East Bay Municipal Utility District

Sobrante Water Treatement Plant Reliability Improvements Project Initial Study

March 2022

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PANORAMA ENVIRONMENTAL, INC.

East Bay Municipal Utility District

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Initial Study

March 2022

Prepared for:
East Bay Municipal Utility District
375 11th Street
Oakland, CA 94607

Prepared by:
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Acronyms and Abbreviations

AWS	Alameda whipsnake
bmp	best management practice
CalGreen	California Green Building Standards Code
CCB	chlorine contact basin
CRHR	California Register of Historical Resources
CRLF	California red-legged frog
EBMUD	East Bay Municipal Utility District
ESA	Environmental Site Assessment
FSCC	Folsom South Canal Connection
GHG	greenhouse gas
MGD	million gallons per day
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
Project	Sobrante Water Treatment Plant Reliability Improvements Project
SFBW	spent filter backwash water
SFDFW	San Francisco dusky-footed woodrat
SLF	Sacred Lands Files
SOWTP	Sobrante Water Treatment Plant
UST	underground storage tank

1 Environmental Checklist

1.	**Project Title:**	Sobrante Water Treatment Plant Reliability Improvements Project
2.	**Lead agency name and address:**	East Bay Municipal Utility District Water Distribution Planning Division – MS 701 375 11th Street Oakland, CA 94607
3.	**Contact person and phone number:**	Stella Tan, Project Manager East Bay Municipal Utility District Water Distribution Planning Division – MS 701 375 11th Street Oakland, CA 94607 510-287-1208 sowtp.improvements@ebmud.com www.ebmud.com/sowtp
4.	**Project locations:**	The Sobrante Water Treatment Plant (SOWTP) Reliability Improvements Project (Project) includes improvements at the existing SOWTP and a new Central North Aqueduct pipeline located in the Cities of San Pablo and Richmond and in the unincorporated communities of El Sobrante and Rollingwood in California. The SOWTP is at 5500 Amend Road, El Sobrante and City of Richmond, in Contra Costa County. The SOWTP is bordered by Amend Road to the north and east, Valley View Road to the west, and San Pablo Dam Road to the south. The Central North Aqueduct pipeline is located in portions of La Honda Road, D Avila Way, San Pablo Dam Road, El Portal Drive, Rollingwood Drive, Road 20, and San Pablo Avenue.
5.	**Project sponsor's name and address:**	East Bay Municipal Utility District (EBMUD) Water Distribution Planning Division 375 11th Street, MS 701 Oakland, CA 94607
6.	**General plan designation:**	SOWTP: Open Space, Public/Semi-Public

7. **Zoning:** SOWTP: General Agriculture (A-2), Open Space, Single Family Residential (R-7), Multiple Family Residential (M-29)

8. **Description of Project:** The SOWTP, constructed in 1964, is the primary water treatment plant serving customers in El Sobrante, Richmond, Pinole, Hercules, Crockett, Rodeo, and San Pablo. The SOWTP primarily treats untreated water stored locally in San Pablo Reservoir. The Project would implement improvements to increase the SOWTP's capacity to meet future demand, treat additional Folsom South Canal Connection (FSCC) water during droughts, reduce disinfection by-products, and improve treatment processes. Figure 1 shows the Project vicinity and Figure 2 shows the proposed location and approximate footprint of the new facilities and ancillary improvements required throughout the SOWTP site.

   The Project would include construction of new facilities and would be divided into a Phase 1 and Phase 2 sequencing, to meet near-term and long-term demand, respectively as detailed below. The Phase 1 improvements would increase the water treatment plant capacity to 60 million gallons per day (MGD), and the Phase 2 improvements would increase capacity further to 80 MGD (see Figure 2 and Figure 3).

   Phase 1 would include the following improvements:

   - A raw water control valve and flow meter
   - Two spent filter backwash water (SFBW) equalization basins
   - A filter-to-waste (FTW) equalization basin
   - Two gravity thickeners
   - Two SFBW flocculation and sedimentation basins
   - Pipelines for the SFBW reclaim and solids handling facilities
   - A chlorine contact basin (CCB)
   - Inlet/outlet pipelines for a clearwell and hydraulic weir
   - A polymer and power building
   - Fifth-stage flocculation for the existing two flocculation basins
   - Storm drain pipelines and a bioretention pond
   - A maintenance building that incorporates existing maintenance buildings/shops
   - An entrance gate, security fencing, and lighting
   - An access and maintenance road for the new facilities

   Phase 2 would include the following improvements:

   - A flocculation basin
   - A sedimentation basin with tube settlers
   - Two dual-media filters and associated pipes, and an operation gallery
   - Two ozone contact basins
   - An ozone destruct room
   - A chemical building
   - The Central North Aqueduct pipeline (outside of SOWTP property), which includes:

- 12,800 feet of 54-inch-diameter pipeline in La Honda Road, D Avila Way, and San Pablo Dam Road in the unincorporated community of El Sobrante and city of Richmond
- 2,400 feet of 72-inch-diameter pipeline in San Pablo Dam Road and El Portal Drive (city of Richmond, city of San Pablo, and the unincorporated communities of Rollingwood and El Sobrante)
- 6,500 feet of 54-inch-diameter pipeline in Rollingwood Drive, Road 20, and San Pablo Avenue (city of San Pablo and the unincorporated community of Rollingwood)

The Project also would include demolition of the existing wash water settling basins, reclaim pumping plant, solids pumping plant, solids detention basins, and related vaults, mechanical, and electrical equipment, after completion of Phase 1.

9. **Surrounding land uses and setting:** The SOWTP is surrounded primarily by residential areas and the Richmond Fire Department Station #63, directly west. The SOWTP is bounded by Amend Road to the north and Valley View Road to the west. The Central North Aqueduct pipeline alignment follows La Honda Road, D Avila Way, San Pablo Dam Road, El Portal Drive, Rollingwood Drive, Road 20, and San Pablo Avenue.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Potential permits and agencies approvals would include, but may not be limited to:

- U.S. Army Corps of Engineers: Clean Water Act Section 404 permit for fill to waters of the U.S.
- Completion of federal consultation requirements, including consultation with the U.S. Fish and Wildlife Service and State Historic Preservation Office
- California Department of Fish and Wildlife: Streambed Alteration Agreement for impacts to riparian areas
- State Water Resources Control Board: Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges associated with Construction and Land Disturbance Activities (Construction General Permit)
- Regional Water Quality Control Board: Clean Water Act Section 401 Water Quality Certification or Waiver, and possible coverage of dewatering discharges under General Low-Threat Discharge Permit;
- Bay Area Air Quality Management District: Authority to Construct and Permit to Operate an ozone system
- Division of Drinking Water: Domestic Water Supply permit amendment for new treatment processes and increased capacity
- Contra Costa County: Encroachment Permit

- City of Richmond: Encroachment Permit
- City of San Pablo: Encroachment Permit

11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

To date no Native American tribes have requested consultation with EBMUD.

