1937	9.2	3.6	3.6	3.8
1938	7.4	2.2	2.2	2.2
1939	22.6	-0.5	-0.4	-0.6
1940	10.2	2.5	3.0	3.0
1941	6.6	0.5	0.5	0.5
1942	7.9	1.4	1.4	1.4
1943	7.6	3.4	3.4	3.4
1944	11.1	2.5	2.5	1.7
1945	9.5	3.0	3.0	3.2
1946	6.7	1.4	1.3	1.3
1947	8.4	2.1	2.1	2.0
1948	7.0	0.9	0.9	0.9
1949	7.9	3.9	3.9	3.9
1950	9.0	2.1	2.1	2.1
1951	9.3	5.2	5.2	5.4
1952	10.9	4.5	4.2	4.3
1953	10.4	3.5	3.5	3.5
1954	7.8	1.5	1.5	1.5
1955	10.2	2.7	2.5	2.5
1956	15.8	7.8	7.8	7.8
1957	12.4	5.9	5.9	5.7
1958	22.6	11.9	13.2	13.2
1959	27.8	-1.8	-1.8	-1.8
1960	14.9	1.7	2.4	1.8
1961	18.6	0.5	0.4	0.4
1962	12.9	1.9	2.2	2.2
1963	8.0	1.8	1.8	1.9
1964	12.9	1.2	1.2	1.3
1965	11.9	4.7	4.7	5.3
1966	17.2	1.5	1.4	1.4
1967	27.0	11.9	11.9	11.9
1968	11.2	2.1	2.1	2.1
1969	9.4	4.3	4.3	4.6
1970	14.6	2.1	2.1	2.1
1971	7.2	1.5	1.5	1.5
1972	7.8	1.4	1.6	1.6
1973	7.9	1.1	1.1	1.1
1974	11.3	3.5	3.5	3.5
1975	6.7	0.8	0.7	0.7
1976	27.8	0.6	0.6	0.6
1977	19.7	-0.2	-0.1	-0.2
1978	11.4	3.6	3.8	3.6
1979	11.6	5.4	5.0	5.4
1980	13.4	7.6	7.6	7.9
1981	17.9	-0.7	-0.8	-0.7
1982	7.4	2.3	2.3	2.2
1983	11.8	2.5	2.5	2.5
1984	12.6	3.4	3.4	3.4
1985	10.2	1.7	1.7	1.7
1986	18.7	12.0	11.6	11.6
1987	21.1	-0.4	-0.5	-0.6
1988	20.8	-1.4	-1.6	-1.4
1989	19.1	2.5	2.4	2.5
1990	22.3	0.0	0.1	0.0
1991	31.0	-1.6	-1.8	-1.8
1992	18.9	1.2	1.5	1.2
1993	9.3	2.8	2.8	3.3
Median	11.8	2.0	2.0	2.0
Minimum	6.6	-1.8	-1.8	-1.8
Maximum	31.0	12.0	13.2	13.2

5.6 REFERENCES

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2. CVPIA Draft PEIS, Draft Methodology/Modeling Technical Appendix, Volume 9, Fish Habitat Water Quality M/M, US Bureau of Reclamation, Sacramento, CA, September 1997.

3. Shasta Outflow Temperature Control PR/ES, Appendix A - Modeling, Appendix B - Environmental (Part I - Fisheries), US Bureau of Reclamation, Sacramento, CA, May 1991.

4. CVPIA-PEIS, Impact Assessment Methodology for Fish, Draft Working Paper # 3, USBR, Sacramento, CA, December 1994.

5. Rowell, J. H., "Mathematical Model Investigations: Trinity Dam Multilevel Outlet Evaluation, Trinity River Temperature Prediction Study", US Bureau of Reclamation, Sacramento, CA, May 1979.

6. Hydroelectric Power Modeling

6.1 MODEL DESCRIPTION

The hydroelectric power model used for the FRWP EIR/EIS analysis, LongTermGen, was recently developed by the Western Area Power Administration (WAPA). WAPA markets and transmits electricity generated in 15 states by power plants that are operated by the Federal government. USBR Central Valley Operations has reviewed LongTermGen and approved of its use. WAPA's CVP transmission system forms an integral part of the Sacramento-area transmission grid, from which the energy needs of the FRWP would be served. The transmission system that serves the FRWP project area occasionally exceeds its maximum rated transfer limits due to continued growth in the Sacramento market. Accordingly, the LongTermGen model was developed specifically for use by the CVP operators to analyze the energy demands of major development proposals and their effect on the power grid. As the LongTermGen model simulates power generation and use for the CVP, it is a useful tool to evaluate hydroelectric power production associated with each of the FRWP alternatives.

One of the primary purposes of the CVP is the delivery of irrigation water supply. Power needed to operate the CVP has first priority and is referred to as Project Use. This includes delivering water to Federal water contractors and wildlife refuges to meet certain environmental objectives. Power in excess of Project Use, called Preference Power, is sold as a means of repaying CVP development costs. LongTermGen, a spreadsheet model, uses operations data from CALSIM II simulations to determine both gross and net CVP power output for the study period. CALSIM II results used as input to LongTermGen include reservoir releases, reservoir storage, and delivery volumes at diversions utilizing WAPA power.

Power plants incorporated in LongTermGen include Trinity, Lewiston, Carr, Spring Creek, Shasta, Keswick, Folsom, Nimbus, New Melones, CVP San Luis and O'Neill. Lewiston is not currently marketed as CVP power; however it is left as a placeholder in the model in the event that it becomes part of CVP power. For the CVP San Luis and O'Neill facilities, the model performs a flow computation to calculate releases because CALSIM II does not simulate these facilities.

6.2 SIMULATION RESULTS

A separate simulation was done for each FRWP modeling scenario. Two figures are provided in this document for each scenario for 2001 Level of Development (LOD). One figure shows monthly average system total energy at the power plants, and the other shows monthly average system total energy at the load center. Two additional figures showing the same information are provided for 2020 LOD. The figures each include the total amount of power generated, project power use, and the net power production available for sale. Three tables are provided for each modeling scenario. One table provides the monthly data values corresponding to the "at plant" and "load center" generation curves in the figures. Two additional tables disaggregate the average monthly values in the figures for 2001 and 2020 LOD, showing the contribution of each power plant.

6.2.1 Alternative 1 Results

Figure 6.2-1 Simulated Monthly Average Total System Energy at Power Plants, Alternative 1, 2001 LOD

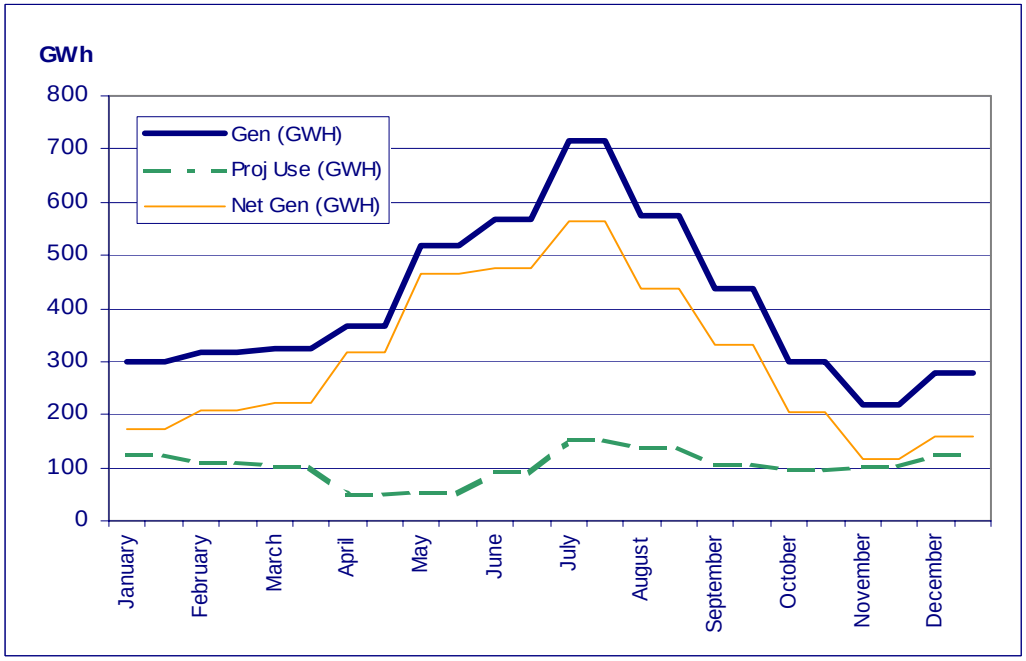

Figure 6.2-2 Simulated Monthly Average Total System Energy at Load Center, Alternative 1, 2001 LOD

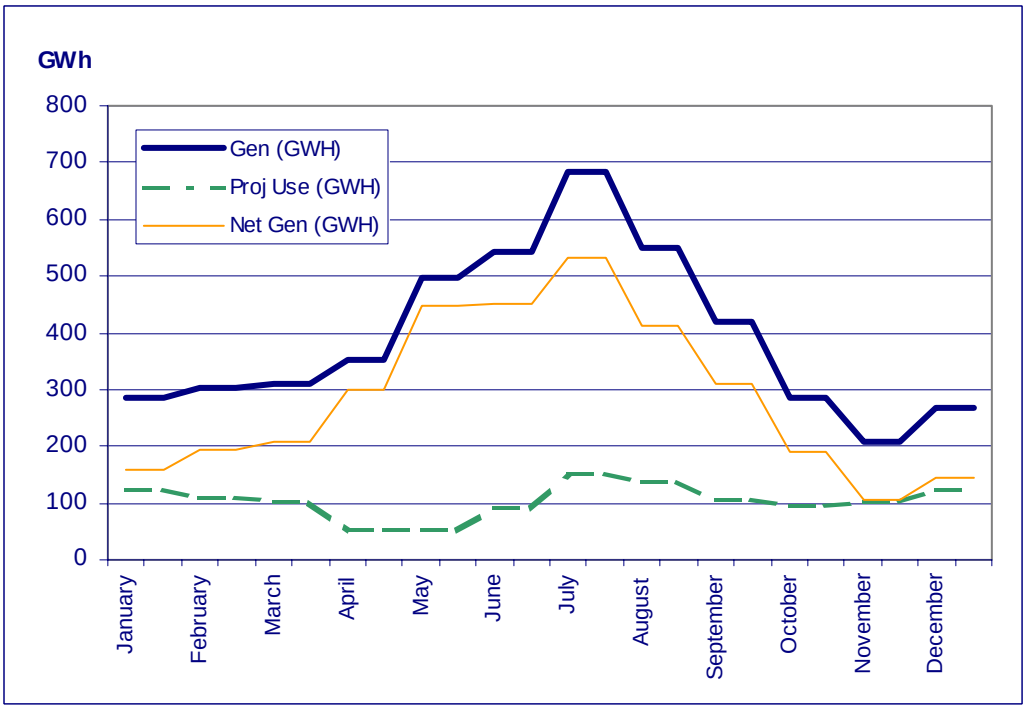

Figure 6.2-3 Simulated Monthly Average Total System Energy at Power Plants, Alternative 1, 2020 LOD

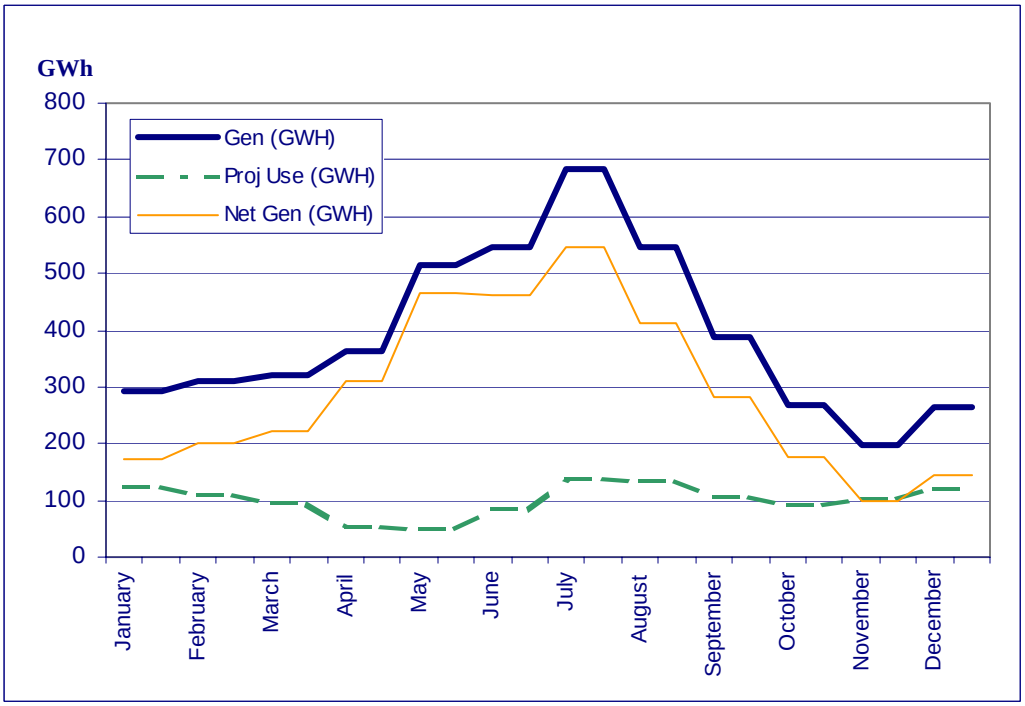

Figure 6.2-4 Simulated Monthly Average Total System Energy at Load Center, Alternative 1, 2020 LOD

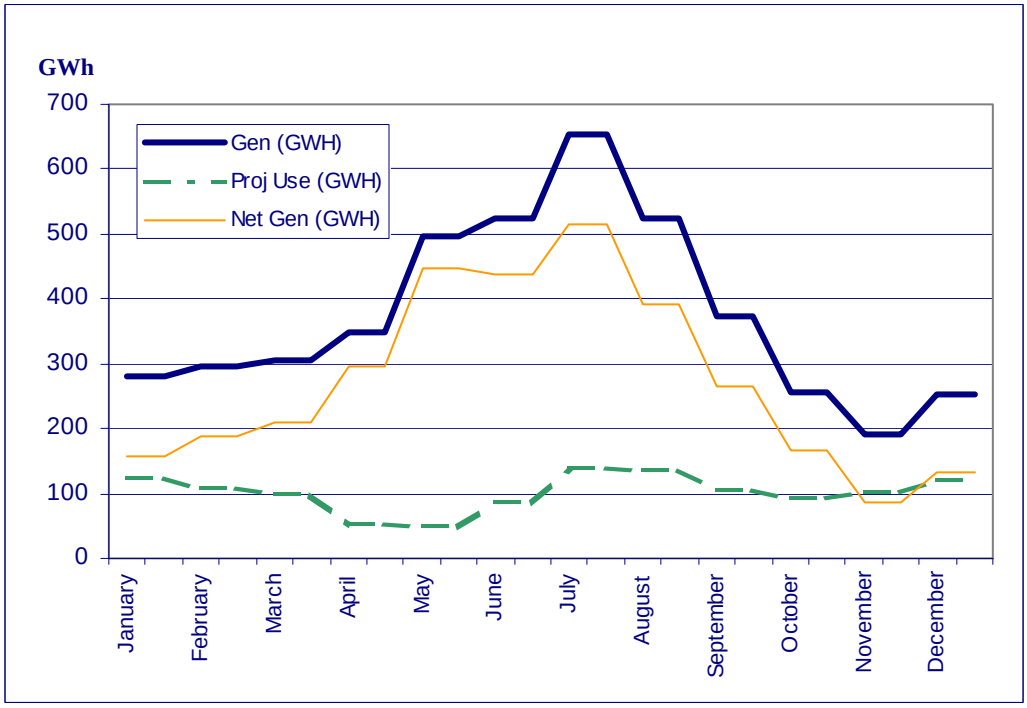

Table 6.2-1 Simulated Monthly Average Total System Energy at Plant and at Load Center, Alternative 1, 2001 LOD and 2020 LOD

	At Plant - 2001			At Plant - 2020			At Load Center - 2001			At Load Center - 2020		
Date	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh
January	298	124	174	294	122	172	285	125	160	281	123	158
February	317	108	209	311	108	203	303	109	194	297	109	188
March	325	102	223	320	97	223	311	103	208	306	98	208
April	367	51	316	363	52	311	353	52	301	349	53	297
May	518	51	466	516	49	467	498	52	446	497	50	447
June	566	90	476	546	86	461	544	91	453	525	87	438
July	714	151	563	683	138	545	685	152	532	655	139	516
August	574	137	437	547	133	414	550	138	412	525	134	390
September	437	106	331	388	105	283	419	107	312	372	106	266
October	298	95	204	268	90	178	286	96	190	257	91	166
November	219	103	116	199	102	97	209	104	106	190	103	88
December	280	122	158	264	119	145	268	123	145	253	120	132

Table 6.2-2 Simulated Monthly Average Total System Energy at Individual Plants, Alternative 1, 2001 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.5	0.0	13.7	27.0	139.7	30.4	52.4	6.0	286.6	11.3	0.2	0.0
February	12.2	0.0	5.8	25.5	165.4	32.9	57.9	6.4	306.1	10.8	0.1	0.0
March	16.7	0.0	11.5	24.8	156.2	32.7	57.2	6.8	305.8	18.2	0.9	0.1
April	16.7	0.0	10.0	13.0	158.0	32.7	58.1	6.8	295.2	61.6	9.6	0.5
May	65.0	0.0	13.4	16.7	197.9	41.2	64.4	7.0	405.6	76.1	33.5	2.4
June	42.4	0.0	40.1	37.8	227.8	50.5	68.7	7.6	474.9	51.1	37.6	2.3
July	59.7	0.0	77.4	70.5	270.6	64.4	71.9	8.7	623.2	65.5	24.0	1.1
August	56.2	0.0	77.1	69.7	195.7	51.9	41.7	5.4	497.7	60.5	14.9	0.6
September	51.8	0.0	71.7	67.8	107.8	34.0	42.6	5.6	381.2	55.6	0.1	0.0
October	30.8	0.0	39.5	42.7	100.1	29.0	25.1	3.4	270.6	27.8	0.1	0.0
November	12.7	0.0	11.7	17.6	102.6	25.2	35.2	4.5	209.5	9.5	0.0	0.0
December	14.7	0.0	8.7	15.8	146.5	31.9	46.1	5.6	269.4	10.6	0.1	0.0
Totals	396.4	0.0	380.7	428.7	1968.2	456.8	621.2	73.8	4325.9	458.3	120.9	7.0

Table 6.2-3 Simulated Monthly Average Total System Energy at Individual Plants, Alternative 1, 2020 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.6	0.0	13.0	26.2	138.9	30.2	50.7	5.7	282.3	11.2	0.1	0.0
February	11.3	0.0	4.8	24.3	163.5	32.4	57.1	6.3	299.7	10.8	0.1	0.0
March	16.3	0.0	11.3	24.2	154.0	32.2	56.3	6.7	301.1	18.3	0.5	0.1
April	17.4	0.0	12.7	14.7	153.7	32.1	56.2	6.6	293.5	61.9	7.4	0.4
May	79.5	0.0	6.3	10.2	200.0	40.7	61.1	6.6	404.5	76.2	32.6	2.6
June	55.8	0.0	23.8	22.0	234.2	49.5	64.3	7.1	456.6	51.2	36.0	2.5
July	59.1	0.0	65.3	59.0	268.8	62.6	68.4	8.3	591.4	65.3	24.6	1.2
August	49.4	0.0	65.9	59.3	202.1	51.9	37.3	4.7	470.6	60.2	14.9	0.8
September	40.0	0.0	51.8	49.3	117.2	33.4	36.0	4.7	332.4	55.5	0.0	0.0
October	24.8	0.0	28.9	32.8	98.4	27.3	24.2	3.3	239.8	27.7	0.4	0.1
November	11.5	0.0	8.9	15.1	94.8	23.3	31.6	4.0	189.4	9.5	0.0	0.0
December	14.4	0.0	7.7	15.1	138.0	30.4	42.6	5.1	253.3	10.7	0.0	0.0
Totals	396.9	0.0	300.5	352.2	1963.7	446.1	586.1	69.2	4114.7	458.5	116.6	7.5

6.2.2 Alternatives 2-5 Results

Figure 6.2-5 Simulated Monthly Average Total System Energy at Power Plants, Alternatives 2-5, 2001 LOD

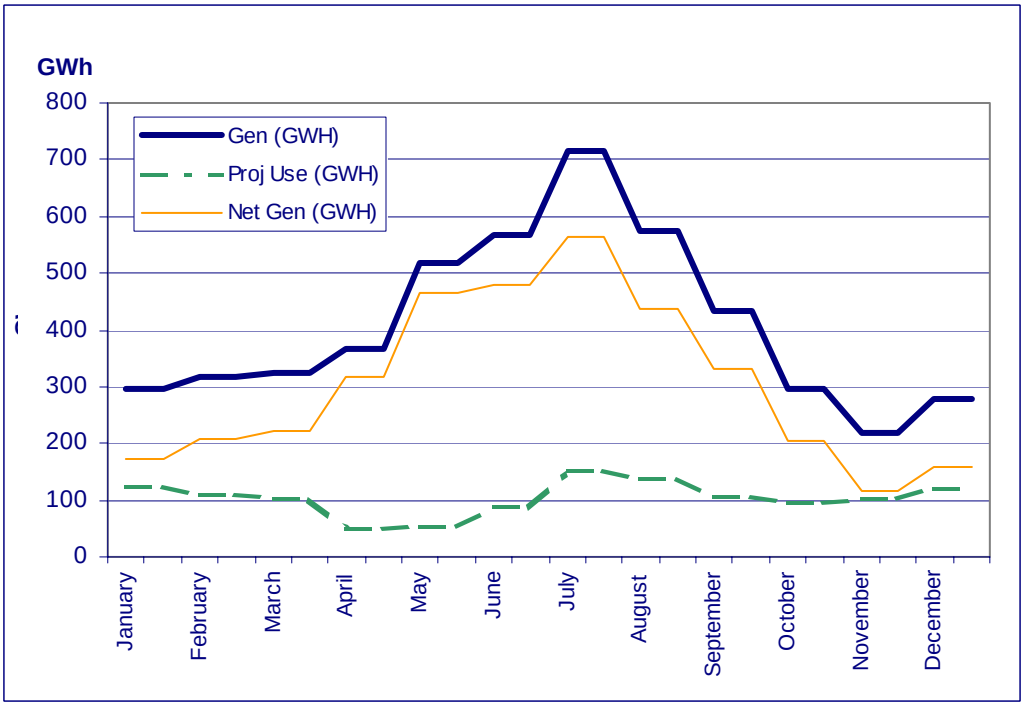

Figure 6.2-6 Simulated Monthly Average Total System Energy at Load Center, Alternatives 2-5, 2001 LOD

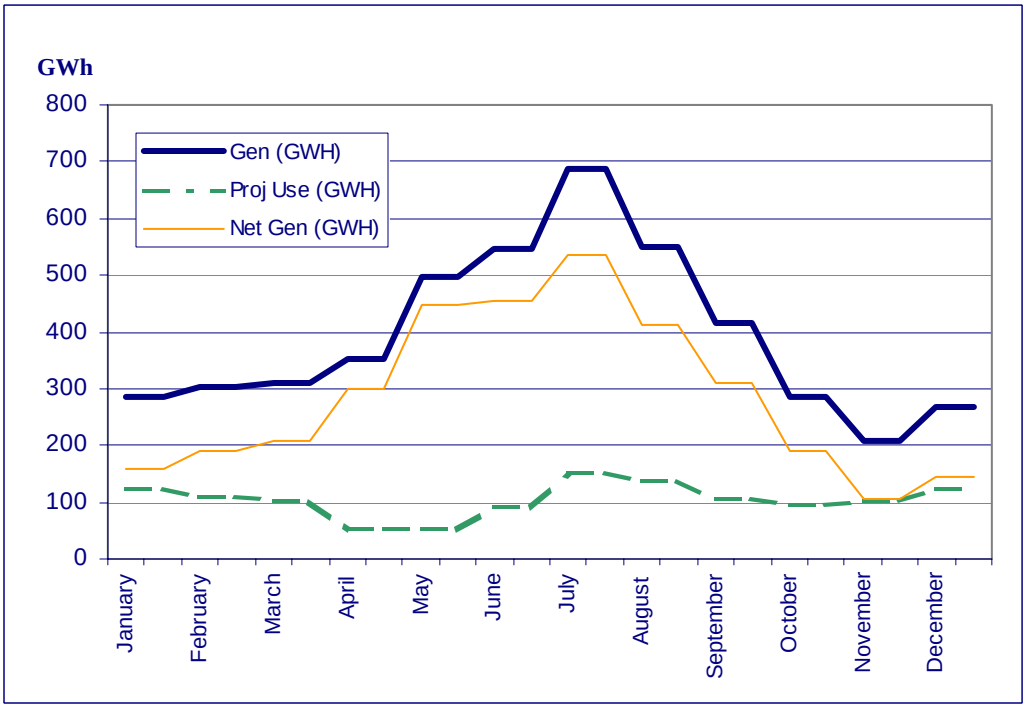

Figure 6.2-7 Simulated Monthly Average Total System Energy at Power Plants, Alternatives 2-5, 2020 LOD

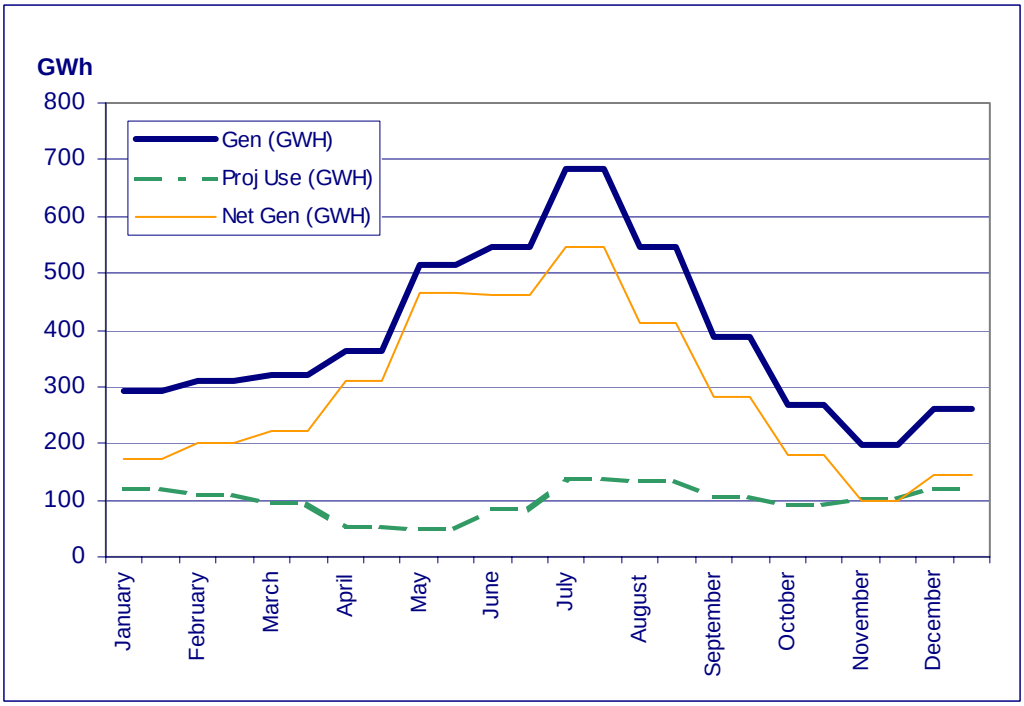

Figure 6.2-8 Simulated Monthly Average Total System Energy at Load Center, Alternatives 2-5, 2020 LOD

