DRAFT

Initial Study and Mitigated Negative Declaration

Amador Water Agency - Central Amador Water Project (CAWP) Transmission Main Improvements and Tank D Replacement

(56 - CAWP 1A.9 (P)) (WO# 7124110)

Prepared by:

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February 2025

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DRAFT MITIGATED NEGATIVE DECLARATION

Lead Agency: Amador Water Agency

Project Location: The 13.94-acre Project Site corresponds to a portion of Sections 6, 25, 29, 30, 31, 32 and 36, Township 6 and 7 North, and Range 12 and 13 east (Mount Diablo Base and Meridian) of the "West Point, California" 7.5-minute quadrangle. The approximate center of the Project is located at 38.41943592° North and -120.58698501° West within the Upper Mokelumne watershed (Hydrological Unit Code 18040012; Natural Resources Conservation Service [NRCS] et al. 2016).

Project Description Summary: The Project will include construction of a replacement prestressed concrete water tank with an operational capacity of 275,000-gallons and associated transmission lines within the community of Pioneer, CA.

Public Review Period: February 27, 2025 to March 31, 2025

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: **Special-Status Plant Habitat Avoidance.** The following measures shall be implemented to avoid impacts to Special-Status Plant Habitat within the pipeline alignment:

- Where feasible, Project-related activities shall be restricted to previously developed or disturbed areas to avoid disturbance of habitats that may support special-status plants. All Project personnel shall be made aware of the impact limits and avoided areas during construction. No Project-related work shall occur outside of the Project impact limits. All Project-related vehicles and equipment shall be restricted to the Project impact limits or existing environmentally cleared designated access roads and staging areas.
- If suitable habitat for special-status plants cannot be avoided, and if special-status plant surveys for the Project are not current (per the CDFW protocol; surveys are typically considered current if it is within 2-5 years of construction), a preconstruction special-status plant survey shall be conducted according to CDFW, CNPS, and USFWS protocols.
    - Surveys shall be conducted throughout habitat areas that include ground-disturbing or vegetation-disturbing activities (including a 50-foot buffer from construction activities) to address potential direct and indirect impacts of the Project. Surveys shall be conducted by a qualified biologist and timed according to the identifiable period for special-status plant species with potential to occur (typically the blooming

period). To the extent feasible, known reference populations will be visited prior to surveys to confirm target species are evident and identifiable at the time of the survey. If no special-status plants are found, no further measures pertaining to special-status plants are necessary.

- If a special-status plant is identified within or adjacent to the Project impact area, the following shall apply:

    - An impact assessment shall be made by a qualified biologist to determine whether Project related activities would be significant such that they would have the potential to eliminate, substantially reduce the number of, or restrict the range of the special-status plant species, and/or conflict with any local policies or ordinances protecting special-status plant species. If impacts are determined to be less than significant, no further measures are needed.

    If potential impacts are determined to be significant, the following shall apply:

    - The Project shall be modified to the extent feasible to minimize impacts to special-status plants. No-disturbance buffers shall be established around special-status-plant populations to be avoided in or adjacent to the Project Area. The no-disturbance buffer shall include the extent of the avoided special-status plants (as determined by a qualified biologist during an appropriate time to identify the plants immediately preceding construction) plus a minimum 25-foot buffer, unless otherwise determined by a qualified biologist. Buffer distances may vary depending upon factors such as species ecology, species rarity, and site-specific conditions. The avoidance area shall be clearly demarcated in the field and demarcation shall be maintained for the duration of Project construction. No vegetation-disturbing or ground-disturbing activities shall occur within the avoidance area. If other work must occur within the avoidance area, a qualified biologist shall be present for the duration of such work to ensure no impacts occur within the avoidance area.
    - A Worker Environmental Awareness Program (WEAP) shall be developed prior to construction to inform workers of avoided special-status plants. A qualified biologist will present the WEAP to all personnel working in the Project Area prior to the start of Project activities. The WEAP may be recorded and used through the duration of construction to train new workers who were absent for the initial WEAP. The WEAP will include, but will not be limited to, species identification, habitat requirements, and the species' protected status. The training shall provide clear instruction that if any workers encounter the special-status plant(s) to be avoided within a new location of the Project impact area, work shall halt within 25-feet of the plants and the biological monitor shall be informed. The Project proponent shall retain logs of personnel who have taken the training for the duration of construction.

- If complete avoidance is not feasible, the agency with jurisdiction (CDFW, USFWS and/or the CEQA Lead Agency) shall be consulted to determine if additional minimization or mitigation measures are required. Additional measures, if needed, shall be developed in consultation with the respective agency. These measures may include restoration or permanent preservation of habitat for the special-status plant species or translocation (via seed collection and/or transplantation) from planned impact areas to unaffected suitable habitat. If a plant that is a state or federally listed threatened or endangered plant or is a candidate for state listing is found onsite, the applicant shall consult with CDFW and/or USFWS, as applicable, to determine appropriate avoidance and minimization measures, and an incidental take permit and compensatory mitigation may be required.
- To avoid the introduction and spread of non-native invasive plant species, clothing, vehicles, and equipment (including shoes, equipment undercarriage and tires/tracks) should be cleaned prior to entering the Project Area and, if invasive plant species are known to occur within the Project Area, prior to entering an area of the Project-site that is free of invasive plants. Materials used for the Project, such as fill dirt or erosion control materials, should be from weed-free locations or certified weed free.

BIO-2: **Crotch Bumble Bee.** If the Crotch bumble bee is no longer a Candidate or formally Listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are required.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species and ground-disturbing activities are scheduled to begin between February 1 and October 31, preconstruction surveys shall be conducted by a qualified biologist. Based on CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species, three Crotch bumble bee surveys shall be conducted at two-to-four-week intervals during the colony active period (April-August).

If Crotch bumble bees are detected, any remaining surveys will focus on nest location. If no nests are found but the species is observed during preconstruction surveys, work crews should be informed of the possibility of Crotch bumble bees or their nests being present onsite. If a Crotch bumble bee is encountered during construction, work shall stop until the individual leaves of its own volition. If an active Crotch bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take, and the designated biologist shall coordinate with CDFW to determine if an Incidental Take Permit under Section 2081 of the California ESA will be required. Nest avoidance buffers may be removed at the completion of the flight season (October 31) and/or once the qualified biologist deems the nesting colony is no longer active.

If initial grading is phased or delayed for any reason, preconstruction surveys will be repeated prior to ground-disturbing activities if nesting habitat is still present or has reestablished and will be affected.

BIO-3: **Nesting Birds Preconstruction Survey.** A preconstruction nesting bird survey shall be conducted within 14 days prior to the commencement of Project-related activities to identify active nests that could be impacted by construction.

The preconstruction nesting bird survey shall include accessible areas within 100 feet of the Project boundaries, including any temporary disturbance areas. For raptors, the preconstruction nesting bird survey shall include accessible areas within 500 feet of the Project boundary.

If active nests are found, a no-disturbance buffer shall be established around the nest. A qualified biologist, in consultation with CDFW, shall establish a buffer distance. The buffer shall be maintained until the nestlings have fledged (e.g., are capable of flight and become independent of the nest), to be determined by a qualified biologist. The avoidance buffer can be removed and no further measures are necessary once the young have fledged or the nest is no longer occupied, as determined by a qualified biologist.

BIO-4: **Townsend's Big-Eared Bat.** Within 30 days prior to initiation of Project activities, a bat habitat assessment shall be conducted by a qualified bat biologist to examine trees that will be removed/trimmed and structures that will be removed for suitable bat roosting habitat. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, abandoned structures) will be identified and the area around the features searched for bats and bat sign (i.e., guano, staining, culled insect parts). The following measures shall be applied depending on the findings:

- If suitable bat roosting habitat is identified, the feature shall be avoided and protected in place to the extent feasible. A buffer area shall be established around the roost site to minimize disturbance of roosting bats. The size of the buffer area will be determined in consultation with CDFW.
- If suitable trees or structures cannot be avoided, removal shall be timed to occur outside of the maternity roosting season (generally April 1 to August 31) and only when nighttime low temperature are above 45 degrees Fahrenheit and rainfall is less than ½ inch in 24 hours.
- Trees with identified bat roosting habitat shall be removed using a two-phase removal process conducted over two consecutive days. On the first day, tree limbs and branches will be removed, using chainsaws only. Removal will avoid limbs with cavities, cracks, crevices, or deep bark fissures. On the second day, the remainder of the tree will be removed.
- Standing dead trees or snags with habitat features should be removed over a single day by gently lowering the tree or snag to the ground. The tree or snag shall be left undisturbed onsite for the next 48 hours.

- Removal and trimming of trees with potential roosting habitat shall be conducted in the presence of a biological monitor.
- If removal/modification of a suitable tree or structure must occur during the maternity season, a qualified bat biologist shall conduct a focused survey(s) within 48 hours of scheduled work. If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until after the maternity season or a qualified biological monitor has determined the roost is no longer active.

Cultural Resources

CUL-1: **Unanticipated Discoveries.** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Amador County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC

can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Paleontological Resources

PALEO-1: **Discovery of Unknown Resources.** If any paleontological resources (i.e., fossils) are found during Project construction, construction shall be halted immediately in the subject area and the area shall be isolated using orange or yellow fencing until the AWA is notified and the area is cleared for future work. A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources.

Transportation

TRA-1: **Construction Traffic Management Plan.** If construction activities require roadway closures, a construction traffic management plan (Traffic Plan) shall be prepared, prior to construction, by the Contractor, in coordination with the AWA, California Department of Transportation (if necessary), and the City of Ione. The management plan shall be detailed and comprehensive to adequately mitigate potential conflicts between baseline and construction-related traffic. The Traffic Plan will include, at a minimum, the following measures:

- Adequate off-street worker parking shall be provided.
- A flagman or signal-controlled one-way traffic-control operation shall be provided where two-way traffic operation is impractical or unsafe.
- Roadway disturbances shall be minimized during non-working hours; open trenches shall be covered with steel plates or by the use of temporary backfill during non-working hours.
- Temporary steel plate trench crossings shall be provided as needed to maintain access to homes, farms, and businesses.
- Construction sites shall be posted with appropriate warning signage at least one week prior to construction to allow local residents to select an alternative travel route.
- Construction staging areas shall be provided to minimize storage of equipment and materials in the traffic lanes.
- All paved surfaces disturbed during construction shall be repaved when work is complete.

- The Contractor shall provide traffic control and diversion plans for review and approval by each appropriate jurisdiction.
- To minimize delays in emergency response during project construction, emergency providers shall be notified in advance. Police, fire protection, and ambulance services shall be notified in advance of the times, duration, and location of construction activities throughout the project's construction process.

Tribal Resources

TCR-1: **Unanticipated Discovery of Tribal Cultural Resources.** If potentially significant TCRs are discovered during ground disturbing activities, all work shall cease within 50 feet of the find. A Native American Representative from traditionally and culturally affiliated Native American Tribes that requested consultation on the Project shall be immediately contacted and invited to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. If deemed necessary by the AWA, a qualified cultural resources specialist, who meets the Secretary of Interior's Standards and Qualifications for Archaeology, may also assess the significance of the find in joint consultation with Native American representatives to ensure that Tribal values are considered. Work at the discovery location cannot resume until the AWA, in consultation as appropriate and in good faith, determines that the discovery is either not a TCR, or has been subjected to culturally appropriate treatment, if avoidance and preservation cannot be accommodated.

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Appendix B – Biological Resources Assessment for the Central Amador Water Project Transmission Main Improvements and Tank D Replacement Project, ECORP Consulting, Inc. 2025

Appendix C – Historic Properties Identification and Evaluation Report for the CAWP Transmission Main Improvements ECORP Consulting, Inc. 2025

Appendix D – Energy Consumption Analysis, ECORP Consulting, Inc. 2025

Appendix E – Noise Impact Results, ECORP Consulting, Inc. 2025

Appendix F- CAWP Transmission Main Improvements and Tank D Replacement Project Engineering Report, Bailey Engineering, December 30, 2024

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
°F	degrees Fahrenheit
AAD	Amador Air District
ACBCI	Augustine Band of Cahuilla Indians
ACHP	Advisory Council on Historic Preservation
ACRA	Amador County Recreation Agency
ACSD	Amador County Sheriff's Department
ACUSD	Amador County Unified School District
AFPD	Amador Fire Protection District
AMI	Area Median Income
ANSI	American National Standards Institute
APE	Area of Potential Effect
AWA	Amador Water Agency
BCC	USFWS Bird of Conservation Concern
BMPs	Best Management Practices
BRA	Biological Resource Assessment
BSA	Biological Study Area
CAA	Clean Air Act
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAWP	Central Amador Water Project
CBC	California Building Code
CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
CCR	California Code of Regulations
CCWD	Calaveras County Water District
CDCR	California Department of Corrections and Rehabilitation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

Term	Definition
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH4	methane
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalence Levels
CNPS	California Native Plant Society
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
County	Amador County
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CWD	County Water District
CZMA	Coastal Zone Management Act
DAC	Disadvantaged Community
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EAP	Energy Action Plan
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration

Term	Definition
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information Systems
HCD	California Department of Housing and Community Development
HMGP	Hazard Mitigation Grant Programs
HMP	Habitat Management Plan
IEPR	Integrated Energy Policy Report
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
L_{eq}	Equivalent Noise Level
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MGD	million gallons per day
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
Mph	Miles per hour
MRZ	Mineral Resource Zone
MSA	Master Service Agreement
MSL	Mean Sea Level
N/A	Not Applicable
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NO_x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWSRS	National Wild and Scenic Rivers System

Term	Definition
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Service
OHP	California Office of Historic Preservation
PDM	Pre-Disaster Mitigation
PG&E	Pacific Gas and Electric Company
PM	Post Mile
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
PPV	Peak particle velocity
PRC	Public Resources Code
RBS	Rural Residential
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act of 1899
ROG	Reactive Organic Gases
ROW	Right-of-Way
RTP	Regional Transportation Plan
RWDs	Reports of Waste Discharge
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Officer
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SR	State Route
SRA	State Responsibility Area
SSC	California Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	Tribal cultural resource
tpd	Tons per Day
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation

Term	Definition
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zones
VOC	Volatile Organic Compound
WARF	Western Amador Recycling Facility
WDRs	Waste Discharge Requirements
WEAP	Worker Environmental Awareness Program

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1.0 BACKGROUND

1.1 Summary

Project Title:	Amador Water Agency Central Amador Water Project (CAWP) Transmission Improvements and Tank D Replacement (56 - CAWP 1A.9 (P)) (WO# 7124110)
Lead Agency Name and Address:	Amador Water Agency 12800 Ridge Road Sutter Creek, California 95685
Contact Person and Phone Number:	Brandt Cook (209) 257-5206
Project Location:	The 13.94-acre Project Site corresponds to a portion of Sections 6, 25, 29, 30, 31, 32 and 36, Township 6 and 7 North, and Range 12 and 13 east (Mount Diablo Base and Meridian) of the "West Point, California" 7.5-minute quadrangle (U.S. Geological Survey 1948). The approximate center of the Project is located at 38.41943592° North and -120.58698501° West within the Upper Mokelumne watershed (Hydrological Unit Code 18040012; Natural Resources Conservation Service.
General Plan Designation:	Rural Residential (RBS)
Zoning:	Single Family Residential (R1) or Single Family Residential – Agricultural (R1A)

1.2 Introduction

Amador Water Agency (AWA) is the Lead Agency for this California Environmental Quality Act (CEQA) Initial Study. This Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Amador Water Agency CAWP Transmission Main Improvements and Tank D Replacement (Project) to satisfy CEQA (Public Resources Code [PRC], Section 21000 et seq.) and state CEQA Guidelines (Title 14, California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences before approving those projects. AWA will use this CEQA Initial Study to determine which CEQA document is appropriate for the Project: Negative Declaration, Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR).