Figure 1 Project Location

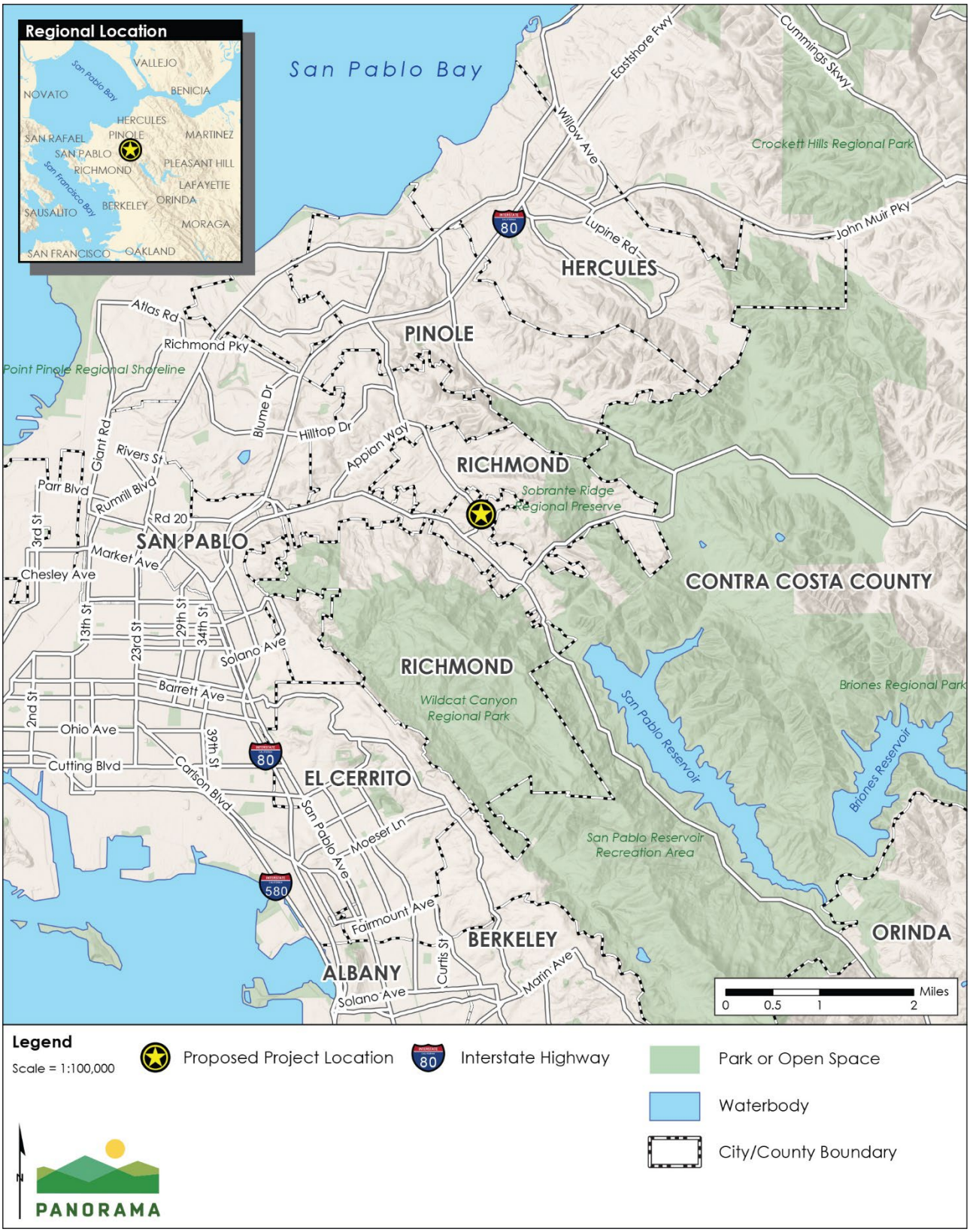


Figure 2 Phase 1 and Phase 2 Project Elements

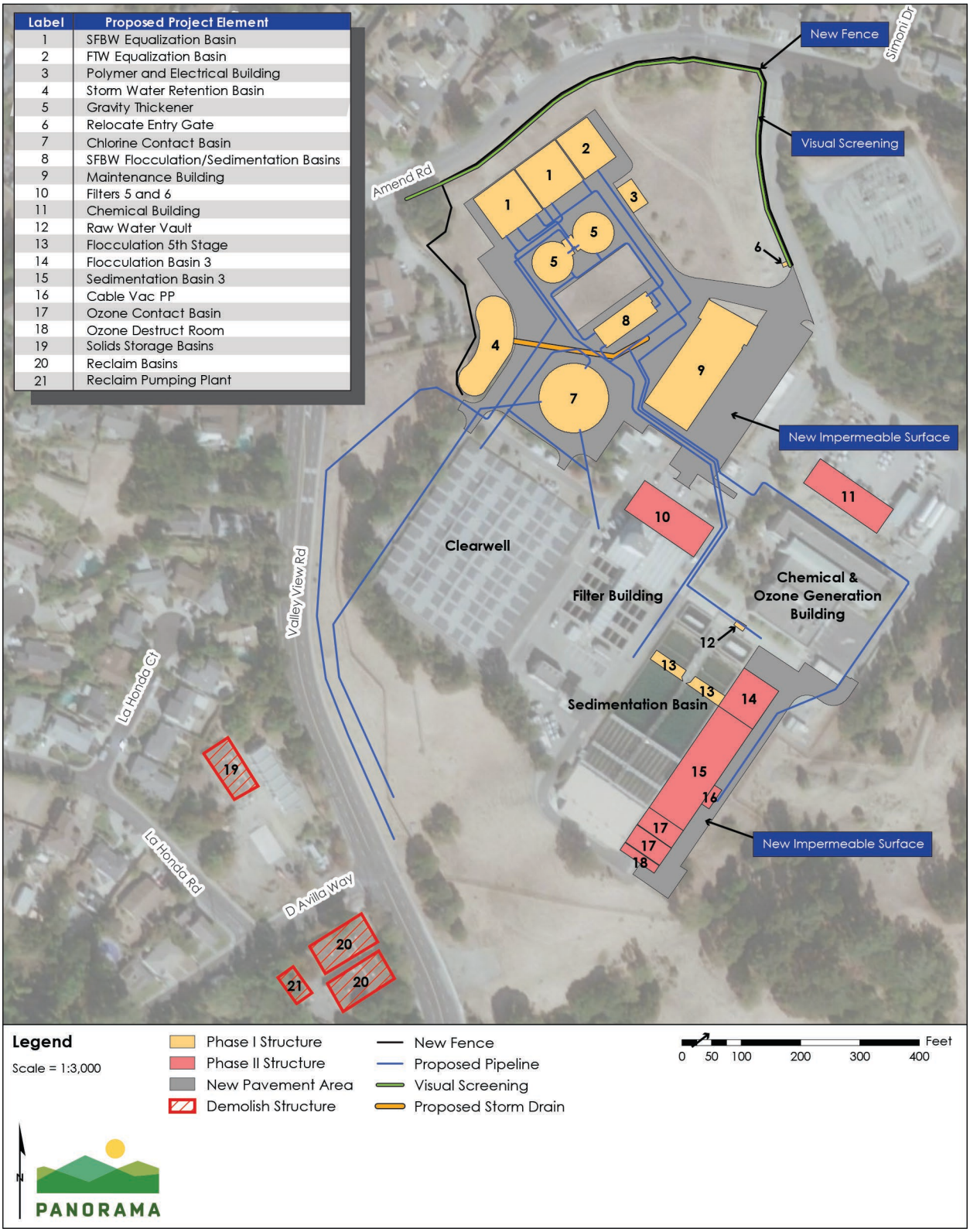
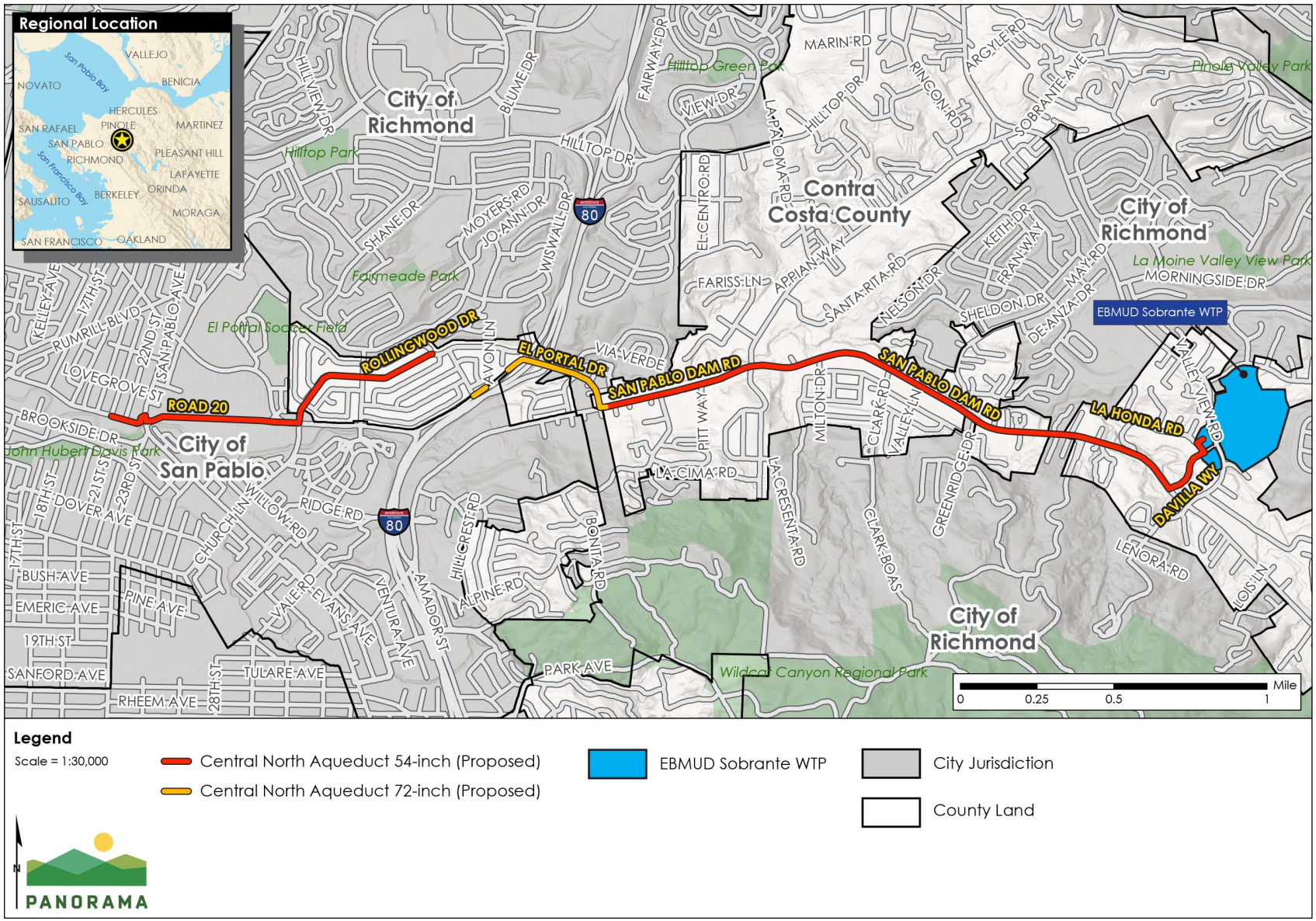


Figure 3 Central North Aqueduct Pipeline Location



Environmental Factors Potentially Affected

The following checked environmental factors potentially would be affected by the Project, involving at least one potentially significant impact, as shown in the CEQA checklist on the following pages.