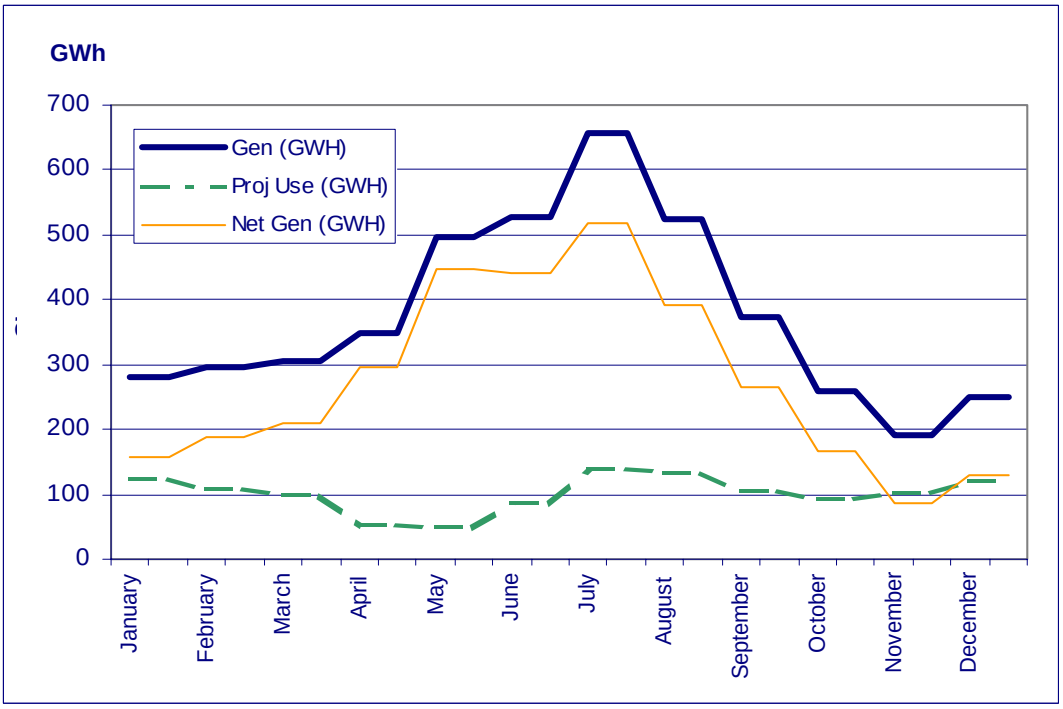

Table 6.2-4 Simulated Monthly Average Total System Energy at Plant and at Load Center, Alternatives 2-5, 2001 and 2020 LOD

	At Plant - 2001			At Plant - 2020			At Load Center - 2001			At Load Center - 2020		
Date	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh
January	297	124	174	293	121	171	284	125	160	280	123	157
February	316	109	207	309	108	202	302	110	192	296	109	187
March	325	102	223	320	96	223	311	103	208	306	97	209
April	366	51	316	364	52	312	352	51	301	350	52	297
May	517	51	466	515	49	466	498	52	446	496	50	446
June	568	90	478	547	85	462	545	91	455	526	86	439
July	716	151	565	684	137	546	687	152	534	656	139	517
August	574	137	437	546	133	414	550	138	412	524	134	390
September	435	105	330	388	105	283	417	106	311	372	106	267
October	297	95	203	269	90	179	285	95	190	258	91	167
November	219	102	117	199	101	98	209	103	106	190	102	88
December	279	121	158	262	119	143	267	123	145	250	120	130

Table 6.2-5 Simulated Monthly Average Total System Energy at Individual Plants, Alternatives 2-5, 2001 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.4	0.0	13.7	26.8	139.4	30.4	52.5	6.0	286.0	11.3	0.2	0.0
February	11.9	0.0	5.9	25.5	165.3	32.9	57.4	6.4	305.2	10.8	0.1	0.0
March	16.5	0.0	11.4	24.5	156.2	32.6	57.3	6.8	305.4	18.2	1.0	0.1
April	16.6	0.0	9.9	12.9	158.0	32.8	57.9	6.8	294.8	61.6	9.5	0.5
May	64.9	0.0	13.5	16.7	197.7	41.2	64.5	7.1	405.6	76.1	33.5	2.4
June	42.7	0.0	40.8	38.3	227.8	50.7	68.8	7.6	476.7	51.1	37.7	2.3
July	59.9	0.0	77.7	70.8	271.4	64.7	71.9	8.7	625.3	65.5	23.7	1.1
August	56.0	0.0	76.8	69.4	195.7	51.9	42.2	5.5	497.6	60.5	14.9	0.6
September	51.4	0.0	70.9	67.5	107.5	33.9	42.3	5.6	379.1	55.6	0.2	0.0
October	30.6	0.0	39.3	42.6	99.7	28.9	25.1	3.4	269.6	27.7	0.1	0.0
November	12.9	0.0	12.1	17.8	101.8	25.0	35.0	4.5	209.2	9.5	0.0	0.0
December	14.8	0.0	8.9	15.8	146.1	31.9	45.8	5.6	268.7	10.5	0.1	0.0
Totals	395.6	0.0	380.9	428.7	1966.6	457.0	620.7	73.9	4323.3	458.3	120.9	7.0

Table 6.2-6 Simulated Monthly Average Total System Energy at Individual Plants, Alternatives 2-5, 2020 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.4	0.0	12.9	26.1	138.6	30.2	50.6	5.7	281.5	11.2	0.1	0.0
February	11.4	0.0	4.7	24.2	162.5	32.2	57.0	6.3	298.4	10.9	0.1	0.0
March	16.2	0.0	11.3	24.2	154.0	32.2	56.3	6.7	301.0	18.3	0.5	0.1
April	17.5	0.0	12.9	14.9	153.7	32.2	56.1	6.6	294.0	61.8	7.4	0.4
May	79.5	0.0	6.3	10.1	199.7	40.7	61.2	6.6	404.1	76.2	32.5	2.6
June	55.8	0.0	24.0	22.3	234.7	49.7	64.5	7.1	458.1	51.1	35.7	2.5
July	59.2	0.0	65.7	59.3	268.8	62.7	68.6	8.3	592.6	65.3	24.8	1.2
August	49.1	0.0	65.5	59.1	202.1	51.9	37.7	4.8	470.2	60.2	15.0	0.8
September	40.0	0.0	52.1	49.1	116.9	33.4	35.9	4.7	332.1	55.5	0.1	0.0
October	25.0	0.0	29.5	33.5	98.1	27.3	24.1	3.3	240.9	27.7	0.3	0.0
November	11.5	0.0	8.9	15.1	94.8	23.4	31.5	4.0	189.1	9.5	0.0	0.0
December	14.0	0.0	7.1	14.4	137.6	30.3	42.4	5.1	251.0	10.7	0.0	0.0
Totals	396.5	0.0	300.9	352.5	1961.7	446.2	586.0	69.2	4113.0	458.5	116.5	7.6

6.2.3 Alternative 6 Results

Figure 6.2-9 Simulated Monthly Average Total System Energy at Power Plants, Alternative 6, 2001 LOD

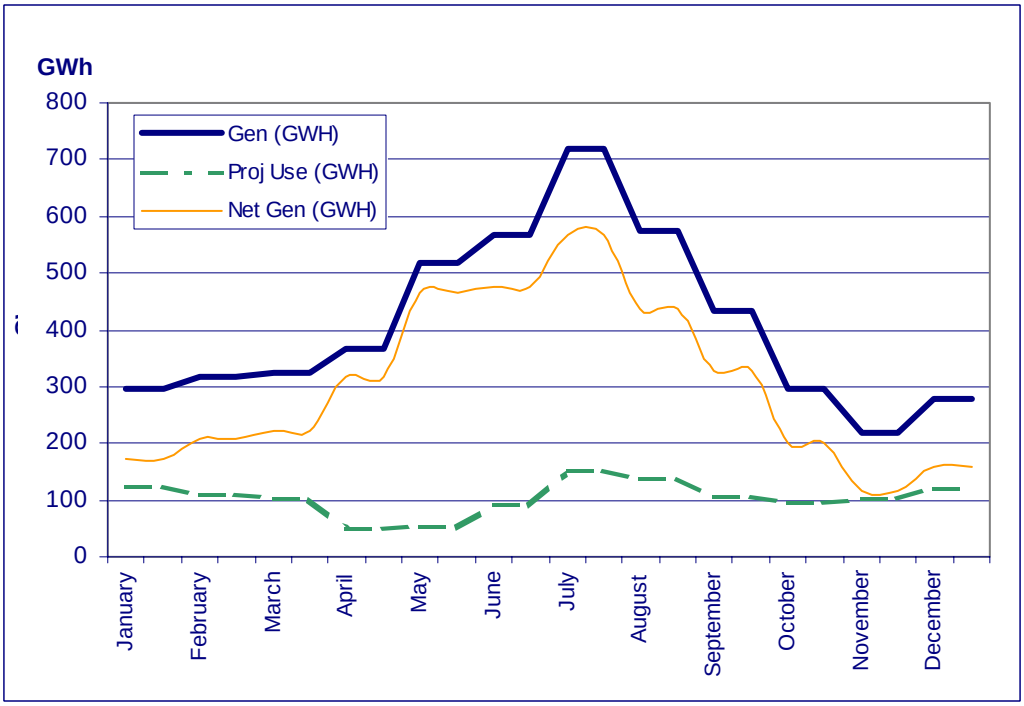

Figure 6.2-10 Simulated Monthly Average Total System Energy at Load Center, Alternative 6, 2001 LOD

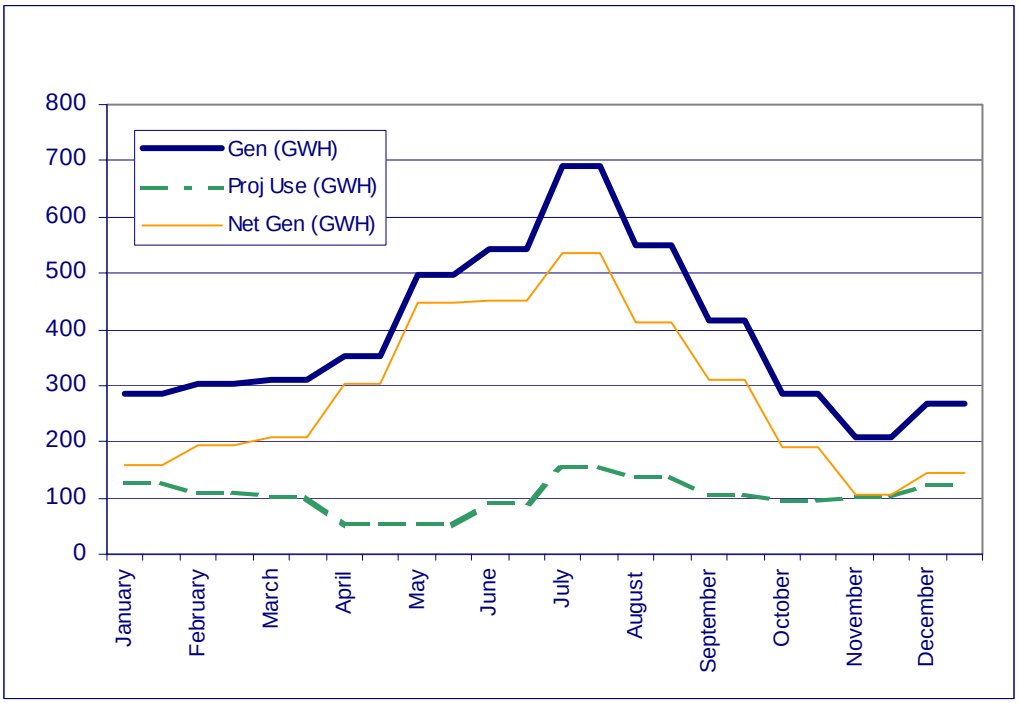

Figure 6.2-11 Simulated Monthly Average Total System Energy at Power Plants, Alternative 6, 2020 LOD

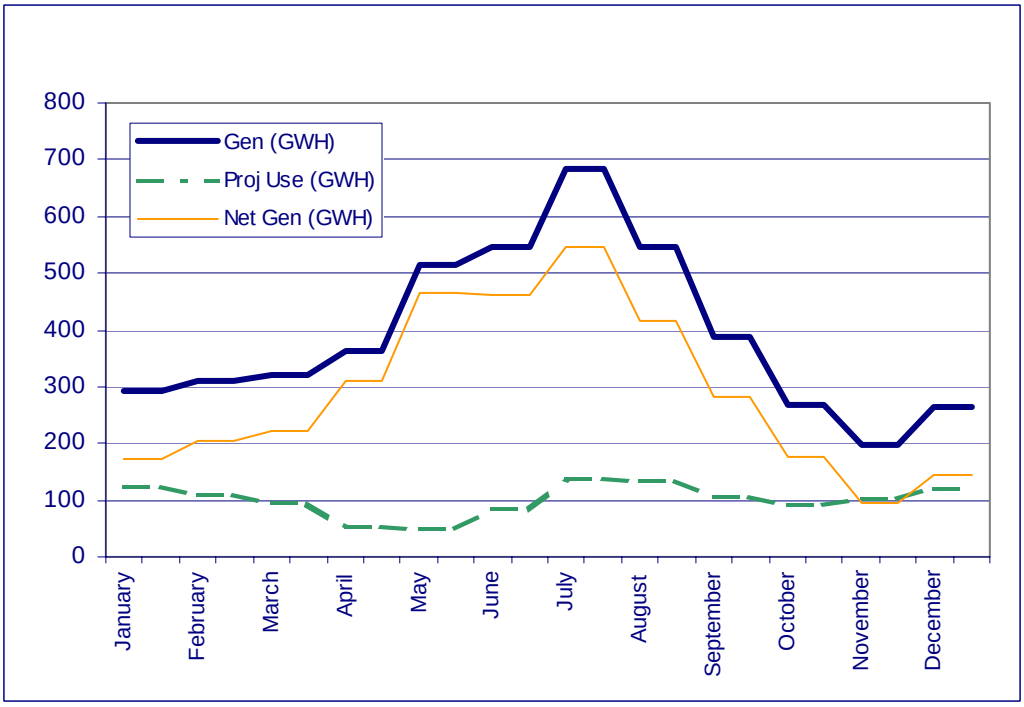

Figure 6.2-12 Simulated Monthly Average Total System Energy at Load Center, Alternative 6, 2020 LOD

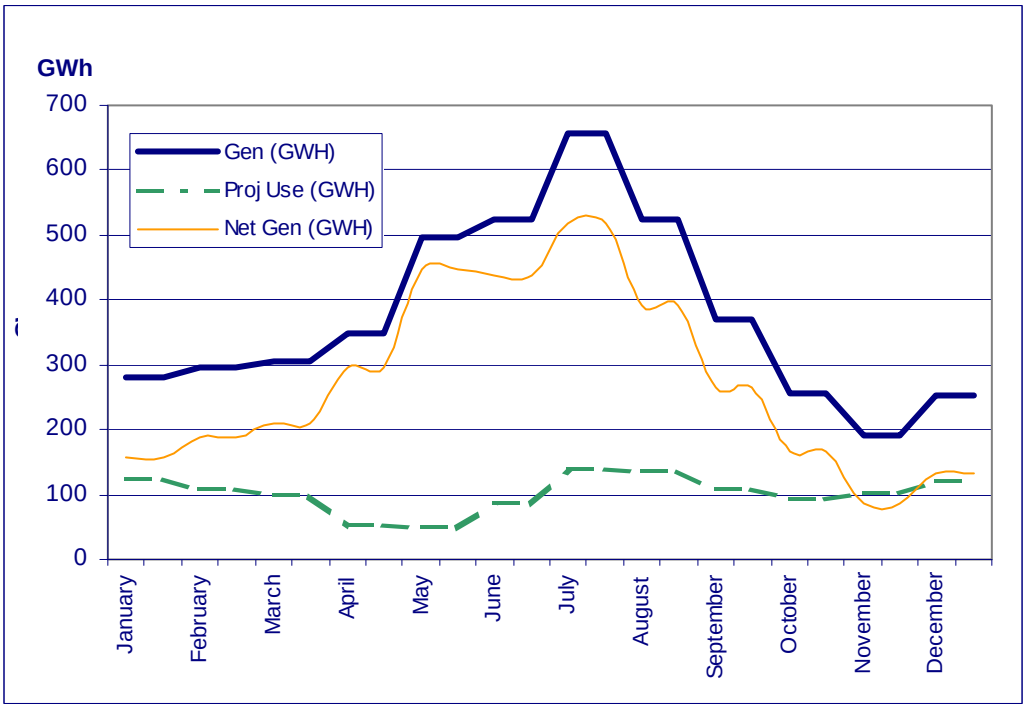

Table 6.2-7 Simulated Monthly Average Total System Energy at Plant and at Load Center, Alternative 6, 2001 and 2020 LOD

	At Plant - 2001			At Plant - 2020			At Load Center - 2001			At Load Center - 2020		
Date	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh	Gen GWh	Proj Use GWh	Net Gen GWh
January	297	124	173	294	122	172	284	125	159	281	123	158
February	317	109	208	310	108	203	303	110	193	297	109	188
March	324	102	223	320	97	224	310	103	208	306	98	209
April	367	51	316	364	52	312	353	52	302	350	53	297
May	518	51	466	516	49	467	498	52	446	496	50	447
June	566	90	476	546	86	461	543	91	452	525	86	438
July	719	152	567	684	137	547	690	153	536	657	139	518
August	574	137	437	547	133	414	551	139	412	525	134	391
September	435	106	329	387	105	282	417	107	311	372	106	265
October	297	95	202	268	90	178	285	96	189	257	91	166
November	218	102	117	198	102	97	209	103	106	190	103	87
December	279	121	158	263	119	144	267	122	145	252	120	132

Table 6.2-8 Simulated Monthly Average Total System Energy at Individual Plants Alternative 6, 2001 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.3	0.0	13.5	26.7	139.8	30.4	52.1	5.9	285.8	11.2	0.2	0.0
February	12.1	0.0	5.8	25.5	165.4	32.9	57.7	6.4	305.8	10.8	0.1	0.0
March	16.5	0.0	11.3	24.6	156.0	32.6	57.2	6.8	305.0	18.2	0.9	0.1
April	16.7	0.0	10.1	13.1	158.1	32.7	58.1	6.8	295.7	61.6	9.6	0.5
May	64.9	0.0	13.4	16.7	198.0	41.2	64.4	7.0	405.7	76.1	33.5	2.4
June	42.2	0.0	39.9	37.5	228.2	50.6	68.7	7.6	474.7	51.1	37.7	2.3
July	60.6	0.0	78.7	71.6	272.0	64.8	72.2	8.8	628.7	65.5	23.6	1.1
August	56.2	0.0	77.1	69.7	195.3	51.9	42.1	5.4	497.7	60.5	14.8	0.6
September	51.5	0.0	71.1	67.2	107.8	33.9	42.2	5.6	379.4	55.6	0.1	0.0
October	30.6	0.0	39.1	42.3	99.8	28.9	25.2	3.4	269.3	27.7	0.1	0.0
November	12.7	0.0	11.6	17.5	102.4	25.1	35.1	4.5	208.9	9.5	0.0	0.0
December	14.7	0.0	8.7	15.8	146.0	31.8	46.0	5.6	268.6	10.6	0.1	0.0
Totals	396.1	0.0	380.2	428.3	1968.9	456.9	621.0	73.9	4325.4	458.4	120.6	7.0

Table 6.2-9 Simulated Monthly Average Total System Energy at Individual Plants Alternative 6, 2020 LOD

Date	Trinity	Lewiston	Carr	Sp. Ck.	Shasta	Keswick	Folsom	Nimbus	Tot. North	N. Mel.	CVP SL	O'Neill
January	17.5	0.0	13.1	26.3	138.7	30.2	50.7	5.7	282.3	11.2	0.1	0.0
February	11.2	0.0	4.7	24.2	163.4	32.4	57.1	6.3	299.4	10.9	0.1	0.0
March	16.3	0.0	11.4	24.3	154.1	32.2	56.3	6.7	301.3	18.2	0.5	0.1
April	17.5	0.0	12.8	14.8	153.9	32.2	56.2	6.6	294.0	61.9	7.4	0.4
May	79.5	0.0	6.3	10.2	199.8	40.7	61.1	6.6	404.2	76.2	32.6	2.6
June	55.8	0.0	23.8	22.1	234.3	49.5	64.3	7.1	456.9	51.2	35.9	2.5
July	59.1	0.0	65.4	59.0	269.5	62.8	68.9	8.3	592.9	65.3	24.7	1.3
August	49.4	0.0	66.0	59.5	202.0	51.9	37.5	4.8	471.1	60.2	15.0	0.8
September	39.9	0.0	51.8	49.1	116.9	33.3	35.8	4.7	331.5	55.5	0.0	0.0
October	24.8	0.0	28.9	32.8	98.5	27.3	24.1	3.3	239.6	27.7	0.4	0.1
November	11.5	0.0	9.0	15.2	94.5	23.3	31.4	4.0	188.9	9.4	0.0	0.0
December	14.3	0.0	7.6	15.0	137.6	30.3	42.6	5.1	252.5	10.8	0.0	0.0
Totals	396.7	0.0	300.7	352.4	1963.2	446.2	586.1	69.2	4114.6	458.5	116.8	7.6

Attachment A

Modeling of "Worst Case" Reverse Flow Events

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FLOW SCIENCE®

TECHNICAL MEMORANDUM

To: Gary Nuss, CH2M Hill

From: Susan Paulsen, Aaron Mead, John List

Date: 07/23/02

Subject: Results of preliminary modeling of "worst case" reverse event flows
Freeport diversion project water quality analysis
FSI 014065

This technical memorandum is written to summarize the results of Task 1, the preliminary modeling of "worst case" reverse flow periods, for the Freeport diversion project water quality analysis. To complete this task, Flow Science utilized modeled river flow rates and velocities at Freeport for selected reverse flow periods, which were extracted from the modeled record from the SRWTP Expansion EIR analysis. Modeled flow records also included the corresponding hourly SRWTP flow rates from the diffuser to the river, which were simulated using the modeled river flow rates and the current operations plan of the SRWTP. The data from these models were then used as input to the river transport model (also called the longitudinal dispersion model), which was used to simulate effluent concentrations at four locations upstream of the SRWTP diffuser (see Figure 1). A sensitivity analysis was also performed as part of Task 1 to assess the effect of variations in the longitudinal dispersion coefficient employed in the modeling. Input parameters and results of this analysis are described below.

SRWTP OUTFALL OPERATIONS

Currently, the SRWTP effluent flow is diverted to storage when the river flow rate falls below fourteen (14) times the instantaneous effluent flow rate. Discharge to the river resumes when the river flow rate again increases to 14 times the effluent flow rate. When effluent discharge to the river resumes, the flow rate is the sum of the flow rate directly from the treatment plant plus a fraction of the volume that had been stored in the diversion basins during the reverse flow event. This procedure is incorporated into the permit conditions for the SRWTP and has been used by Flow Science to estimate hourly effluent flow rates to the Sacramento River and diversion basin storage volumes over the 70-year simulation period used for Master Plan EIR and for permit studies.

During the peer review process for the flow and water quality modeling used in the EIR, both peer reviewers and members of the Regional Board questioned the use of the 14:1 flow ratio. In response, Flow Science researched the history behind the flow ratio and found that it had been determined during the 1987 EIR analysis and incorporated into the permit and operating conditions in 1990 or before (see memorandum dated November 14, 2001). Flow Science has determined that the flow ratio at which the diffuser will probably cease to function as designed is 10:1, not 14:1. At a flow ratio below 10:1, the discharge mixing becomes unstable, and pockets of undiluted effluent may reach the river surface. SRCSD is currently evaluating whether or not to pursue a change in the flow ratio at which a diversion is initiated.

DESCRIPTION OF RIVER TRANSPORT MODEL

The river transport model solves for the percent of effluent within the model domain. The effluent concentrations are a function of both time and position, and the model utilized the analytical solution to the advection-diffusion equation, as described below. The mass of effluent entering the model domain at the diffuser location is added in the spatial interval containing the diffuser and is redistributed to surrounding spatial intervals at each time step. Fluid is advected within the model domain at the mean river velocity, which is determined for each time step in the simulation.

The model formulation is as follows:

$$C(x,t) = \sum_{\gamma} \frac{M_\gamma}{A\sqrt{4\pi E(t)\Delta t}} \exp\left(-\frac{(x-(X_\gamma + U(t)\Delta t))^2}{4E(t)\Delta t} \right),$$

where

- U, the river velocity, varies as a function of time and is taken to be uniform throughout the model's spatial domain.
- E, the longitudinal dispersion coefficient, varies as a function of velocity and is also taken to be uniform throughout the model's spatial domain.
- A is the cross-sectional area of the river.
- x represents the distance from the diffuser within the model domain.
- Δt is the length of the timestep used in the modeling (400 seconds).
- X_γ represents the center of a segment of length 100 feet at location γ.
- M_γ is the mass of effluent contained in the 100 feet segment at location γ.

The modeling process described here has been independently peer-reviewed and approved.

The longitudinal dispersion coefficient (E) has not been measured for the Sacramento River near Freeport. Thus, a sensitivity analysis was performed to assess the effect of different assumptions regarding this coefficient on model results. Three values of the longitudinal dispersion coefficient were tested:

- Low value (little dispersion): E varied from 5 – 20 ft^2/s.
- Mid-range value (moderate dispersion): E varied from 20 – 110 ft^2/s, consistent with measurements made by the State of California Department of Water Resources in the early 1960s (see Fischer et al., 1979, for details).
- High value (high dispersion): 40 – 500 ft^2/s.

Four potential intake locations were modeled. Table 1 summarizes the assumed distances upstream of the SRWTP diffuser for each of these intake locations.

