EAST BAY MUNICIPAL UTILITY DISTRICT

NOTICE OF PREPARATION OF
DRAFT ENVIRONMENTAL IMPACT REPORT
MOKELUMNE AQUEDUCTS RESILIENCY PROJECT
EAST BAY MUNICIPAL UTILITY DISTRICT

MARCH 28, 2022

TO: Responsible and Trustee Agencies, Organizations, and Interested Parties

FROM: East Bay Municipal Utility District – Lead Agency; Project Applicant
375 Eleventh Street, MS 701
Oakland, CA 94607-4240

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the Mokelumne Aqueducts Resiliency Project

The East Bay Municipal Utility District (EBMUD), acting as lead agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) for the Mokelumne Aqueducts Resiliency Project (Project).

AGENCIES: EBMUD requests your input regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed Project.

ORGANIZATIONS AND OTHER INTERESTED PARTIES: EBMUD requests comments from organizations and interested parties regarding the environmental issues associated with construction and operation of the proposed Project.

PROJECT TITLE: Mokelumne Aqueducts Resiliency Project

PROJECT LOCATION: The Mokelumne Aqueduct System, which includes the Pardee Tunnel, Mokelumne Aqueducts and Lafayette Aqueducts, transports untreated water from Pardee Reservoir and the Sacramento River to EBMUD's service area and is the primary supply for 1.4 million people in Alameda and Contra Costa Counties. The Mokelumne Aqueduct System originates at EBMUD's Pardee Reservoir in the Sierra Foothills and extends from the Pardee Center in Campo Seco for approximately 90 miles through the Central Valley, along the Calaveras River and the Sacramento-San Joaquin Delta (Delta), to water treatment plants and terminal reservoirs in the EBMUD service area in the East Bay (see **Figure 1**). The Mokelumne Aqueducts consist of three steel pipelines, with the first of the pipelines (Mokelumne Aqueduct No. 1) completed in 1929, and Mokelumne Aqueducts Nos. 2 and 3 completed in subsequent years. The existing Mokelumne Aqueducts have a combined total capacity of 325 million gallons a day (mgd). The Mokelumne Aqueducts Resiliency Project is proposed to replace a portion of the existing Mokelumne Aqueducts with a buried Aqueduct Tunnel (Tunnel) of approximately 16.5 miles in length, beginning west of Interstate 5 in the City of Stockton, CA and ending at the EBMUD's Bixler Maintenance Yard in unincorporated Contra Costa County, CA (see **Figures 2-1 through 2-6)**. The Tunnel alignment follows the EBMUD's existing 100-foot wide right-of-way (ROW) for the existing Mokelumne Aqueducts.

PROJECT PURPOSE: Portions of the Mokelumne Aqueducts located above-ground within the Delta are currently at risk of failure due to earthquake hazards and levee failure hazards including flood scour and submergence. Failure of one or more of the Mokelumne Aqueducts would severely reduce the level of water service to EBMUD's customers. To address this potential public health impact, the purpose of the Project is to improve the resiliency of the existing Mokelumne Aqueducts by replacing them in a proposed buried Tunnel within the existing Mokelumne Aqueduct ROW for the 16.5 mile reach where they cross the Delta.