☒ Aesthetics	☐ Agriculture/Forestry	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Energy
☒ Geology / Soils	☒ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☒ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☒ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

☐ The proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ Although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ The proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ The proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

1.1 Aesthetics

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway or designated scenic roadway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Discussion

a) **Less than Significant Impact.** Contra Costa County has many scenic vistas in the Project vicinity, but the two main scenic features are: (1) scenic ridges, hillsides, and rock outcroppings; and (2) the San Francisco Bay/Delta estuary system (Contra Costa County, 2010a). The SOWTP is not visible from the San Francisco Bay/Delta estuary system. The proposed SOWTP facilities could be visible from surrounding ridgelines. The proposed SOWTP facilities would be integrated into the existing SOWTP and would be similar in nature to the existing SOWTP. Therefore, changes of views from the surrounding ridgelines due to the new SOWTP facilities would not have a substantial adverse effect. Because the changes to scenic vistas would not be substantially adverse, the impact would be less than significant.

b) **Less than Significant Impact.** No state scenic highways are in or near the Project area (Caltrans, 2018). Contra Costa County has designated San Pablo Dam Road as a scenic route (Contra Costa County, 2010b). The SOWTP is not visible from San Pablo Dam Road, but the Central North Aqueduct pipeline alignment would be within San Pablo Dam Road, from D Avilla Way to El Portal Drive. The pipeline would be constructed underground within the public right-of-way and not visible during Project operation, but small air valves would be above grade at the high points along the alignment which would be minimally visible. Because the impacts from construction of the Central North Aqueduct pipeline would be temporary and

the buried pipeline would not affect views from San Pablo Dam Road, the impact on scenic roads would be less than significant.

c) **Potentially Significant Impact.** The proposed SOWTP facilities and improvements would be integrated into the existing SOWTP. New facilities that are proposed to be constructed would be visually integrated into the existing SOWTP, which is already a visual element of the site and surrounding views, so the new facilities would maintain the existing visual character of the SOWTP. The nature, scale, and locations of the proposed facilities could affect the visual quality and character of the site due to closer proximity to the residential areas. The Central North Aqueduct pipeline would not be visible during operation, because the pipeline would be buried and would not affect visual quality. Because the impact from changes in the existing visual character or quality of public views of the SOWTP would be potentially significant, this impact will be described further in the EIR.

d) **Potentially Significant Impact.** Project construction may require nighttime lighting in the winter when construction may extend after sunset. Furthermore, new external lighting would be required for the proposed facilities, to allow safe site access and provide secure viewing of the SOWTP at all times. The new lighting would be focused downward to minimize light spillage on the surrounding neighborhood while still providing sufficient light for operations staff and security purposes. The proposed maintenance building could be visible to the surrounding residential areas but the design would ensure that no building materials become a substantial source of glare. The water surface at the equalization basins would be the same level of glare generated from a natural water body and would not be a nuisance to viewers in neighboring areas. Because the impact from sources of lighting during Project construction and operation would be potentially significant, this will be described further in the EIR.

1.2 Agriculture and Forestry

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a -b) **No Impact.** The existing SOWTP site's land use is designated as Public/Semi-Public (PS) in the Contra Costa County General Plan and is zoned for General Agriculture (Contra Costa County, 2020). This zoning designation reflects its previous use for agricultural production, prior to being developed for the SOWTP in the 1960s. The California Important Farmland Finder indicates that the Project site is on Urban and Built-Up Land and does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation, 2018). Furthermore, the Central North Aqueduct pipeline would be entirely within public roads. Because the Project would not convert Farmland to nonagricultural use,

would not conflict with existing zoning for agricultural use, and would not affect any lands under Williamson Act contract, no impact would occur.

c -d) **No Impact.** The Project area does not contain forest land. Because no loss of forest land or conflicts with zoning of forest land would be caused by the Project, no impact would occur.

e) **No Impact.** No agricultural or forest lands are in the Project area. The SOWTP provides potable water to existing urban areas. Because the Project would not convert farmland or forest land to other uses, no impact would occur.

1.3 Air Quality

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

Discussion

a -c) **Potentially Significant Impact**. Project construction would result in emissions of criteria pollutants during heavy equipment operation and use. The increased water treatment capacity and improved water treatment processes potentially could result in new operational emissions. Because the impact from construction and operational emissions could be potentially significant, the impacts will be described further in the EIR.

d) **Potentially Significant Impact**. Project construction would require use of diesel equipment that would generate odors from diesel exhaust emissions. Project operation would increase water treatment capacity and improve water treatment processes, neither of which would be a source of offensive odors. Because the impact from diesel equipment generating odors during construction would be potentially significant, the impact will be described further in the EIR.

1.4 Biological Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

a) **Potentially Significant Impact.** The SOWTP site contains non-native grassland, coast live oak woodland, seasonal wetland, willow riparian, and developed/ruderal vegetation. Seasonal wetlands are along the northern and southern edge of the site. No special-status plants were detected during focused floristic surveys of the site (Sequoia, 2021a).

San Pablo Creek flows to the south from the reclaim basin auxiliary facility at the SOWTP and provides low-quality habitat for western pond turtle *(Emys marmorata)* and low- to mid-quality habitat for California red-legged frog (CRLF) (*Rana draytonii*) (Sequoia, 2021b). Mid-quality

upland CRLF habitat is north and east of San Pablo Creek, where CRLF could overwinter; however, no burrow complexes were observed in the mid-quality upland CRLF habitat north and east of San Pablo Creek (Sequoia, 2021b). The upland habitat are grassland and discontinuous oak woodland, which potentially could provide dispersal habitat for Alameda whipsnake (AWS) *(Masticophis lateralis euryxanthus)*. However, the Project area is not continuous with known populations of AWS, making dispersal unlikely to occur at the Project site. There is habitat for San Francisco dusky-footed woodrat (SFDFW) (*Neotoma fuscipes annectens*) throughout the Project area; however, no SFDFW nests or middens were observed at the Project site (Sequoia, 2021b). Good quality nesting habitat for passerines and some waterfowl are present throughout the Project area, and tall buildings and scattered eucalyptus trees around open areas also could provide nest sites for raptors. In addition, a small drainage in the southeast corner of the Project area could provide dependable access to water that may attract some species.

Based on the database and literature review conducted for the Project, special-status wildlife species have been previously documented in the vicinity of the Project site. The Project could have potentially significant impacts on special-status species and the impact will be described further in the EIR.

b) **Potentially Significant Impact**. The Project would require trimming and potentially removal of oak trees adjacent to a seasonal drainage and San Pablo Creek. The impact on riparian areas is potentially significant and will be described further in the EIR.

c) **Potentially Significant Impact**. The Project would fill a portion of the seasonal wetlands in the northern portion of the Project site. The impact on wetlands is potentially significant and will be described further in the EIR.

d) **No Impact**. The Project is an urbanized area that has already been developed. San Pablo Creek is the only true wildlife corridor in proximity to the Project site and will be unaffected by Project construction and operation. The Project will have no impact on the movement of native wildlife.

e) **Potentially Significant Impact.** According to the preliminary arborist conditions report, Project construction would remove some trees. The trees to be removed are considered to be protected under City of Richmond and Contra Costa County policies and ordinances (Merrill Morris Partners, 2021). While EBMUD is exempt from local ordinances, including tree removal permit requirements, the tree removal activities could result in an impact on the environment that would conflict with local ordinances for the protection of biological resources. Because the potential conflict with local policies and ordinances protecting biological resources would be potentially significant, this impact will be described further in the EIR.

f) **No Impact**. Because the Project area is not within the boundaries of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation agreement, no impact would occur.