Table 1 Assumed Intake Locations

Intake Location	Distance U/S of the Outfall	
	Feet	Miles
A*	14,900	2.82
Model Boundary	13,200	2.50
B-1	7,200	1.36
B-2	6,400	1.21
C	4,700	0.89

*Intake location A was not modeled since it was outside the model domain.

PROSIM MODELING

For the SRWTP Expansion EIR, a 70-year time series of hourly river and effluent flow rates was used as the basis for the water quality modeling evaluation. The Fischer Delta Model (FDM) and the USBR PROSIM model were used in generating this time series. PROSIM modeling was performed by SWRI to provide a 70-year hydrologic period of record as input to the FDM. This hydrologic period was used to characterize existing and future (2020) hydrologic conditions. For the initial Freeport diversion study (as presented in this TM), the existing hydrologic condition was used. Projected future (2020) hydrologic conditions exhibit slightly reduced river flows, reflecting increased upstream diversions. This means that projected reverse flow conditions at these future river flows (if they eventuate) could be slightly worse than with existing hydrologic conditions.

Output from the PROSIM simulations included the following: 1) export pumping rates from the Tracy and Banks pumping plants; 2) Contra Costa Water District (CCWD)

pumping rates at Rock Slough and Old River; 3) North Bay Aqueduct pumping; 4) City of Vallejo pumping; 5) net Delta consumptive use; 6) the Delta Cross Channel position; and 7) Delta inflows from Yolo Bypass, San Joaquin River, Calaveras River, Cosumnes River, Mokelumne River, and the Sacramento River.

PROSIM simulates CVP and SWP operations and the hydrologic effects of those operations on major Central Valley river flows and reservoir storage volumes. The model simulates system operations within the geographic area affected by CVP and SWP facilities, including the Delta. The model simulates one month of operation at a time, sequentially from one month to the next, and from one year to the next. Each decision that the model makes regarding stream flow regulation is the result of user-defined operational requirements and constraints (e.g., flood control storage limitations, minimum instream flow requirements, Delta outflow requirements, diversion requirements) or operational rules (e.g., preference among reservoirs for releasing water). The PROSIM simulation assumptions used for the current study are summarized in Table 2 (again, the existing conditions were used for this study). This table is excerpted from a Draft Technical Memorandum entitled "Water Quality Modeling Methodology for the Sacramento Regional Wastewater Treatment Plant, 2020 Master Plan," dated September 20, 2001)

Table 2. SRWTP 2020 Master Plan EIR PROSIM Simulation Assumptions

Model Input Parameter	Existing Conditions	Future Baseline	Future No Project	Future with Project (Cumulative)
Period of Record	1922-1991 [a]	1922-1991 [a]		
Hydrology/Level of Land Use	2000 Level	2020 Level		
Demands				
Sacramento River Basin				
North of Delta	Limited by Maximum Historic Use [b]	Limited by Maximum Historic Use [b]		
CVP Refuge	Firm Level 2 [b]	Firm Level 2 [b]		
American River Basin				
SRWTP Service Area	2000 Level [b]	2000 Level [b]	2005 Level [b]	2020 Level [b]
Outside SRWTP Service Area [b]	2000 Level [b]	2020 Level [b]		
EBMUD	None	Variable [c]		
South of Delta				
CVP	3.4 MAF/YR	3.4 MAF/YR		
CCWD	140 TAF/YR [d]	195 TAF/YR [d]		
SWP (w/ North Bay Aqueduct)	2.6-3.6 MAF/YR	3.4-4.2 MAF/YR		
SWP Interruptible Demand	Yes (up to 84 TAF/MO)	Yes (up to 134 TAF/MO)		
Facilities/Operations				
Folsom Flood Control Diagram	Variable 400/670 non-linear (without outlet modifications)	Variable 400/670 non-linear (without outlet modifications)		
CVP Water Allocation				

Table 2. SRWTP 2020 Master Plan EIR PROSIM Simulation Assumptions

Model Input Parameter	Existing Conditions	Future Baseline	Future No Project	Future with Project (Cumulative)
CVP Settlement/Exchange	100%, 75% based on Shasta Index	100%, 75% based on Shasta Index		
CVP Agriculture	100% - 0% based on supply	100% - 0% based on supply		
CVP Municipal & Industrial	100% - 50% based on supply	100% - 50% based on supply		
CVP Refuges	100%, 75% based on Shasta Index	100%, 75% based on Shasta Index		
Standards / Regulatory Actions				
Trinity River				
Instream Flow Requirement	1991 DOI Secretarial Decision 340 TAF/YR	Trinity EIS Preferred Alternative 369-815 TAF/YR variable		
Trinity Reservoir End-of-September Minimum Storage	No requirement	600 TAF as able		
Clear Creek				
Instream Flow Requirement	CVPIA Nov. 20, 1997 AFRP Upstream Action #1	CVPIA Nov. 20, 1997 AFRP Upstream Action #1		
Upper Sacramento River				
Shasta Lake End-of-September Minimum Storage	1,900 TAF as able, 1993 Winter-run Biological Opinion	1,900 TAF as able, 1993 Winter-run Biological Opinion		
Instream Flow Requirement @ Keswick	SWRCB WR 90-5, 1993 Winter-run Biological Opinion, and CVPIA Nov. 20, 1997 AFRP Upstream Action #2	SWRCB WR 90-5, 1993 Winter-run Biological Opinion, and CVPIA Nov. 20, 1997 AFRP Upstream Action #2		
River Flow Objective for NCP	3,250 – 5,000 cfs as able	3,250 - 5,000 cfs as able		
American River				
Instream Flow Requirement @ Nimbus	CVPIA Nov. 20, 1997 AFRP Upstream Action #3	CVPIA Nov. 20, 1997 AFRP Upstream Action #3		
Instream Flow Requirement @ H St	SWRCB D-893	SWRCB D-893		
Lower Sacramento River				
Instream Flow Requirement @ Freeport	CVPIA Nov. 20, 1997 AFRP Delta Action #4	CVPIA Nov. 20, 1997 AFRP Delta Action #4		
Instream Flow Requirement @ Rio Vista	SWRCB D-1641	SWRCB D-1641		
Mokelumne River				
Instream Flow Requirement	1996 Joint Settlement Agreement [e]	1996 Joint Settlement Agreement [e]		
Stanislaus River				
Instream Flow Requirement	New Melones Interim Operations Plan, 1997 (STANMOD/SANJASM) [f]	New Melones Interim Operations Plan, 1997 (STANMOD/SANJASM) [f]		
Tuolumne River				
Instream Flow Requirement	1995 FERC 2299-024 94 – 301 TAF/YR (SANJASM)	1995 FERC 2299-024 94 – 301 TAF/YR (SANJASM)		
San Joaquin River				
Instream Flow Requirement @ Vernalis	SWRCB D-1422, SWRCB D-1641 and CVPIA Nov. 20, 1997 AFRP Delta Action #1 (SANJASM)	SWRCB D-1422, SWRCB D-1641 and CVPIA Nov. 20, 1997 AFRP Delta Action #1 (SANJASM)		

Table 2. SRWTP 2020 Master Plan EIR PROSIM Simulation Assumptions

Model Input Parameter	Existing Conditions	Future Baseline	Future No Project	Future with Project (Cumulative)
Delta				
Delta Outflow Index/Salinity Requirements	SWRCB D-1641 *(MDO Implementation)* and CVPIA Nov. 20, 1997 AFRP Delta Action #3	SWRCB D-1641 *(MDO Implementation)* and CVPIA Nov. 20, 1997 AFRP Delta Action #3		
Delta Cross Channel Gate Operation	SWRCB D-1641 and CVPIA Nov. 20, 1997 AFRP Delta Action #6	SWRCB D-1641 and CVPIA Nov. 20, 1997 AFRP Delta Action #6		
Delta Export Restrictions	SWRCB D-1641 Export/Inflow Ratio, CVPIA Nov. 20, 1997 AFRP Delta Actions #1, #5 and #7 *(Delta Action #8 not modeled)*	SWRCB D-1641 Export/Inflow Ratio, CVPIA Nov. 20, 1997 AFRP Delta Actions #1, #5 and #7 *(Delta Action #8 not modeled)*		

[a] The 1922-1994 period of record is available for Sacramento Valley Land Use Hydrology, but is not available for the Mokelumne, Stanislaus, Tuolumne, and San Joaquin assumptions stated in this table (SANJASM simulation results unavailable). Therefore, the 1922-1991 period of record will be simulated.
[b] Specific purveyor demands are provided in Attachment 1 to this memorandum.
[c] The EBMUD/SCWA/City of Sacramento proposed joint project located at Freeport was modeled using Reclamation's assumptions as described under the following EBMUD heading.
[d] Contra Costa Water District demand is a time-series that reflects operation of Los Vaqueros Reservoir.
[e] As developed by Reclamation for the November 1998 CVPIA PEIS Preferred Alternative simulation. It represents a hybrid of a SANJASM simulation with EBMUD data.
[f] Available STANMOD/SANJASM simulations for the Stanislaus River implement CVPIA November 20, 1997 AFRP Upstream Action #4, insofar as it is met by the 1997 New Melones Interim Operation Plan.

SELECTION OF REVERSE FLOW PERIODS

In addition to PROSIM output, input to the FDM included simulated hourly tides at the downstream model boundary. As previously mentioned, both an existing condition (corresponding to 2000) and future conditions (corresponding to 2020) were simulated for the SRWTP Expansion EIR. The existing condition simulation results were utilized for this analysis.

As shown in Figure 2, water year 1977 had the largest number of reverse flow periods. Water year 1977 also had the largest number of reverse flow periods with upstream flow rates greater than 3,000 cfs, which have the greatest potential to carry effluent to the proposed diversion locations. For this reason, the reverse flow periods modeled for Task 1 were selected from the modeled results for water year 1977.

Hourly simulated river and effluent flow rates for water year 1977 are shown in Figure 3. Two times series were selected from this flow record: (1) from 11/19/76 21:00 to 11/22/76 12:00, which contained the largest reverse flow period in the record (maximum upstream river flow rate of 10,527 cfs); and (2) from 12/15/76 03:00 to 12/17/76 20:00, which contained the longest reverse flow period in the record (4.78 hours

of reverse flow). Figures 4 and 5 show the river and effluent flow rates during these two time periods in greater detail. In this memorandum, these periods will be referred to as the November flow period (with November events 1 through 5) and the December flow period (with December events 1 through 5). Note from these figures that two types of reverse flow periods alternate with each other in the record: a longer reverse flow period with a greater upstream flow rate followed by a shorter event with less upstream flow, reflecting the diurnal and semi-diurnal high water conditions.

SIMULATION RESULTS (TASK 1)

During the technical team meeting on March 26, 2002, six "movies" were shown that illustrate the results of the simulations. Three movies were shown for each flow period, corresponding to simulation results obtained using the low, moderate, and high longitudinal dispersion coefficients. These movies are provided with this technical memorandum on the attached CD.

For each of the ten modeled reverse flow periods, results were also plotted as a function of time and location. These figures are attached as Appendix A. The first figure (page A-1) shows model results for event 1 from the November flow period and contains six panels. The upper left panel shows the river flow rate as a function of time for this simulated reverse flow period. The upper right panel shows the calculated "advective distance," defined as the mean travel distance for the reverse flow period, also presented as a function of time. The remaining four panels show the simulated concentration of effluent at the four proposed diversion locations (see Figure 1). Each of the four lower panels shows three sets of results, corresponding to the simulated effluent concentration at that location for each of the three modeled values of the longitudinal dispersion coefficient. Results using highest dispersion coefficients (shown in red) produce the longest events, while results using the lowest dispersion coefficients (shown in green) produce the shortest events. Results obtained using the mid-range dispersion coefficient are shown in blue.

A total of 120 events were simulated, corresponding to the various combinations of potential diversion location (4 possibilities), reverse flow periods (10 modeled events), and varying longitudinal dispersion coefficients (3 values). Each event was defined in terms of the time at which effluent was present at a given location. For each event, the values of several parameters were calculated, including:

- The "advective distance" at the start of each event.
- The "advective distance" at the end of each event.
- The minimum advective distance (i.e., the farthest travel distance of the mean river flow in the upstream direction).

- The event duration (defined here as the length of time effluent was present at greater than a 200:1 dilution (0.5% concentration)).
- The average simulated effluent concentration present at a given location during an event.
- The maximum simulated effluent concentration present at a given location during an event.
- The characteristics of the reverse flow period, including the maximum upstream river flow rate, the duration of the reverse flow period, and the river stage (water surface elevation) during the reverse flow period.
- The characteristics of the river flow prior to the reverse flow period, including the maximum river flow, the duration of positive (downstream) flow prior to the reverse flow period, and the volume of flow traveling past Freeport prior to the reverse flow period.

After these parameters were calculated, they were plotted for each proposed diversion location in order to attempt to determine relationships between characteristics of each reverse flow period and characteristics of each event. Sample plots are shown in Appendix B.

As shown in Appendix B, there is a clear relationship between the magnitude of the reverse flow (i.e., the maximum upstream flow rate) and the duration of the reverse flow event (see page B-1). Relationships are also apparent between the magnitude of the reverse flow events and the average and maximum concentrations of effluent at the proposed diversion locations, although there is a significant amount of scatter to these plots (pages B-2 and B-3). Similarly, there is a significant amount of scatter about the relationship between the event duration and the magnitude of the reverse flow (page B-4). Thus, the magnitude of reverse flow is likely only a loose indication of the characteristics of the effluent event at the proposed diversion locations.

Appendix B also contains plots that relate antecedent conditions to each reverse flow event to the effluent concentration and the length of time effluent is present at the proposed diversion location. Antecedent conditions that were examined included the maximum river flow rate prior to the reverse flow event, the volume of river flow past Freeport prior to the reverse flow event, and river stage. These were plotted against various characteristics of the effluent event at each proposed diversion location, including maximum effluent concentration present, average effluent concentration present, and the length of time effluent was present. No clear patterns were apparent between antecedent conditions and effluent event characteristics.

Appendix C contains plots that show the relationships between the calculated "advective distance"* and various characteristics of the reverse flow events. The "advective distance" that is calculated for the start of each effluent event (i.e., the advective distance when effluent is first present at the various diversion locations) is apparently independent of the maximum upstream river flow rate (see page C-1). Similarly, this advective distance is largely independent of other characteristics of the reverse flow event, including antecedent conditions. Additionally, there is an obvious relationship between the advective distance at the start of an effluent event and the advective distance at the end of an effluent event (page C-2). This relationship is dependent upon the magnitude of the longitudinal dispersion coefficient: effluent is present at the proposed diversion locations longer for higher dispersion coefficients than for lower dispersion coefficients. Finally, relationships can be established between the advective distance at the start of an event and the advective distance at the end of an event. These depend upon either the length of the reverse flow event or upon the minimum advective distance (i.e., the advective distance at which reverse flow stops and river flow in the downstream direction resumes). See page C-3. Thus, a plan for operation of the diversion that involves the advective distance at the start and at the end of an effluent event can be developed relatively easily.

MODELING ACCURACY

The river transport model was initially developed by Flow Science in 2000 for use in the SRWTP EIR analyses. In October 2001, the model and sample model results (along with the other water quality models utilized for the SRWTP EIR) were peer-reviewed and found acceptable by a panel of nationally recognized water quality and modeling experts (Professor Ken Reckhow of Duke University, Professor Vladimir Novotny of Marquette University, and Professor Philip Roberts of the Georgia Institute of Technology).

The value of the longitudinal dispersion coefficient used in the modeling has not been measured for this portion of the Sacramento River. Thus, the accuracy of the river transport modeling could be assessed by conducting a field dye study to determine the behavior of SRWTP effluent in the Sacramento River near Freeport during reverse flow events. Since a field study to determine the value of this coefficient has not been conducted to date, Flow Science used three different values of the dispersion coefficient to span the anticipated range of possible dispersion coefficients. The largest dispersion

* Advective distance is determined by summing the product of average velocity and time step length at each time step, beginning when reverse flow first occurs and ending a) when effluent first reaches the proposed diversion site (the advective distance at the start of an event) and b) when effluent last touches the proposed diversion site (the advective distance at the end of an event). These advective distances represent the displacement of undispersed effluent from the point of discharge at the times when dispersed effluent first reaches and leaves the proposed diversion site.

coefficient utilized in the modeling is likely to be larger than the dispersion coefficient that would be measured during field studies. Thus, the results obtained from modeling using the largest dispersion coefficient will likely overestimate the length of time that effluent will be present at the proposed diversion location(s). Again, quantification of the margin of safety afforded by the use of this dispersion coefficient would require a field study.

DISCUSSION

As a result of the modeling performed for Task 1 and subsequent discussions with the Technical Team, Flow Science has identified several issues that the Team may wish to pursue in greater detail. If appropriate and after consultation with the Technical Team, Flow Science could prepare more detailed scopes of work for these tasks.

Item 1. Field work to resolve the issue of the longitudinal dispersion coefficient. Results from Task 1 show that effluent concentrations and duration are sensitive to the value of the dispersion coefficient. For example, see Table 3 below, which summarizes the results of the river transport modeling for one event (event 4 from November 1976). As shown in Table 3, if the diversion is stopped while effluent is present, a higher value of the dispersion coefficient results in a significantly longer interruption in the diversion schedule. A higher diversion coefficient also results in lower effluent concentrations at each of the proposed diversion locations.

Table 3. Results of river transport modeling for event 4, November 1976

Parameter	Low LD coefficient	Moderate LD coefficient	High LD coefficient
Maximum simulated effluent concentration [%]			
Location C	5.4	4.1	3.3
Location B-2	5.1	4.0	3.2
Location B-1	5.1	3.9	3.1
Location A	--**	--**	--**
Average simulated effluent concentration [%]			
Location C	3.4	3.0	2.6
Location B-2	3.5	3.0	2.3
Location B-1	3.6	2.8	2.1
Location A	--**	--**	--**
Event duration* [hr]			
Location C	4.2	4.7	5.4
Location B-2	3.3	3.9	4.7
Location B-1	2.9	3.6	4.3
Location A	--**	--**	--**

* Event duration is defined as the length of time that effluent is present at a proposed diversion location at concentrations greater than 0.5% (200:1 dilution).

** River transport modeling showed that effluent did not reach proposed diversion location A.

Various estimates of the longitudinal dispersion coefficient were modeled because dispersion has not been quantified on this stretch of the river. The moderate dispersion coefficient was obtained from field tests conducted by the Department of Water Resources in the early 1960s (see Fischer et al., 1979, for details). The best way to determine the appropriate value of the dispersion coefficient would be to do a field study under representative conditions (i.e., when reverse flows occur, likely in late summer or fall). This could best be achieved by adding dye (e.g., Rhodamine WT) to the SRWTP discharge at Freeport and measuring dye concentrations from a boat in the Sacramento River upstream of the diffuser location. The river transport model would then be used to calibrate the value of the dispersion coefficient so that measured and modeled results match as closely as possible. If it is necessary to avoid river withdrawals while effluent is present at the diversion location, it should be possible to develop operational rules for the diversion in the absence of these data and to refine them once the dispersion coefficient is verified. It is important to note that, while the value of the dispersion coefficient can be refined, some uncertainty in the value of this coefficient will remain even after performance of a field study. Uncertainty in the value of the longitudinal dispersion coefficient is due to variations in flow velocities across the river cross-section, changing river topography and flow parameters, and other ambient conditions.

Item 2. Analysis of water quality at the proposed diversion locations. The Technical Team and the SRWTP Expansion EIR team have each discussed the possibility of performing a water quality analysis to determine what (if any) concentrations of effluent would be "acceptable" considering the level of treatment that will be applied to the diverted water. Of course, it would be far easier to divert continuously if the diverted water is readily treatable than to halt diversions when effluent is present.

As part of the SRWTP Expansion EIR analysis, detailed water quality data have been developed for a large number of constituents for both the river and the effluent. These data were developed using recent measurements from grab samples collected in the river during the period 1996-2000, which were collected by (1) the *Sacramento River Coordinated Monitoring Program*; (2) the SRWTP's *Priority Pollutant Prevention Program*; and (3) the U.S. Geological Survey's *National Ambient Water Quality Assessment (NAWQA)* Program. Effluent water quality data were compiled for the period 1998-2000 from (1) operation data (SRWTP MODS data); (2) the Pollution Prevention Monitoring Studies (P4 files); (3) the Acute Toxicity Monitoring Program; and (4) a special study conducted at SRWTP for pathogens. Data were summarized in the form of data distributions, which describe both a mean and a standard deviation that fits either a normal or a ln-normal distribution.

Data for existing conditions are summarized in Table 4, attached, which also estimates long-term average peak constituent concentrations at a proposed diversion location. The long-term average peak constituent concentrations were calculated for a peak effluent concentration of 6% (estimated from the river transport modeling) and

using the mean values from the data distributions. Note that these calculations do not calculate the maximum expected instantaneous constituent concentrations for the diversion. For the SRWTP Expansion EIR, Monte Carlo analysis was used to calculate the expected range of water quality conditions over 70 years of diffuser operations. A similar analysis could be conducted for the diversion location utilizing these data distributions, if desired. Results would include statistics describing the anticipated constituent concentrations at the diversion location for a representative study period (e.g., a 70-year period of hydrologic record).

Item 3. Flow modeling to "predict" reverse flow events and operations. If the diversion is to be stopped for the period when effluent is present at the diversion location, an operations model will be needed to control these operations. As detailed above, this operations model could be triggered by the "advective distance" associated with a given reverse flow event; the advective distance could be easily calculated in real time based upon velocity measurements made in the river. However, the results of Task 1 show that there is considerable scatter about the correlation between advective distance and the presence of effluent at each of the proposed diversion locations. One alternative to developing an operational model based upon real time measurements of flow or velocity made in the river would be simply to model river conditions in advance and to develop a plan of diversion operation based upon model predictive results. The Fischer Delta Model (FDM) could be used for this task. During low flow conditions (i.e., when reverse flows will occur), river flow rates are readily predicted, as are tidal elevations at the downstream boundary of the Delta. These would be used as input to the FDM, which would be utilized to predict the timing and severity of an upcoming reverse flow event. Model results could in turn be used to set operating schedules well in advance. Because tides are very predictable and river release schedules are known in advance during low flow conditions, the use of modeling to develop operations schedules would be a reliable method.

FLOW SCIENCE

Table 4. Water quality data for existing conditions. From SRWTP Expansion EIR analysis, see text for details.

Constituents	River: All Scenarios			Effluent: Existing condition			At diversion location: peak long-term average constituent concentration[a]
	Arithmetic		Distribution	Arithmetic		Distribution	
	Mean	s.d.		Mean	s.d.		
Metals							
Arsenic, total, µg/L	1.516	0.468	Ln(x)	2.228	0.601	Ln(x)	1.56
Copper, total recoverable, µg/L	4.092	2.169	Ln(x)	5.427	1.619	Ln(x)	4.17
Lead, total recoverable, µg/L	0.637	0.431	Ln(x)	0.520	0.219	Ln(x)	0.63
Mercury, total, ng/L	8.332	6.330	Ln(x)	8.660	2.739	Ln(x)	8.35
Selenium, total recoverable, µg/L	DL	DL	n/a	ND	ND	n/a	
Silver, total recoverable, µg/L	ND	ND	n/a	0.303	0.106	Ln(x)	
Zinc, total recoverable, µg/L	5.485	3.813	Ln(x)	32.267	3.773	Ln(x)	7.09
Organics							
Tetrachloroethene, µg/L	DL	DL	n/a	1.032	0.965	Ln(x)	
Bis (2-ethylhexyl) Phthalate, µg/L	DL	DL	n/a	1.968	1.123	Ln(x)	
Chlorodibromomethane, µg/L	DL	DL	n/a	DL	DL	n/a	
Carbon Tetrachloride, µg/L	DL	DL	n/a	DL	DL	n/a	
Pesticides							
Diazinon, µg/L	DL	DL	n/a	145.080	70.049	Ln(x)	
Conventional Parameters							
pH, Std Units	7.741	0.195	Normal	6.522	0.125	Normal	7.67
Specific Conductance, µS/cm	127.918	25.475	Normal	n/a	n/a	n/a	
DO, mg/L	9.541	1.309	Normal	ND	ND	n/a	
Hardness, mg/L as CaCO3	Calculated separately		n/a	100.342	11.023	Ln(x)	
TOC, calculated, mg/L	2.205	0.765	Ln(x)	16.818	3.620	Normal	3.08
TSS, mg/L	34.112	24.281	Ln(x)	27.362	2.166	Ln(x)	33.71
Nutrients							
Nitrate (NO3), mg/L as N	ND	ND	n/a	0.981	2.613	Ln(x)	
Ammonia (NH3), mg/L as N	0.017	0.011	Ln(x)	16.213	2.728	Ln(x)	0.99
Bromide, mg/L	ND	ND	n/a	DL	DL	n/a	
Pathogens							
Total Coliform, MPN/100 mL	783.732	1495.613	Ln(x)	10.115	50.170	Ln(x)	737.31
Giardia (DAPI/DIC positive), organisms/L	DL	DL	n/a	ND	ND	n/a	

NOTE 1

n/a - Not applicable or not analyzed.
ND - No data.
DL - Unable to compute due to majority (> 65%) of records being less than detection limit.
a - Takes into account contributions from river and effluent to provide a total, long-term average concentration.