In accordance with CEQA, this Initial Study/Mitigated Negative Declaration (IS/MND) will be circulated for a 30-day public review and comment period. Written comments on the Draft IS/MND should be submitted to:

Brandt Cook - Amador Water Agency
12800 Ridge Road
Sutter Creek, California 95685

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Project is located in the community of Pioneer, south of Highway 88 and north of Highway 26 in Amador County, California (Figure 2-1). The Project Area is mostly developed with low density residences, paved roads, and a transmission powerline corridor. The 13.94 acre project site includes construction of a replacement Tank D on a 1.4 acre parcel located at 14885 Williams Road and installation of new transmission pipelines from the existing Tank D at 14882 Old Emigrant Road, to the new tank via a cross-country section and Kelly Lane and Williams Road.

The 13.94-acre Project Site corresponds to a portion of Sections 6, 25, 29, 30, 31, 32 and 36, Township 6 and 7 North, and Range 12 and 13 east (Mount Diablo Base and Meridian) of the "West Point, California" 7.5-minute quadrangle). The approximate center of the Project is located at 38.41943592° North and -120.58698501° West within the Upper Mokelumne watershed (Hydrological Unit Code 18040012;).

2.2 Project Background

The Amador Water Agency, located within Amador County, California, was established in 1959 to provide water service throughout Amador County. The water served by the Agency is primarily sourced as surface water from the Mokelumne River, although a small portion of the Agency's customers are served with groundwater. The Agency services approximately 22,500 people through retail and wholesale services in the cities of Ione, Jackson, , Plymouth, Sutter Creek and Amador City, the communities of Lake Camanche Village, Pine Grove, Pioneer, Buckhorn and several other unincorporated areas. The Agency's owns and operates several water systems including the CAWP Buckhorn system, Amador Water System (AWS – Tanner and Ione systems), La Mel Heights system, Lake Camanche Village system and the Pacific Gas & Electric Company (PG&E) Tiger Creek system. Combined, the AWA systems include more than 40 tanks, multiple water supplies, 25 pump stations, and 350 miles of water pipelines. The Agency also wholesales treated drinking water to the City of Jackson, City of Plymouth, Pine Grove Community Services District, First Mace Meadow Water Association, and Drytown County Water District.

The CAWP Buckhorn Water System provides water to approximately 3,560 retail and wholesale service connections in the Pioneer and Pine Grove areas. The current Tank D, part of the CAWP Buckhorn system, currently serves approximately 175 connections. The Buckhorn system has a historical ten-year maximum day demand of approximately 1.44 million gallons per day (MGD) and a historical peak day demand of approximately 1.9 MGD. Tank D currently has an approximate average day demand of 30 gallons per minute (gpm) and maximum day demand of 65 gpm. Approximately 120 new customers on Williams Road, Bobbie Lane, Kelly Lane, Kathy Lane, Judy Lane, Bevers Way and Dusty Way could be served by a new Tank located at 14885 Williams Road. These potential customers are currently served by wells and there has been continued interest from residents in this area to connect to the Agency's potable water system.

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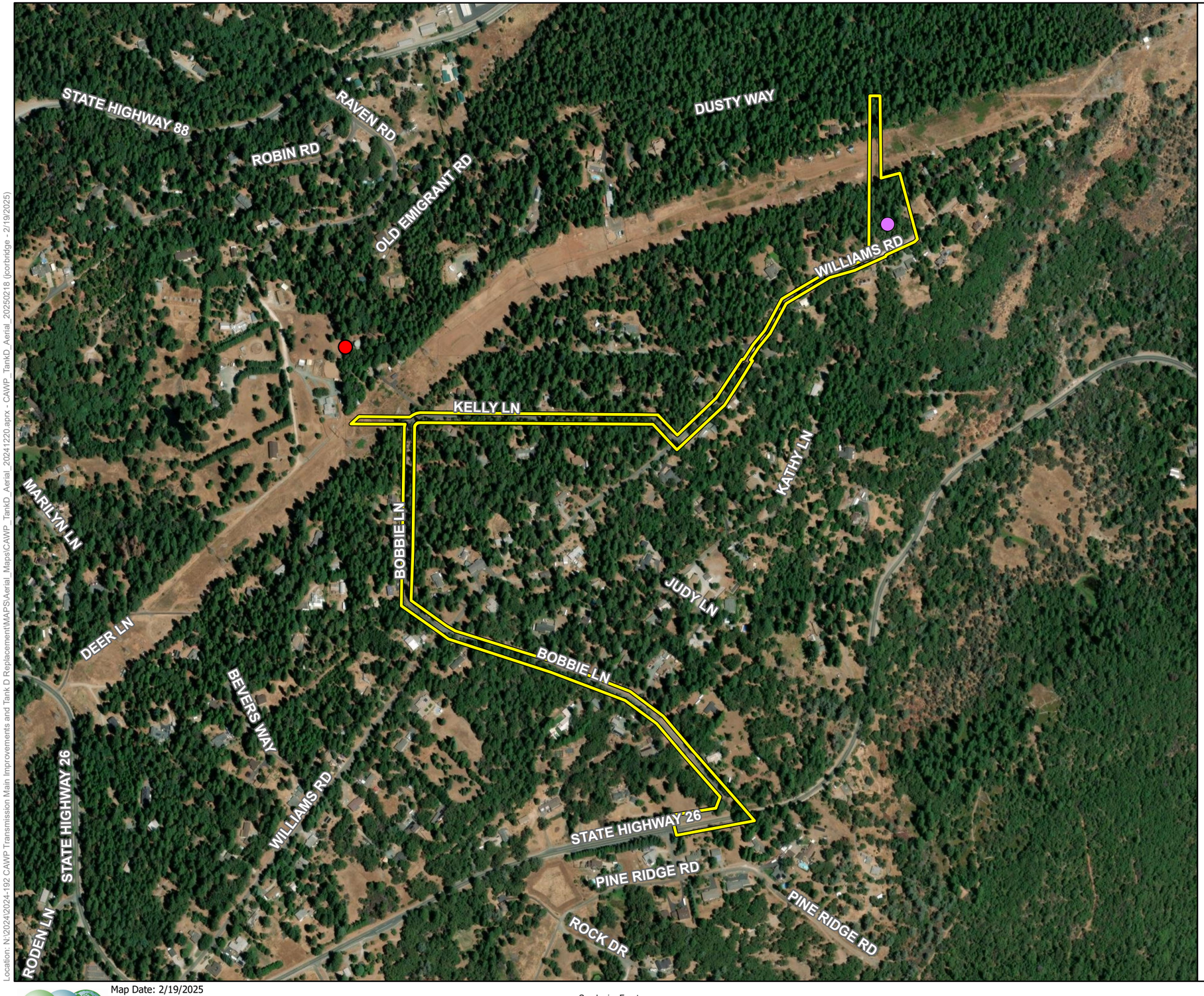


Map Contents

Project Alignment - 9.49 ac.

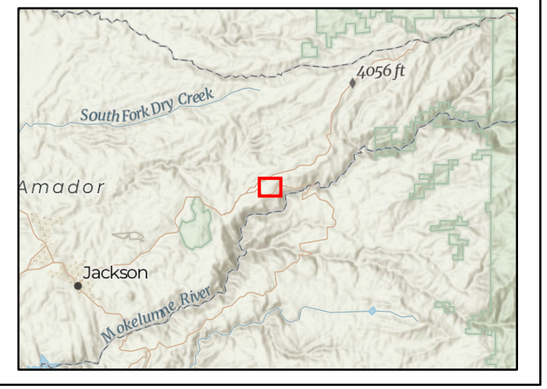
CAWP Tank Locations

Existing Tank

Proposed Tank (approximate location)

Sources: Esri, Maxar

Boundary from Bailey Engineering



Location: N:\2024\2024-192 CAWP Transmission Main Improvements and Tank D Replacement\MAPS\Aerial_Maps\CAWP_TankD_Aerial_20241220.aprx - CAWP_TankD_Aerial_20250218 (jcorbridge - 2/19/2025)

Map Date: 2/19/2025

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 2-1: Project Alignment

2024-192 CAWP Transmission Main Improvements and Tank D Replacement

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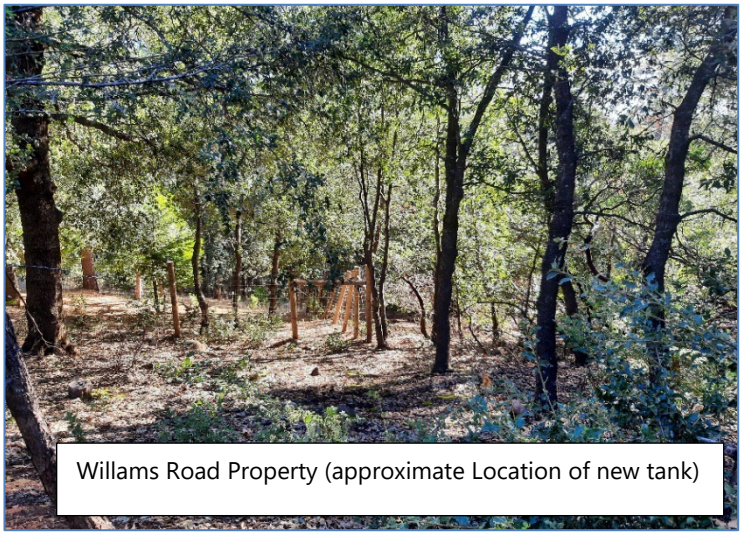
2.3 Project Description

The existing Tank D is an old circular bolted steel tank, in poor condition and in imminent need of replacement. The existing tank is located off Raven Road, behind private residences, with an approximate elevation of 3,050 feet above mean sea level (MSL). The existing tank is 24 feet tall with a 30-foot diameter and approximate capacity of 124,250 gallons. It is filled from the CAWP Transmission Main, which passes directly in front of the existing tank. Tank D currently serves approximately 175 connections (Tank D Service Area). Just downstream of Tank D, where the CAWP main reaches Highway 26, AWA serves another approximate 75 connections (Riverview Service Area) directly off of the CAWP Transmission Main. These connections regularly experience low pressures and reduction in available fire flows when other tanks in the system fill at peak velocities off the transmission main. The proposed Project intends to replace Tank D with a new tank located at 14885 Williams Road, which is a significantly higher elevation. This new tank will provide improved fire flow and potable water storage for an enlarged service area. The project will also remove all service connections from the transmission main and serve them directly from the new tank, allowing the CAWP main to be a truly dedicated transmission main that solely fills tanks, which will increase its filling capacity and improve efficiency. Pipelines from the existing tank site to the new tank site and from the new tank to the distribution system will be required. Pressure reducing valves will need to be added and existing pressure reducing valves along Highway 88 (Cedar Mill site) and on Rocky Lane, Alaire Lane and Highway 26 may need to be modified. Additional fire hydrants along the pipeline alignments and service connections in the vicinity of the new tank will be included. Considerations for a future pump station at the tank site to serve connections around the new tank will also be included in tank siting and piping configuration, although there are no current plans for this proposed pump station nor is design of that included in this Project.

Existing Tank D

The Project will include construction of a replacement water tank with an operational capacity of 275,000-gallons on a new slab foundation at a new site being acquired that is currently a portion of 14885 Williams Road.

The new site will be cleared, graded, fenced for security and paved for access. A new CMU building (approximately 10'x10') will be constructed onsite to house electrical equipment and provide a location for the PGE service drop. New vaults will be



Willams Road Property (approximate Location of new tank)

constructed onsite to house control valves. Site piping will be constructed to provide the ability to remove the tank from service and provide connections for a second future tank and future pump station. A tank overflow pipe will be constructed in the existing Dusty Way easement, and site and storm drainage will be constructed to minimize impacts to existing roads from runoff. Once the new tank is constructed and operational, the old tank will be demolished.

A new 8" or 10" tank inlet pipeline will connect to the CAWP Main downstream of the existing tank and proceed to the tank site via a short cross-country section, Kelly Lane and Williams Road. Kelly Lane and a portion of Williams Road are Amador County maintained and will require an encroachment permit. A 10" or 12" outlet pipeline will parallel the inlet pipeline and connect to existing distribution system piping downstream of the existing tank. An 8" outlet pipeline will branch off at the intersection of Kelly Lane and Bobbie Lane and proceed in Amador County Right-of-Way (ROW) along Bobbie Lane to connect to existing distribution system piping near the intersection of Highway 26 and Bobbie Lane. Interties between distribution and transmission will be constructed for emergency use. A new section of distribution piping will be constructed along Deer Lane or adjacent to connect to existing distribution system piping on Marilyn Lane. This will require a California Department of Transportation (Caltrans) encroachment permit. This section of pipeline will also connect to existing distribution system piping and disconnect from the CAWP Main, eliminating the transmission/distribution system cross connect. A new distribution system pressure reducing station will be constructed on the new main between Deer Lane and Marilyn Lane. A new transmission system pressure reducing station will also be constructed near the intersection of Deer Lane and Highway 26 or near the end of Raven Road. A new section of pipe on/for the CAWP Main will be installed at the existing Tank D site to bypass existing valves, site piping and the existing tank. Pressure reducing valves on the CAWP Main along Highway 88, and on the Tank D distribution system on Alaire Lane, Highway 26 and Rocky Lane may be modified. A pressure reducing station may be added adjacent to Pioneer Volcano Road for the lowest part of the Tank D distribution system. Once the new facilities are online, the existing tank will be demolished and vaults at the existing site will be abandoned. All transmission lines would be constructed via open trenching.