1.5 Cultural Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

Discussion

a) **No Impact.** An evaluation of historic-age buildings and structures in the Project area was conducted in August 2021 (Paleowest, 2021). None of the individual buildings or structures or the SOWTP facility as a whole, is a historical resource or meets the criteria for listing in the California Register of Historical Resources (CRHR). Because none of the buildings or structures are eligible for listing on the CRHR, and because the Central North Aqueduct pipeline would be buried within roadways and would not affect any potentially significant historic buildings or structures, no impact would occur.

b) **Potentially Significant Impact.** The preliminary cultural resources analyses determined that the Project area does not contain any previously recorded Native American sites or historic-period archaeological sites (Paleowest, 2021). Desktop geoarchaeological analyses of the mapped sediments at the SOWTP and other factors influencing buried site sensitivity, such as proximity to streams and known archaeological sites, suggest that the majority of the Project site has low sensitivity for containing unknown buried archaeological sites. However, the southwest area of the Project site near the intersection of D'Avilla Way and Valley View Road is considered to have moderate to high sensitivity for buried archaeological deposits. Portions of the Central North Aqueduct pipeline may also include areas that are sensitive to buried resources. Because the impact of the proposed ground-disturbing activities in the southwest portion of the site on unknown buried archaeological resources would be potentially significant, the impact will be described further in the EIR.

c) **Potentially Significant Impact.** No human remains have been discovered at the SOWTP. The Central North Aqueduct pipeline construction would require trenching and subsurface excavation that could potentially encounter human remains. Although the Project site and pipeline alignment are unlikely to contain human remains, the lack of surface and record indications does not preclude the possibility that human remains could be present and inadvertently encountered and damaged during Project construction. The presence of a cultural

site in the Sacred Lands Files (SLF) also suggests an increased potential to encounter human remains at the Project site (Paleowest, 2021). Because the Project construction has the potential to disturb human remains the impact is considered potentially significant, it will be described further in the EIR.

1.6 Energy

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ENERGY. Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐

Discussion

a-b) **Potentially Significant Impact.** The Project would require energy for construction and for operation of the new facilities. Because the energy impact would be potentially significant, this will be described further in the EIR.

1.7 Geology and Soils

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐
ii) Strong seismic ground shaking?	☒	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv) Landslides?	☒	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

Discussion

a i) **Potentially Significant Impact**. The SOWTP is not within an Alquist-Priolo earthquake fault zone, but a portion of the Central North Aqueduct pipeline would traverse the Hayward fault zone, which is in the Alquist-Priolo earthquake fault zone (California Department of Conservation, 2021a). Because the impact associated with ruptures because of earthquake faults

in the Alquist-Priolo earthquake fault zone would be potentially significant, the impact will be described further in the EIR.

a ii) **Potentially Significant Impact**. Major earthquakes in the San Francisco Bay Area have been recorded since the early 1800s along various faults of the San Andreas fault system. The Project site would be subject to the potential adverse effects of severe shaking from nearby faults, dominated by the Hayward fault. Because the impact associated with strong seismic ground shaking would be potentially significant, the impact will be described further in the EIR.

a iii-iv) **Potentially Significant Impact**. Landslides and other ground failures occur during earthquakes, triggered by the strain induced in soil and rock by the groundshaking vibrations, and during non-earthquake conditions, most frequently during the rainy season. Liquefaction is a specialized form of ground failure caused by earthquake ground motion. Liquefaction is a "quicksand" condition, occurring in water-saturated, unconsolidated, relatively clay-free sands and silts, caused by hydraulic pressure (from ground motion) forcing apart soil particles and forcing them into quicksand-like liquid suspension. In the process, normally firm but wet ground materials take on the characteristics of liquids (Contra Costa County, 2010c). According to the preliminary geotechnical study of the SOWTP site, the majority of the proposed Project facilities would not be subject to potential slope movement hazards, with the possible exception in an area of previously mapped sliding (presumably presently stable) below the southwest corner of the existing clearwell (Terra Engineers, Inc., 2021). Because the impact associated with seismic-related ground failure, including liquefaction, would be potentially significant, the impact will be described further in the EIR.

b) **Potentially Significant Impact**. Soils in the Project site is within the Upland Soil Associations category. The Upland Soil Associations soils generally are highly expansive and corrosive, with moderate to slow permeability (Contra Costa County, 2010d). Project construction and operations potentially could result in soil erosion and loss of topsoil by grading approximately 5 acres of ground and increasing impervious surfaces at the SOWTP site. Standard industry methods, such as sediment and erosion control best management practices (BMPs), would be implemented to prevent surface runoff and erosion where applicable. Because the impact associated with soil erosion and topsoil loss would be potentially significant, the impact will be described further in the EIR.

c) **Potentially Significant Impact**. Aside from earthquake rupture and the direct effects of ground shaking (see discussion a iii-iv), one of Contra Costa County's major geological hazards is from unstable hill slopes. Slopes may suffer landslides, slumping, soil slips, and rockslides. Landslide-susceptible areas are characterized by steep slopes and downslope creep of surface materials. As previously mentioned, the majority of the proposed new facilities would not be subject to potential slope movement hazards, with the possible exception of the area on the south-facing slope above and along Valley View Road, which could be subject to shallow slope creep (debris flow) (Terra Engineers, Inc., 2021). Because the impact associated with unstable

geological or soil units would be potentially significant, the impact will be described further in the EIR.

d) **Potentially Significant Impact**. As previously mentioned, the Project site soil is within the Upland Soil Associations category, which generally is highly expansive (Contra Costa County, 2010d). The "shrink-swell" capacity of expansive soils can cause damage to foundations and pipelines. Because the impact on soil that has expansive properties would be potentially significant, the impact will be described further in the EIR.

e) **No Impact**. Because no installation of septic tanks or alternative wastewater disposal systems would be part of the Project, no impact would occur.

f) **Potentially Significant Impact.** Paleontological resources can be found within the geographic extent of sedimentary rocks formations at the SOWTP. The Project would require excavation into geologic units that could contain paleontological resources. Because the impact on paleontological resources would be potentially significant, the impact will be described further in the EIR.