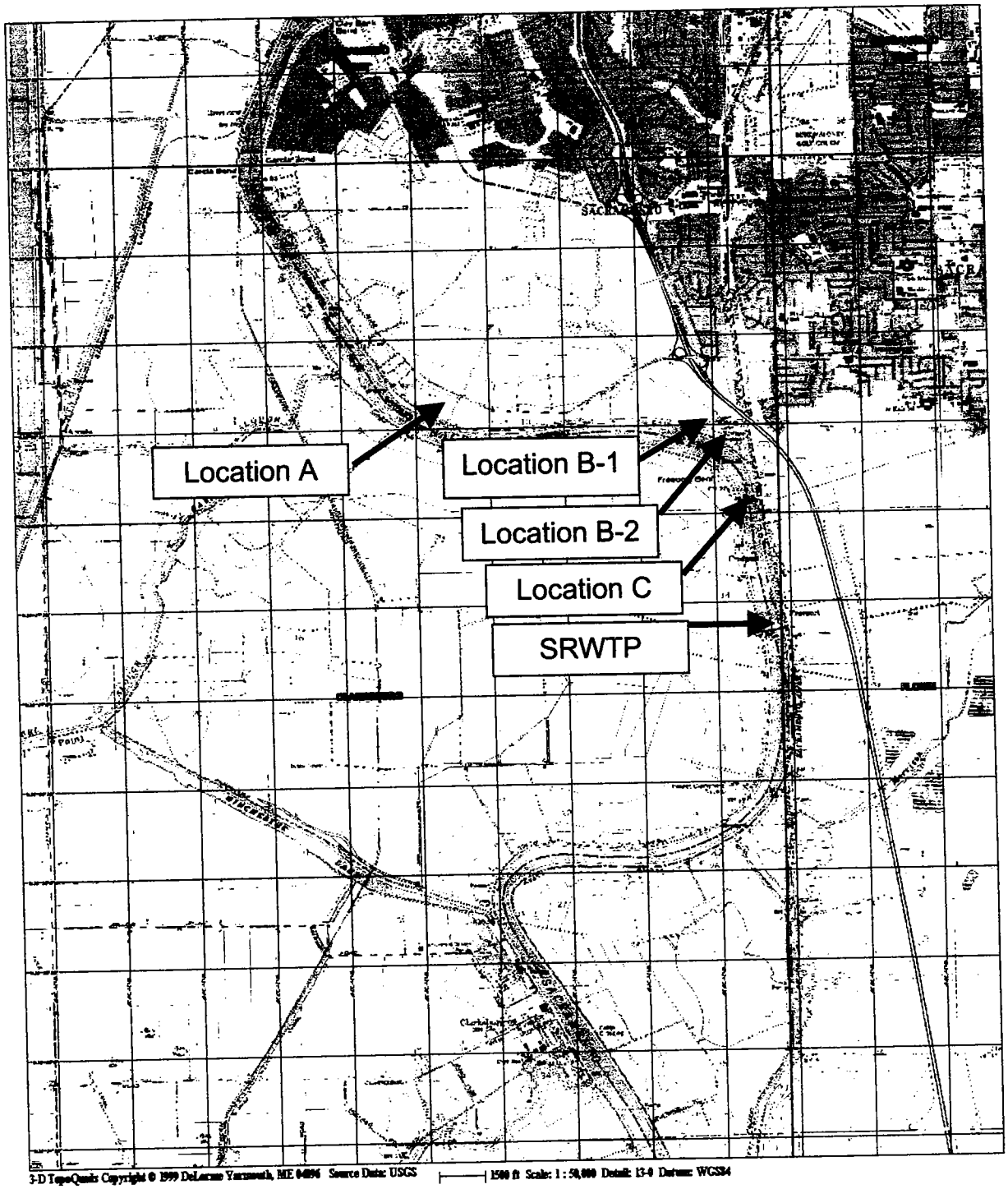
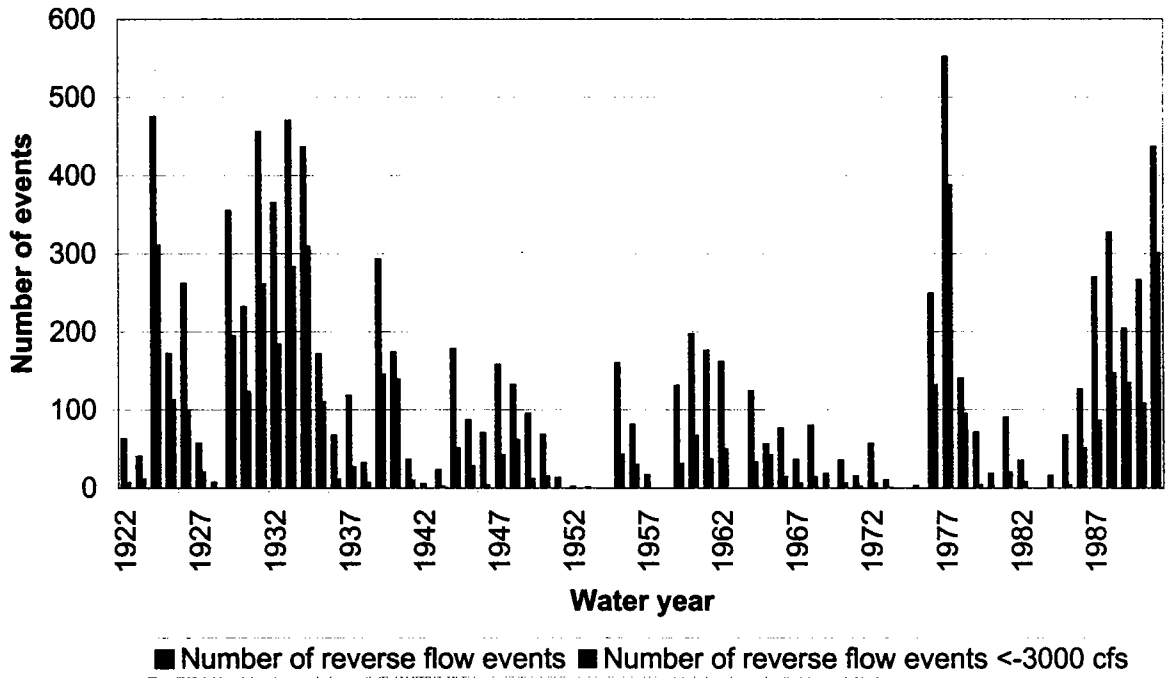
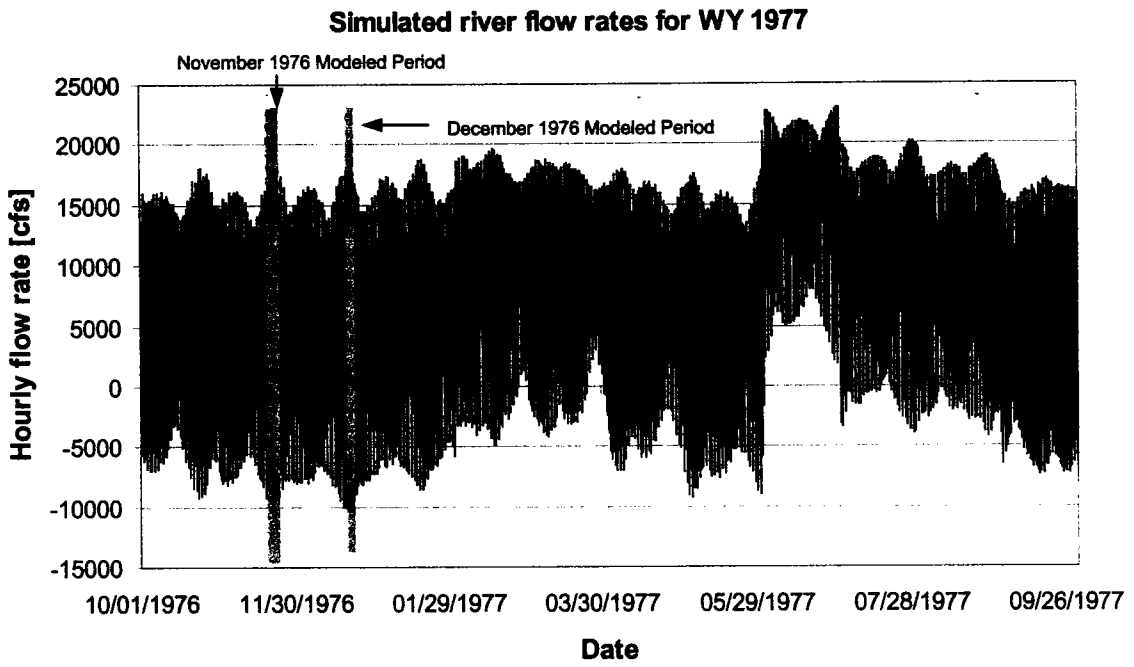


Figure 1. Proposed diversion locations utilized in the river transport modeling. The location of the SRWTP diffuser is also shown. Locations are approximate.

Figure 2. Modeled existing condition
Characterization of reverse flow events





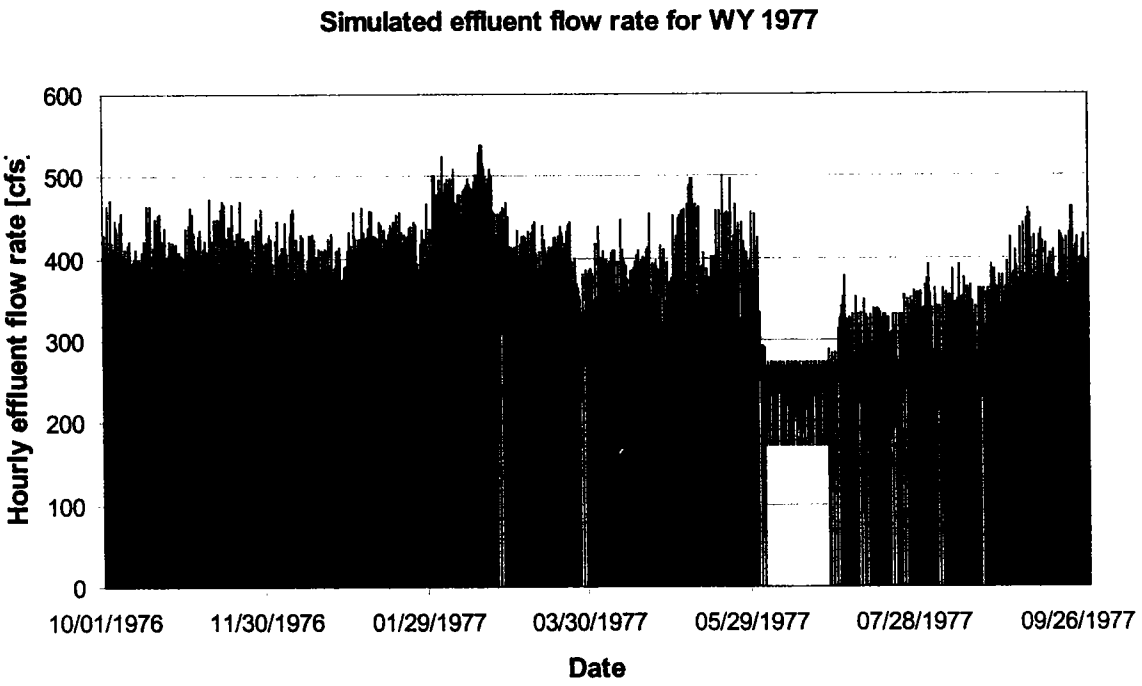


Figure 3. Simulated river and effluent flow rates for water year 1977. Conditions correspond to "existing condition" (year 2000). See text for details

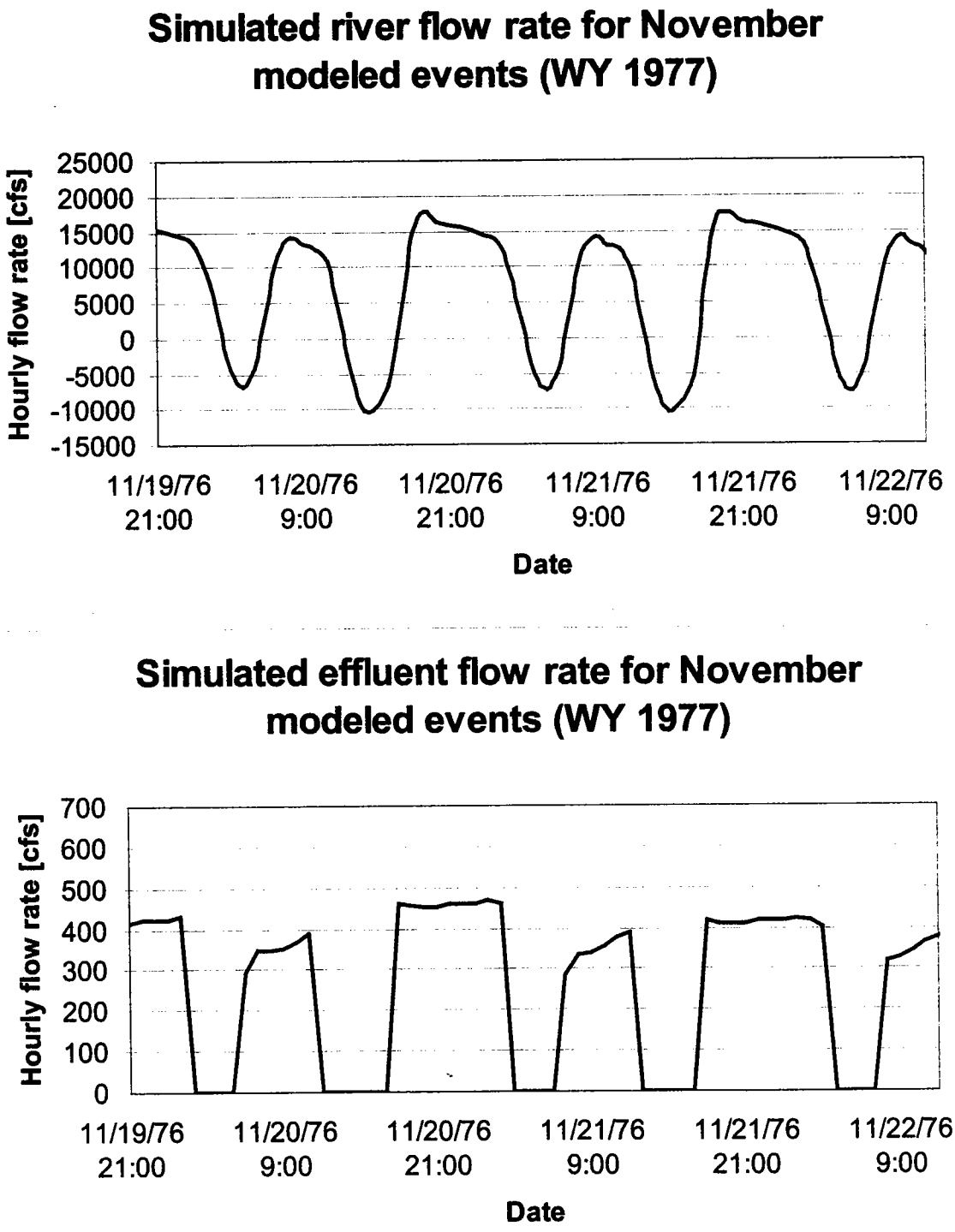
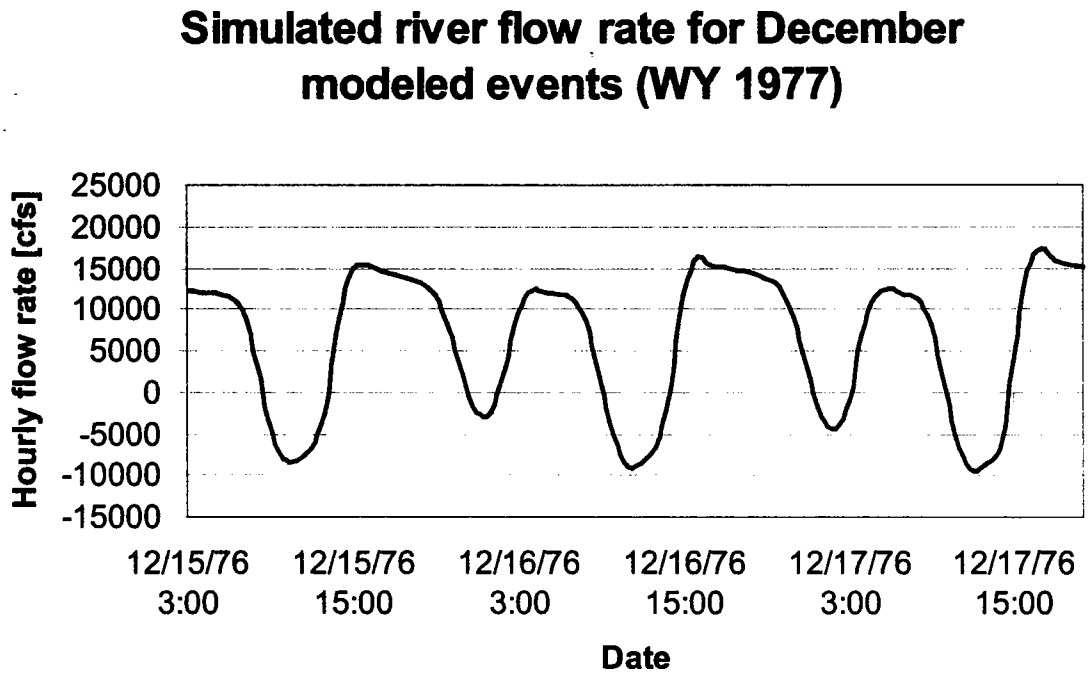


Figure 4. Simulated river and effluent flow rates for five reverse flow events from November 1976.



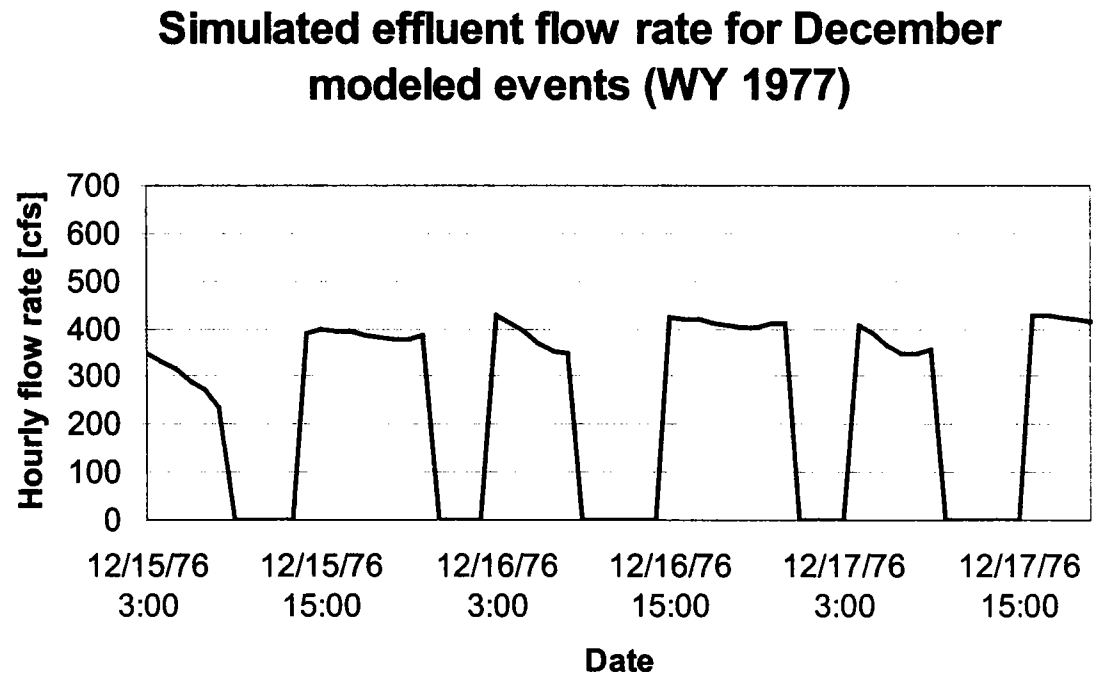
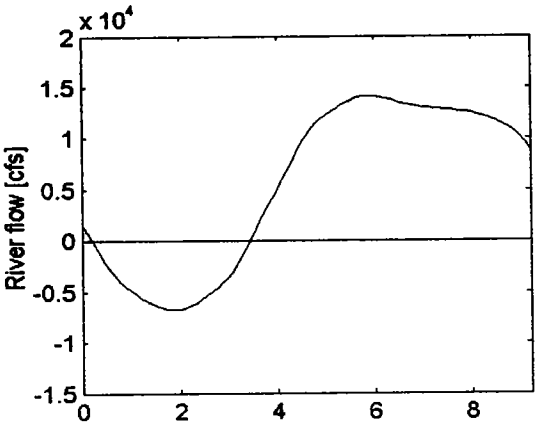


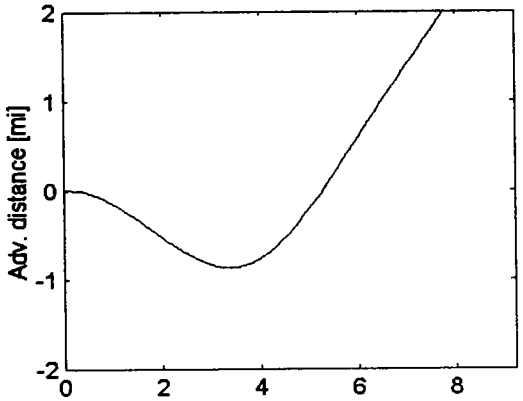
Figure 5. Simulated river and effluent flow rates for five reverse flow events from December 1976.

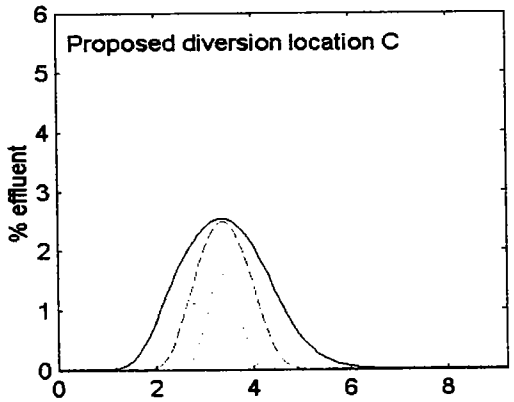
Appendix A

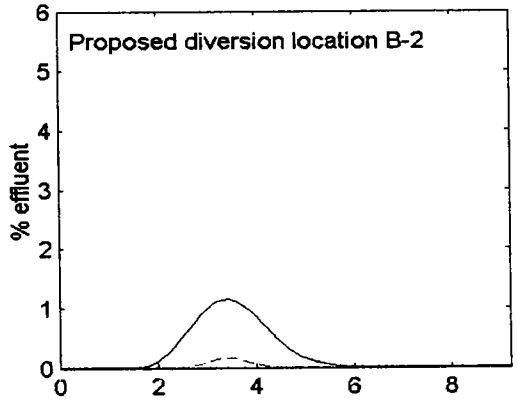
Summary of results for ten modeled reverse flow events

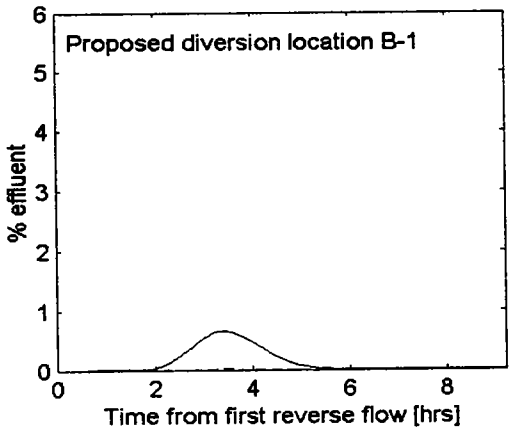
Summary of results for modeled event 1 from November 1976