2.4 Project Need

The existing Tank D needs to be replaced as soon as possible. Per the Engineering Report (Appendix F), recent inspections recommend the existing tank be fully recoated, which is not possible due to the state of disrepair. Failures are not expected to be repairable and will require emergency construction, at significantly greater cost than new construction. The replacement should be planned for and completed as soon as possible to ensure a stable water supply for Agency customers. The CAWP Main is severely constrained by the requirements associated with serving River View customers. A new tank should be

located at a high enough elevation to serve these customers directly from the new tank by gravity feed. If the existing tank were at a higher elevation, it does not have enough capacity for a maximum day demand of existing customers plus Riverview customers. Decoupling the distribution system from the transmission main will allow the CAWP Main to better serve all customers along its length, especially downstream of Tank D. The project as designed addresses these needs.

2.5 Land Use and Planning

The proposed Project Site, both at the new Tank D location and the new transmission lines, is designated as Rural Residential (RBS) in the Amador County General Plan and the zoning designation is Single Family Residential (R1) or Single Family Residential Agricultural District (R1A). The proposed Project is an allowed use.

2.6 Project Construction and Timing

Construction of the proposed Project would begin December 2025 and would be constructed in a single phase and completed by December 2026. Construction equipment will likely include excavators, backhoes, graders, loaders, skid steers, pavers, grinders, rollers, sweepers, cranes, and dump trucks. Generally, construction will occur between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays. Post-construction activities will include site clean-up. Construction will require temporary staging and storage of materials and equipment. Staging areas will be located at the new tank site.

Although construction is not expected to generate hazardous waste, field equipment used during construction has the potential to contain various hazardous materials such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum-based products.

2.7 Regulatory Requirement, Permits, and Approvals

- Amador County – AWA must obtain a grading and encroachment permit from Amador County.
- California Department of Transportation – AWA must obtain an encroachment permit for the new section of distribution piping that will be constructed along Deer Lane to connect to existing distribution system piping on Marilyn Lane.
- California Regional Water Quality Control Board (RWQCB) - AWA must obtain a National Pollutant Discharge Elimination (NPDES) Construction Activities Stormwater General Permit. The permit requires that the project applicant prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to any construction activities.
- U.S. Fish and Wildlife Service (USFWS): Consultation for endangered species and possible take permits, if needed.

2.8 Consultation With California Native American Tribe(s)

AWA has notified the following California Native American tribes traditionally and culturally affiliated with the geographic area of the Proposed Project: United Auburn Indian Community of the Auburn Rancheria,

Buena Vista Rancheria of Me-Wuk Indians, and Shingle Springs Band of Miwok Indians. No tribes have requested consultation pursuant to PRC Section 21080.3.1. Section 4.18 of this IS/MND provides a summary of the notification process.

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the Project, involving at least one impact that is a *Potentially Significant Impact,* as indicated by the checklist on the following pages.

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

Determination

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the 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. ☒

I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the 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. ☐

I find that although the 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 Project, nothing further is required. ☐

_____ Date: _____

Amador Water Agency

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4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 Visual Character of the Project Site

Visual Character of Project Site

The Project is located in the community of Pioneer, south of State Route 88 and north of State Route 26 in Amador County, California. The Project is located along existing roads (Deer Lane, Raven Road, Kelly Lane, Williams Road, Bobbie Lane, Kathy Lane, and Red Corral Road) and a transmission powerline corridor on rolling terrain in a rural setting south of the community of Pioneer, California. The Project Site is situated at an elevational range of approximately 2,990 to 3,200 feet above MSL in the Northern High Sierra Nevada region of the California floristic province.

The Project is currently occupied by low-density development roadways and a transmission powerline corridor. The existing facilities include a water-holding tank. Undeveloped portions of the BSA primarily include mixed-conifer forest and developed/disturbed land cover types.

4.1.1.2 Regional Setting

State Scenic Highways

A scenic highway is generally defined by the California Department of Transportation (Caltrans) as a public highway that traverses an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural landscape attributes. A highway may be designated scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers' enjoyment of the view.

Only one highway section in Amador County is listed as an officially Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of State Route 88 in the eastern portion of the county along the southern boundary of Amador County. This route traverses the Sierra Nevada Mountains to the east. State Route (SR) 88 through the community of Pioneer is listed "eligible" but is not currently officially designated (Caltrans 2024).

The proposed Project not located within the area of SR 88 that is designated as a scenic highway.

4.1.1.3 Local

Amador County General Plan

The Amador County General Plan was adopted by the County Board of Supervisors in October 2016. The County General Plan is a policy document designed to give long-range guidance regarding the growth

and resources within the County. The relevant policies from the Amador County related to visual resources and the proposed project are listed below:

Goal CM-4: Maintain and enhance the visual quality and scenic views along designated scenic corridors.

Policy CM-4.1: Maintain visual quality and scenic views along designated scenic corridors through project review and adoption of a scenic highway ordinance.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Less Than Significant Impact.

A scenic vista is a viewpoint that provides a distant view of highly valued natural or manufactured landscape features for the benefit of the general public. Typical scenic vistas are locations where views of rivers, ocean, hillsides, and open space areas can be obtained as well as locations where valued urban landscape features can be viewed in the distance. The proposed project will take place on private land and within existing roadways. Therefore, it is highly unlikely that the project will be seen from a scenic vista; however, if construction of the proposed pipeline is visible from a scenic vista, any impacts to a scenic vista would be temporary during construction activities. Once the proposed Project is completed there will be no change in the visual character of the roadway or quality of public views and the new tank will be located on private property that will not be accessible by the general public. Therefore, the proposed Project would have a less than significant impact to visual scenic vistas.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No Impact.

A portion of State Route (SR) 88 has been designated as a scenic highway, and the rest of SR-88 and SR-49 may be eligible for designation. However, the proposed Project is not located near or within a state designated scenic highway and will not damage scenic resources, including but not limited to trees, outcroppings, and historic buildings within a state scenic highway viewshed.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized areas, 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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project is within a rural residential area within an urban forest setting intersected by a maintained PG&E transmission line corridor. Project construction activities would introduce equipment and machinery into the viewshed of the limited viewer groups/residents that would have views of the project site, creating temporary effects on limited views of Project Site during construction. Once construction is complete, the new water tank will likely only be visible from neighbor's properties.

Additionally, the new water tank will be painted in a natural color that similarly matches the color of the vegetation around the tank site and would further help reduce any perceived changes in the viewshed. Therefore, the project will not result in a degradation of the visual character or quality of the public views of the site and surrounding area and the Project would not conflict with zoning and other regulations governing scenic quality. Any visual impacts as a result of the project would be less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

No Impact

The Proposed Project involves replacing an existing tank with a new tank in a higher elevation location and new connection pipeline within existing roadways. The new tank will be painted tan to match the surrounding landscape and reduce its visibility when viewed from surrounding areas. Small manually operated outdoor work lighting is proposed on the new tank structure as part of the Project and would not create a new source of substantial light or glare. There would be no impact and no mitigation is required.

4.1.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

4.2.1.1 California Important Farmland Inventory System and Farmland Mapping and Monitoring Program

The California Department of Conservation Farmland Mapping and Monitoring Program identifies lands that have agriculture value and maintains a statewide map of these lands called the Important Farmlands Inventory. Important Farmland maps classify land into one of eight categories, which are defined as follows:

- Prime Farmland – Land that has the best combination of features for the production of agricultural crops.
- Farmland of Statewide Importance – Land other than Prime Farmland that has a good combination of physical and chemical features for the production of agricultural crops.
- Unique Farmland – Land of lesser quality soils used for the production of the state's leading agricultural cash crops.
- Farmland of Local Importance – Land that is of importance to the local agricultural economy.
- Grazing Land – Land with existing vegetation that is suitable for grazing.
- Urban and Built-up Lands – Land occupied by structures with a density of at least one dwelling unit per 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public utility structures, and other developed purposes.
- Land Committed to Nonagricultural Use – Vacant areas; existing lands that have a permanent commitment to development but have an existing land use of agricultural or grazing lands.
- Other Lands – Land that does not meet the criteria of the remaining categories.

According to the California Department of Conservation (DOC) online Important Farmland Finder Map (DOC 2024a), the proposed location of the new water tank is classified as Other Land. Areas of the new transmission line are identified as Other Land or Urban and Built-Up Land. Other land is described as vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

4.2.1.2 Williamson Act Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to enter into agreements with private landowners to restrict parcels for agricultural or related open space use. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value.

The proposed Project is not zoned for agriculture or forestry use and is not under Williamson Act contract (DOC 2024b).

4.2.2 Regulatory Setting

Amador County Right-to-Farm Ordinance

The Agricultural Lands and Operations Disclosure (Ordinance Code 1504, Title 19, Chapter 19.80) implements the County's Right-to-Farm ordinance. The purpose of this ordinance is to promote the general health, safety, and welfare of the County and to preserve and protect those lands, however zoned, where agricultural operations do or may occur; to support and encourage the continued agricultural operations in the County; and to warn prospective purchasers and residents of property adjacent to agricultural operations of the inherent problems associated with the agricultural uses, including but not limited to, noise, dust, odor, smoke, fertilizers, and pesticides that may accompany agricultural operations. Sellers of any parcel located in the unincorporated area of the County, however zoned, and whether improved or unimproved, are required to disclose the Right-to-Farm ordinance provisions to prospective buyers as part of real estate transactions.

4.2.3 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact

As discussed above, the California Important Farmland Finder Map identifies the Project Site as Other Land or Urban and Built Up Lands. Therefore, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. There would be no impact and mitigation is not required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐

Less Than Significant Impact

The proposed Project site and surrounding parcels are not under Williamson Act contracts (DOC 2024b). The Proposed Project would not conflict with existing zoning for agricultural uses or a Williamson Act contract.

The Amador County General Plan Designation for the project site is Rural-Residential (Amador County 2024a). The description for that designation is as follows:

> Low-density residential use. One-acre net minimum lot sizes are acceptable in areas served by public water. Five-acre minimum lot sizes are required in areas lacking public water service.

Implementation of the proposed Project would change the use to include a new water tank but would not result in any land use designation or zoning change. Therefore, any impact would be less than significant, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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))?	☐	☐	☐	☒

No Impact

As described previously in item a), the proposed Project does not involve properties zoned for forest land, timberland or Timberland Production, and therefore would not conflict with existing zoning codes. No impact would occur and no mitigation measures are required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact

See discussion under item c). No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact

See discussion under item a), the proposed Project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest. No impact would occur and no mitigation measures are required.

4.2.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.3 Air Quality

4.3.1 Environmental Setting

This assessment was prepared using methods and assumptions recommended in the rules and regulations of the Amador Air District (AAD). Regional and local existing conditions are presented, along with pertinent pollutant emissions standards and regulations that apply to the Mountain Counties Air Basin (MCAB), which encompasses the Project Area. The purpose of this assessment is to estimate criteria air pollutants attributable to the Project and determine the level of impact the Project would have on the environment.

The Project Area is located within Amador County (County). The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The Project Area is located in the MCAB portion of Amador County. The MCAB is comprised of all of Amador, Calaveras, Mariposa, Nevada, Plumas, Sierra, and Tuolumne counties and parts of El Dorado and Placer counties. The topography of Amador County portion of the MCAB is highly variable and includes rugged mountain peaks and valleys with extreme slopes and differences in altitude in the Sierras, as well as rolling foothills to the west. The MCAB lies along the northern Sierra Nevada Mountain range, close to or contiguous with the Nevada border, covering an area of approximately 11,000 square miles. Elevations in Amador County range from over 9,000 feet above sea level within the Sierra Nevada Mountain range to several hundred feet above sea level at the County's boundary with Sacramento County.

4.3.2 Ambient Air Quality

Both the USEPA and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards establish safe levels of contaminants that avoid specific adverse health

effects associated with each pollutant. The ambient air quality standards cover what are called criteria pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter (PM), nitrogen oxide (NO_x), sulfur dioxide (SO_2), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas.

The USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) for O_3, particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards are not to be exceeded during a three-year period. The attainment status for Amador County portion of the MCAB is presented in Table 4.3-1.

Table 4.3-1. Attainment Status of Criteria Pollutants in the Amador County Portion of the MCAB

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Marginal Nonattainment
PM_{10}	Unclassified	Unclassified
$PM_{2.5}$	Unclassified	Unclassified/Attainment
CO	Unclassified	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Note: CO = Carbon monoxide; MCAB = Mountain Counties Air Basin; N_2O = Nitrous Oxide; NO_2 = Nitrogen Dioxide; O_3 = Ozone; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; SO_2 = Sulfur dioxide

Source: California Air Resources Board (CARB) 2023, U.S. Environmental Protection Agency (USEPA) 2024a

The determination of whether an area meets the federal standards is based on air quality monitoring data. As shown above, sometimes areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Maintenance areas are areas that have previously been in nonattainment but now meet the air quality standards. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. For federal nonattainment areas, classifications vary based on the severity of the pollution. The region is designated as a marginal nonattainment area for the federal ozone (O_3) standards and a nonattainment area for the state O_3 standards (CARB 2023; USEPA 2024a).

4.3.3 Regulatory Setting

4.3.3.1 Amador Air District

The air quality regulating authority in Amador County is the AAD. The AAD responsibilities include managing air resources of the County, assisting with compliance of regulations, achieving and maintaining ambient air quality standards set by the USEPA and CARB, and protecting public health and the environment from adverse air quality impacts (AAD 2024).

4.3.3.2 United States Environmental Protection Agency

General Conformity ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain national standards for air quality. Established under the federal Clean Air Act (CAA) (section 176(c)(4)), the General Conformity rule plays an important role in helping states improve air quality in those areas that do not meet the NAAQS. Under the General Conformity rule, federal agencies must work with state and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. The overall purpose of the General Conformity rule is to ensure that:

Federal activities do not cause or contribute to new violations of NAAQS;

Actions do not worsen existing violations of the NAAQS; and

Attainment of the NAAQS is not delayed.

The General Conformity process begins with an "applicability analysis," whereby it must be determined how and to what degree the Conformity Rules apply. According to USEPA's General Conformity Guidance: Questions and Answers (1994), before any approval is given for a Federal Action to go forward, the federal agency must apply the applicability requirements found at 40 Code of Federal Regulations (CFR) Section 93.153 to the Federal Action and/or determine on a pollutant-by-pollutant basis, whether a determination of General Conformity is required. During the applicability analysis, the federal agency determines the following:

- Whether the action will occur in a nonattainment or maintenance area;
- Whether one or more of the specific exemptions apply to the action;
- Whether the federal agency has included the action on its list of presumed-to-conform actions;
- Whether the total direct and indirect emissions are below or above the *de minimis* levels; and/or
- Where a facility has an emissions budget approved by the State or Tribe as part of the State Implementation Plan or Tribal Implementation Plan, the federal agency determines that the emissions from the proposed action are within the budget.

The General Conformity Rule allows for exemptions for emissions that are not reasonably foreseeable, will not result in an increase in emissions, are below de minimis limits, are the result of emergency actions, are included in stationary source air permits, are for routine maintenance and repair of existing structures, or are included in a transportation conformity determination undertaken by Federal Highway Administration or Federal Transit Administration (40 CFR 93.153(c)).