1.8 Greenhouse Gas Emissions

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Discussion

a-b) **Potentially Significant Impact**. The Project would generate greenhouse gas (GHG) emissions during construction and with potential increases in operational energy use associated with the additional treatment processes. Because the impact from the increase in GHG emissions would be potentially significant, the impact will be described further in the EIR.

1.9 Hazards and Hazardous Materials

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐

Discussion

a) **Potentially Significant Impact.** The Project would use a larger quantity of chemicals than currently used at SOWTP to treat the increased water treatment capacity. Phase 2 of the Project includes a new chemical building to increase the available chemical storage for the 80 MGD capacity of the SOWTP. The types of chemicals used at the SOWTP will remain the same. Demolition of some existing SOWTP facilities would entail removal of hazardous building materials, such as asbestos-containing materials (e.g., pipeline gaskets) at the Reclaim Basin Pumping Plant (Acumen Industrial Hygiene Inc., 2021). A Phase I Environmental Site Assessment (ESA) of the SOWTP was conducted in August 2021 which discovered the possible

presence of an undocumented fuel release from a 1,000-gallon diesel underground storage tank (UST) that potentially could affect soil, soil vapor, and/or groundwater quality (Northgate Environmental Management, Inc., 2021). The ESA also noted the possibility of residual agricultural chemicals (primarily Dichlorodiphenyltrichloroethane [DDT]-related compounds and metals) that could be present in shallow soil at the Project site because of historical orchard and possibly cattle grazing operations at the site. Because the impact of the demolition and disposal of hazardous materials and wastes would be potentially significant, the impact will be described further in the EIR.

b) **Potentially Significant Impact.** Project construction and operations would require the use of diesel fuel and minor amounts of lubricants, paints, solvents, and glues. Because the impact associated with release of hazardous materials to the environment would be potentially significant, the impact will be described further in the EIR.

c) **Potentially Significant Impact.** The SOWTP is not within 0.25 mile of an existing or proposed school. However, the Central North Aqueduct pipeline alignment would be within 0.25 mile of La Cheim School; Sheldon Elementary School; Rancho School; Highland Elementary; Vista High School; Helms Middle School; Contra Costa College; and Broadway School (U.S. EPA, 2021). Because the impact of hazardous emissions or of handling hazardous materials within 0.25 mile of these schools would be potentially significant, the impact will be described further in the EIR.

d) **Potentially Significant Impact**. The Project site is listed in the GeoTracker website (SWRCB, 2021) as having a UST, permitted by the Contra Costa County Health Services Department, identified as EBMUD Sobrante Water Treatment Plant (Facility ID 07-000-734538). The Project site is not listed in the EnviroStor website (Department of Toxic Substances Control (DTSC), 2021). Because the impact of a UST at the Project site would be potentially significant, the impact will be described further in the EIR.

e) **No Impact**. The Project site is not within 2 miles of a public airport. The nearest public airport, Buchanan Field, is more than 10 miles away. Because of the distance to the nearest public airport, no impact would occur.

f) **Potentially Significant Impact**. Project implementation would not impair or physically interfere with adopted emergency response or evacuation plans. However, the construction activities for the Central North Aqueduct pipeline during Phase 2 of the Project could require temporary lane closure or road closure, which could affect emergency response access during construction. Because the impact of temporary Project interference with emergency response along San Pablo Dam Road, El Portal Drive, Rollingwood Drive, and Road 20 would be potentially significant, the impact will be described further in the EIR.

g) **Potentially Significant Impact**. The Project site is in a "local responsibility area," where local jurisdictions are responsible for fire protection. The Project site is approximately 1,000 feet from a very high fire hazard severity zone (CALFIRE, 2009). Construction equipment can generate fires from hot exhaust gases or from contact with the hot surfaces of exhaust systems.

Because the impact of increased risk of wildfire during construction would be potentially significant, the impact will be described further in the EIR.

1.10 Hydrology and Water Quality

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☒	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☒	☐	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☒	☐	☐	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐
iv) impede or redirect flood flows?	☒	☐	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

Discussion

a) **Potentially Significant Impact**. Construction activities could increase erosion and sedimentation, and spills of fuels or lubricants could degrade water quality of surface waters from stormwater discharges. The new facilities would increase the impervious surface area, which could result in additional discharge of stormwater to surface waters. Project improvements would include installation of a bioretention basin to capture and treat stormwater, in accordance with applicable local and state water quality control plans and regulations. Stormwater runoff from construction activities could degrade surface water

quality. Because the impact on water quality from the foregoing factors would be potentially significant, the impact will be described further in the EIR

b) e) **Potentially Significant Impact.** Project construction would not require groundwater supplies. The new facilities would increase the impervious surface area by approximately 5 acres. Project improvements would include a bioretention basin that would treat and control stormwater runoff and encourage recharge of groundwater. However, because the impact of the increase in impervious surface area and resulting impact on groundwater recharge would be potentially significant, the impact will be described further in the EIR.

c i-iv) **Potentially Significant Impact.** Project improvements would create approximately 5 acres of additional impervious surface. The Project also includes construction within a natural drainage/seasonal wetland and flow within that drainage would be rerouted around the Project. Project construction would require substantial earth moving. The construction activities and changes in drainage patterns at the site and infiltration rates could cause erosion or siltation to occur on or off site. The Project includes a bioretention basin and stormwater improvements to capture the increased runoff, but off-site flooding, exceedance of the stormdrain capacity, or redirection of flood flows are risks due to the rerouting of an existing seasonal drainage and increased impervious surface. The impacts on erosion and siltation, flooding, and stormwater capacity would be potentially significant and will be described further in the EIR.

d) **Potentially Significant Impact.** The SOWTP is not in an area subject to flood hazard, tsunami, or seiche. The Central North Aqueduct pipeline would cross a Federal Emergency Management Agency flood hazard zone that has a 1 percent annual chance of flood hazard (Zone A), at D Avilla Way and El Portal Drive. The Central North Aqueduct pipeline would be placed underground within a public right-of-way and would not be subject to flood inundation during Project operations. During Project construction, a release of pollutants could occur during flood inundation. The likelihood of active construction during a flood event is low and standard construction best management practices regarding work during rain events and spill control methods would reduce the impact to less than significant.