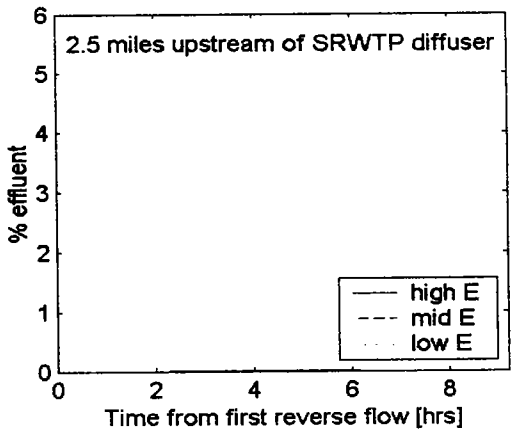




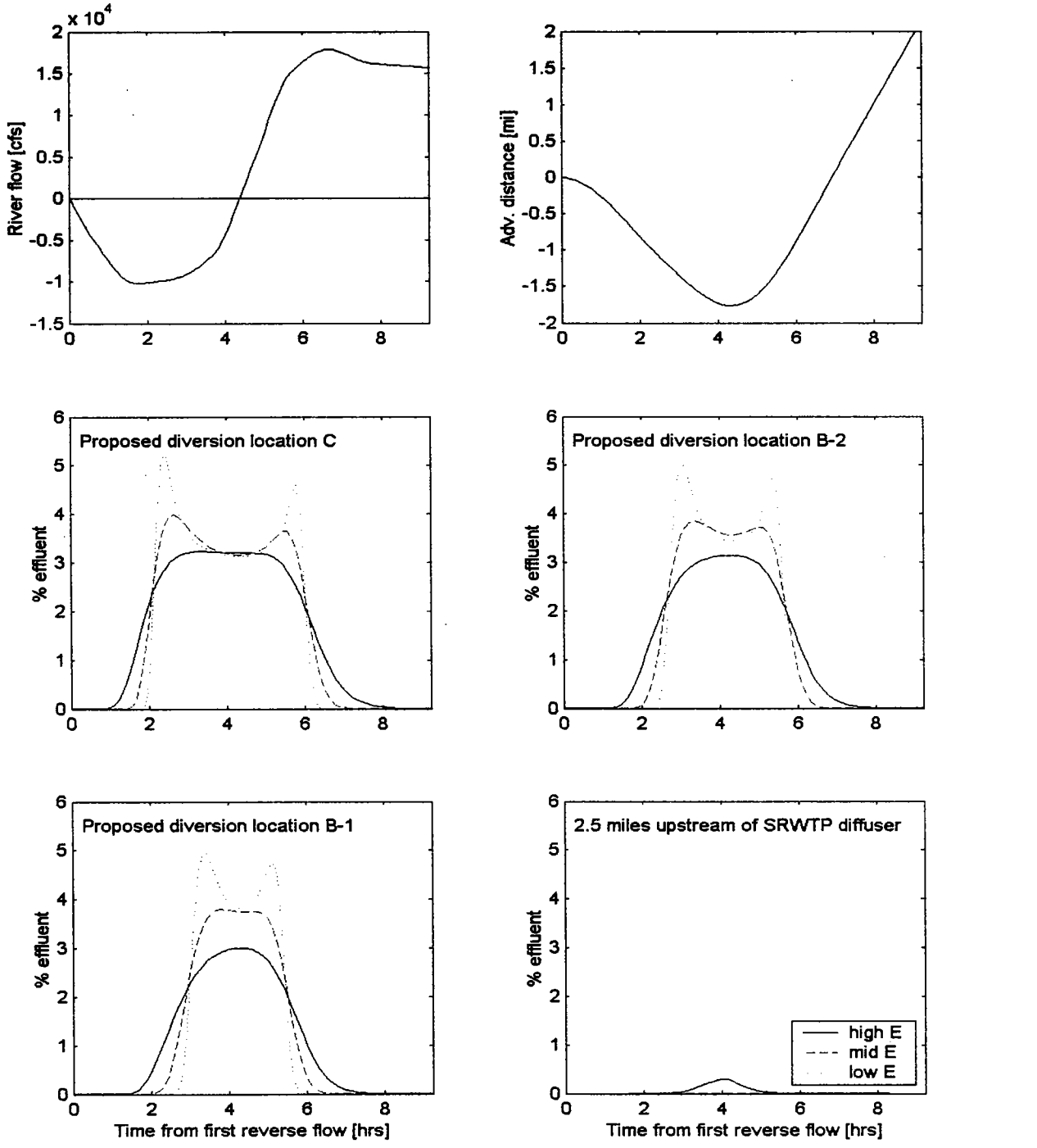








Summary of results for modeled event 2 from November 1976



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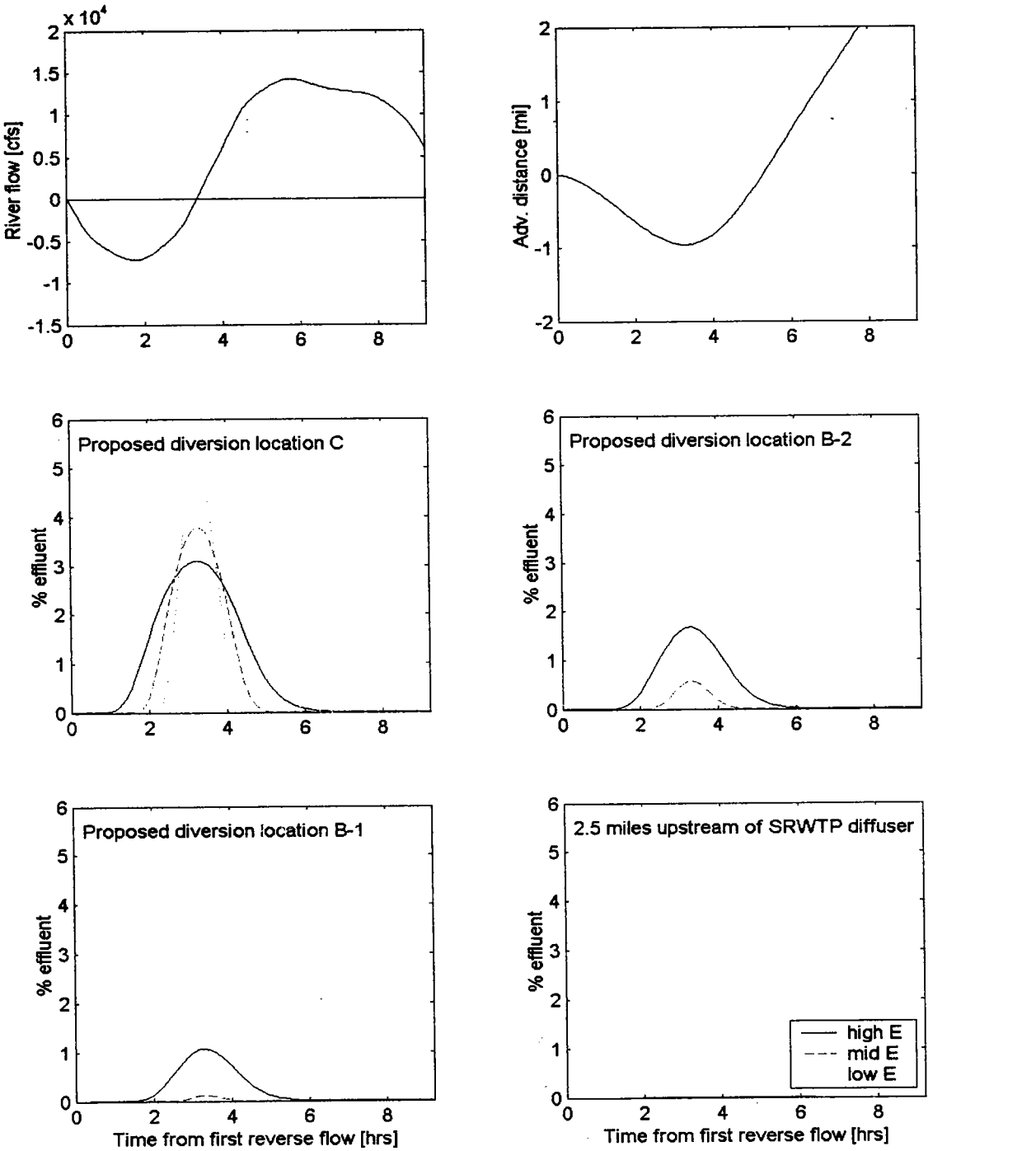
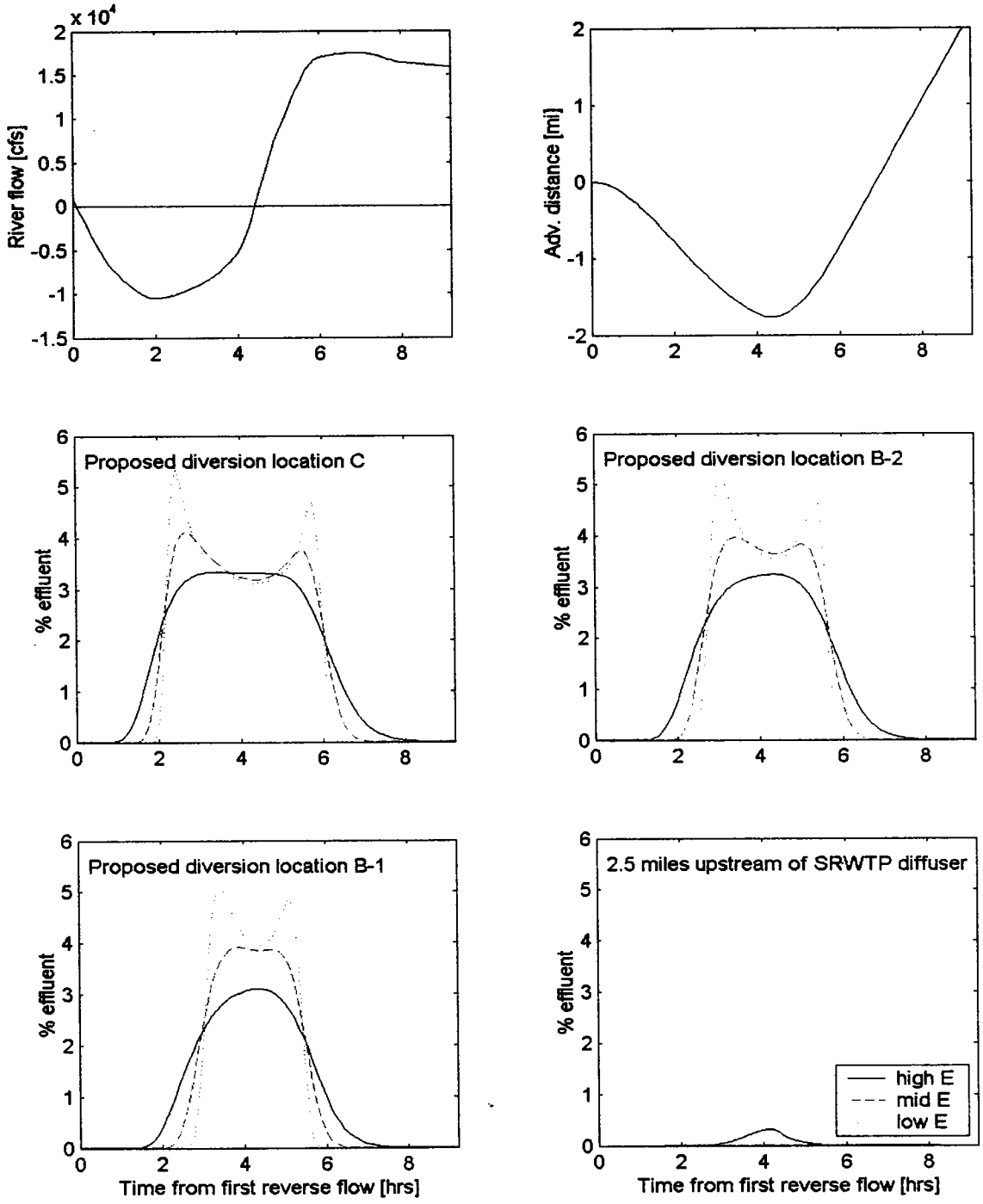
Summary of results for modeled event 3 from November 1976



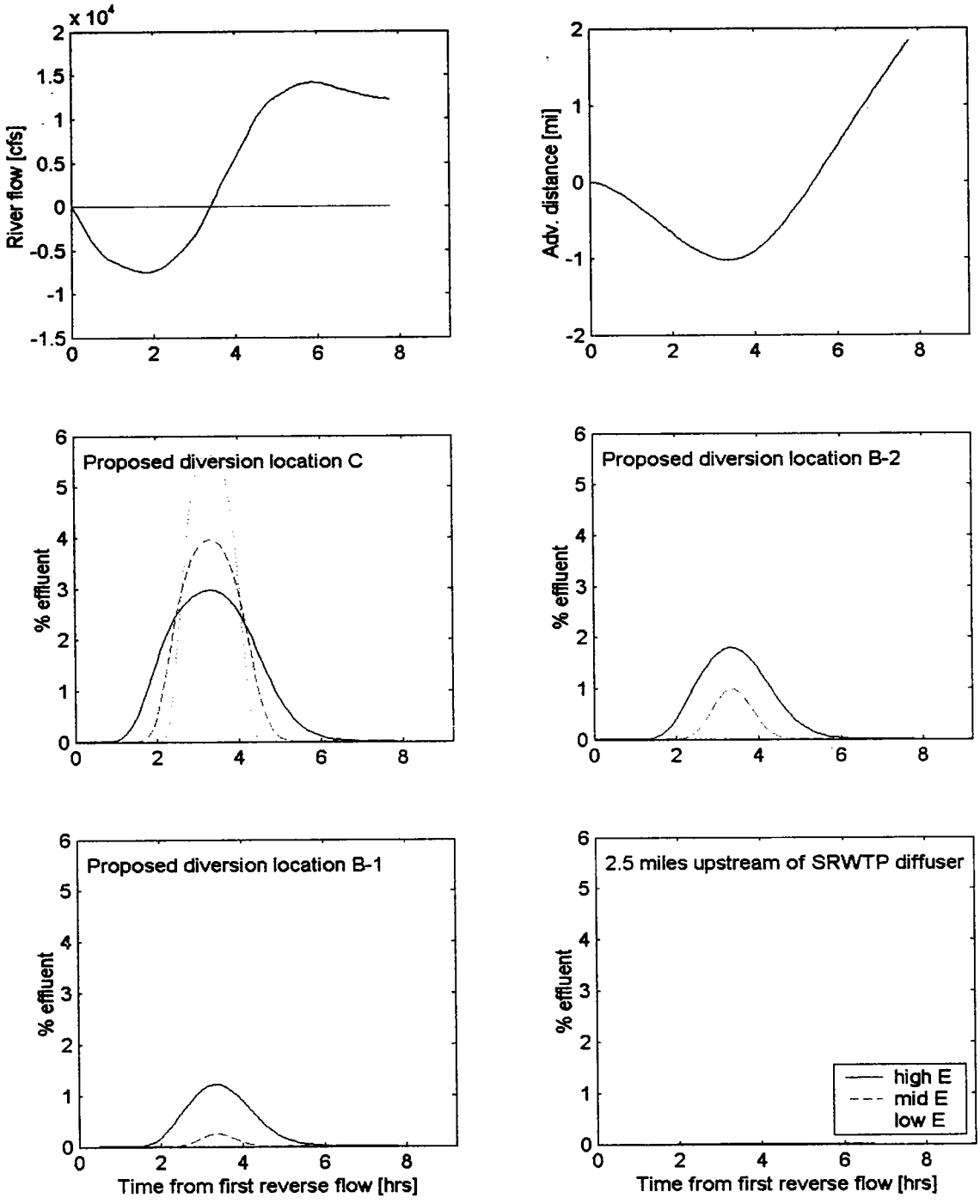
FLOW SCIENCE

Summary of results for modeled event 4 from November 1976



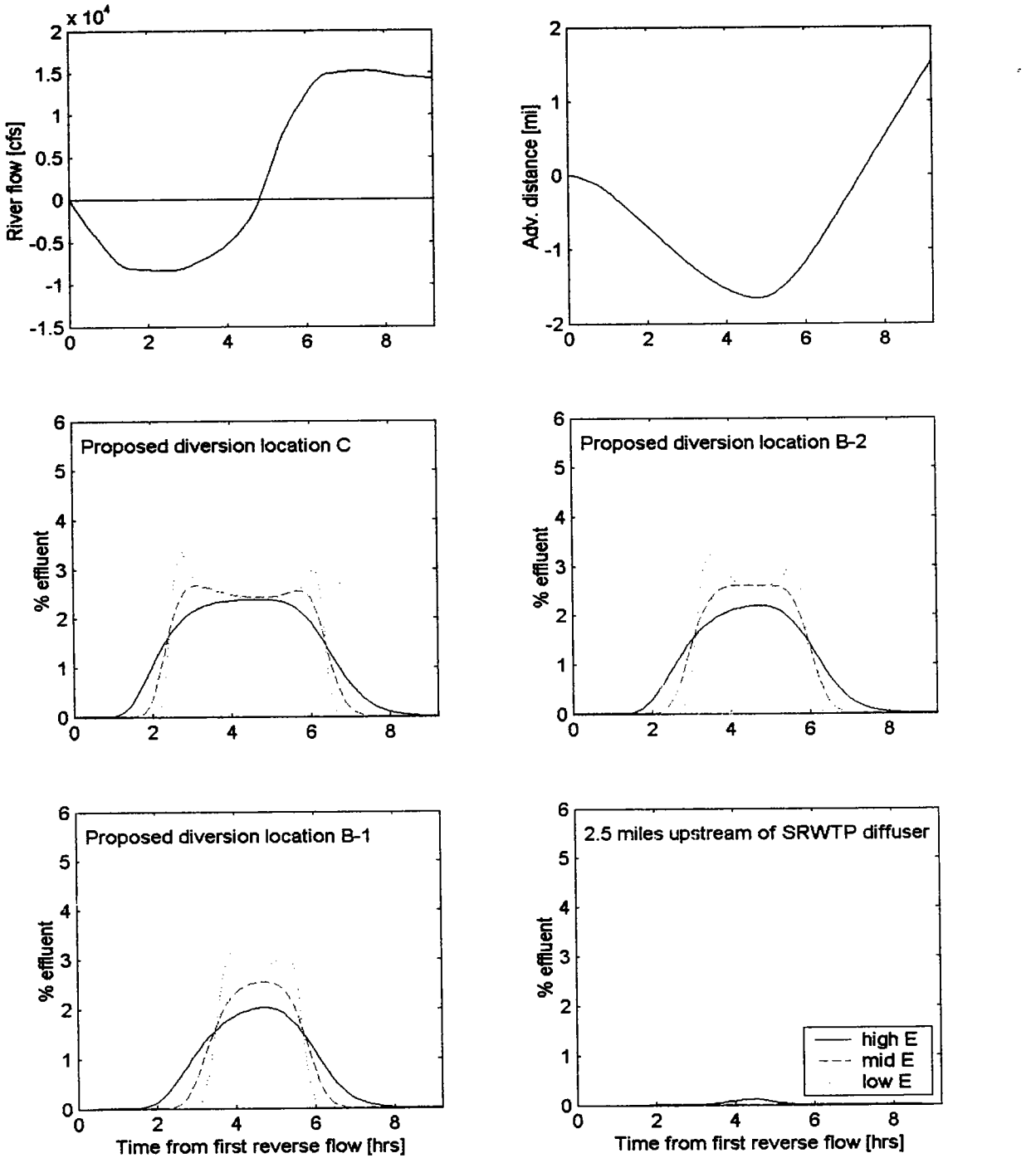
FLOW SCIENCE

Summary of results for modeled event 5 from November 1976

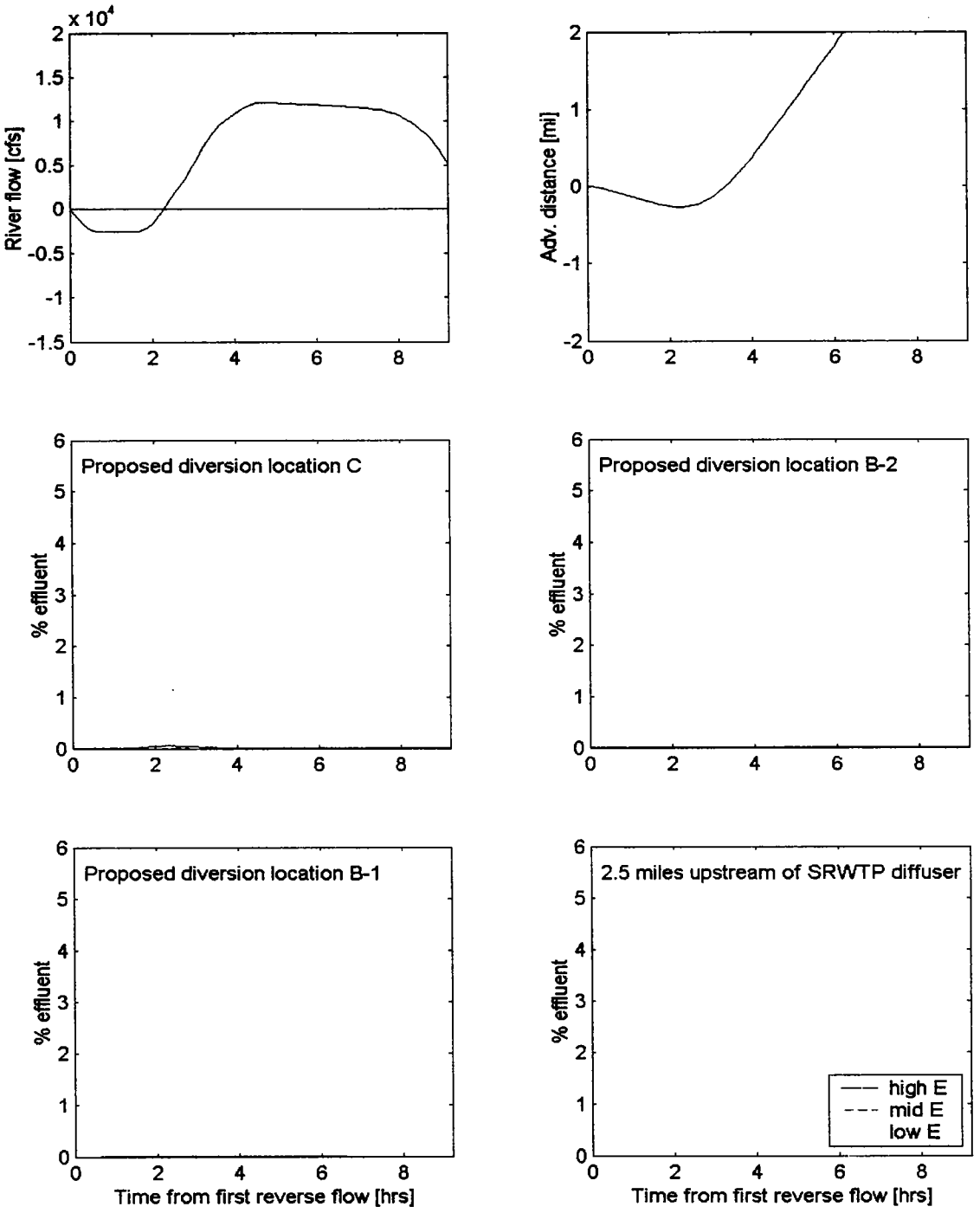


FLOW SCIENCE

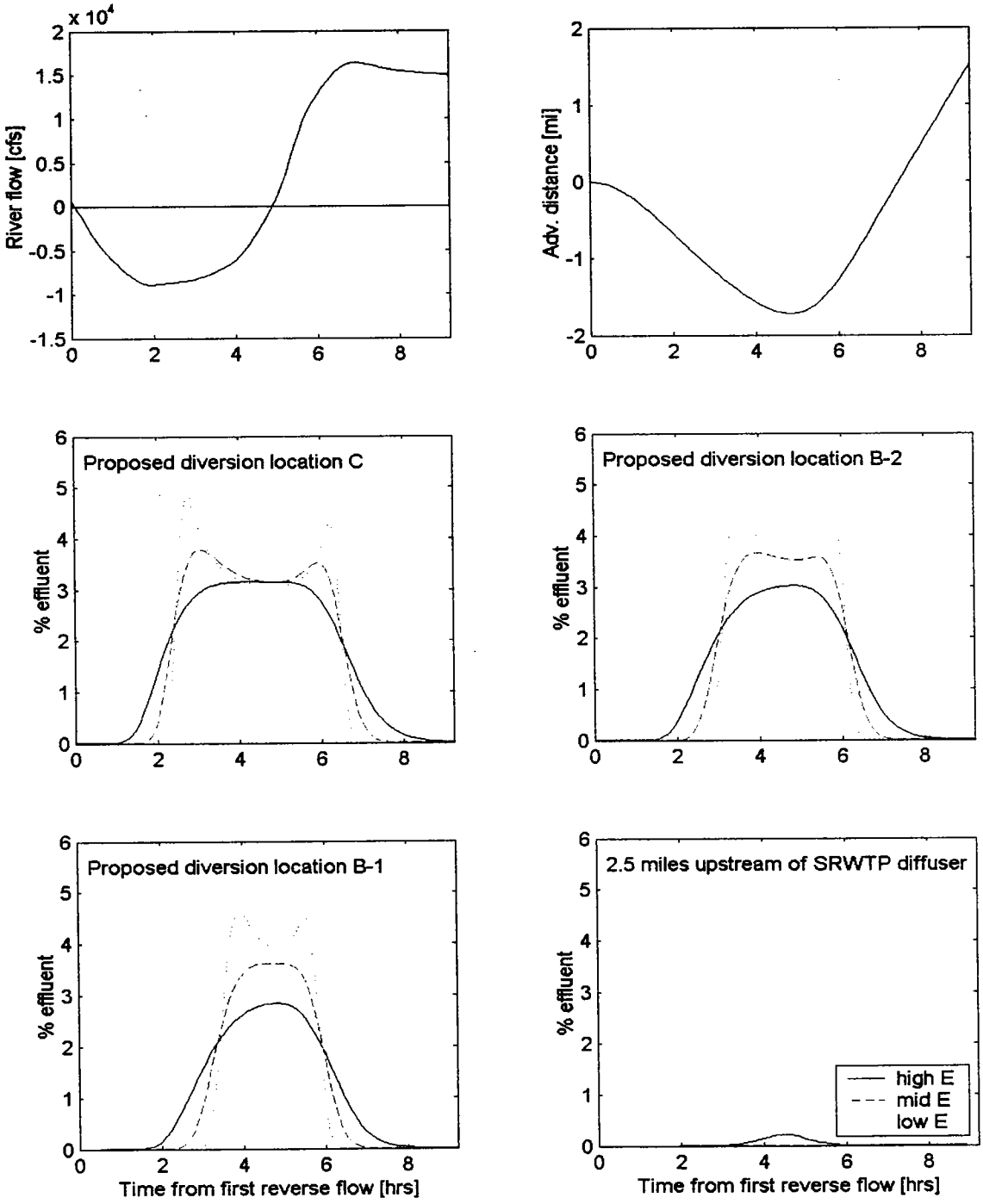
Summary of results for modeled event 1 from December 1976



Summary of results for modeled event 2 from December 1976

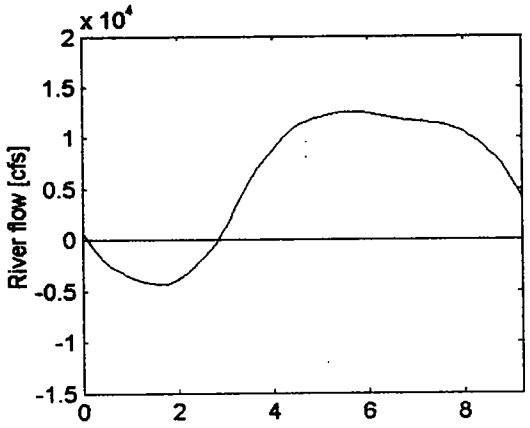


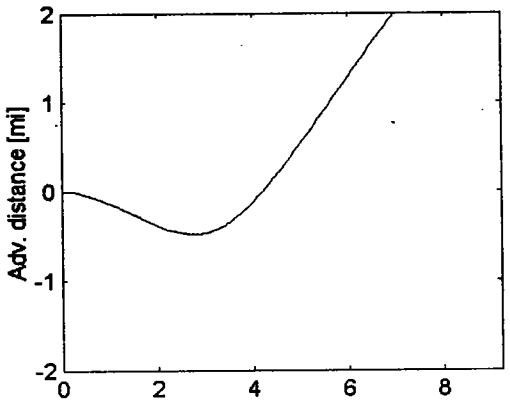
Summary of results for modeled event 3 from December 1976

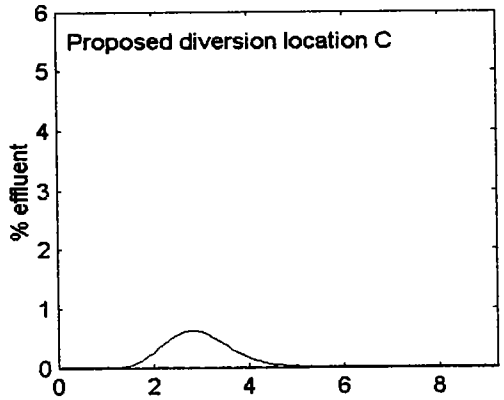


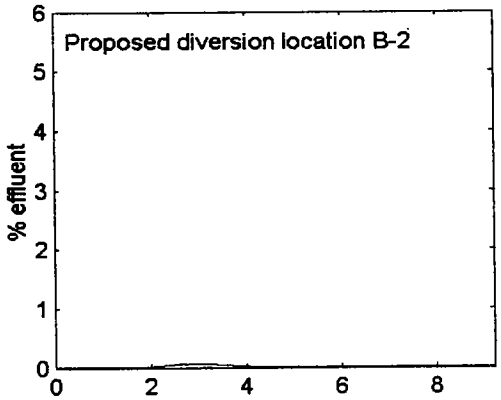
FLOW SCIENCE

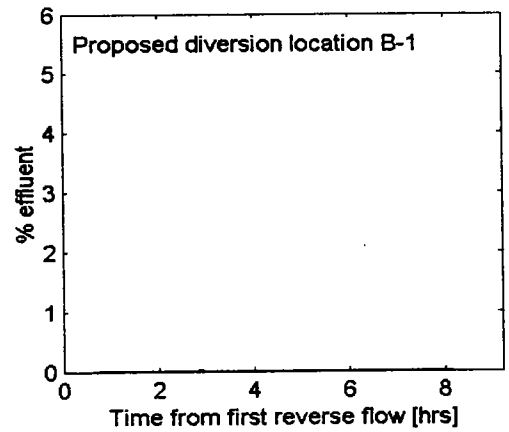
Summary of results for modeled event 4 from December 1976