4.3.3.3 Thresholds of Significance

4.3.3.4 Amador Air District

The AAD has not formally adopted thresholds of significance for the evaluation of proposed projects that are subject to CEQA review. Therefore, air pollutant significance thresholds will be based on AAD's Rule 500, which provides thresholds for major stationary sources of emissions (Project emissions are also evaluated against the significance thresholds established in neighboring El Dorado County for comparison purposes). AAD Rule 500 thresholds of significance are shown in Table 4.3-2.

Table 4.3-2. AAD Rule 500 Thresholds of Significance

Pollutant	Significance Threshold (pounds/day)
ROG	274
NO_x	274
PM_{10}	384
$PM_{2.5}$	–
CO	548
SO_2	548

Note: CO = Carbon Monoxide: NO_x = Nitrogen Oxide; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; ROG = Reactive Organic Gas; SO_2 = Sulfur dioxide

Source: Amador Air District (AAD) 2001

4.3.3.5 United States Environmental Protection Agency Conformity Determination

A conformity determination would be required if the annual emissions of non-attainment pollutants generated by the Project were to exceed the General Conformity *de minimis* thresholds. The *de minimis* limits represent an emissions level that the USEPA has determined will have only de minimis impacts to the air quality of an area and are thus exempted from the General Conformity Rule. If the overall predicted increase in emissions of a criteria pollutant due to a federal action in a nonattainment area exceeds the de minimis limits as shown in Table 4.3-3, a conformity determination is required.

Table 4.3-3. Federal General Conformity *De Minimis* Emissions Levels in Amador County

Pollutant	Attainment Status	Classification	USEPA General Conformity Threshold (tons/year)
Ozone (VOCs or NO_x)	Nonattainment	Marginal	50

Table 4.3-3. Federal General Conformity *De Minimis* Emissions Levels in Amador County			
Pollutant	**Attainment Status**	**Classification**	**USEPA General Conformity Threshold (tons/year)**
PM_{10}	Unclassified	N/A	100
$PM_{2.5}$	Unclassified	N/A	100
CO	Unclassified/Attainment	N/A	100
NO_2	Unclassified/Attainment	N/A	100
SO_2	Unclassified/Attainment	N/A	100
Lead	Unclassified/Attainment	N/A	25

Note: CO = Carbon Monoxide; N/A = Not Applicable; NO_2 = Nitrogen Dioxide; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; SO_2 = Sulfur dioxide; VOC = Volatile Organic Compound

Source: U.S. Environmental Protection Agency (USEPA) 2024b

4.3.4 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

No Impact.

The AAD is the agency primarily responsible for compliance with federal and state standards within Amador County. The AAD helps to ensure that air quality conditions are maintained through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the AAD includes adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the federal CAA and the California Clean Air Act. A project is inconsistent with regional air quality planning if it would result in population and/or employment growth that exceeds growth estimated in the applicable air quality plan.

The Proposed Project does not include development of new housing or employment centers and would not induce population or employment growth. The Proposed Project would construct a new 275,00-gallon water tank, water pipelines and associated infrastructure. The replacement reservoir would meet current design standards and be sized for current water demands and fire flows. Therefore, the Proposed Project would not conflict with or obstruct regional air quality planning and there is no impact. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

Air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable.

The majority of the Proposed Project's air quality impacts are attributable to construction activities. For purposes of impact assessment, air quality impacts have been separated into construction impacts and operational impacts.

4.3.4.1 Construction Emissions

Emissions associated with Project construction would be temporary and short-term but have the potential to represent a significant air quality impact. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities. Off-road construction equipment is often diesel-powered and can be a substantial source of nitrogen oxide (NO_X) emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of reactive organic gas (ROG) emissions.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

AAD Significance Thresholds

The AAD has not formally adopted thresholds of significance for the evaluation of proposed projects that are subject to CEQA review. For purposes of this analysis, emission thresholds of the criteria air pollutants are based on the definition of a "major source," as identified in AAD's Rule 500. The predicted maximum

daily emissions of ROG, NO_x, CO, SO_2, PM_{10}, and $PM_{2.5}$, associated with Project construction are summarized in Table 4.3-4 and compared to the threshold promulgated by AAD's Rule 500.

Table 4.3-4. Construction-Related Criteria Air Pollutant Emissions

Project Phase	Pollutant (maximum pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction Year One	3.93	65.60	34.90	0.23	38.20	14.70
Significance Thresholds[1]	*274 pounds/day*	*274 pounds/day*	*548 pounds/day*	*548 pounds/day*	*384 pounds/day*	-
Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Construction emissions taken from the season (summer or winter) with the highest output.
CO = Carbon Monoxide; NO_x = Nitrogen Oxide; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; ROG = Reactive Organic Gas; SO_2 = Sulfur dioxide
[1]Significance thresholds for ROG, NO_x, CO, SO_2, and PM_{10} are based on the definition of a "major source" derived from Amador Air District's Rule 500. To ensure a more conservative analysis and to provide additional protection to nearby receptors from regional concentrations of O_3 precursors, NO_x and ROG thresholds are based on standards applied to federally classified serious nonattainment areas, though the County is only classified marginal nonattainment. Construction emission calculations account for the paving of 13.93 acres and the demolition and export of 11,844 tons of pavement.
Source: California Emissions Estimator Model (CalEEMod) Version 2022.1.1. Refer to Appendix A for Model Data Outputs.

Source: California Emissions Estimator Model (CalEEMod) Version 2022.1.1. Refer to Appendix A for Model Data Outputs.

As shown, construction would not exceed any significance thresholds derived from AAD's Rule 500.

For the purposes of further comparison, the significance thresholds for criteria pollutants set forth by the El Dorado County Air Quality Management District (EDCAQMD) are also noted. El Dorado County Air Pollution Control District's (EDCAPCD's) *Guide to Air Quality Assessment* (EDCAPCD 2002) includes significance thresholds to assist lead agencies in determining whether a project may have a significant air quality impact. While the significance thresholds promulgated in El Dorado County are not binding in Amador County, they are instructional for comparison purposes. The EDCAQMD's construction emission significance thresholds are 82 pounds per day of NO_x and ROG. As shown, construction of the Proposed Project would not generate emissions of NO_x or ROG at levels greater than 82 pounds daily.

USEPA Conformity Determination

As previously described, the Proposed Project is located in the Amador County region, which is designated as a nonattainment area for the federal O_3 standard. Emissions generated during Project implementation would be short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Conformity Determination thresholds. Predicted maximum annual construction-generated emissions for the Proposed Project are summarized in Table 4.3-5 and compared against the USEPA Conformity Determination thresholds for Amador County.

Table 4.3-5. Construction-Related Emissions (USEPA Conformity Determination Analysis)

Construction Year	Pollutant (tons per year)				
	VOC (ROG)	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction Year One	0.34	2.45	2.55	0.51	0.22
USEPA Conformity Determination Thresholds (40 CFR 93.153)	*50*	*50*	*100*	*100*	*100*
Exceed USEPA Conformity Determination Thresholds?	**No**	**No**	**No**	**No**	**No**

Notes: Construction emission calculations account for the paving of 13.93 acres and the export of 11,844 tons of pavement.
CFR = Code of Federal Regulations; CO = Carbon Monoxide; NO_x = Nitrogen Oxide; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; ROG = Reactive Organic Gas; USEPA = U.S. Environmental Protection Agency; VOC = Volatile Organic Compound

Source: California Energy Emissions Module (CalEEMod) version 2022.1.1. Refer to Appendix A for Model Data Outputs.

As shown in Table 4.3-6, emissions from construction of the Proposed Project would not exceed the USEPA Conformity Determination thresholds for the region.

Construction impacts would be less than significant. No mitigation is required.

4.3.4.2 Operational Emissions

The Proposed Project includes the installation of a new water tank, waterlines, and associated infrastructure. The operational emissions would be minimal and primarily attributed to tank pumping activities. As such, there are no significant new operational air quality emissions associated with the Proposed Project. Therefore, operational impacts would be less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less Than Significant Impact.

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses.

Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The Proposed Project involves the installation of a new water tank and infrastructure spanning varying distances to sensitive receptors, as it is a linear project spanning multiple acres. Sensitive receptors in the Project Area consist of rural single-family residences, some of which are located directly adjacent to the waterline improvements.

4.3.4.3 Construction-Generated Air Contaminants

Construction of the Project would result in temporary emissions of diesel particulate matter (DPM), ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ from the exhaust of off-road; heavy-duty diesel equipment for Project construction; grading; and other miscellaneous activities. As previously identified, the MCAB, which encompasses the Project Area, is designated nonattainment for the federal and state O_3 standards (CARB 2023). Thus, existing levels of this pollutant are at unhealthy levels during certain periods in the MCAB. However, shown in Table 4.3-4 and 4.3-5, construction-related emissions would not result in an exceedance of the significance thresholds derived from AAD's Rule 500 or the USEPA Conformity Determination thresholds for the region. Therefore, no regional health effects from Project criteria pollutants would occur.

The health effects associated with O_3 are generally associated with reduced lung function. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_x in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function, and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths. The concentration of O_3 at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 parts per billion. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NO_x) in excess of the AAD Rule 500 significance thresholds or the USEPA Conformity Determination thresholds for the region, which are set to be

protective of human health and account for cumulative emissions, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the AAD Rule 500 thresholds or the USEPA Conformity Determination thresholds for the region, which are set to be protective of human health and account for cumulative emissions in Amador County. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and PM_{10} exhaust contains $PM_{2.5}$ exhaust as a subset. As with ROG and NO_x, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed thresholds. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of air pollutants or adverse health impacts associated with those pollutants. Impacts would be less than significant and no mitigation is required.

4.3.4.4 Operational Air Contaminants

Operation of the Proposed Project would not change existing activities in the Project Area beyond the water tank filling which would result in minimal air quality emissions. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during Project operations. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less Than Significant Impact

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the Project Area. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not contain any of the land uses identified as typically associated with emissions of objectionable odors. As such, no operational impacts would occur and no mitigation is required.

4.3.5 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.4 Biological Resources

This section is based on the analysis and recommendations presented in the Biological Resources Assessment (BRA) prepared for the proposed Project (ECORP 2025a, Appendix B). The Project area is referred to below as the Biological Study Area (BSA).

4.4.1 Environmental Setting

The BSA includes all areas where Project-related activities may result in impacts to sensitive biological resources. The 13.94-acre BSA corresponds to a portion of Sections 6, 25, 29, 30, 31, 32 and 36, Township 6 and 7 North, and Range 12 and 13 east (Mount Diablo Base and Meridian) of the "West Point, California" 7.5-minute quadrangle (U.S. Geological Survey 1948). The approximate center of the BSA is located at 38.41943592° North and -120.58698501° West within the Upper Mokelumne watershed (ECORP 2025a).

The BSA is located along existing roads (Deer Lane, Raven Road, Kelly Lane, Williams Road, Bobbie Lane, Kathy Lane, and Red Corral Road) and a transmission powerline corridor on rolling terrain in a rural setting south of the community of Pioneer, California. The BSA is situated at an elevational range of approximately 2,990 to 3,200 feet above MSL in the Northern High Sierra Nevada region of the California floristic province.

The BSA is currently occupied by low-density development roadways and a transmission powerline corridor. The existing facilities include a water-holding tank. Undeveloped portions of the BSA primarily include mixed-conifer forest and developed/disturbed land cover types.

4.4.1.1 Vegetation Communities and Land Cover Types

The following sections describe vegetation communities and land cover types within the Study Area as observed during the site reconnaissance. A full list of plants observed onsite can be found in Appendix C of Appendix B. The approximate extent of vegetation communities and land cover types are depicted on Figure 4.4-1.

Mixed Conifer Forest

There is a relatively small patch of mixed conifer forest vegetation community found in the northeast corner of the BSA, at the new tank location, that is located between the transmission corridor and rural residences. Within the BSA, this vegetation community is dominated by ponderosa pine (*Pinus ponderosa*) with incense cedar (*Calocedrus decurrens*), black oak (*Quercus kelloggii*), Pacific madrone (*Arbutus menziesii*), and manzanita (*Arctostaphylos* sp.) present at lower cover in the overstory and the regenerative sapling layer. The herbaceous understory is dominated by mountain misery (*Chamaebatia foliolosa*) and chaparral honeysuckle (*Lonicera interrupta*).

The mixed conifer forest within the BSA most resembles the *Pinus ponderosa - Calocedrus decurrens - Pseudotsuga menziesii* Forest & Woodland Alliance as characterized in the Manual of California Vegetation. This alliance has a state rarity rank of S4 and is not considered a sensitive natural community. The mixed conifer forest within the BSA does not resemble any known sensitive associations.

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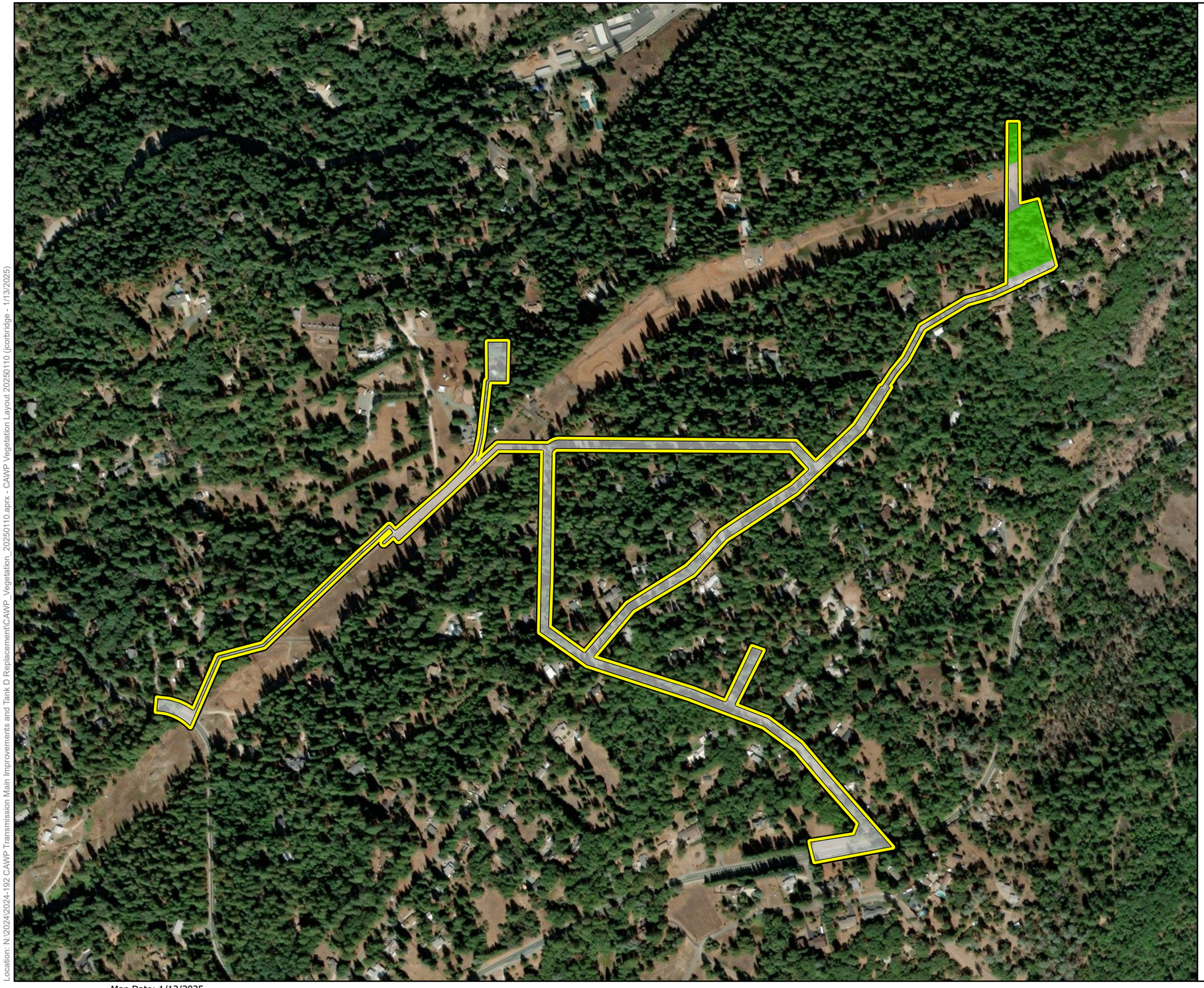

Map Contents

BSA - 13.94 ac.