PROJECT DESCRIPTION: The Project includes construction across the Delta of an approximately 16.5 mile long, 15-foot diameter tunnel, containing a 120-inch steel carrier pipeline with a capacity of 325 mgd that would replace the vulnerable section of the Mokelumne Aqueducts. The Tunnel would be located in stable soil deposits at an approximate depth of 90 to 130 feet below mean sea level, below weak, compressible soils comprised of surficial floodplain soil deposits. The Tunnel would be excavated by an electric-powered Tunnel Boring Machine (TBM) and supported using approximately 5-foot-long watertight precast concrete segmental rings that will be installed as the TBM advances. Excavated soil from the Tunnel would be stockpiled temporarily at the launch shaft sites and dried out prior to transporting the soils to a permanent disposal site using large trucks and/or using the railroad. After the tunneling has been completed, the 120-inch steel carrier pipeline will be installed and welded together within the Tunnel. Low-density cellular concrete would be pumped into the annular space outside the carrier pipeline to encase the pipeline and cement mortar lining would be applied to the inside of the carrier pipeline to protect the steel from corrosion. The Tunnel would be constructed in two to three tunnel drives, each from a concrete launch shaft approximately 70 feet in diameter to a concrete reception shaft approximately 35 feet in diameter. Depending on the number of Tunnel drives, up to four Tunnel shafts would be constructed, including one reception shaft to be located at the east end of the Tunnel alignment in the City of Stockton, one reception shaft at the west end at EBMUD's Bixler Maintenance Yard in unincorporated Contra Costa County, and two intermediate shafts including a launch shaft located at Holt and combination launch and reception shaft near Bacon Island Road. The Tunnel access shafts would remain after construction for long-term maintenance access to the carrier pipeline installed inside the Tunnel. The access shafts at Holt and near Bacon Island Road are in the Delta and therefore would extend approximately 30-feet above the ground surface to provide access to the Tunnel in the event of Delta flooding. Additional property adjacent to EBMUD's existing ROW would be obtained for the purpose of constructing Tunnel access shafts that would be used during construction and operation of the Tunnel. Access routes, including bridges, may require improvements to accommodate large vehicles transporting heavy equipment and materials to and from the launch shafts.

Mokelumne Aqueduct No. 3 would remain in service to provide operational flexibility and support future planned and unplanned outages of the Tunnel. The above ground section of existing Mokelumne Aqueduct No. 3 would be retrofitted to help mitigate seismic and flooding risks. After the Tunnel is constructed and placed in service, existing Mokelumne Aqueducts Nos. 1 and 2 would be decommissioned for approximately 16.5 miles, with aboveground sections removed and underground sections abandoned in place and filled with cellular concrete to prevent a potential collapse hazard.

POTENTIAL ENVIRONMENTAL EFFECTS: The following areas of potentially significant environmental impacts will be analyzed in the EIR:

- Aesthetics: Temporary construction effect of nighttime lighting at the shaft location and long-term effect of new access shafts in the Delta approximately 30-feet above the ground surface.
- Agriculture and Forestry: Temporary and long-term effects of acquiring additional temporary and permanent property to accommodate shaft construction.
- Air Quality: Temporary construction effect due to construction equipment and vehicle trips from construction workers, construction equipment delivery, construction material import, and off haul of excavated soil from the tunnel and for removal/abandonment of Mokelumne Aqueducts No. 1 and 2.
- Biological Resources: Potential construction effects due to vegetation removal and construction activities at the access shafts due to adjacent wetlands, potential for nesting birds, potential for federally and/or state listed plant or wildlife species, and potential for removal of trees that are protected under local ordinances.
- Cultural and Tribal Cultural Resources: Potential for ground disturbance at shaft locations to effect previously undiscovered cultural or tribal cultural resources.
- Geology and Soils: Potential for ground disturbance at shaft locations to effect previously undiscovered paleontological resources and soil erosion or loss of topsoil.

- Greenhouse Gas Emissions: Temporary construction effect due to construction equipment and vehicle trips from construction workers, construction equipment delivery, construction material import, and off haul of excavated soil from the Tunnel and for removal/abandonment of Mokelumne Aqueducts No. 1 and 2.
- Hazards and Hazardous Materials: Potential for ground disturbance at shaft locations to encounter contaminated soil and groundwater and routine handling and transport of fuels, lubricants, paints, and solvents associated with construction activities.
- Hydrology and Water Quality: Temporary effects of dewatering during construction of Tunnel access shafts.
- Noise and Vibration: Temporary effects of construction equipment at the construction shafts and along the existing Mokelumne Aqueducts alignment during removal/abandonment of Mokelumne Aqueducts No. 1 and 2.
- Recreation: Temporary effects of construction activities at the shaft in the City of Stockton, which will result in noise and restricted access along a recreational trail.
- Transportation and Traffic: Temporary effects of increased traffic associated with vehicle trips from construction workers, construction equipment delivery, construction material import, and off haul of excavated soil from the Tunnel and of Mokelumne Aqueducts No. 1 and 2.
- Utilities and Service Systems: Temporary effects of relocating existing utilities if they are encountered at the shaft sites and potential for solid waste generated from the Project to exceed the capacity of local landfills.
- Land Use and Planning: Potential for the Project to conflict with the Delta Plan prepared by the State of California's Delta Protection Commission.
- Potential cumulative impacts and potential for growth inducement.