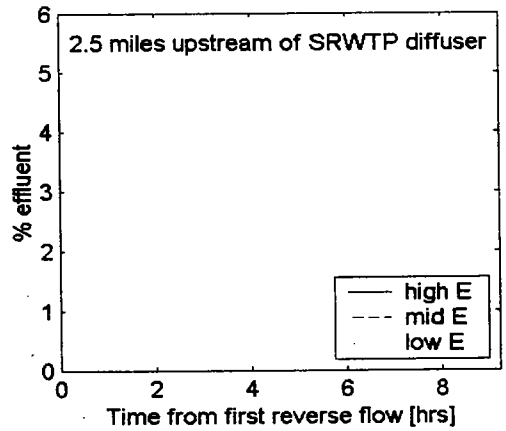




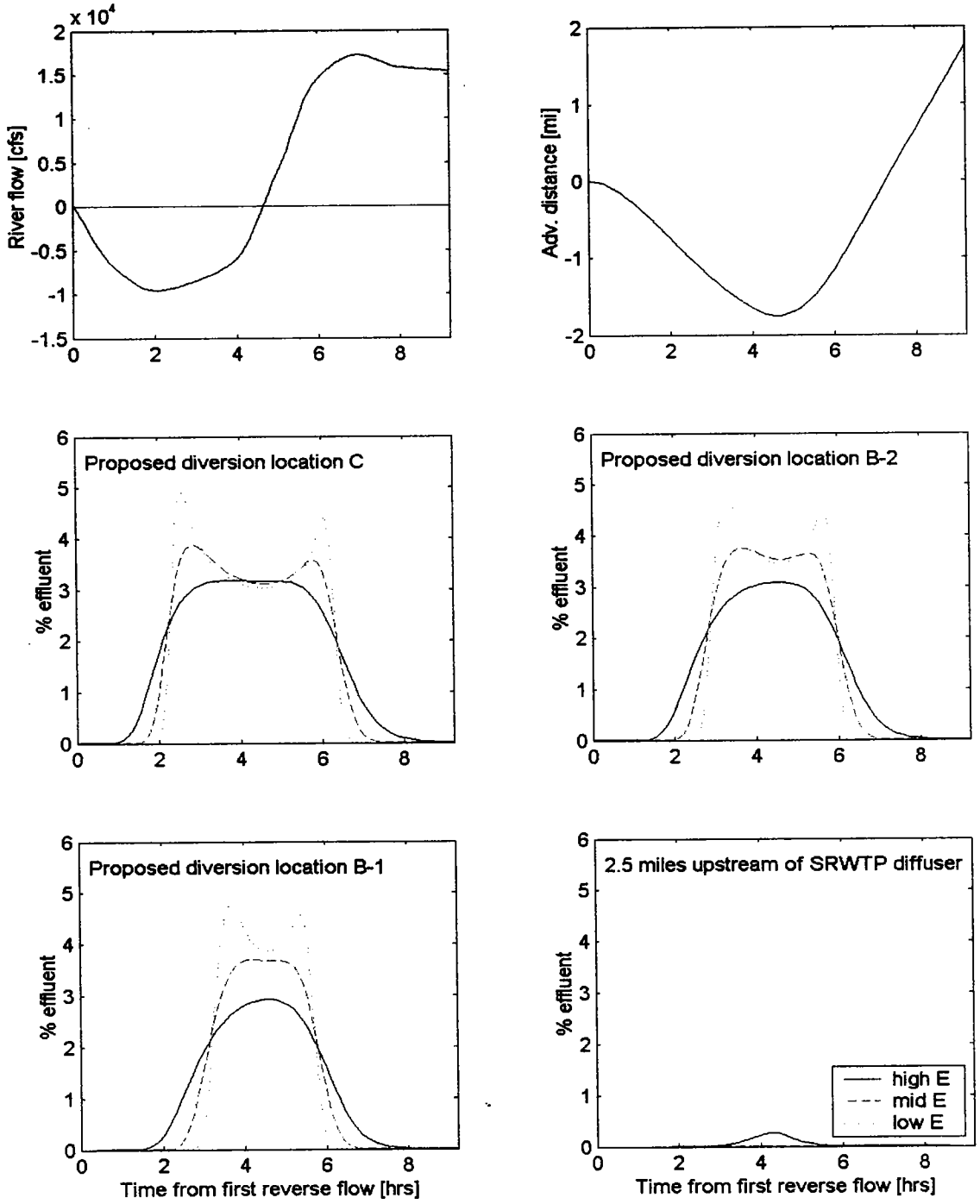






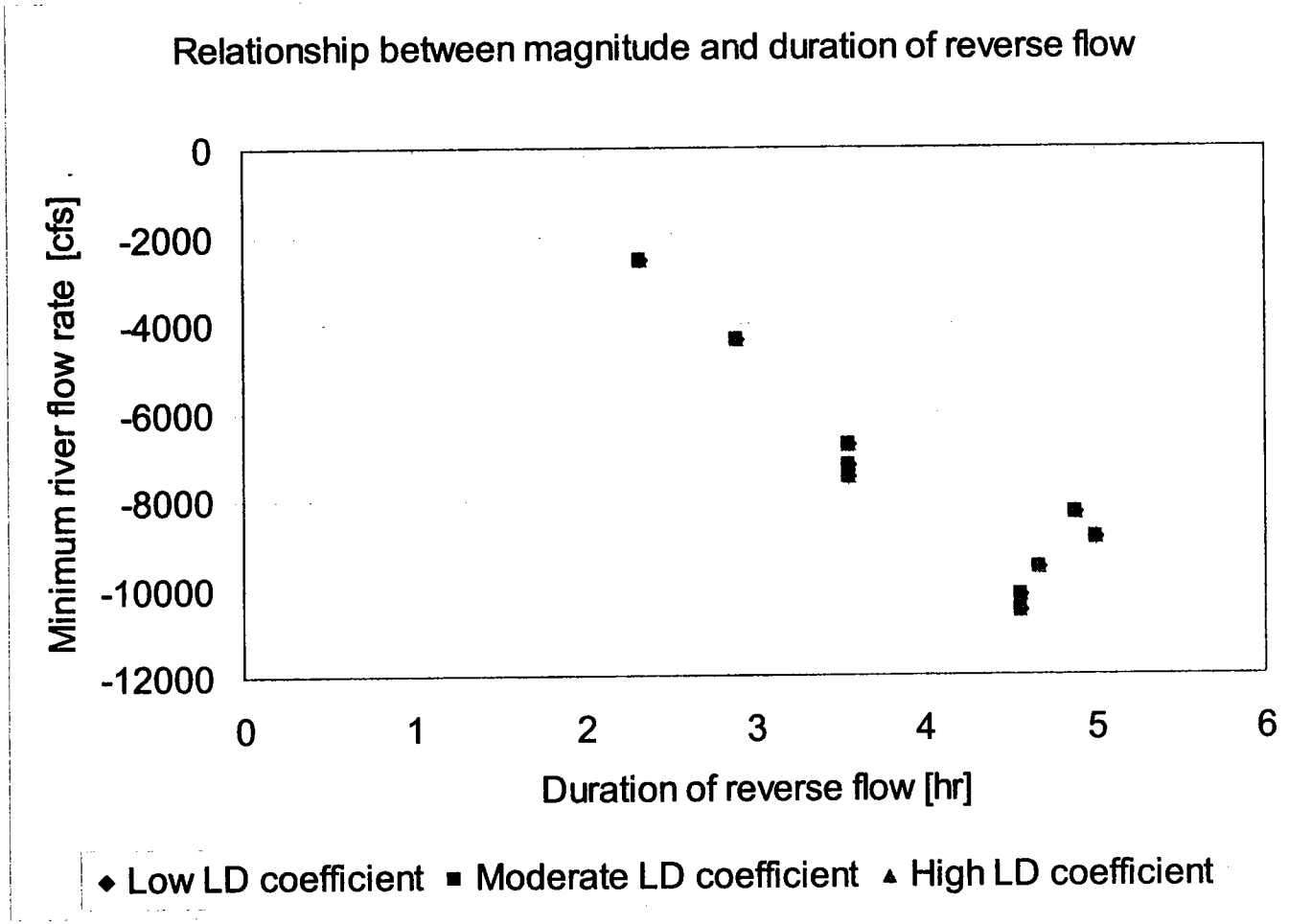


Summary of results for modeled event 5 from December 1976



Appendix B

Relationships between variables for ten modeled reverse flow events



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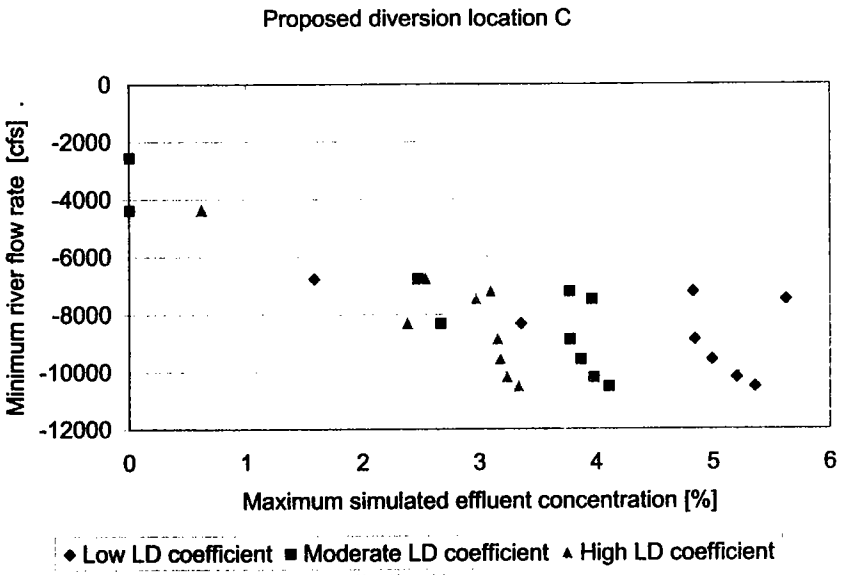
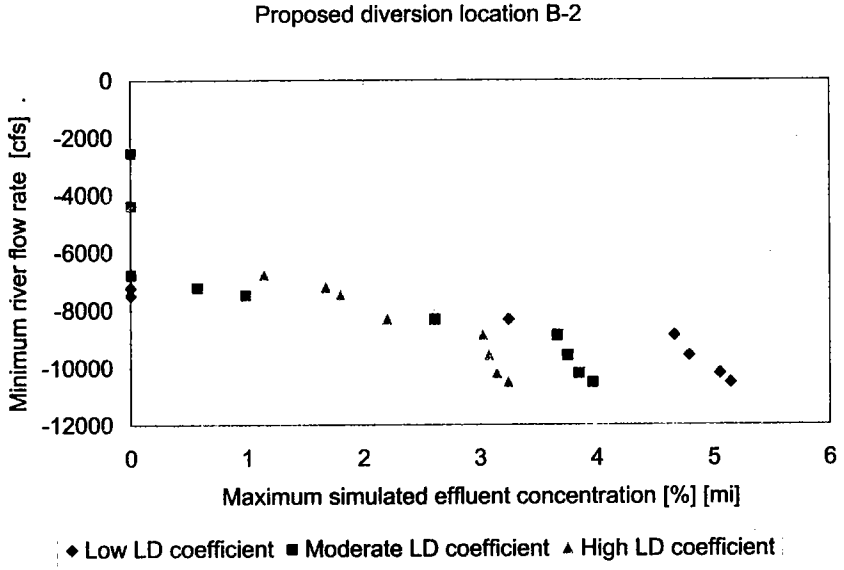
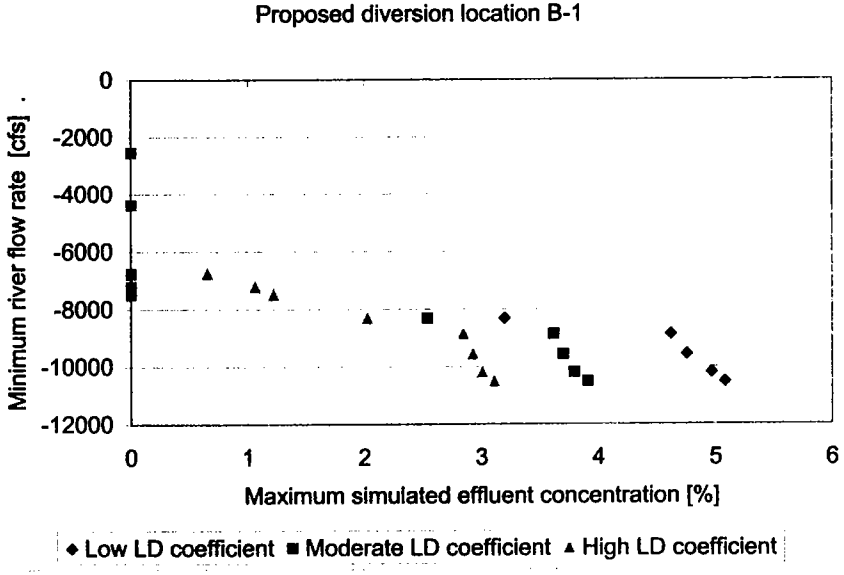
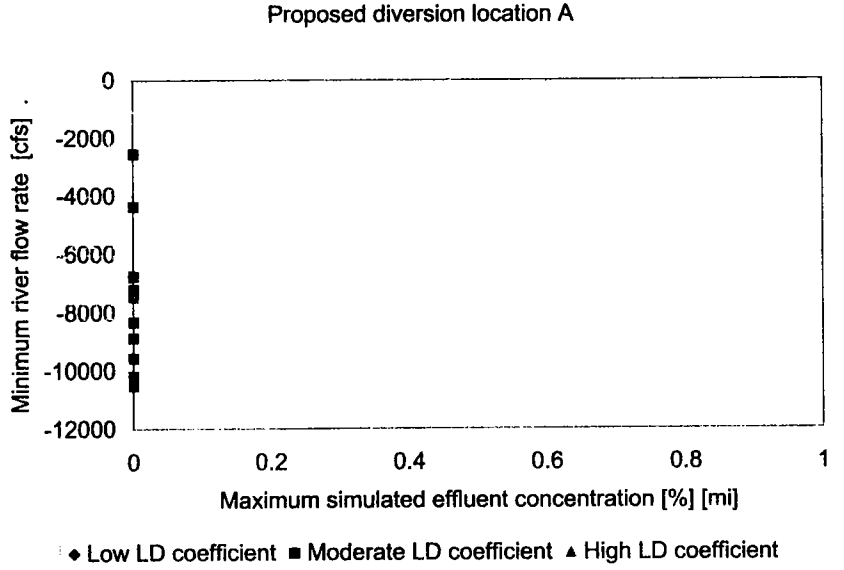
Relationship between magnitude of reverse flow event and maximum concentration at proposed location









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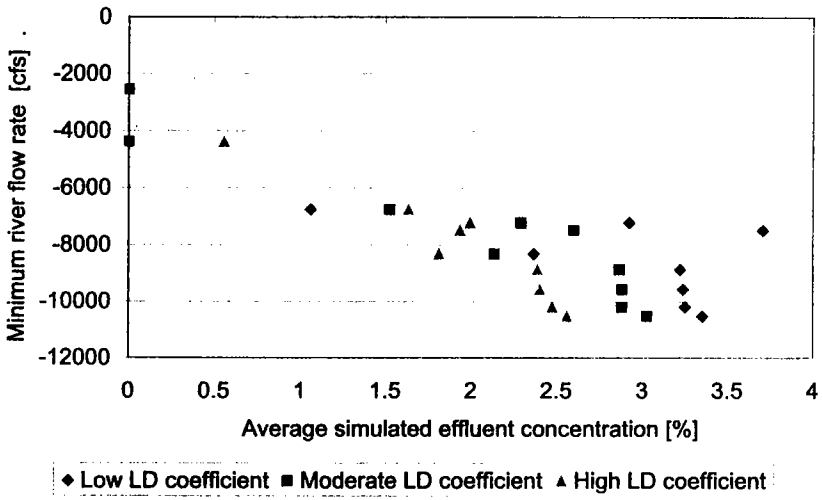
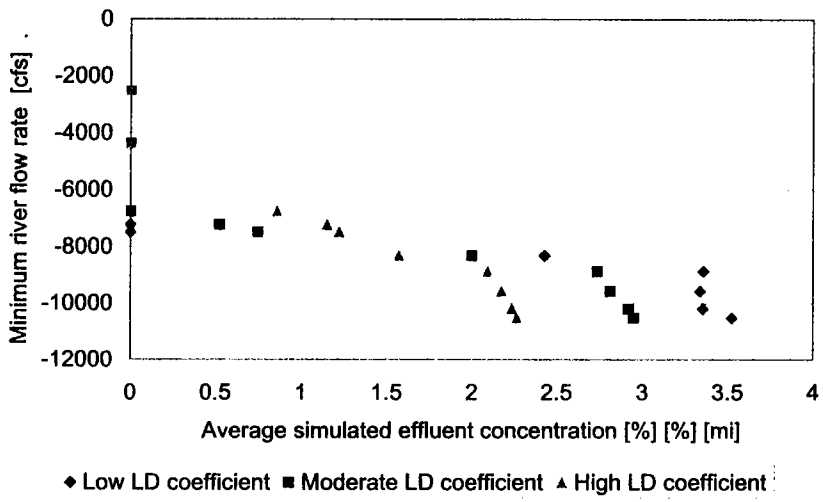
Relationship between magnitude of reverse flow event and average concentration at proposed location

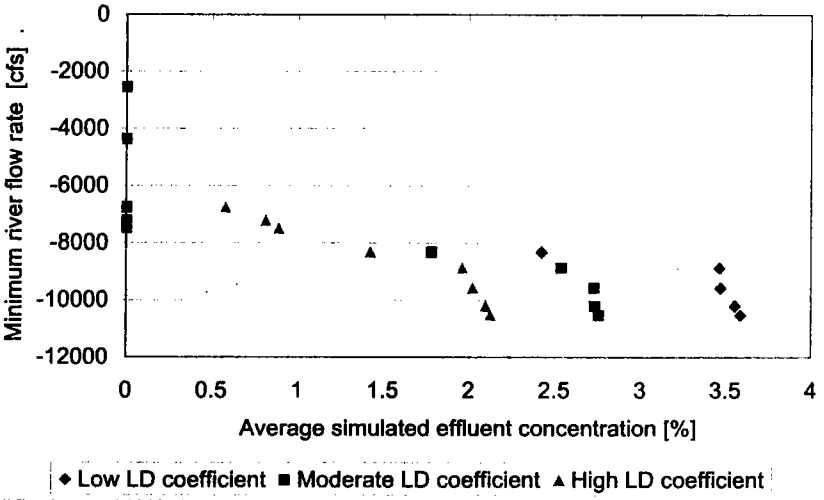
Proposed diversion location C



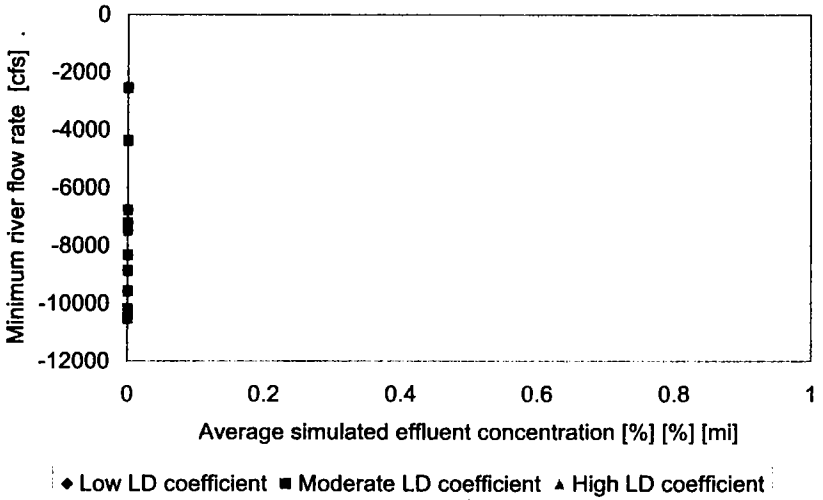
Proposed diversion location B-2



Proposed diversion location B-1



Proposed diversion location A



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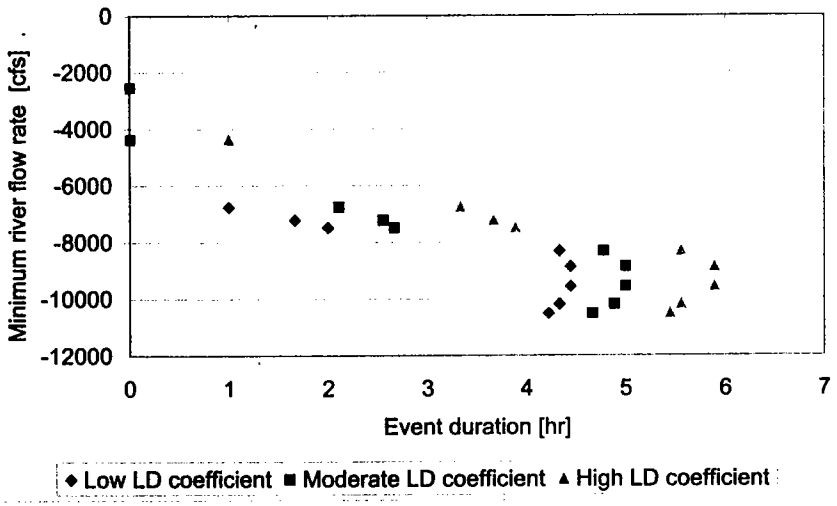
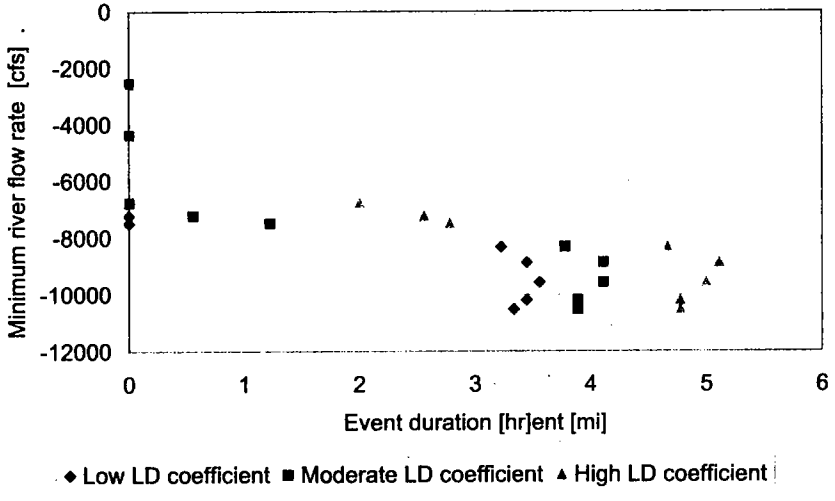
Relationship between event duration (length of time effluent is present at >0.5%) and minimum river flow