Land Cover

Developed / Disturbed

Mixed Conifer Forest

Sources: Esri, Maxar

Land cover designations from on premise observations

Location: N:\2024\2024-192 CAWP Transmission Main Improvements and Tank D Replacement\CAWP_Vegetation_20250110.aprx - CAWP Vegetation Layout 20250110 (jcorbridge - 1/13/2025)

Map Date: 1/13/2025

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 4.4-1. Vegetation Communities and Land Cover Types

2024-192 CAWP Transmission Main Improvements and Tank D Replacement Project

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Developed/Disturbed

The disturbed or developed land cover type is found throughout the majority of the BSA and is composed of the existing water tank site, roads, rural residences, and vegetation clearing associated with the transmission powerline corridor. The existing water tank site, roads, and residences are either devoid of herbaceous vegetation or dominated by sparse ruderal vegetation including hedgehog dog-tail grass (*Cynosurus echinatus*), ripgut brome (*Bromus diandrus*), and vetch (*Vicia* sp.). California yerba santa (*Eriodictyon californicum*) is scattered at the water tank site and in the transmission powerline corridor. The overstory of these areas resembles the mixed conifer forest within the BSA. All overstory cover along the transmission powerline corridor has been previously removed. The remaining vegetation within this area resembles disturbed grassland with scattered non-native annual grasses, clovers (*Trifolium* spp.), common mullein (*Verbascum thapsus*), and incense cedar saplings.

Developed/disturbed is not a vegetation community and does not have a state or global rarity ranking.

4.4.1.2 Aquatic Resources

No aquatic resources were found within the BSA during the preliminary aquatic resources assessment. Roadside ditches are common in the BSA with culverts spanning driveways, but these ditches are not aquatic resources since they do not support the three-parameters necessary to be wetlands or field indicators of ordinary high-water marks.

4.4.1.3 Wildlife

The vegetation communities in the BSA provide habitat for a variety of wildlife species. Wildlife species observed onsite include mule deer (*Odocoileus hemionus*), pocket gopher evidence (*Thomomys* sp.), western gray squirrel (*Sciurus griseus*), California scrub-jay (*Aphelocoma californica*), acorn woodpeckers (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), and turkey vulture (*Cathartes aura*). Other species typically associated with the vegetation communities found in the BSA include striped skunk (*Mephitis mephitis*), and raccoons (*Procyon lotor*). A list of wildlife species observed in the BSA is provided in Appendix B.

4.4.1.4 Special-Status Species

Appendix G of the BRA (Appendix B, ECORP 2025a) provides a list of all the special-status plant and wildlife species identified as potentially occurring within the BSA. This list was created based on a review of literature and database searches including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database, California Native Plant Society (CNPS) Rare Plant Inventory, USFWS Information for Planning and Consultation, and National Marine Fisheries Service Resources data, as further described in Appendix B. This provides the listing status for each species, a brief habitat description, and a determination on the potential to occur within the BSA. The following sections briefly describe and discuss the special-status species that are either listed or are candidates for listing under the California or federal ESAs and could potentially occur within the BSA.

Plants

Sanborn's Onion

Sanborn's onion (*Allium sanbornii* var. *sanbornii*) is not listed pursuant to either the federal or California ESAs but is designated as a California Rare Plant Rank (CRPR) 4.2 species. This species is a bulbiferous herbaceous perennial that usually occurs on serpentinite or gravelly soils in chaparral, cismontane woodlands, and lower montane coniferous forest. Sanborn's onion blooms from May through September and is known to occur at elevations ranging from 855 to 4,955 feet above MSL. The current range of this species in California includes Butte, Calaveras, El Dorado, Nevada, Placer, Plumas, Shasta, Tehama, Tuolumne, and Yuba counties.

The mixed conifer forest in the BSA may provide marginally suitable habitat for Sanborn's onion. There are no California Natural Diversity Database (CNDDB) recorded occurrences of this species within 5 miles of the BSA. Sanborn's onion has low potential to occur in the BSA.

Three-Bracted Onion

Three-bracted onion (*Allium tribracteatum*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is a bulbiferous herbaceous perennial that occurs on volcanic soils in chaparral, lower montane coniferous forests, and upper montane coniferous forests. Three-bracted onion blooms from April through August; it is known to occur at elevations ranging from 3,610 to 9,845 feet above MSL. Three-bracted onion is endemic to California; the current range of this species includes Alpine, Calaveras, El Dorado, and Tuolumne counties.

The mixed conifer forest in the BSA may provide marginally suitable habitat for three-bracted onion. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Threebract onion has low potential to occur in the BSA.

Pleasant Valley Mariposa-Lily

Pleasant Valley mariposa-lily (*Calochortus clavatus* var. *avius*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is a perennial bulbiferous herb that occurs in Josephine silt loam and volcanic soils in lower montane coniferous forest. Pleasant Valley mariposa-lily blooms from May through July and is known to occur at elevations ranging from 1,000 to 5,905 feet above MSL. This species is endemic to California; its current range includes Amador, Calaveras, El Dorado, Mariposa, and Placer counties; it is likely extirpated from Mariposa County.

The mixed conifer forest within the BSA may provide suitable habitat and the disturbed areas that support native vegetation may provide marginally suitable habitat for Pleasant Valley mariposa-lily. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Pleasant valley mariposa-lily has potential to occur in the BSA.

Fresno Ceanothus

Fresno ceanothus (*Ceanothus fresnensis*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.3 species. This species is an evergreen perennial shrub that occurs in

cismontane woodland openings or lower montane coniferous forest. Fresno ceanothus blooms from May through July and is known to occur at elevations ranging from 2,955 to 7,250 feet above MSL. Fresno ceanothus is endemic to California; the current range of this species includes Calaveras, El Dorado, Fresno, Madera, Mariposa, Nevada, Placer, Plumas, Tulare, and Tuolumne counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide marginally suitable habitat for Fresno ceanothus. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA). Fresno ceanothus has low potential to occur in the BSA. (ECORP 2025a).

Red Hills Soaproot

Red Hills soaproot (*Chlorogalum grandiflorum*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 plant. This species is a bulbiferous perennial herb that typically occurs on serpentinite, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest communities. Red Hills soaproot blooms from May through June and is known to occur at elevations ranging from 805 to 5,545 feet above MSL. Red Hills soaproot is endemic to California; the current range of this species includes Amador, Calaveras, El Dorado, Placer, and Tuolumne counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide suitable habitat for red hills soaproot. There are four CNDDB recorded occurrences of this species within 5 miles of the BSA. Red hills soaproot has potential to occur in the BSA.

Brandegee's Clarkia

Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 plant. This species is an herbaceous annual that occurs in chaparral, cismontane woodlands, and lower montane coniferous forest. Brandegee's clarkia blooms from May through July and is known to occur at elevations ranging from 245 to 3,000 feet above MSL. Brandegee's clarkia is endemic to California; the current range of this species includes Butte, El Dorado, Nevada, Placer, Sacramento, Sierra, and Yuba counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide marginally suitable habitat for Brandegee's clarkia and there are few known records of this species in the vicinity. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Brandegee's clarkia has low potential to occur in the BSA.

Sierra Clarkia

Sierra clarkia (*Clarkia virgata*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.3 plant. This species is an herbaceous annual that occurs in cismontane woodlands and lower montane coniferous forest. Sierra clarkia blooms from May through August and is known to occur at elevations ranging from 1,310 to 5,510 feet above MSL. Sierra clarkia is endemic to California; the current range of this species includes Amador, Calaveras, El Dorado, Mariposa, Placer, Plumas, Tuolumne, and Yuba counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide suitable habitat for Sierra clarkia. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Sierra clarkia has potential to occur in the BSA.

Tansy-Flowered Woolly Sunflower

Tansy-flowered woolly sunflower (*Eriophyllum confertiflorum* var. *tanacetiflorum*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.3 species. This species is a perennial shrub that occurs in cismontane woodland and lower montane coniferous forest. Tansy-flowered woolly sunflower blooms from May through July and is known to occur at elevations ranging from 1,000 to 4,395 feet above MSL. Tansy-flowered woolly sunflower is endemic to California; the current range of this species includes Calaveras, Inyo, Kern, Mariposa, and Tuolumne counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide marginally suitable habitat for tansy-flowered woolly sunflower and there are few known records of this species in the vicinity. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Tansy-flowered woolly sunflower has low potential to occur in the BSA.

Dubious Pea

Dubious pea (*Lathyrus sulphureus* var. *argillaceus*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 3 species. This species is an herbaceous perennial that occurs in cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest. Dubious pea blooms from April through May and is known to occur at elevations ranging from 490 to 3,050 feet above MSL. Dubious pea is endemic to California; the current range of this species includes Amador, Calaveras, El Dorado, Nevada (distribution or identity is uncertain), Placer, Shasta, and Tehama counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide suitable habitat for dubious pea. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Dubious pea has potential to occur in the BSA.

Humboldt Lily

Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is a perennial bulbiferous herb that occurs in openings within chaparral, cismontane woodland, and lower montane coniferous forest. Humboldt lily blooms from May through July and is known to occur at elevations ranging from 295 to 4,200 feet above MSL. Humboldt lily is endemic to California; the current range of this species includes Amador, Butte, Calaveras, El Dorado, Los Angeles, Nevada, Placer, Plumas, San Diego, Santa Barbara, Sierra, Tehama, and Yuba counties.

The mixed conifer forest and the disturbed areas that support native vegetation in the BSA may provide suitable habitat for Humboldt lily. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA. Humboldt lily has potential to occur in the BSA.

Invertebrates

Crotch's Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is a candidate for listing as endangered under the California Endangered Species Act (ESA). The historic range of the Crotch bumble bee extends from coastal areas east to the edges of the desert in central California south to Baja California del Norte, Mexico, excluding mountainous areas. The species was historically common throughout the southern two-thirds of its range but is now largely absent from much of that area and is nearly extirpated from the center of its historic range, the Central Valley.

The Crotch bumble bee inhabits open grassland and scrub habitats. The species visits a wide variety of flowering plants, although its very short tongue makes it best suited to forage at open flowers with short corollas. Plant families most commonly associated with Crotch bumble bee include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. The species primarily nests underground. Little is known about overwintering sites for the species, but bumble bees generally overwinter in soft, disturbed soils or under leaf litter or other debris. The flight period for Crotch bumble bee queens in California is from late February to late October, peaking in early April with a second pulse in July. The flight period for workers and males in California is from late March through September with peak abundance in early July (ECORP 2024a).

There is a low chance of foraging, nesting, or overwintering of Crotch bumble bee to occur due to the high level of disturbance in the BSA. However, abandoned rodent burrows may provide suitable nesting habitat, leaf litter and bare soil may provide marginal overwintering habitat, and flowering resources may provide marginal foraging habitat for this species. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Birds

Sharp-Shinned Hawk

Sharp-shinned hawk (Accipiter striatus) is not listed pursuant to either the California or federal ESAs; however, it is a CDFW Watch List species. Their breeding range in California is poorly known but breeding or summering sharp-shinned hawks have occurred throughout the state. They nest in most forest types, particularly dense stands with at least some conifers. Breeding occurs from April through August. The species is a common migrant and winter resident in the Central Valley of California.

The mixed conifer forest within the BSA may provide suitable wintering and foraging habitat for this species. Therefore sharp-shinned hawk has potential to occur in the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Olive-Sided Flycatcher

The olive-sided flycatcher (*Contopus cooperi*) is not listed pursuant to either the California or federal ESAs but is a CDFW Species of Species Concern (SSC) and a USFWS Bird of Conservation Concern (BCC). In the western U.S., olive-sided flycatchers breed from Washington south throughout California, except the

Central Valley, eastern deserts, and mountains of Southern California. This species breeds in late-successional coniferous forests including Ponderosa pine woodlands, black oak woodlands, mixed coniferous forests, and Jeffrey pine forests, usually at mid to high elevations. They use edges and clearings surrounding dense forests, foraging primarily on bees and wasps. Nesting occurs during May through August.

The mixed conifer forest in the BSA could provide suitable nesting habitat for this species. Therefore, olive-sided flycatcher has potential to nest in the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Oak Titmouse

Oak titmouse (*Baeolophus inornatus*) are not listed and protected under either state or federal ESAs but are considered a USFWS BCC. Oak titmouse breeding range includes southwestern Oregon south through California's Coast, Transverse, and Peninsular ranges, western foothills of the Sierra Nevada, into Baja California; they are absent from the humid northwestern coastal region and the San Joaquin Valley. They are found in dry oak or oak-pine woodlands but may also use scrub oaks or other brush near woodlands. Nesting occurs during March through July.

The mixed conifer forest within the BSA provides suitable nesting habitat for the species. Therefore, oak titmouse has potential to occur in the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Evening Grosbeak

The evening grosbeak (*Coccothraustes vespertinus*) is not listed and protected under either federal or California ESAs; however, it is considered a BCC according to the USFWS. In California, evening grosbeak breeding range includes the mountains of Northern California from Siskiyou and Trinity counties, and Warner Mountains on both slopes of the Cascade-Sierra axis south to Tulare County. Evening grosbeak nest in trees and large shrubs in open canopy mixed conifer forests, and open and closed canopy red fir forests. Nesting occurs from May through August.