PUBLIC REVIEW PERIOD: This Notice of Preparation (NOP) is available for public review and comment for 30 days. The comment period for the NOP begins March 28, 2022 and ends on April 28, 2022. Your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

RESPONSES AND QUESTIONS: Responses to or questions regarding this NOP should be directed to:

David J. Rehnstrom, Manager of Water Distribution Planning
East Bay Municipal Utility District
375 Eleventh Street, MS 701
Oakland, CA 94607-4240
Or by e-mail to: *mokelumne.aqueducts.resiliency@ebmud.com*

March 28, 2022

Olujimi O. Yoloye
Director of Engineering and Construction
East Bay Municipal Utility District

Date

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Attachments: Figure 1 Water Supply Overview
Figure 2-1 through 2-6 Mokelumne Aqueducts Resiliency Project Alignment

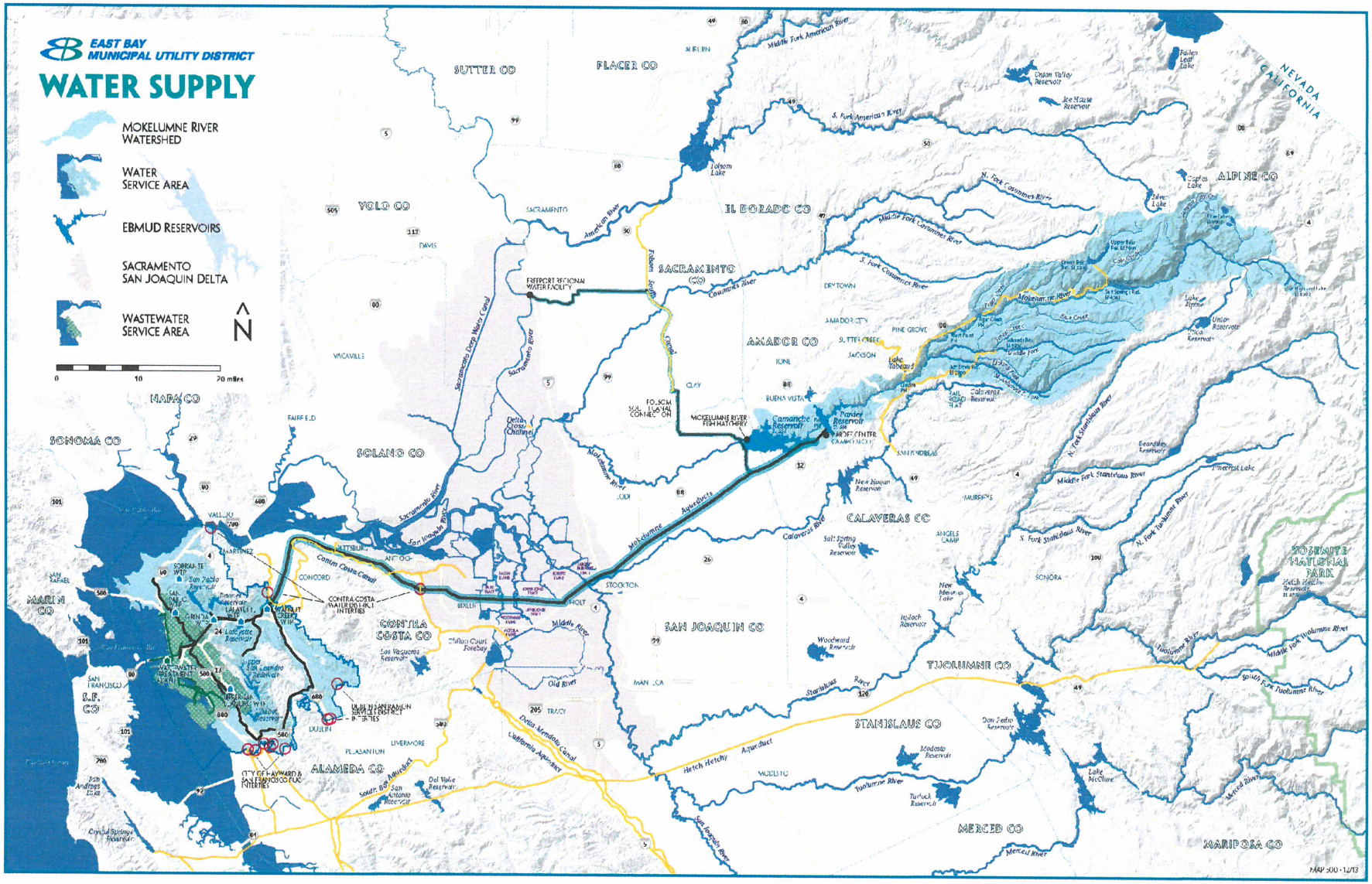

Figure 1
Water Supply Overview

Figure 2-1
Mokelumne Aqueducts Resiliency Project Alignment

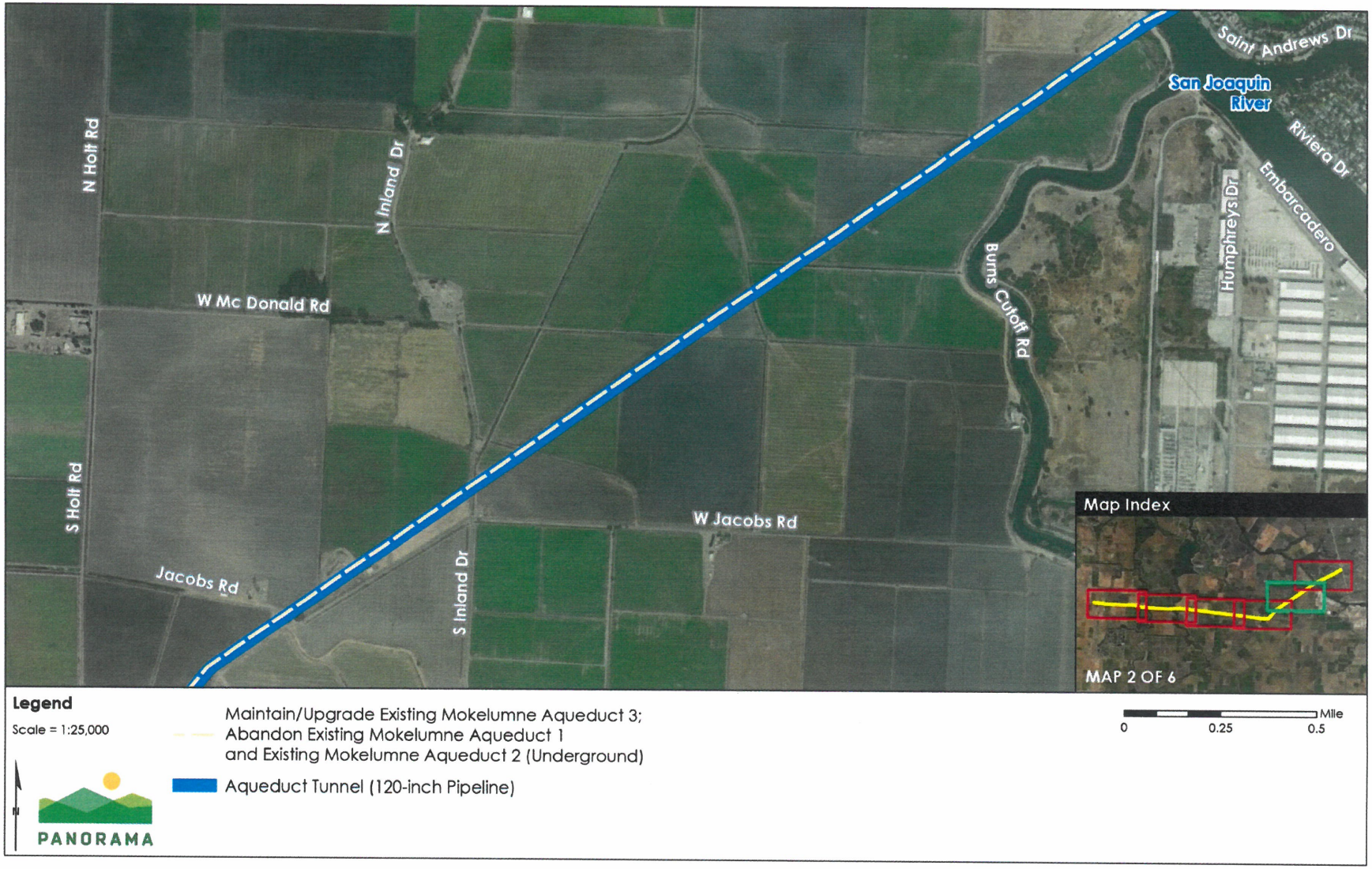

Figure 2-2