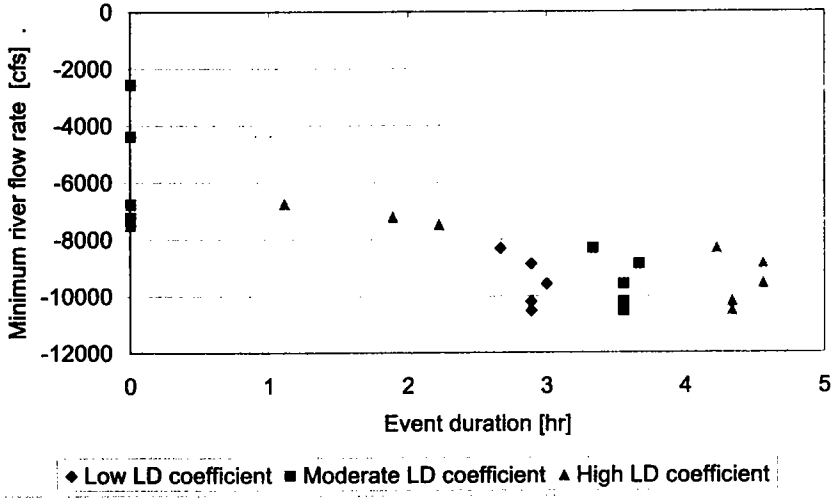
Proposed diversion location C



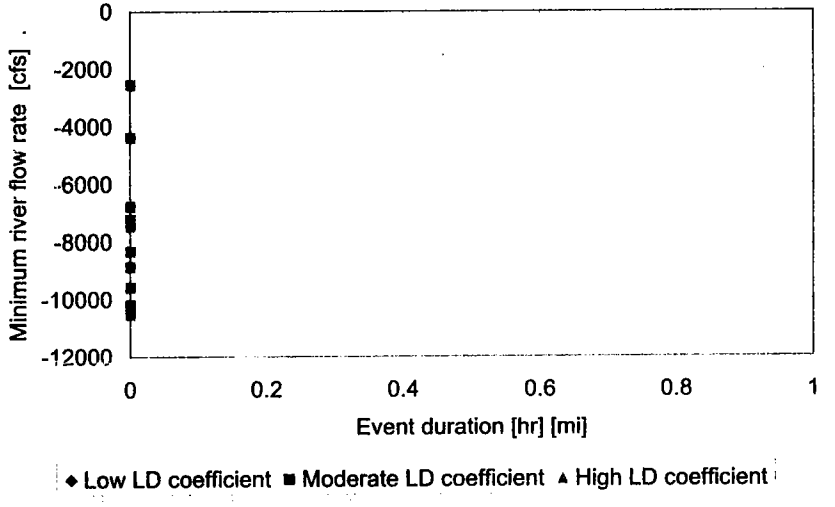
Proposed diversion location B-2



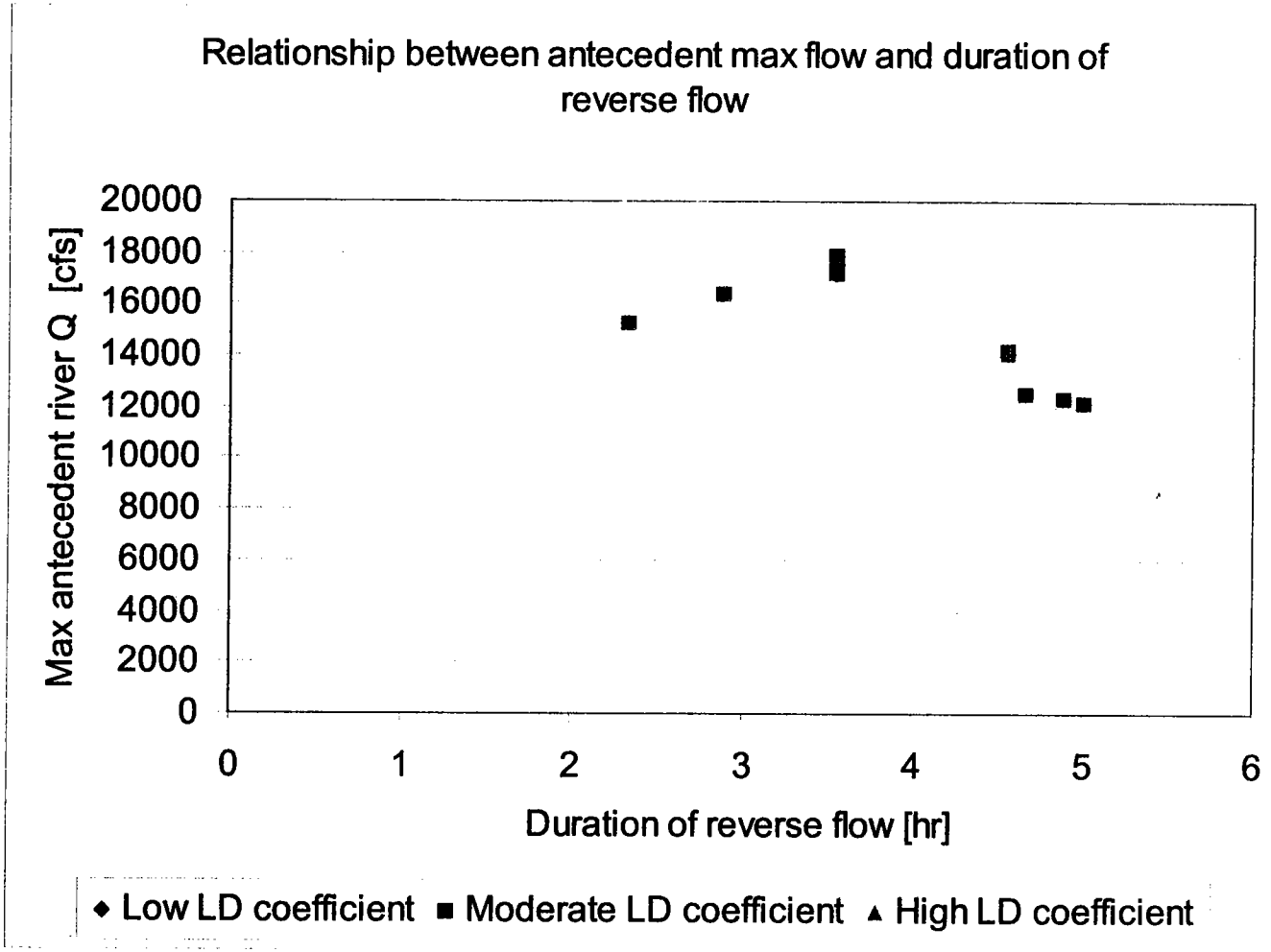
Proposed diversion location B-1



Proposed diversion location A

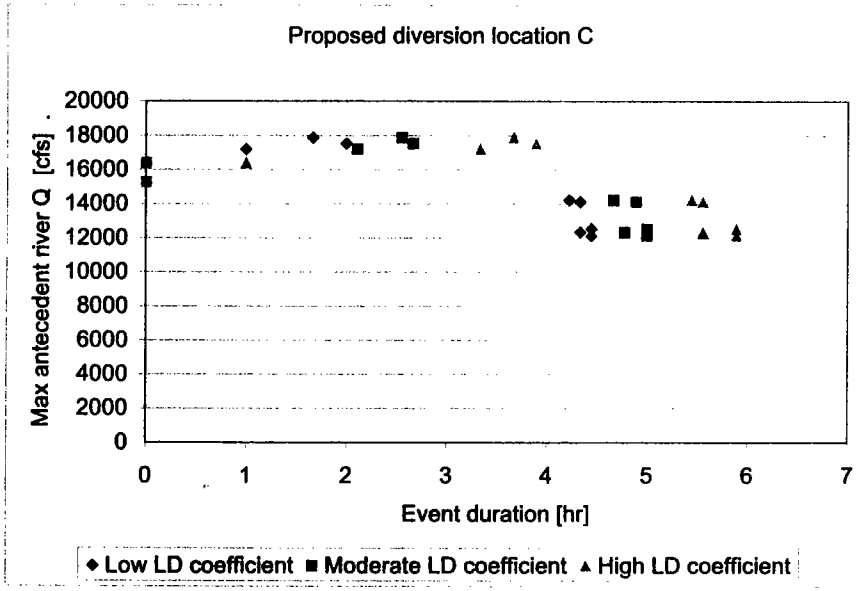


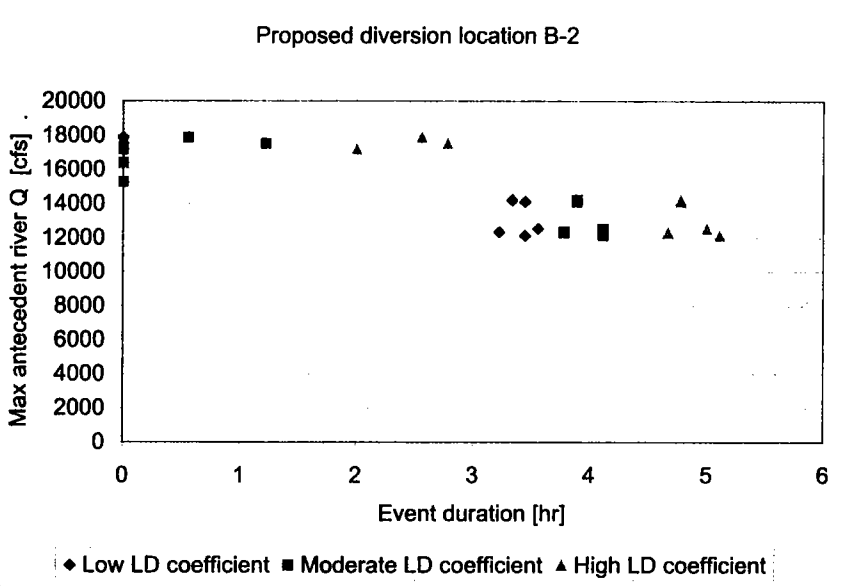
FLOW SCIENCE®

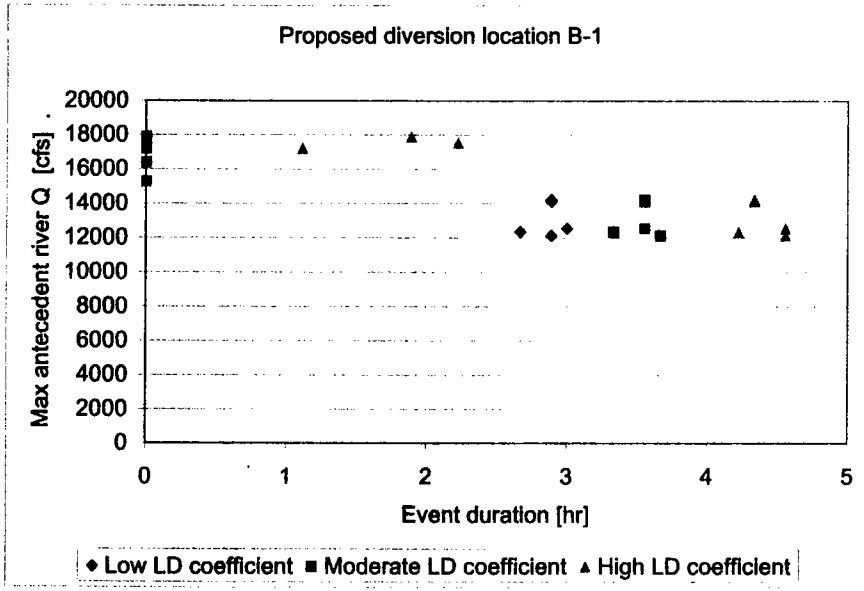


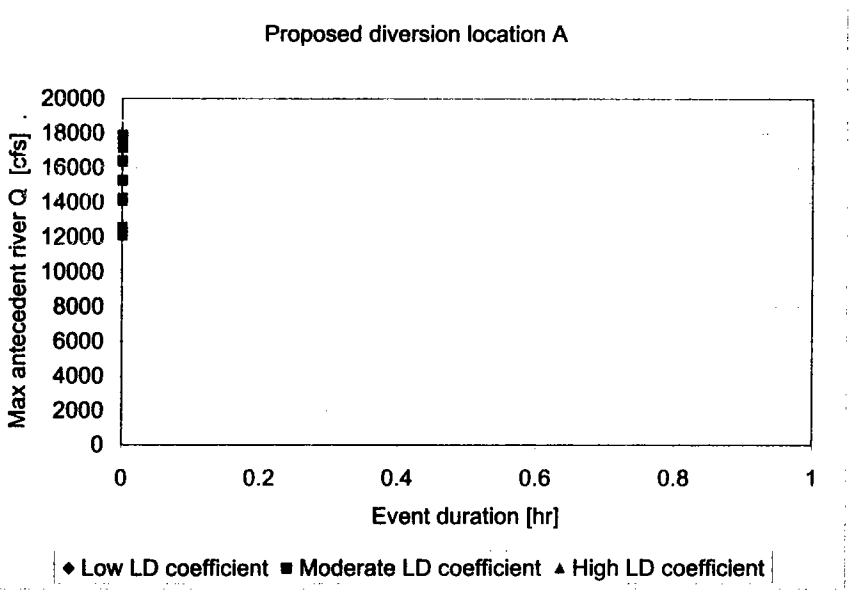
FLOW SCIENCE

Relationship between event duration (length of time effluent is present at >0.5%) and max antecedent river flow



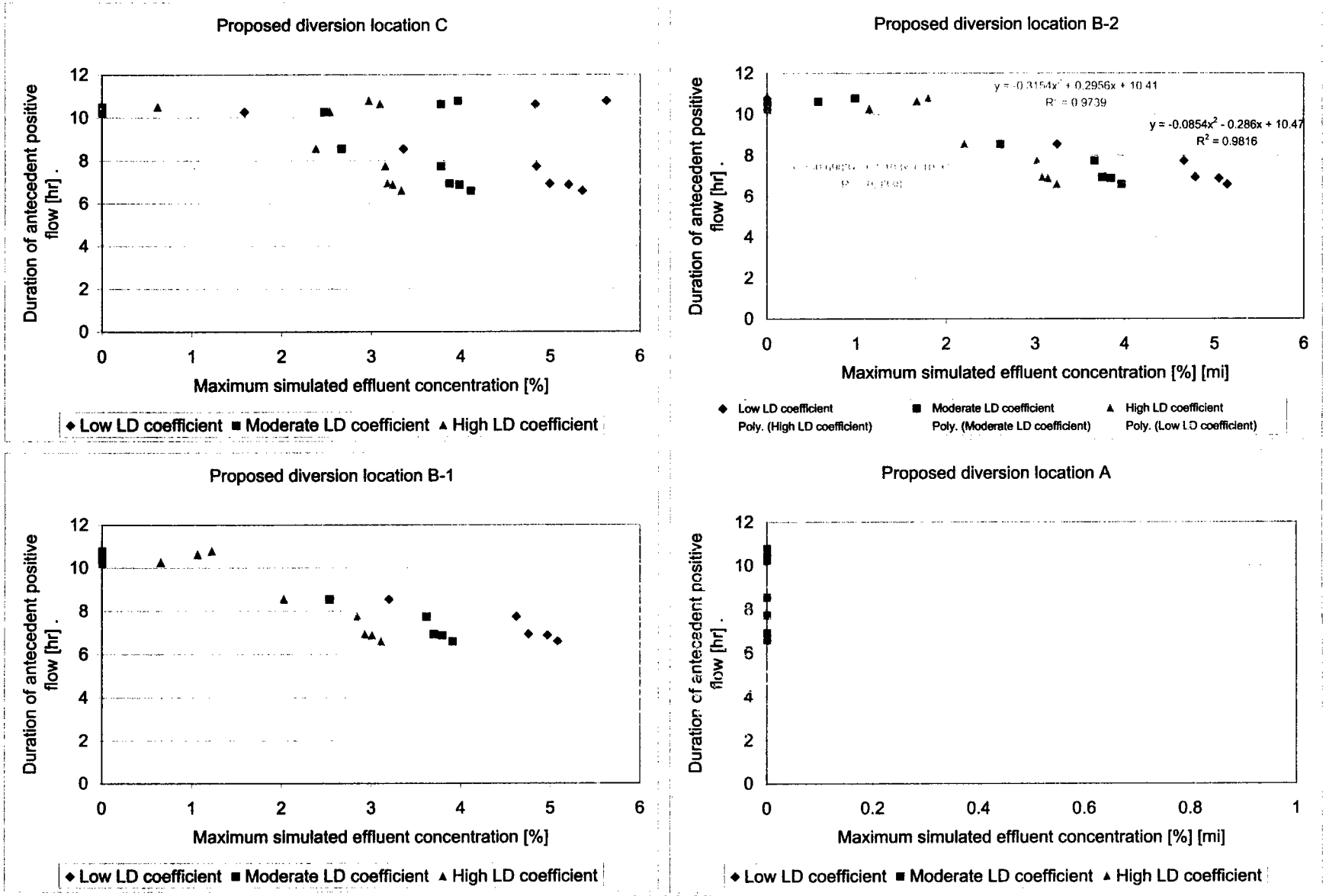






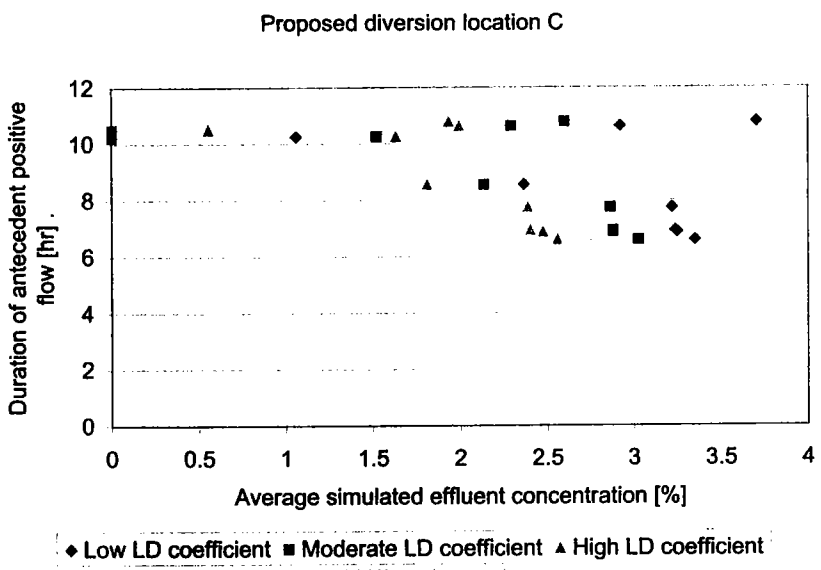
FLOW SCIENCE®

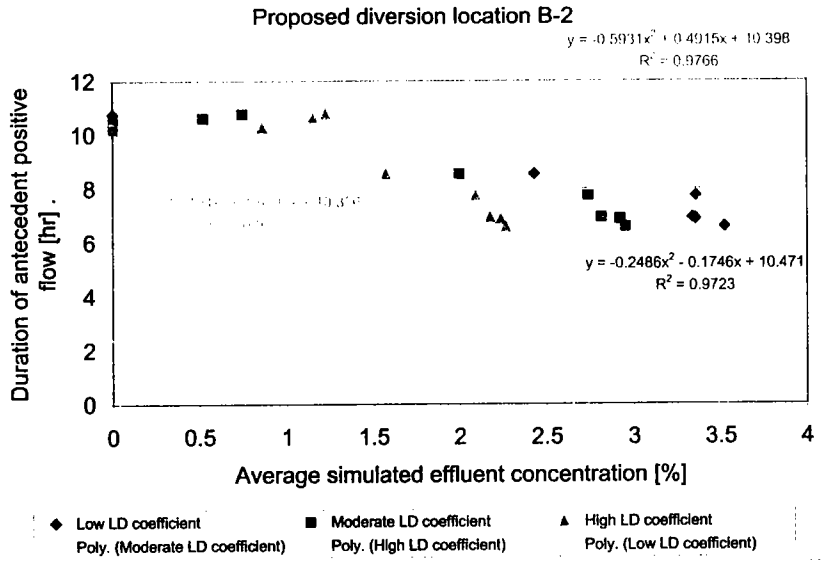
Relationship between duration of antecedent positive flow and maximum concentration at proposed location

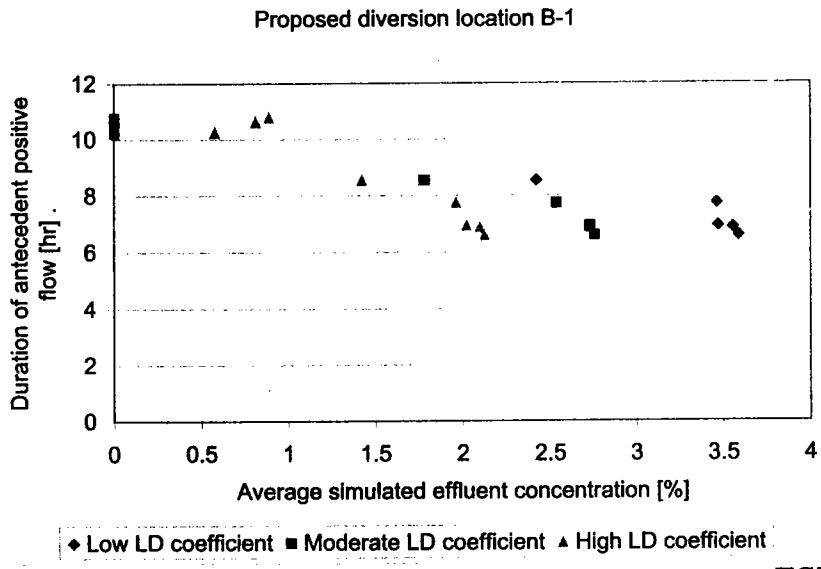


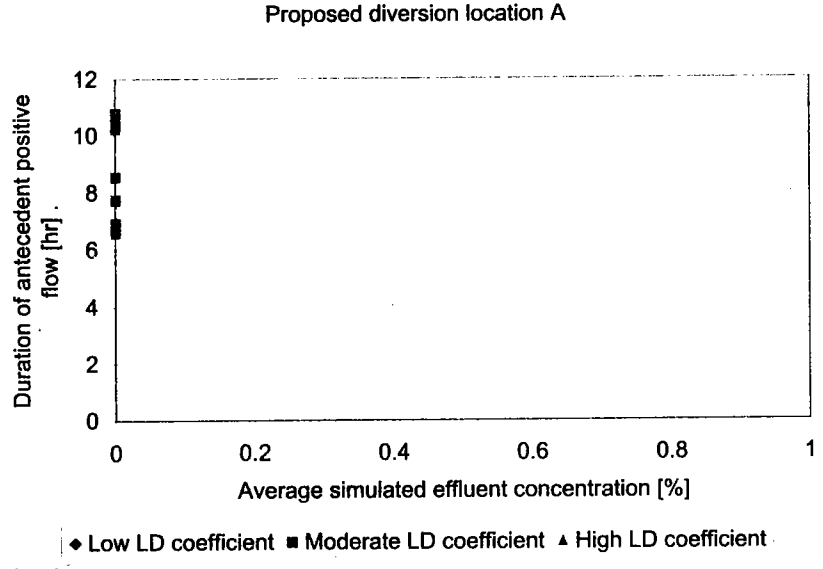
FLOW SCIENCE®

Relationship between duration of antecedent positive flow and average concentration at proposed location



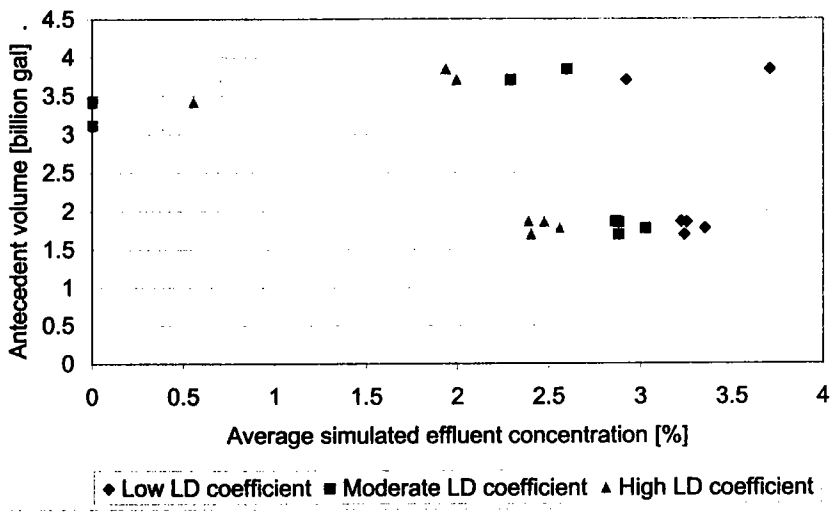




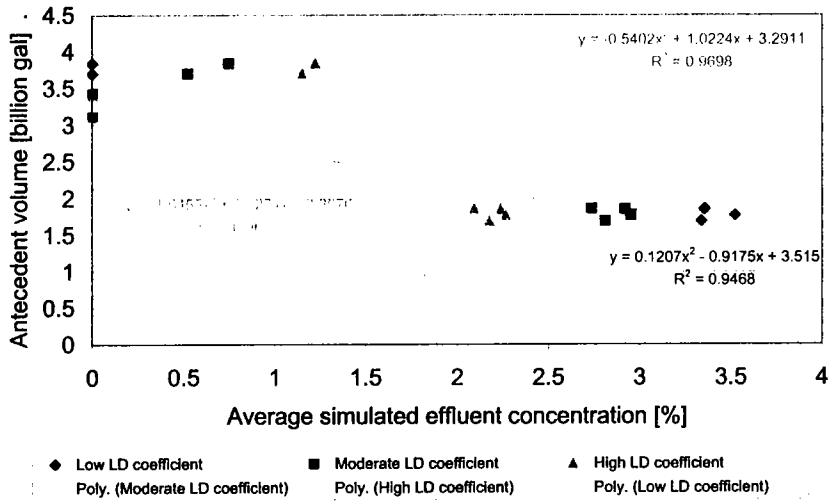


Relationship between duration of antecedent volume and average concentration at proposed location

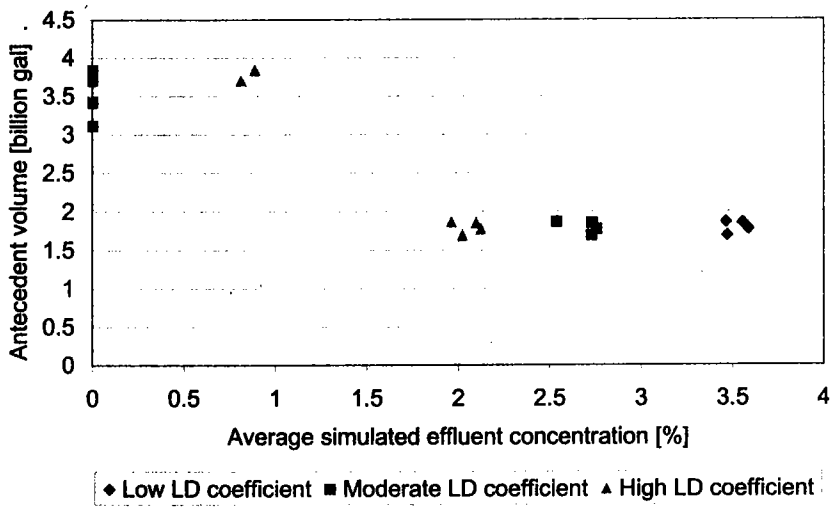
Proposed diversion location C



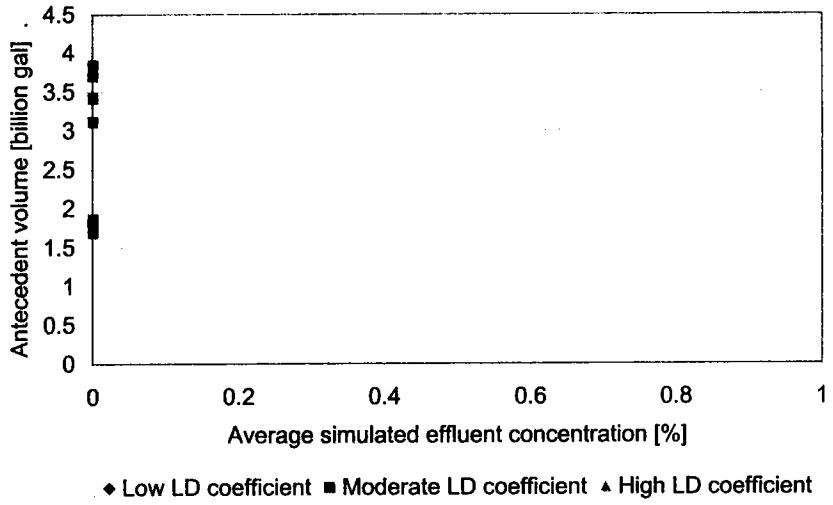
Proposed diversion location B-2



Proposed diversion location B-1



Proposed diversion location A



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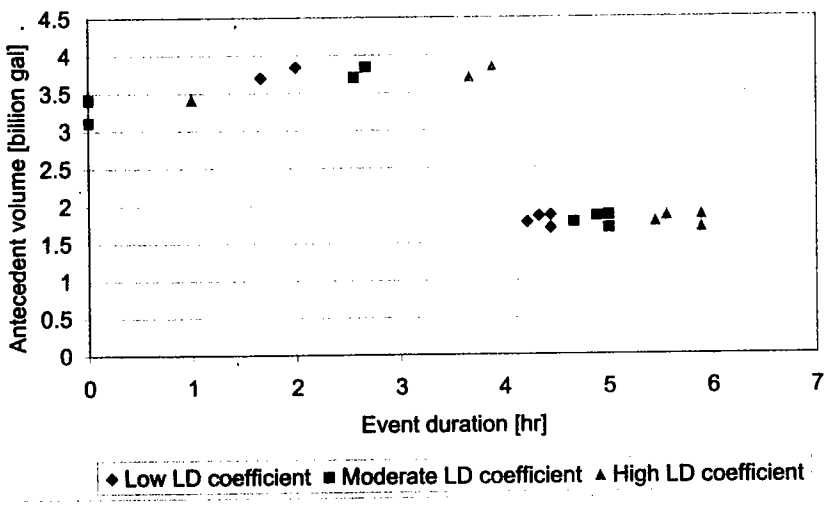
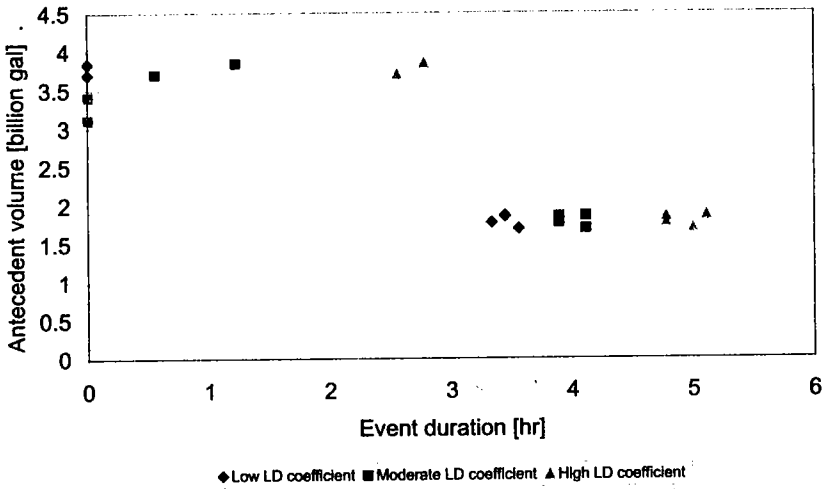
Relationship between antecedent volume and length of event (i.e., length of time effluent > 0.5%)