The mixed conifer forest within the BSA provides suitable nesting habitat for this species. Therefore, evening grosbeak has potential to nest within the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Lawrence's Goldfinch

The Lawrence's goldfinch (*Spinus lawrencei*) is not listed pursuant to either the California or federal ESAs but is currently a BCC according to the USFWS. Lawrence's goldfinches breed west of the Sierra Nevada-Cascade axis from Tehama, Shasta, and Trinity counties south into the foothills surrounding the Central Valley to Kern County; and on the Coast Range from Contra Costa County to Santa Barbara County. Lawrence's goldfinches nest in arid woodlands usually with brushy areas, tall annual weeds, and the local water source. Nesting occurs during March through September.

The mixed conifer forest within the BSA may provide suitable nesting habitat. Therefore, Lawrence's goldfinch has potential to nest within the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Black-Throated Gray Warbler

Black-throated gray warbler (*Setophaga nigrescens*) is not listed and protected under either federal or California ESAs; however, it is considered a BCC according to the USFWS. Their breeding range includes British Columbia south into northern Mexico. In California, present primarily in mountains: Klamath to Warner mountains, North Coast Ranges south to Sonoma and Napa counties; Santa Cruz Mountains and Diablo Range of Santa Clara County, Oakland hills, Diablo Range south through Santa Barbara and Ventura counties; Cascade and Sierra Nevada ranges south through Piute and Tehachapi mountains; Transverse Ranges, San Jacinto Mountain, Palomar Mountain, Mount Laguna, Cuyamaca Mountains, and possibly Santa Ana Mountains in extreme southwest; White and Inyo mountains, Panamint and Kingston ranges, and New York Mountains in southeast. Breeding habitat includes open coniferous or mixed coniferous-deciduous woodland with brushy undergrowth, pinyon-juniper and pine oak associates, and oak scrub. Their deep cup nests are often built on horizontal branches and constructed of a variety of plant material, feathers, and mammal fur. Nesting occurs from May through July.

The mixed conifer forest within the BSA provides suitable nesting habitat. Therefore, black-throated gray warbler has potential to nest within the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Hermit Warbler

The hermit warbler (*Setophaga occidentalis*) is not listed and protected under either federal or California ESAs; however, it is considered a BCC according to the USFWS. In California, their breeding range includes Klamath Mountains, Sierra Nevada from Siskiyou County south to Tulare County, and in the Coast Ranges from Del Norte County south to Marin County with localized breeding south of these counties. Breeding habitat includes mixed conifer forests. Breeding occurs from May through July.

The mixed conifer forest within the BSA provides suitable nesting habitat. Therefore, hermit warbler has potential to nest within the BSA. There are no CNDDB recorded occurrences of this species within 5 miles of the BSA.

Other Migratory Bird Treaty Act Protected Birds

In addition to the special status birds previously mentioned, the BSA support suitable nesting habitat for a variety of common bird species that are protected under the Migratory Bird Treaty Act (MBTA), such as acorn woodpecker, northern mockingbird (*Mimus polyglottos*), and house finch (*Haemorhous mexicanus*), among others.

Special-Status Mammals

Townsend's Big-Eared Bat

The Townsend's big-eared bat (*Corynorhinus townsendii*) is not listed pursuant to either the California or federal ESAs; however, this species is considered an SSC by CDFW. Townsend's big-eared bat is a fairly large bat with prominent bilateral noes lumps and large rabbit-like ears. This species occurs throughout the west and ranges from the southern portion of British Columbia south along the Pacific coast to central Mexico and east into the Great Plains. This species has been reported from a wide variety of habitat types and elevations from sea level to 10,827 feet above MSL. Habitats used include coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Its distribution is strongly associated with the availability of caves and cave-like roosting habitat including abandoned mines, buildings, bridges, rock crevices, and hollow trees. This species is readily detectable when roosting due to their habit of roosting pendant-like on open surfaces. Townsend's big-eared bat is a moth specialist with more than 90 percent of its diet composed of lepidopterans. Foraging habitat is generally edge habitats along streams adjacent to and within a variety of wooded habitats. This species often travels long distances when foraging and large home ranges have been documented in California.

The mature trees in the BSA may provide suitable roosting habitat for this species. There is one recorded CNDDB occurrence of this species within 5 miles of the BSA.

4.4.1.5 Critical Habitat or Essential Fish Habitat

There is no designated critical habitat mapped within the Study Area.

Based on the literature review, ESA Anadromous fish that may be present include California Central Valley steelhead Distinct Population Segment and Essential Fish Habitat for Chinook Salmon is potentially present in the "West Point, California" 7.5-minute quadrangle. However, since there are no aquatic resources within the BSA there is no habitat for special-status fish within the BSA.

4.4.1.6 Wildlife Movement Corridors and Nursery Sites

Due to the high level of disturbance and development within the BSA it is unlikely for the BSA to serve as a potential wildlife movement corridor for terrestrial wildlife species. However, roadside and rural/residential portions of the BSA have the potential to serve as wildlife movement corridors for terrestrial wildlife species. There are no Essential Habitat Connectivity areas mapped within the BSA; nor were there observations, records, or suitable habitat for nursery sites (e.g., deer fawning grounds, waterbird rookeries) within the BSA.

4.4.1.7 Protected Trees

The Amador County General Plan protects Ione chaparral and oak woodlands; however, these resources are not found within the BSA and therefore will not be impacted during Project activities.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated

There are no known occurrences of special-status species for the BSA, but no protocol level surveys have been performed, to date. However, the BSA supports potentially suitable habitat for a few special-status species. The following discussion provides recommended measures to avoid and/or minimize potential impacts to these special-status species.

4.4.2.1 Special-Status Plants

The Project Area supports potential habitat for special-status plants, as identified in Table 2 of Appendix B. No special status plants are known to occur onsite; however, protocol-level surveys have not been conducted. If a special-status plant occurs in or near the Project development area, Project direct impacts could include damage or loss of individual plants and Project indirect impacts could include loss of suitable habitat, disturbance from human encroachment, and changes in habitat quality due to introduction or spread of non-native invasive plants, alteration of hydrology, erosion, and transport of soil, debris or pollutants into occupied habitat from adjacent Project areas. Implementation of Mitigation Measure BIO-1, which identifies avoidance areas, will reduce impacts to special-status plants to less than significant.

4.4.2.2 Special-Status Invertebrates

Abandoned rodent burrows, loose soil and leaf litter, and the flowering plants in the BSA may provide suitable nesting, overwintering, and foraging habitat for Crotch bumble bees, respectively. Therefore, the proposed Project will incorporate Mitigation Measure BIO-2, which will minimize potential impacts to the Crotch Bumble Bee to a less than significant impact.

4.4.2.3 Special-Status Birds and Nesting Birds (Including Raptors)

The BSA contains suitable nesting and/or wintering and foraging habitat for several special-status birds and other birds protected under the California Fish and Game Code and MBTA. If Project-related activities occur during the nesting season, the removal of active nests or disruption of nesting activities could lead to "take" of a protected bird, or an active nest with eggs or young, which would be considered a significant impact under CEQA. Impacts to wintering and foraging habitat is typically not considered

significant under CEQA. Therefore, with implementation of Mitigation Measure BIO-3, which will require preconstruction surveys and the steps to implement if a next is found, impacts to special-status birds and nesting birds would be less than significant.

4.4.2.4 Townsend's Big-Eared Bat

The mature trees located in the mixed conifer forest within the BSA represent potential roosting habitat for Townsend's big-eared bat and other species of day-roosting bats. If occupied bat roosts are present, removal of the habitat feature could result in direct mortality or injury to special-status bats. Removal during the maternity roosting season could result in the loss of an established maternity roosting site and injury or mortality of pups that are not yet able to fly. Removal of a roost site during the winter season could also result in direct injury or death of special-status bats, particularly during time periods of colder weather or heavy rain, when bats are more likely to be in torpor. Impacts to special-status bats and maternity roost sites are considered significant under CEQA. Therefore, to avoid and minimize impacts to special-status bats or roosting colonies, Mitigation Measure BIO-4 shall be incorporated and any impacts to special-status mammals shall be reduced to a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Impact.

As discussed above, no sensitive natural communities, oak woodlands, or riparian habitat is found within the BSA and therefore will not be adversely impacted during Project implementation. Therefore, the Project will have no impact on sensitive natural communities and no mitigation measures is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

No aquatic resources were found within the BSA during the preliminary aquatic resources assessment. Roadside ditches are common in the BSA with culverts spanning driveways, but these ditches are not

aquatic resources since they do not support the three-parameters necessary to be wetlands or field indicators of ordinary high-water marks. Therefore, there would be no impact on any protected wetlands, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

Project implementation may temporarily disturb and displace wildlife from the Project area. Some wildlife such as birds or nocturnal species are likely to continue to use the habitats opportunistically for the duration of construction. Once construction is complete, wildlife movements are expected to resume. Additionally, there are no documented nursery sites and no nursery sites were observed within the proposed Project area during the site reconnaissance. Therefore, the Project is expected to have a less than significant impact on wildlife movement.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

Less Than Significant Impact.

The Project does not include any protected trees or other biological resources that conflict with any local policies or ordinances. Therefore, any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

The proposed Project is not in an area covered by a habitat conservation plan and therefore will not conflict with the provisions of a habitat conservation plan. There would be no impact and no mitigation is required.

4.4.3 Mitigation Measures

BIO-1: **Special-Status Plant Habitat Avoidance.** The following measures shall be implemented to avoid impacts to Special-Status Plant Habitat within the pipeline alignment:

- Where feasible, Project-related activities shall be restricted to previously developed or disturbed areas to avoid disturbance of habitats that may support special-status plants. All Project personnel shall be made aware of the impact limits and avoided areas during construction. No Project-related work shall occur outside of the Project impact limits. All Project-related vehicles and equipment shall be restricted to the Project impact limits or existing environmentally cleared designated access roads and staging areas.
- If suitable habitat for special-status plants cannot be avoided, and if special-status plant surveys for the Project are not current (per the CDFW protocol; surveys are typically considered current if it is within 2-5 years of construction), a preconstruction special-status plant survey shall be conducted according to CDFW, CNPS, and USFWS protocols.
    - Surveys shall be conducted throughout habitat areas that include ground-disturbing or vegetation-disturbing activities (including a 50-foot buffer from construction activities) to address potential direct and indirect impacts of the Project. Surveys shall be conducted by a qualified biologist and timed according to the identifiable period for special-status plant species with potential to occur (typically the blooming period). To the extent feasible, known reference populations will be visited prior to surveys to confirm target species are evident and identifiable at the time of the survey. If no special-status plants are found, no further measures pertaining to special-status plants are necessary.
- If a special-status plant is identified within or adjacent to the Project impact area, the following shall apply:
    - An impact assessment shall be made by a qualified biologist to determine whether Project related activities would be significant such that they would have the potential to eliminate, substantially reduce the number of, or restrict the range of the special-status plant species, and/or conflict with any local policies or ordinances protecting special-status plant species. If impacts are determined to be less than significant, no further measures are needed.

    If potential impacts are determined to be significant, the following shall apply:

    - The Project shall be modified to the extent feasible to minimize impacts to special-status plants. No-disturbance buffers shall be established around

special-status-plant populations to be avoided in or adjacent to the Project Area. The no-disturbance buffer shall include the extent of the avoided special-status plants (as determined by a qualified biologist during an appropriate time to identify the plants immediately preceding construction) plus a minimum 25-foot buffer, unless otherwise determined by a qualified biologist. Buffer distances may vary depending upon factors such as species ecology, species rarity, and site-specific conditions. The avoidance area shall be clearly demarcated in the field and demarcation shall be maintained for the duration of Project construction. No vegetation-disturbing or ground-disturbing activities shall occur within the avoidance area. If other work must occur within the avoidance area, a qualified biologist shall be present for the duration of such work to ensure no impacts occur within the avoidance area.

- A Worker Environmental Awareness Program (WEAP) shall be developed prior to construction to inform workers of avoided special-status plants. A qualified biologist will present the WEAP to all personnel working in the Project Area prior to the start of Project activities. The WEAP may be recorded and used through the duration of construction to train new workers who were absent for the initial WEAP. The WEAP will include, but will not be limited to, species identification, habitat requirements, and the species' protected status. The training shall provide clear instruction that if any workers encounter the special-status plant(s) to be avoided within a new location of the Project impact area, work shall halt within 25-feet of the plants and the biological monitor shall be informed. The Project proponent shall retain logs of personnel who have taken the training for the duration of construction.
- If complete avoidance is not feasible, the agency with jurisdiction (CDFW, USFWS and/or the CEQA Lead Agency) shall be consulted to determine if additional minimization or mitigation measures are required. Additional measures, if needed, shall be developed in consultation with the respective agency. These measures may include restoration or permanent preservation of habitat for the special-status plant species or translocation (via seed collection and/or transplantation) from planned impact areas to unaffected suitable habitat. If a plant that is a state or federally listed threatened or endangered plant or is a candidate for state listing is found onsite, the applicant shall consult with CDFW and/or USFWS, as applicable, to determine appropriate avoidance and minimization measures, and an incidental take permit and compensatory mitigation may be required.
- To avoid the introduction and spread of non-native invasive plant species, clothing, vehicles, and equipment (including shoes, equipment undercarriage and tires/tracks) should be cleaned prior to entering the Project Area and, if invasive plant species are known to occur within the Project Area, prior to entering an area of the Project-site that is free of invasive plants. Materials used

for the Project, such as fill dirt or erosion control materials, should be from weed-free locations or certified weed free.

BIO-2: **Crotch Bumble Bee.** If the Crotch bumble bee is no longer a Candidate or formally Listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are required.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species and ground-disturbing activities are scheduled to begin between February 1 and October 31, preconstruction surveys shall be conducted by a qualified biologist. Based on CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species, three Crotch bumble bee surveys shall be conducted at two-to-four-week intervals during the colony active period (April-August).

If Crotch bumble bees are detected, any remaining surveys will focus on nest location. If no nests are found but the species is observed during preconstruction surveys, work crews should be informed of the possibility of Crotch bumble bees or their nests being present onsite. If a Crotch bumble bee is encountered during construction, work shall stop until the individual leaves of its own volition. If an active Crotch bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take, and the designated biologist shall coordinate with CDFW to determine if an Incidental Take Permit under Section 2081 of the California ESA will be required. Nest avoidance buffers may be removed at the completion of the flight season (October 31) and/or once the qualified biologist deems the nesting colony is no longer active.

If initial grading is phased or delayed for any reason, preconstruction surveys will be repeated prior to ground-disturbing activities if nesting habitat is still present or has reestablished and will be affected.