1.11 Land Use and Planning

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

a) **No Impact.** Phase 1 of the Project would be constructed and operated within the SOWTP site owned by EBMUD, adjacent to the existing SOWTP facilities. Phase 2 of the Project would include construction of the Central North Aqueduct pipeline to support conveyance of the increased capacity of the SOWTP. The Central North Aqueduct pipeline would be placed entirely underground and within a public right-of-way. Because the Project would not physically divide an established community, no impact would occur.

b) **No Impact.** The Project site is designated for Public/Semi-Public (PS) land use and zoned for General Agriculture. The Central North Aqueduct pipeline would traverse Single-Family Residential, Open Space, Multi-Family Residential–High, Office, Commercial, and Public/Semi-Public land use designations (Contra Costa County, 2020) and will be located within the existing roadway right-of-way. Phase 1 of the Project would be constructed and operated within the existing Project site. Phase 2 would be constructed and operated within the existing Project site or underground and primarily within a public or EBMUD right-of-way. A temporary construction easement may be required for construction of a portion of the Central North Aqueduct pipeline where it crosses San Pablo Creek. The Project would not change the existing uses of the Project site or public right-of-way. Because the Project would not conflict with any land use plan, policy, or regulation, no impact would occur.

1.12 Mineral Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a-b) **No Impact.** No mineral resources are known to occur on the Project site. The Contra Costa County General Plan does not identify mineral resources or aggregate areas in the Project area (California Department of Conservation, 2021b). Because the Project would not result in loss of a known mineral resource or loss of availability of a locally important mineral recovery site in a General Plan, no impact would occur.

1.13 Noise

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) **Potentially Significant Impact.** Phase 1 of the Project includes construction and demolition within the Project site and adjacent to residential areas. The Central North Aqueduct pipeline constructed in Phase 2 of the Project would be underground, within a public right-of-way and adjacent to residential areas. SOWTP operation is not expected to generate noise that would be perceptible at any sensitive receptor locations. Construction and demolition would require the use of construction equipment that would generate short-term noise impacts that could affect sensitive receptors, including adjacent residences proximal to the Project. Limited nighttime construction could be required along portions of the Central North Aqueduct pipeline and could cause short-term nighttime noise, which could affect nearby residences. Because the impact of construction noise would be potentially significant, the impact will be further described in the EIR.

b) **Potentially Significant Impact.** Construction activities could generate groundborne vibration during pile drilling, compaction of fill at the SOWTP site, and as part of repaving along the Central North Aqueduct pipeline, which could result in damage to nearby structures or cause substantial human annoyance. Demolition activities could also generate vibration from use of jackhammers and other equipment required to remove the concrete. Because the impact of vibration would be potentially significant, the impact will be further described in the EIR.

c) **No Impact.** The Project is not located within 2 miles of a private or public airport nor within an area with an adopted airport land use plan. Because the Project site is not within 2

miles of a private or public airport or airport land use planning area, no impact from airport noise would occur.

1.14 Population and Housing

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **No Impact.** The proposed improvements at the SOWTP would not include construction of new homes or businesses. Therefore, the Project would not directly induce population growth. The Project would add treatment improvements that would allow EBMUD to increase reliability of water service. Land use agencies in the EBMUD service area, including both cities and counties, develop and adopt long-term planning documents, such as general plans, for physical development within their jurisdictions. These planning documents determine the nature and intensity of land uses served by EBMUD. Demand associated with land use agency planned growth was accounted for in EBMUD's 2050 Demand Study (EBMUD, 2020) which was used to determine proposed Project sizing and design. Because the Project would serve planned land use changes and redevelopment projects that are disclosed and incorporated into land use agency general plans and subsequent amendments thereto, Project implementation would not support growth beyond planned levels or in areas not planned for development by the land use agencies. Because the Project would not cause population growth or necessitate increased housing, no impact would occur.

b) **No Impact.** No residences are within the Project site. The Project would not displace any residential housing or necessitate the construction of housing in other places. Because no residences are within the Project site and the Project would not displace or necessitate construction of replacement housing, no impact would occur.

1.15 Public Services

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
PUBLIC SERVICES.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Discussion

a) **No Impact.** The Project proposes water treatment facility improvements and would not include residential or commercial development that would directly or indirectly induce population growth. The Project would serve existing water system customers. The Project is located adjacent to a fire station and will not affect the fire station or access to or from the fire station. The Project would not require new or expanded fire and police protection, schools, parks, or other facilities. Thus, the Project would not require new or expanded governmental facilities. In addition, the Project would not indirectly induce unplanned population growth (see Section 1.14 Population and Housing). Because the Project would not create new demands for services or affect the ability of local service providers to maintain acceptable service ratios, response times, or other performance objectives for services, no impact would occur.

1.16 Recreation

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a -b) **No Impact.** The Project would not increase population (see Section 1.14, Population and Housing). Therefore, the Project would not increase use of existing neighborhood or regional parks or recreational facilities. Recreational areas located less than 0.5 mile from the Project site include Sobrante Ridge Regional Preserve, Pinole Park, La Moine Park, Wildcat Canyon Park, Fairmead Park, and Kennedy Plaza. The use of these surrounding recreational facilities and areas would not increase because of the Project. In addition, the Project would not construct recreational facilities or be required to construct or expand recreational facilities that may have an adverse physical effect on the environment. Because of the foregoing reasons, no impact would occur.

1.17 Transportation

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
TRANSPORTATION. Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
d) Result in inadequate emergency access?	☒	☐	☐	☐

Discussion

a) **Potentially Significant Impact**. Construction would generate traffic at the Project site. Construction traffic is anticipated to occur during daytime construction hours at the SOWTP site. Truck traffic would access the Project site during construction from Interstate 80 via Amend Road, Valley View Road, and San Pablo Dam Road. Truck traffic would also access the Project site during construction via Appian Way and via San Pablo Dam Road from Highway 24. Valley View Road, San Pablo Dam Road, and Appian Way are arterial roadways, Amend Road is a collector roadway, and Highway 24 is a freeway (Conta Costa County, 2017). San Pablo Dam Road, Valley View Road, and Amend Road are Proposed Class II Facilities in the Contra Costa County Bicycle Facilities Network (Contra Costa County, 2010e). The Central North Aqueduct pipeline construction would require temporary lane or road closures within La Honda Road, D'Avila Way, San Pablo Dam Road, El Portal Drive, Rollingwood Drive, Road 20, and San Pablo Avenue during pipeline trenching and installation within the roadway. Limited nighttime construction could be required along portions of the Central North Aqueduct pipeline. The temporary lane and increased traffic during Project construction could potentially conflict with a traffic circulation plan, policy, or ordinance. Because the impact on traffic circulation from the increased construction traffic and lane closures would be potentially significant, the impact will be described further in the EIR.