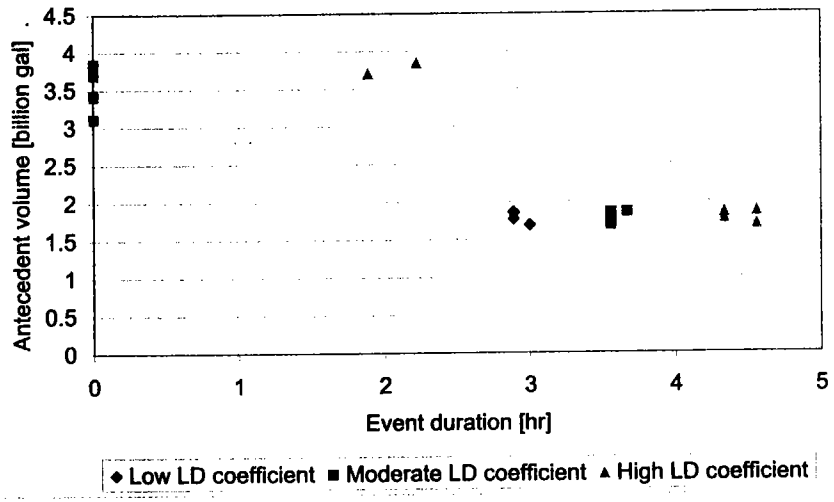
Proposed diversion location C



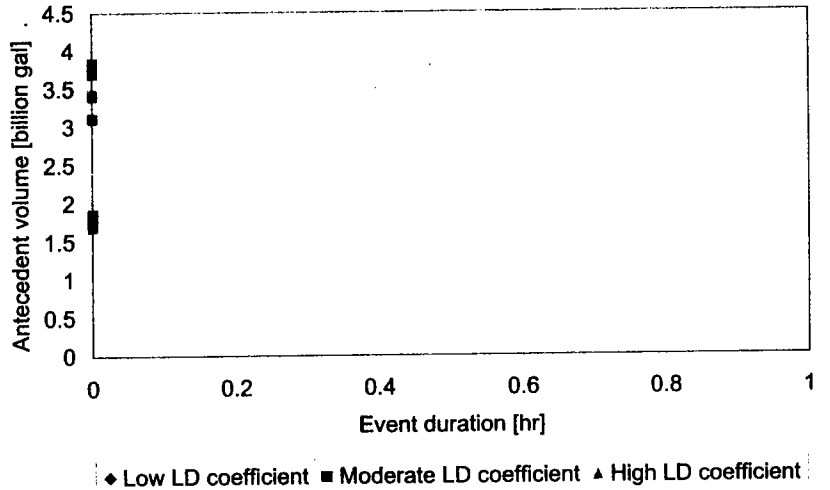
Proposed diversion location B-2



Proposed diversion location B-1



Proposed diversion location A



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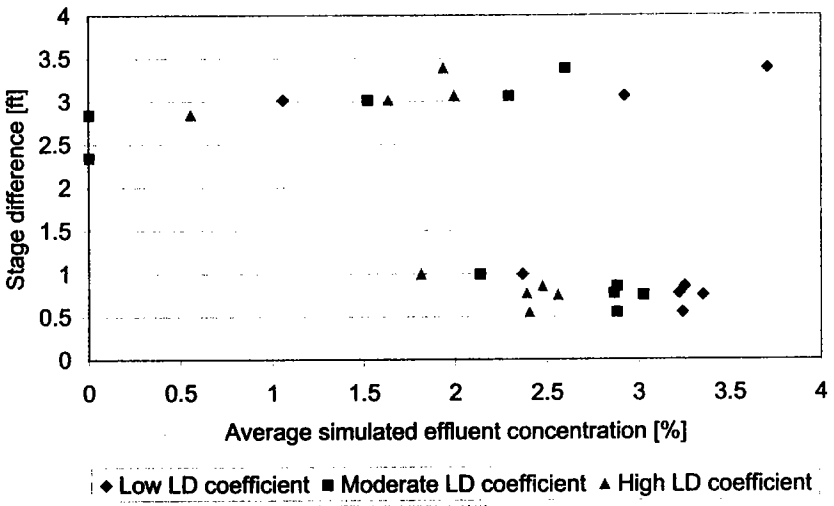
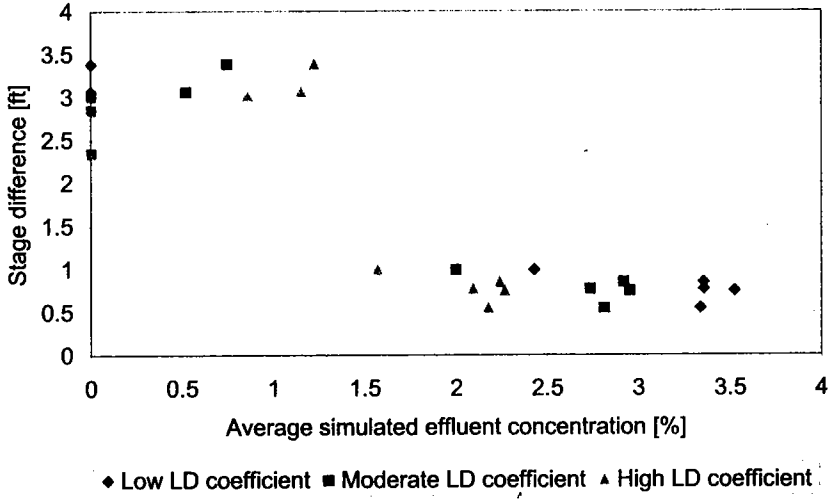
Relationship between stage difference and average concentration at proposed location

Stage difference is defined as the difference between the highest antecedent stage and the stage at the onset of the reverse flow event

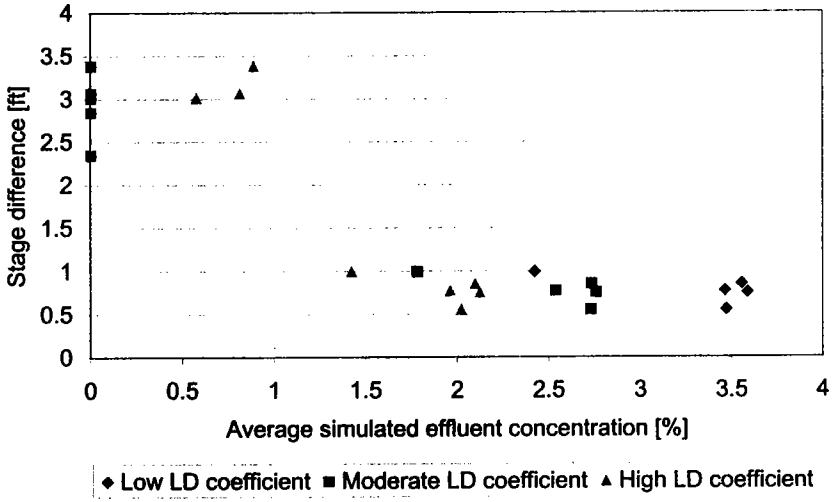
Proposed diversion location C



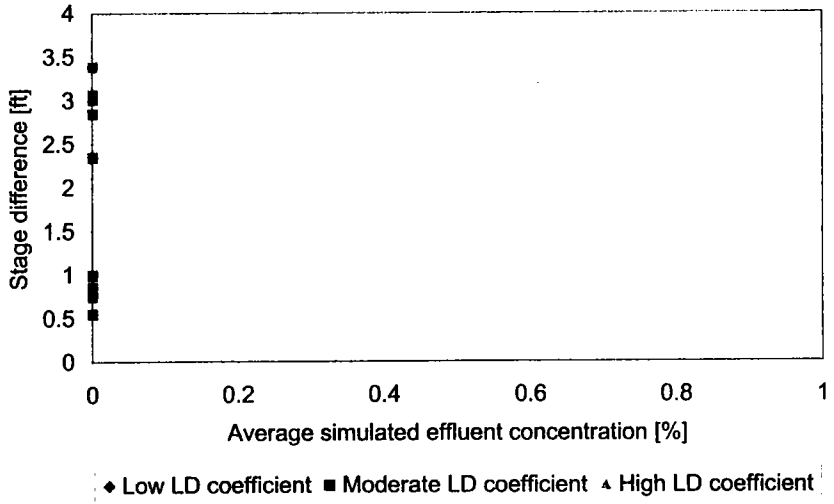
Proposed diversion location B-2



Proposed diversion location B-1



Proposed diversion location A



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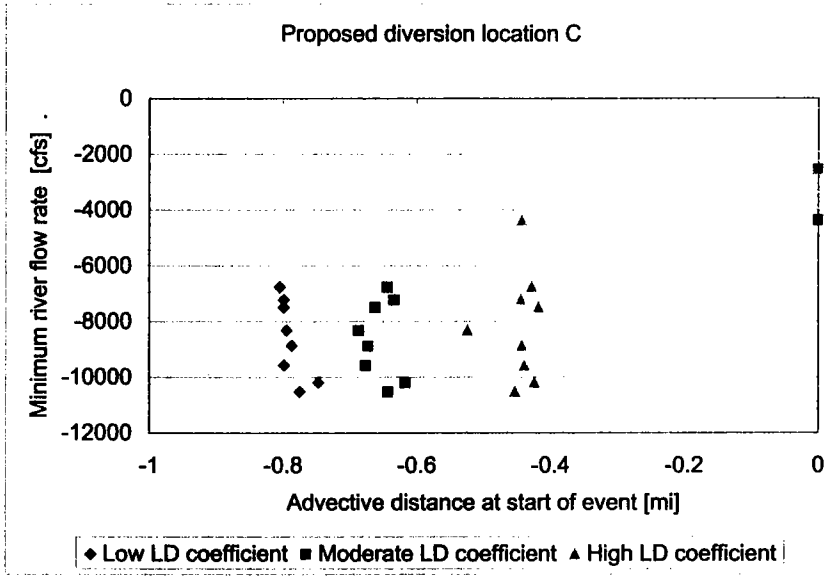
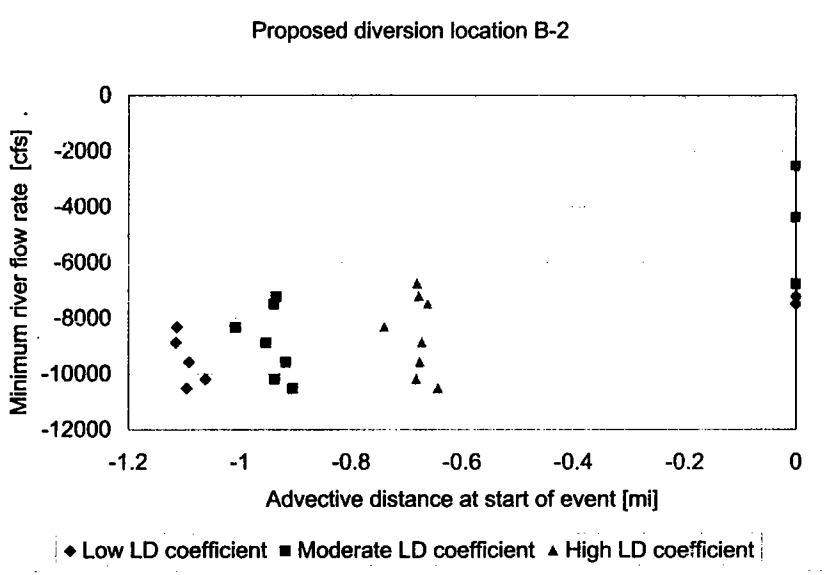
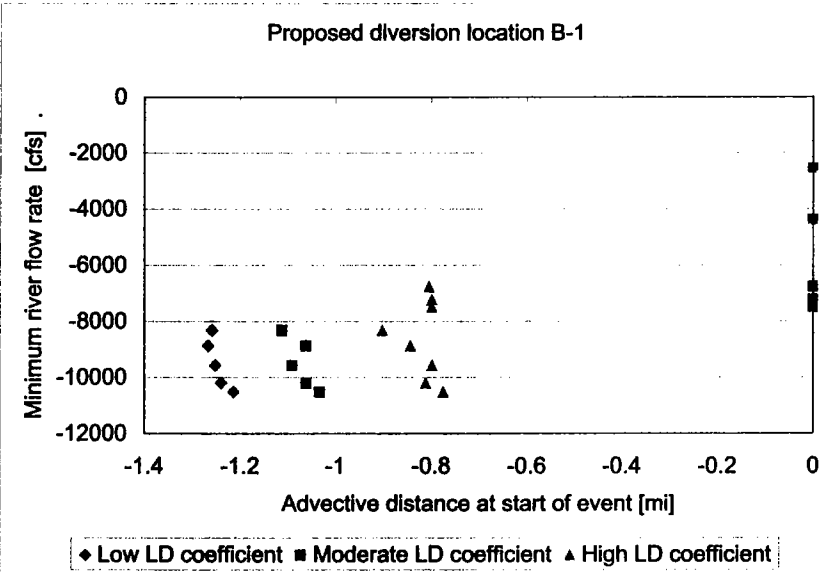
Appendix C

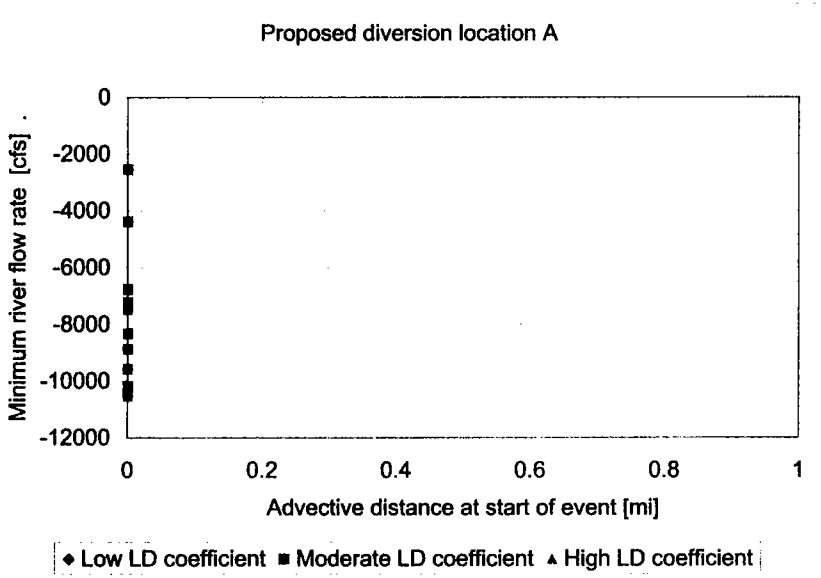
Relationships between "advective distance" and key event parameters

Relationship between magnitude of reverse flow event and advective distance at start of event









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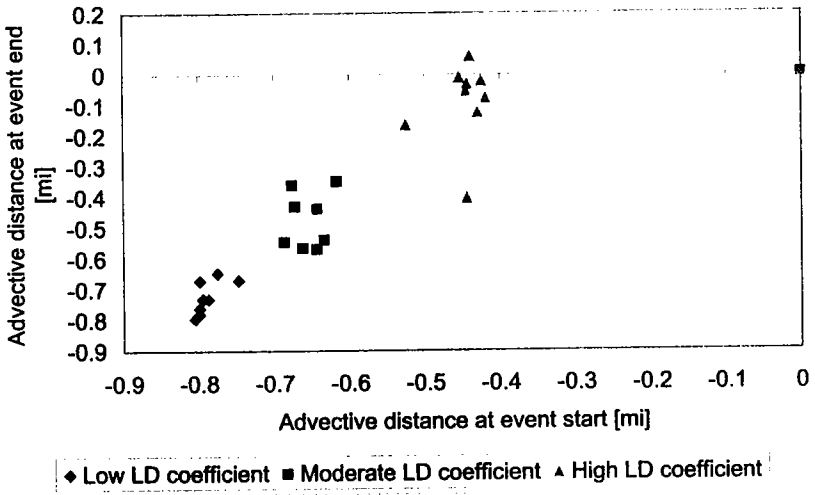
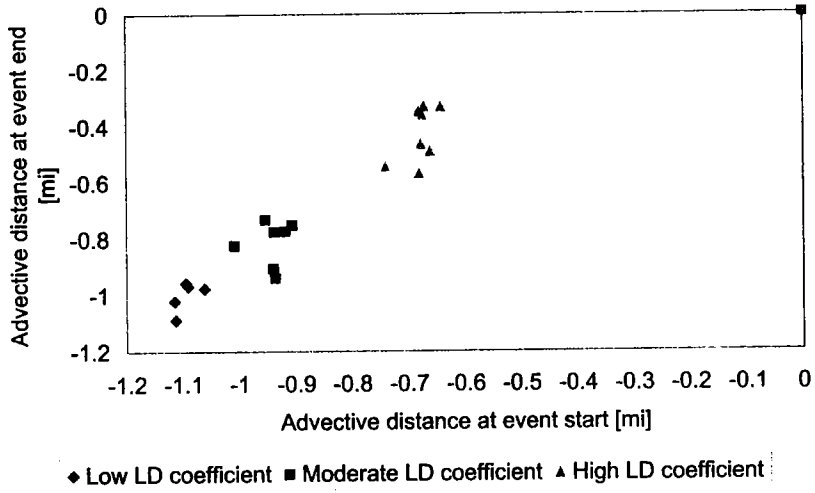
Relationship between advective distance at start and end of event at proposed location

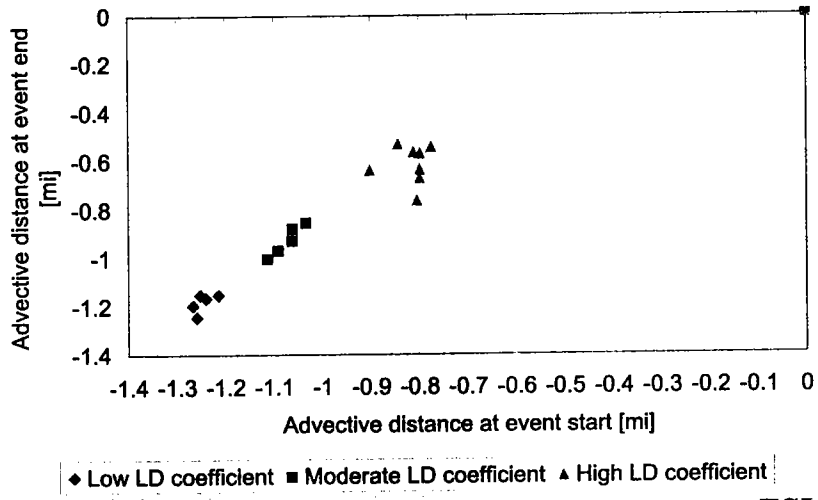
Proposed diversion location C



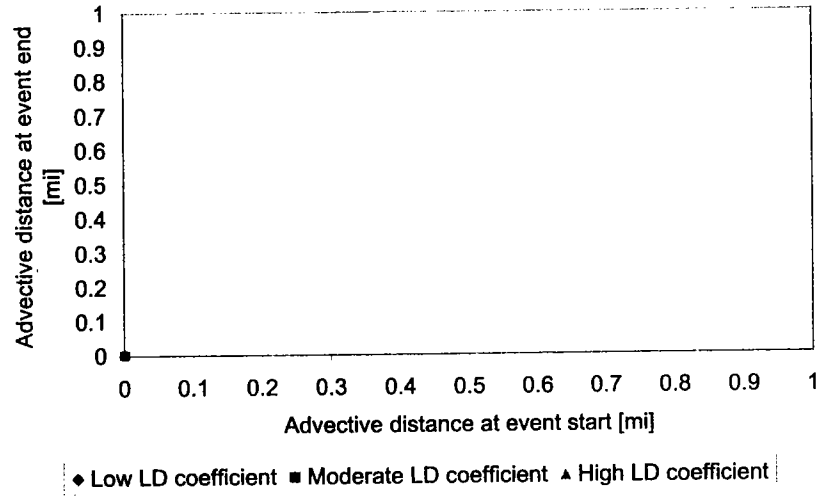
Proposed diversion location B-2



Proposed diversion location B-1



Proposed diversion location A



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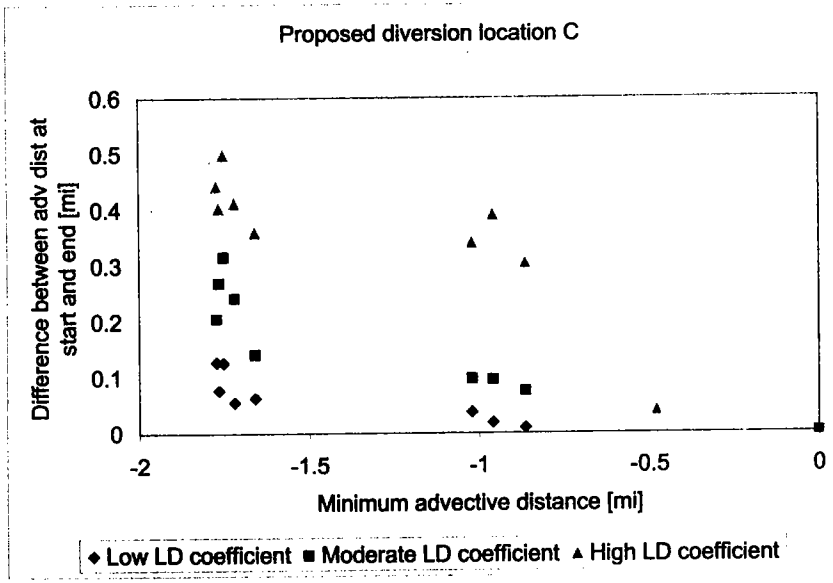
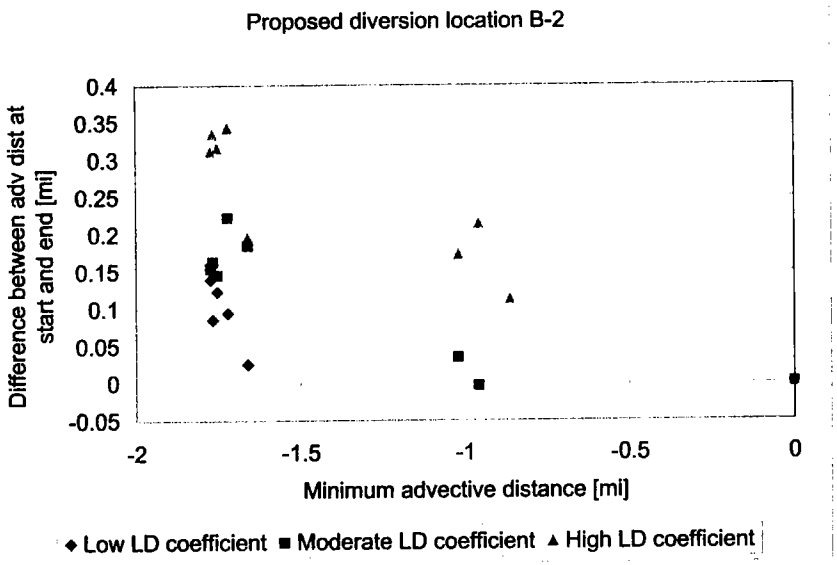
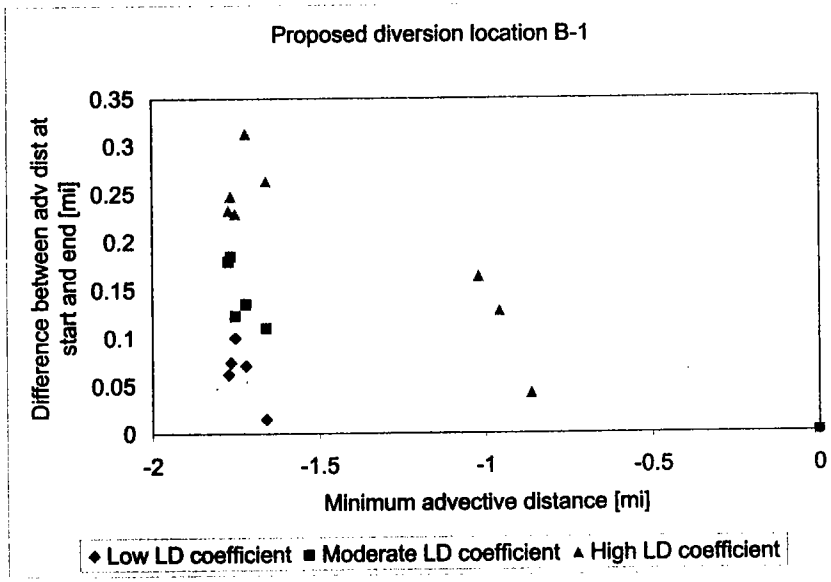
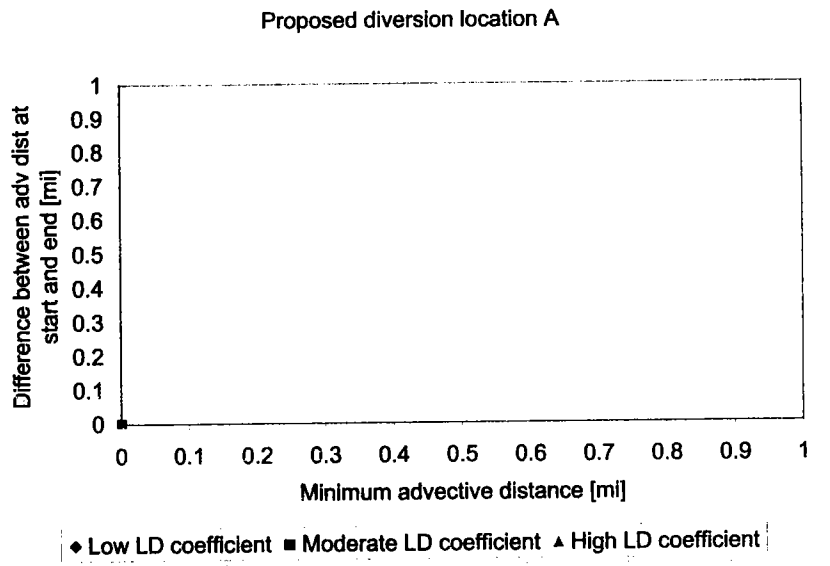
Relationship between advective distance at peak and at end of event at proposed location









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