BIO-3: **Nesting Birds Preconstruction Survey.** A preconstruction nesting bird survey shall be conducted within 14 days prior to the commencement of Project-related activities to identify active nests that could be impacted by construction.

The preconstruction nesting bird survey shall include accessible areas within 100 feet of the Project boundaries, including any temporary disturbance areas. For raptors, the preconstruction nesting bird survey shall include accessible areas within 500 feet of the Project boundary.

If active nests are found, a no-disturbance buffer shall be established around the nest. A qualified biologist, in consultation with CDFW, shall establish a buffer distance. The buffer shall be maintained until the nestlings have fledged (e.g., are capable of flight and become independent of the nest), to be determined by a qualified biologist. The avoidance buffer

can be removed and no further measures are necessary once the young have fledged or the nest is no longer occupied, as determined by a qualified biologist.

BIO-4: **Townsend's Big-Eared Bat.** Within 30 days prior to initiation of Project activities, a bat habitat assessment shall be conducted by a qualified bat biologist to examine trees that will be removed/trimmed and structures that will be removed for suitable bat roosting habitat. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, abandoned structures) will be identified and the area around the features searched for bats and bat sign (i.e., guano, staining, culled insect parts). The following measures shall be applied depending on the findings:

- If suitable bat roosting habitat is identified, the feature shall be avoided and protected in place to the extent feasible. A buffer area shall be established around the roost site to minimize disturbance of roosting bats. The size of the buffer area will be determined in consultation with CDFW.
- If suitable trees or structures cannot be avoided, removal shall be timed to occur outside of the maternity roosting season (generally April 1 to August 31) and only when nighttime low temperature are above 45 degrees Fahrenheit and rainfall is less than ½ inch in 24 hours.
- Trees with identified bat roosting habitat shall be removed using a two-phase removal process conducted over two consecutive days. On the first day, tree limbs and branches will be removed, using chainsaws only. Removal will avoid limbs with cavities, cracks, crevices, or deep bark fissures. On the second day, the remainder of the tree will be removed.
- Standing dead trees or snags with habitat features should be removed over a single day by gently lowering the tree or snag to the ground. The tree or snag shall be left undisturbed onsite for the next 48 hours.
- Removal and trimming of trees with potential roosting habitat shall be conducted in the presence of a biological monitor.
- If removal/modification of a suitable tree or structure must occur during the maternity season, a qualified bat biologist shall conduct a focused survey(s) within 48 hours of scheduled work. If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until after the maternity season or a qualified biological monitor has determined the roost is no longer active.

4.5 Cultural Resources

ECORP Consulting, Inc. prepared a Cultural Resources Inventory Report (ECORP 2025b) for the Proposed Project to determine if cultural resources were present in or adjacent to the Project Area and assess the sensitivity of the Project Area for undiscovered or buried cultural resources. Cultural resources include pre-contact archaeological sites, historic archaeological sites, and historic built environment sites. Pre-contact archaeological sites are places that contain the material remains of activities carried out by the native population of the area (i.e., Native Americans) prior to the arrival of Europeans in the Project Area.

Places that contain the material remains of activities carried out by people after the arrival of Europeans are considered historic archaeological sites. Historic built environment features include houses, garages, barns, commercial facilities, industrial facilities, community buildings, and other buildings, structures and facilities that are more than 50 years old. Historic built environment features may also have associated archaeological deposits, such as abandoned wells, cellars, privies, refuse deposits, and foundations of former outbuildings.

The information provided below is an abridged version of the Cultural Resources Inventory Report and is included here to provide a brief context of the potential cultural resources in the Project Area. Due to the sensitive nature of cultural resources and their records and documentation, which are restricted from public distribution by state and federal law, the IS/MND appendices do not include the cultural resources report; however, all pertinent information necessary for impact determinations is included in this section.

4.5.1 Environmental Setting

Amador County is located almost entirely within the Sierra Nevada geomorphic province. From the Sacramento Valley eastward, the Sierra Nevada gradually rises to the glaciated crest in the vicinity of Mokelumne Peak and Thimble Peak, both of which are higher than 9,000 feet. At these elevations, the Sierra Nevada has a dry climate in the summer and a wet climate in the winter. With such a significant range in elevation, the Sierra Nevada has a diverse landscape, supporting a wide variety of plant and animal life.. Elevations within the APE range from 360 to 420 feet above mean sea level. The Area of Potential Effect (APE) is located to the south of the town of Pioneer, between SR-88 to the north and SR-26 to the south.

4.5.1.1 Regional History

In 1540, the Viceroy of New Spain, Antonio de Mendoza, commissioned maritime explorer Hernando de Alarcón to chart the Gulf of California and the Colorado River. Alarcón and his crew became the first Europeans to reach Alta (Upper) California when they set foot on the banks of the Colorado River in what is now Imperial County. In 1542, Juan Rodriguez Cabrillo and his crew, sailing north up the Pacific coast of Mexico in search of the Strait of Anián, became the first Europeans to explore the Alta California coastline. Cabrillo landed at San Diego Bay, Santa Catalina Island, and at San Pedro Bay, and may have reached as far north as Point Reyes. In 1579, the English privateer Francis Drake visited Miwok villages north of San Francisco Bay. Sebastian Vizcaíno, sailing north from Mexico, charted Monterey Bay in 1602.

Spanish colonization of Alta California began in 1769 with the Portolá land expedition. Led by Gaspar de Portolá and Junipero Serra, the expedition proceeded north from San Diego on foot. From a hilltop above the Santa Clara Valley, an advance party of scouts led by José Ortega became the first Europeans to observe San Francisco Bay. Spain subsequently established a string of 21 Franciscan missions, 4 presidios (forts), and 4 pueblos (towns) in coastal regions of Alta California. In 1808, the explorer Gabriel Moraga led an expedition from San Jose pueblo into the Central Valley. Moraga named the valley's major rivers, including the Sacramento and San Joaquin, but made no attempt to establish missions, presidios, or pueblos in Alta California's interior.

The Republic of Mexico achieved independence from Spain in 1821. A year later, Alta California became a territory of Mexico with its capital at Monterey. In 1827, the American fur trapper Jedediah Smith led a party of Rocky Mountain Fur Company trappers across the Mojave Desert to Southern California, north up the Central Valley, and east into Nevada, demonstrating the possibility of overland travel across the Sierra Nevada.

During the 1830s, the Mexican government confiscated mission lands and expelled Alta California's Franciscan friars. Former mission lands, along with lands in the Sacramento and San Joaquin valleys, became granted to retired soldiers and other Mexican citizens. Vast swaths of Alta California's coastal regions and interior valleys became private *ranchos*, or cattle ranches. Three of the region's Spanish pueblos—Los Angeles, San José, and Sonoma—survived as Mexican towns. Other settlements developed around presidios at San Francisco, Monterey, Santa Barbara, and San Diego. Many rancho owners, called *californios*, maintained residences in town, while hired vaqueros and unpaid Native American laborers worked on ranchos to produce cow hides and tallow, commodities prized by foreign merchants.

After 1821, the Mexican government began welcoming non-Hispanic immigrants to Alta California. Hundreds of Americans, British, and other foreigners arrived to establish trading relationships; others became naturalized Mexican citizens and applied for land grants. John Sutter, a German-speaking immigrant from Switzerland, built a fort at the confluence of the Sacramento and American rivers in 1839 and petitioned the Mexican governor of Alta California for a land grant; he received nearly 49,000 acres along the Sacramento River in 1841.

Following the Mexican-American War of 1846-1848, Mexico ceded Alta California to the United States. Under the Treaty of Guadalupe Hidalgo, Congress agreed to honor the private property of former Mexican citizens living within the new boundaries of the United States. This meant recognizing Alta California's Mexican land grants. In 1851, Congress passed the California Land Act creating the Board of Land Commissioners to determine the validity of individual grants, placing the burden of proof on patentees. The Board, with assistance from U.S. courts, confirmed most of California's Mexican land grants in subsequent decades.

In January 1848, one of John Sutter's hired laborers, James Marshall, discovered gold in the flume of a lumber mill at Coloma on the South Fork of the American River. News of Marshall's discovery spread around the world, leading to the 1849 California Gold Rush. Tens of thousands of prospectors arrived in the Sierra Nevada foothills, prompting the creation of hundreds of small mining camps along streambeds. The cities of Marysville, Sacramento, and Stockton sprang up along the Feather, Sacramento, and San Joaquin rivers as supply centers for the mines; San Francisco became California's largest city and major port of entry. In 1850, following a year of rapid growth, Congress admitted California as the 31st U.S. state. In the following decades, federal surveyors arrived in California to stake out 36-square-mile townships and 1-square-mile sections on California's unclaimed (i.e., non-rancho) public lands. At general land offices, buyers paid cash for public lands. After 1862, many filed homestead applications to obtain 40, 80, and 160-acre tracts at low upfront costs in exchange for establishing farms.

José María Amador, the descendent of a prominent *californio* family, discovered gold along a foothill stream between the Cosumnes and Mokelumne rivers in 1848. The stream became known as *Amador*

Creek and its nearby mining camp became *Amador City*. When the California Legislature divided Calaveras County along the Mokelumne River in 1854, all lands north of the river became *Amador County* with the mining camp of Jackson as its county seat. Other Gold Rush mining camps, including Plymouth, Ione, and Sutter Creek, also survived as permanent towns. After the Gold Rush, logging, farming, and ranching joined gold mining as leading industries in Amador County. The Amador Branch Railroad, a Central Pacific Railroad subsidiary, built east from Galt and reached Ione in 1876. In 1904, the Ione & Eastern Railroad extended the Amador Branch from Ione to Martell, a town near Jackson (Robertson 1998). During the 1920s, California highway officials graded and paved a string of foothills wagon roads as the *Mother Lode Highway* (now State Route 49). In Amador County, the Mother Lode Highway linked the towns of Plymouth, Amador City, Sutter Creek, Martel, and Jackson with other foothills towns. Sand and gravel mining, winter sports, viticulture, and tourism became important industries during the 20th century.

4.5.1.2 Amador County and Pioneer Area History

Amador County was formed in 1854, when it was separated from Calaveras County after a vote in favor of dividing Calaveras County along the Mokelumne River. Amador County was named for Jose Maria Amador, who owned the San Ramon land grant in Contra Costa County and was former mayordomo of Mission San Jose. During the Gold Rush in 1848-1849, he and his men mined along a creek that was later named Amador Creek. His gold mining camp came to be known as Amador City. Jackson, which had previously been the county seat of Calaveras County, became the county seat of Amador County when it was split from Calaveras County. The county's first northernmost boundary was Dry Creek and was later extended to the Cosumnes River. Amador County lost its easternmost territory with the creation of Alpine County in 1864.

The APE lies approximately 0.25 mile south of the unincorporated Pioneer, between SR-88 and SR-26. Pioneer developed around the Pioneer Station (P-3-448), a general store that opened in 1905 and is more than 0.5 mile north of the APE.

4.5.1.3 Amador Water Agency

Formed in 1959, the AWA provides water, wastewater, and storm drain services to Amador County. The agency purchased the Amador Water System from Pacific Gas and Electric in 1985, to provide treated water service to Sutter Creek, Ione, Amador City and surrounding areas. Several more water and wastewater improvement districts followed suit by also electing to become part of the AWA. The agency's water supply is primarily sourced from the Mokelumne River. Previously known as the Amador County Water Agency, the AWA officially simplified its name in 1995 to clearly demonstrate that it operates separately from the county. As part of the AWA, seven tanks, including Tank D, have supplied water to the neighborhoods of Pioneer from the 1970s onward.

4.5.2 Research Methods

ECORP requested a records search for the APE at the North Central Information Center (NCIC) of the CHRIS at California State University, Sacramento on December 17, 2024. The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the APE,

and whether previously documented pre-contact or historic archaeological resources, architectural resources, or traditional cultural properties exist within this area. NCIC staff completed and returned the records search to ECORP on December 17, 2024. Although AWA expanded the APE after ECORP requested the record search, the additional area was included within the 0.5 mile search radius.

In addition to the official records and maps for archaeological sites and surveys in Amador County, ECORP also reviewed the following references: Built Environment Resource Directory for Amador County; the National Register Information System; Office of Historic Preservation, California Historical Landmarks; CHL; California Points of Historical Interest; Caltrans Local Bridge Survey; Caltrans State Bridge Survey; and *Historic Spots in California*.

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on December 30, 2024 to request a search of the Sacred Lands File for the APE. This search determines whether the California Native American tribes within the APE have recorded Sacred Lands, because the Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources.

Per SWRCB requirements, ECORP sent letters on February 4, 2025 and February 12, 2025, via certified mail to each of the contacts provided by the NAHC and contacts provided by the client. The letters provided a Project description and a map depicting the APE and requested information on any known resources associated with the tribe.

ECORP emailed a letter to the Amador County Historical Society on December 30, 2024 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area.

ECORP subjected the APE to an intensive pedestrian survey on January 6, 2025 under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983) using 15-meter transects (Figure 3). At the time, an ECORP archaeologist examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the archaeologist examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP did not conduct any subsurface investigations or artifact collections during the pedestrian survey.

4.5.3 Research Results

The records search and the 2025 field survey yielded one previously recorded resource: P-3-1995 (West Point to Valley Springs 60kV Transmission Line). ECORP's 2025 field survey yielded seven new historic-period cultural resources within the APE: an CAWP-01 (isolated glass bottle) and the network of roads within the APE, including CAWP-02 (State Route 26/Red Corral Road), as well as sections of CAWP-03 (Williams Road), CWAP-04 (Bobbie Lane), CAWP-05 (Kelly Lane), CAWP-06 (Kathy Lane), and CAWP-07 (Deer Lane).

Resource P-3-1995, including the sections within the APE, was previously evaluated as not eligible for the NRHP/CRHR; ECORP concurs with this finding. Isolated finds, such as CAWP-01 (glass wine bottle), are not eligible for the NRHP/CRHR. ECORP evaluated the network of roads within the APE and determined that it is not eligible for the NRHP/CRHR. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project.

4.5.4 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐

Less than Significant Impact.

As mentioned above, the records search and the 2025 field survey yielded one previously recorded resource: P-3-1995 (West Point to Valley Springs 60kV Transmission Line). ECORP's 2025 field survey yielded seven new historic-period cultural resources within the APE: an CAWP-01 (isolated glass bottle) and the network of roads within the APE, including CAWP-02 (State Route 26/Red Corral Road), as well as sections of CAWP-03 (Williams Road), CWAP (Bobbie Lane), CAWP-05 (Kelly Lane), CAWP-06 (Kathy Lane), and CAWP-07 (Deer Lane).