Mokelumne Aqueducts Resiliency Project Alignment

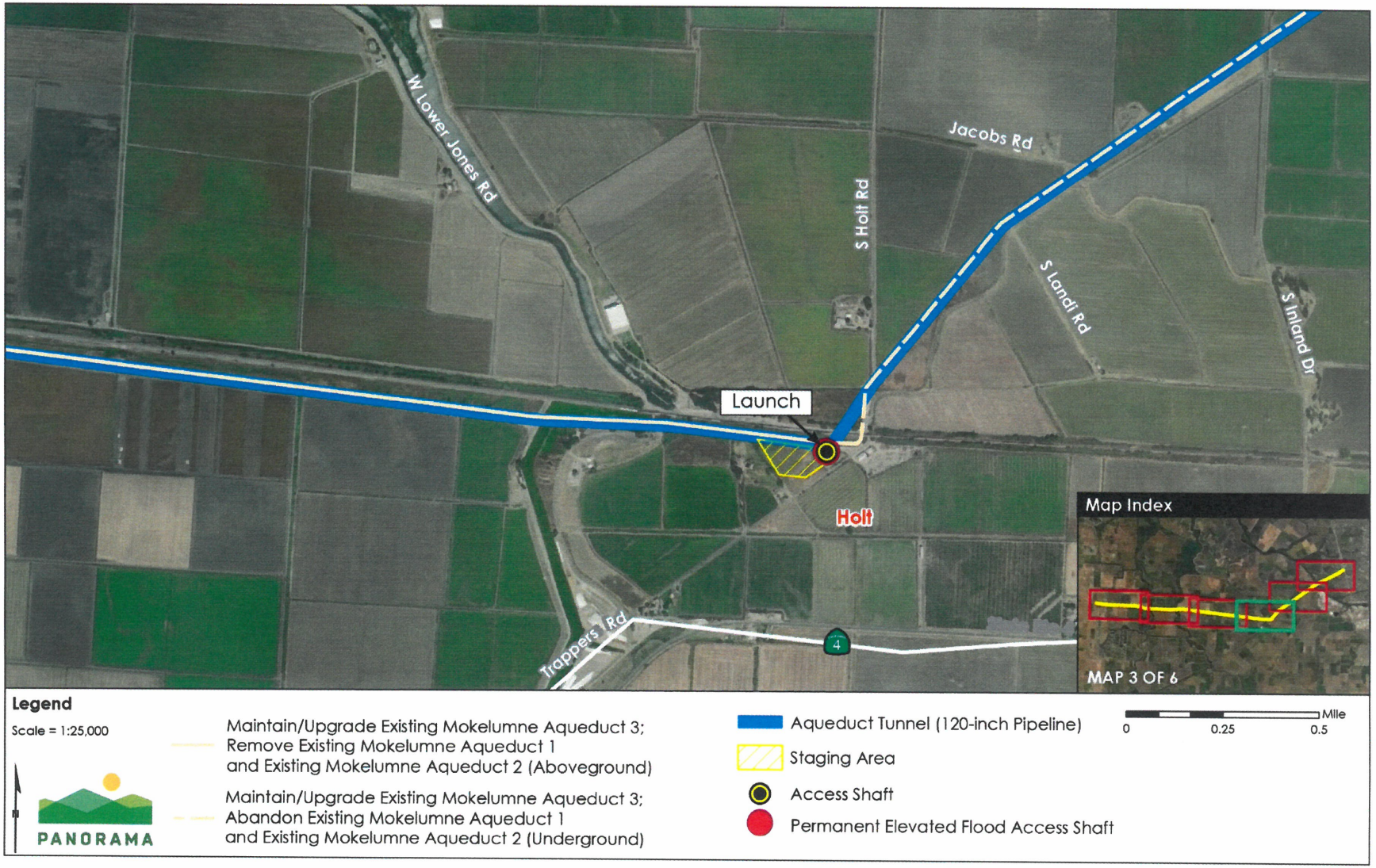

Figure 2-3
Mokelumne Aqueducts Resiliency Project Alignment

Figure 2-4
Mokelumne Aqueducts Resiliency Project Alignment

Figure 2-5
Mokelumne Aqueducts Resiliency Project Alignment

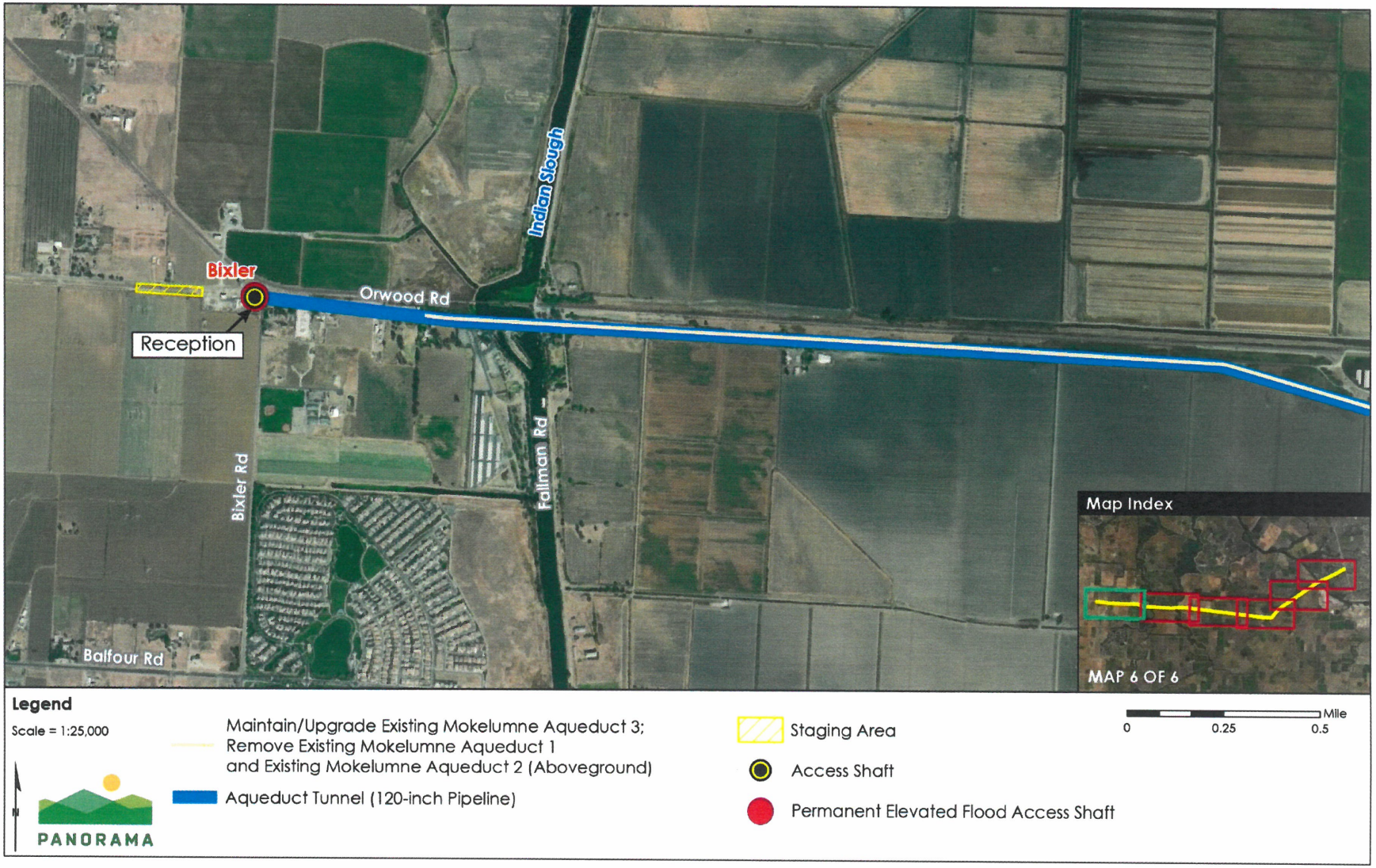

Figure 2-6
Mokelumne Aqueducts Resiliency Project Alignment