b) **Potentially Significant Impact.** Project construction and potentially operation would generate an increase in vehicle miles travelled (VMT). Because the impact of the increase in VMT would be potentially significant, the impact will be described further in the EIR.

c) **Potentially Significant Impact.** The Central North Aqueduct pipeline will be constructed within roadways and will require temporary lane closures during trenching and pipeline installation as describe in a) above. The Project would also temporarily add

construction truck traffic on local roads, such as Appian Way and San Pablo Dam Road. The temporary lane closures, road repaving after pipeline installation, and increased truck traffic could be a safety hazard. Because the impact on local roads would be potentially significant, the impact will be described further in the EIR.

d) **Potentially Significant Impact.** Construction activities during Phase 1 of the Project would be confined to the SOWTP site, but construction of the Central North Aqueduct pipeline during Phase 2 of the Project would require in-road construction with temporary lane and potential road closures and detours. The temporary lane closures or detours could affect emergency access during construction within the roadway. Because the impact of temporary lane or road closures could affect emergency access, the impact would be potentially significant and will be discussed further in the EIR.

1.18 Tribal Cultural Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐

Discussion

A i-ii) **Potentially Significant Impact**. No tribal cultural resources are known to occur within the Project site. A positive result from the Native American Heritage Commission Sacred Lands File was received on May 18, 2021. As part of the cultural resources review of the Project under CEQA, information is being requested on behalf of EBMUD about potential tribal cultural resources (as defined by Public Resources Code Section 21074) that may be near the Project site. Because the impact on tribal cultural resources would be potentially significant, the impact will be described further in the EIR.

1.19 Utilities and Service Systems

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

a) **No Impact**. The Project proposes improvements to the SOWTP water treatment processes, and the EIR will focus on evaluating the potential impacts of those improvements. The Project would not require or result in relocation or construction of any other utilities, including new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, other than those water treatment facilities that are part of the Project and the subject of this environmental review. Because other public service utilities would not be affected, no impact would occur.

b) **No Impact.** Because the Project would improve treatment of existing available water supplies and would not have any adverse impacts associated with availability of supplies, no impact would occur.

c) **No Impact.** Because the Project would not generate any wastewater and would not affect local wastewater treatment providers, no impact would occur.

d) **Less than Significant.** Project construction would generate solid waste that would require disposal at a landfill, primarily waste generated from demolition of structures. The Keller Canyon Landfill, which is the closest available solid waste facility to the Project site, has a permitted capacity of approximately 3,500 tons of solid waste per day and, as of November 2004 (the most recent assessment date), a remaining permitted capacity of 63 million cubic yards (CalRecycle, 2019). Thus, adequate landfill capacity exists in the Project area to accommodate the construction debris that would be generated, and the Project would not impair attainment of solid waste reduction goals.

The 2019 California Green Building Standards Code (CalGreen) requires that at least 65 percent of job site debris that is generated by most types of building projects be recycled, reused, or otherwise diverted from landfill disposal (Contra Costa County, 2021). CalGreen requires submission of plans and reports to verify post-project that these goals were met and provides lists of numerous construction and demolition processing facilities. Because the Project would meet the CalGreen requirements and divert the majority of the construction waste, and because the nearest landfill would have capacity to take Project waste, the Project would not general solid waste in excess of state or local standards or impair the attainment of solid waste reduction goals and the impact would be less than significant.

e) **No Impact.** Because the Project would comply with all applicable regulations regarding solid waste, no impact would occur.

1.20 Wildfire

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐

Discussion

a) **No Impact**. The Project site is within a local responsibility area and is not within a very high fire hazard severity zone. The Project site is approximately 1,000 feet south from a local responsibility very high fire hazard severity zone (CALFIRE, 2009). Project construction would be within the Project site and a public right-of-way for the Central North Aqueduct pipeline work. Work within roadways that would require lane or road closures would be coordinated with emergency providers. Because the Project would not substantially impair an adopted emergency response or emergency evacuation plan, no impact would occur.

b) **Potentially Significant Impact**. Conditions at the Project site could be affected by slope, prevailing winds, and other factors that could increase wildfire risk to workers at the SOWTP and nearby residents during Project construction. Construction equipment can generate fires from hot exhaust gases or from contact with the hot surfaces of exhaust systems. The geography, weather patterns, and vegetation in the Project area provide ideal conditions for recurring wildfires (Contra Costa County, 2018). Grazing is currently conducted on the site to manage wildfire risk within the grassland areas where construction is proposed. Project operation would remove grassland vegetation and reduce the long-term wildfire risk within the area of Phase 1 improvements. Because the impact of increased risk of wildfire during construction would be potentially significant, this will be described further in the EIR.

c) **No Impact.** Because the Project would not require installation of infrastructure that would exacerbate wildfire risk (e.g., roads, firebreaks, power lines, or other utilities), no impact would occur.

d) **Potentially Significant Impact.** Although Project operations would not increase wildfire risk, construction activities could increase the risk of wildfire. Additionally, the new buildings proposed at the SOWTP would be approximately 1,000 feet from a very high fire hazard severity zone. Because the Project is in proximity to a very high fire hazard severity zone, the impact from downstream flooding or landslides related to post-fire instability or drainage changes would be potentially significant will be described further in the EIR.

1.21 Mandatory Findings of Significance

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Discussion

a) **Potentially Significant Impact.** As previously stated in Section 1.4 the Project could have a potentially significant impact on riparian habitat and other natural communities, including state and federally protected wetlands, and potential conflicts with local policies and ordinances protecting biological resources. The Project also potentially could cause a substantial adverse change on historical and archaeological resources or disturb human remains. The impacts could be potentially significant and will be addressed further in the EIR.

b) **Potentially Significant Impact.** Contra Costa County, the City of Richmond, and other relevant agencies such as Caltrans would be contacted during preparation of the EIR, to identify other planned projects in the Project vicinity. Other EBMUD projects in the vicinity also would be considered. Because the impact of the proposed Project and cumulative projects are potentially cumulatively significant, the impact will be addressed further in the EIR.

c) **Potentially Significant Impact**. The Project could adversely affect human beings directly and/or indirectly, from air quality impacts, hazardous material use, noise generation, emergency access impacts, and potential wildfire impacts. Because the impact on human beings would be potentially significant, the impact will be addressed further in the EIR.

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