Resource P-3-1995, including the sections within the APE, was previously evaluated as not eligible for the NRHP/CRHR; ECORP concurs with this finding. Isolated finds, such as CAWP-01 (glass wine bottle), are not eligible for the NRHP/CRHR. ECORP evaluated the network of roads within the APE and determined that it is not eligible for the NRHP/CRHR. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project. Any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated.

The Project Area has a low potential to contain buried intact archaeological materials because the age of the underlying soil predates human occupation and because the Project Area lacks alluvium, which can bury archaeological sites located along perennial waterways. Any cultural resources deposited within the Project Area would have likely been washed downhill, away from the APE, by erosion. The likelihood is further reduced when considering the low number of pre-contact archaeological resources documented

within 0.5 mile of the Project. The Project Area, therefore, has an extremely low potential for intact archaeological resources.

The historic-period resources documented within 0.5 mile of the Project Area mostly include water conveyance systems, such as ditches at subsurface level but near the surface and retaining walls and trash scatters at surface level. This, in addition to the limited development in the area during the historic period, suggests a low potential for intact subsurface cultural resources from before 1953. However, there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources; therefore, with implementation of CUL-1, impacts to archaeological resources will remain less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated.

There are no known burial or dedicated cemetery sites within the Project Area; however, as stated above in b) there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources or human remains; therefore, with implementation of CUL-1, impacts to human remains will remain less than significant.

4.5.5 Mitigation Measures

CUL-1: **Unanticipated Discoveries.** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that

the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.

- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Amador County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

4.6 Energy

4.6.1 Environmental Setting

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity followed by renewables, large hydroelectric and nuclear. Pacific Gas and Electricity Company (PG&E) provides electricity and natural gas to the Project Area. It generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. PG&E provides natural gas and electricity to most of the northern two-thirds of California, from Bakersfield and Barstow to near the Oregon, Nevada, and Arizona State Line. It provides 5.2 million people with electricity and natural gas across 70,000 square miles. In 2022, approximately 40 percent of PG&E's electricity came from renewable resources including biopower, geothermal, small hydroelectric, solar, and wind power. Overall 95 percent of the company's delivered electricity comes from greenhouse gas emission-free sources, including renewables, nuclear, and hydropower (PG&E 2024).

The California Public Utilities Commission (CPUC) regulates PG&E. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the California Energy

Commission (CEC) maintains a power plant database that describes all the operating power plants in the state by county.

4.6.1.1 Energy Consumption

Electricity use is measured in kilowatt-hours (kWh). Vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential land uses in Amador County from 2018 to 2022 is shown in Table 4.6-1. As indicated, the demand for electricity has increased since 2018.

Table 4.6-1. Non-Residential Electricity Consumption in Amador County 2018 – 2022

Year	Electricity Consumption (kilowatt hours)
2022	197,616,494
2021	202,639,069
2020	194,991,369
2019	175,982,808
2018	163,133,751

Source: California Energy Commission (CEC) 2023a

Total automotive fuel consumption in Amador County from 2020 to 2024 is shown in Table 4.6-2. As shown, automotive fuel consumption has increased since 2020.

Table 4.6-2. Automotive Fuel Consumption in Amador County 2020 – 2024

Year	Fuel Consumption (gallons)
2024	17,305,468
2023	17,180,784
2022	17,342,171
2021	17,379,128
2020	15,460,293

Source: California Air Resources Board (CARB) 2024

4.6.2 Regulatory Setting

4.6.2.1 State

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report (IEPR) that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the

State's economy; and protect public health and safety (Public Resources Code Section 25301a). Each biennial IEPR takes into account various factors such as energy supply, demand, infrastructure, environmental considerations, and economic impacts. The report aims to address key energy challenges and provide recommendations to achieve a reliable, affordable, and sustainable energy system for California (CEC 2023b).

Some of the key areas typically covered in the report include:

1. Renewable Energy: The IEPR focuses on promoting renewable energy sources such as solar, wind, geothermal, and biomass. It assesses the state's progress in meeting its renewable energy goals, identifies barriers, and proposes strategies to increase renewable energy generation and integration into the grid.
2. Energy Efficiency: The report highlights the importance of energy efficiency measures to reduce energy consumption and greenhouse gas (GHG) emissions. It explores policies and initiatives to promote energy-efficient technologies and practices in buildings, transportation, and industries.
3. Grid Modernization: The IEPR addresses the modernization and optimization of the electrical grid infrastructure to accommodate a higher penetration of renewable energy, improve grid reliability, and support emerging technologies such as energy storage and electric vehicles.
4. Transportation: The report typically includes a section on transportation, focusing on reducing dependence on fossil fuels and promoting the adoption of electric vehicles and alternative fuels. It may discuss infrastructure development, incentives, and policies to accelerate the transition to cleaner transportation options.
5. Climate Change Mitigation: Given California's commitment to combating climate change, the IEPR often emphasizes strategies to reduce GHG emissions and achieve the state's climate goals. This may include discussions on carbon pricing, cap-and-trade programs, and the integration of climate considerations into energy planning.
6. Energy Resilience: The report may address strategies to enhance the resilience of the energy system, considering factors such as extreme weather events, natural disasters, and cybersecurity risks. It could discuss measures to ensure a reliable and uninterrupted supply of energy during emergencies.
7. Economic Impacts and Equity: The IEPR often explores the economic implications of energy policies and initiatives, including job creation, investment opportunities, and the equitable distribution of benefits across different communities and socioeconomic groups.

The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the IEPR.

The 2023 IEPR focuses on next steps for transforming transportation energy use in California. The 2023 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure (CEC 2023c).

4.6.2.2 Local

Amador County Energy Action Plan

The Amador County Energy Action Plan (EAP) is predominantly intended to evaluate energy consumed by buildings and municipal operations. The goals of the EAP include energy efficiency in existing structures, energy performance in new construction, expansion of renewable energy options, energy efficiency in municipal operations, and water conservation which reduces energy needed to transport and treat water (Amador County 2015).

4.6.3 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☐	☐	☒	☐

Less Than Significant Impact

4.6.3.1 Construction Impacts

A quantifiable source of energy associated with the Proposed Project includes the equipment fuel necessary for construction. The Proposed Project would construct a replacement water tank with an operational capacity of 275,000-gallons, water pipeline, and associated infrastructure. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use. For the purpose of this analysis, Project increases in construction fuel consumption are compared with the countywide fuel consumption in 2024, the most recent full year of data. The amount of total construction-related fuel used was estimated in Table 4.6-3.

Table 4.6-3. Proposed Project Fuel Consumption

Energy Type	Annual Energy Consumed	Percentage Increase Countywide
Vehicular/Equipment Fuel Consumption		

Total Construction Fuel Consumption	1,013,688 gallons	5.85%

Source: California Air Resources Board (CARB) 2021

Notes: The Project increase construction-related fuel consumption is compared with the countywide construction related fuel consumption in 2024, the most recent full year of data. Construction equipment is taken from Attachment A (California Energy Emissions Module CalEEMod). Fuel consumption of off-road construction equipment was assumed to be diesel. Refer to Attachment D (Energy Calculations) for model data outputs.

As shown in Table 4.6-3, the Project's gasoline fuel consumption during construction is estimated to be 1,013,688 gallons of fuel over the course of construction, which would increase the annual gasoline fuel use in Amador County by 5.85 during Project construction. As such, Project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. Impacts would be less than significant.

4.6.3.2 Operational Impacts

The operational energy demand for the Project would be limited to electricity required for the initial filling of the water tank. This process is estimated to consume approximately 14.67 kWh of electricity, which would have a negligible impact on the County's overall non-residential electricity usage, which as shown in Table 4.6-1 was 197,616,494 kWh in 2022, the most recent year of data available. Therefore, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Impact.

The IEPR provides policy recommendations to be implemented by energy providers in California. Electricity would be provided to the Project by PG&E. PG&E's Energy Efficiency 2024-2031 Strategic Business Plan builds on existing State programs and policies that support the IEPR goals of improving electricity, natural gas, and transportation fuel energy use in California. PG&E's Energy Efficiency Plan supports the State's goals of zero-carbon electricity and economy-wide carbon neutrality and moving towards a climate-resilient economy. PG&E's Energy Efficiency portfolio can address climate change by both delivering solutions that help to decarbonize customer's homes and buildings and by supporting the use of clean and renewable energy resources powering our electric system (PG&E 2022). Thus, because PG&E is consistent with the 2023 IEPR and the Project would procure its energy from PG&E, the Project is

consistent with and would not otherwise interfere with or obstruct implementation of the goals presented in the 2023 IEPR.

The Amador County EAP serves to provide goals, strategies, and actions to reduce the County's energy consumption and achieve greater energy efficiency. The Proposed Project would comply with strategies outlined in the EAP, such as Strategy 2.1: Improve compliance with Title 24 Green Building and Energy Efficiency Standards (Amador County 2015).

The Project would be designed and constructed in compliance with the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the CCR. Title 24, first established in 1978 in response to a legislative mandate to reduce California's energy consumption, is updated approximately every three years. The most recent update, the 2022 Energy Standards, became effective on January 1, 2023, and builds upon the 2019 standards to enhance energy efficiency in new construction, additions, and alterations to both residential and nonresidential infrastructure projects, including water storage and distribution systems.

The 2022 Energy Standards introduce key improvements that encourage the use of energy-efficient pumping systems, optimized water conveyance operations, and improved monitoring controls to reduce energy consumption associated with water storage and distribution. The updated standards also emphasize the integration of energy-efficient motors and controls, reduced operational emissions, and enhanced system monitoring to improve overall performance. Buildings and infrastructure projects permitted on or after January 1, 2023, are required to comply with these updated standards, and compliance is mandatory when building permits are issued by local city and county governments.

In addition to the energy efficiency requirements in Title 24, Part 6, the Project would also comply with the California Green Building Standards Code (CALGreen), adopted in January 2010 and incorporated as Part 11 of Title 24. The CALGreen Code establishes mandatory green building standards for all new construction in California and is updated every three years. The most recent 2022 CALGreen update took effect on January 1, 2023, and addresses five key areas applicable to the Project: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. For water infrastructure projects, CALGreen emphasizes measures such as efficient water distribution, leak detection systems, and the use of sustainable construction materials to minimize environmental impacts and improve long-term sustainability.

With these energy and sustainability standards in place, the Project would align with and support state and local goals for renewable energy, energy efficiency, and water conservation. Therefore, no impact would occur.

4.6.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

4.7.1.1 Geomorphic Setting

California contains 11 geomorphic provinces, which are naturally defined geologic regions displaying a distinct landscape or landform. Amador County is located in the Sierra Nevada geomorphic province, between the Sierra Nevada Foothills and the Sacramento Valley. The Sierra Nevada foothills is a tilted fault block nearly 400 miles long. Its east face is a high, rugged multiple scarp, contrasting with the gentle western slope that disappears under sediments of the Central Valley.

The main mass of the Sierra Nevada is a huge batholith of granodiorite and related rocks that is intrusive into metamorphosed rocks of Paleozoic and Mesozoic age. The metamorphic rocks occur largely along the western foothills and in the northern end of the range. They are complexly folded and faulted and consist of a number of major rock units. The principal units are the slates, phyllites, schists, quartzites, hornfels, and limestones of the Calaveras Formation (Carboniferous to Permian); the Amador Group (Middle and Upper Jurassic) of metasedimentary and metavolcanic rocks; the Mariposa Formation (Upper Jurassic), much of which is slate; schists, phyllites, and quartzites of the Kernville Series (Jurassic or older) in the southern Sierra Nevada; and a vast amount of undifferentiated pre-Cretaceous greenstones and amphibolites. In addition, there are numerous intrusions of basic and ultra-basic rocks, many of which are serpentinized. The serpentine bodies have been structurally important in the localization of some gold-bearing deposits and often are parallel to, or occur within, the belts of gold mineralization. There are also numerous dioritic and aplitic dikes that are closely associated with gold-bearing veins (Clark, 1970).

The Sierra Nevada province has been the source of the majority of the state's gold production and contains the richest and the greatest number of districts. Much of the gold mineralization is in the belt of metamorphic rocks that extends along the western foothills and in the northern end of the range, although some important districts are in granitic rocks. Some are associated with small intrusions or stocks related to the Sierra Nevada batholith (Clark, 1970). In the central portion of the Sierra Nevada province, the most productive and best-known districts are in the Mother Lode gold belt.

4.7.1.2 Regional Seismicity and Fault Zones

Classifying and Identifying Faults

A fault is a fracture in the crust of the earth. A fault trace is the line on the earth's surface defining the fault. Displacement of the earth's crust along faults releases energy in the form of earthquakes and in some cases in fault creep. Most faults are the result of repeated displacements over a long period of time.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Surface ruptures have been known to extend up to 50 miles with displacement of an inch to 20 feet. Fault rupture almost always following preexisting faults, which are zones for weakness.

Faults are further distinguished as active, potentially active, or inactive:

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between 1.6 million and 11,000 years ago; and
- **Inactive:** An active fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not rupture.

Amador County is traversed by the Foothills fault system that runs from about Oroville in the north to the east of Fresno in the south. The Foothills fault system is a complex series of northwest trending faults that are related to the Sierra Nevada uplift.

Alquist-Priolo Fault Zones

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (approximately 11,000 years). Based on this criterion, the California Geological Survey (CGS) identifies Earthquake Fault Zones (DOC 2024c). The California legislature passed the Alquist-Priolo Special Studies Act 1972 to address seismic hazards associated with faults and to establish criteria for developments for areas with identified seismic hazard zones. The CGS evaluates faults with available geologic and seismologic data and determines if a fault should be zoned as active, potentially active, or inactive. If CGS determines a fault to be active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazard Act. Alquist-Priolo Special Study Zones are usually one-quarter mile or less in width and require site-specific evaluation of fault location and require a structure setback if the fault is found traversing a project site. The proposed Project is not within an Alquist-Priolo Special Study Zone. The nearest Alquist-Priolo fault zone, the Genoa Fault, is located approximately 40 miles east of the Project Site (DOC 2024c).

Lateral Spreading

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Soil data from the NRCS Web Soil Survey (NRCS 2025a, 2025b) suggests that the potential for lateral spreading is low within the Project Area.

Liquefaction

Liquefaction, which is primarily associated with loose, saturated materials, is most common in areas of sand and silt or on reclaimed lands. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events and the ground will take on liquid properties. Thus, specific soil characteristics and seismic shaking must exist for liquefaction to be possible.

Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high

magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet. According to the DOC, the Project Site is not within an area has the potential for liquefaction (DOC 2019).

Earthquake Induced Landslides

Earthquake-Induced Landslide Zone Areas are areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. The CGS Landslides Maps have not mapped any landslide areas in the Planning Area or its vicinity. According to the Multi-Hazard Mitigation Plan for Amador County, the potential for landslides within the Project area is generally low (Amador County 2020a).

Naturally Occurring Asbestos

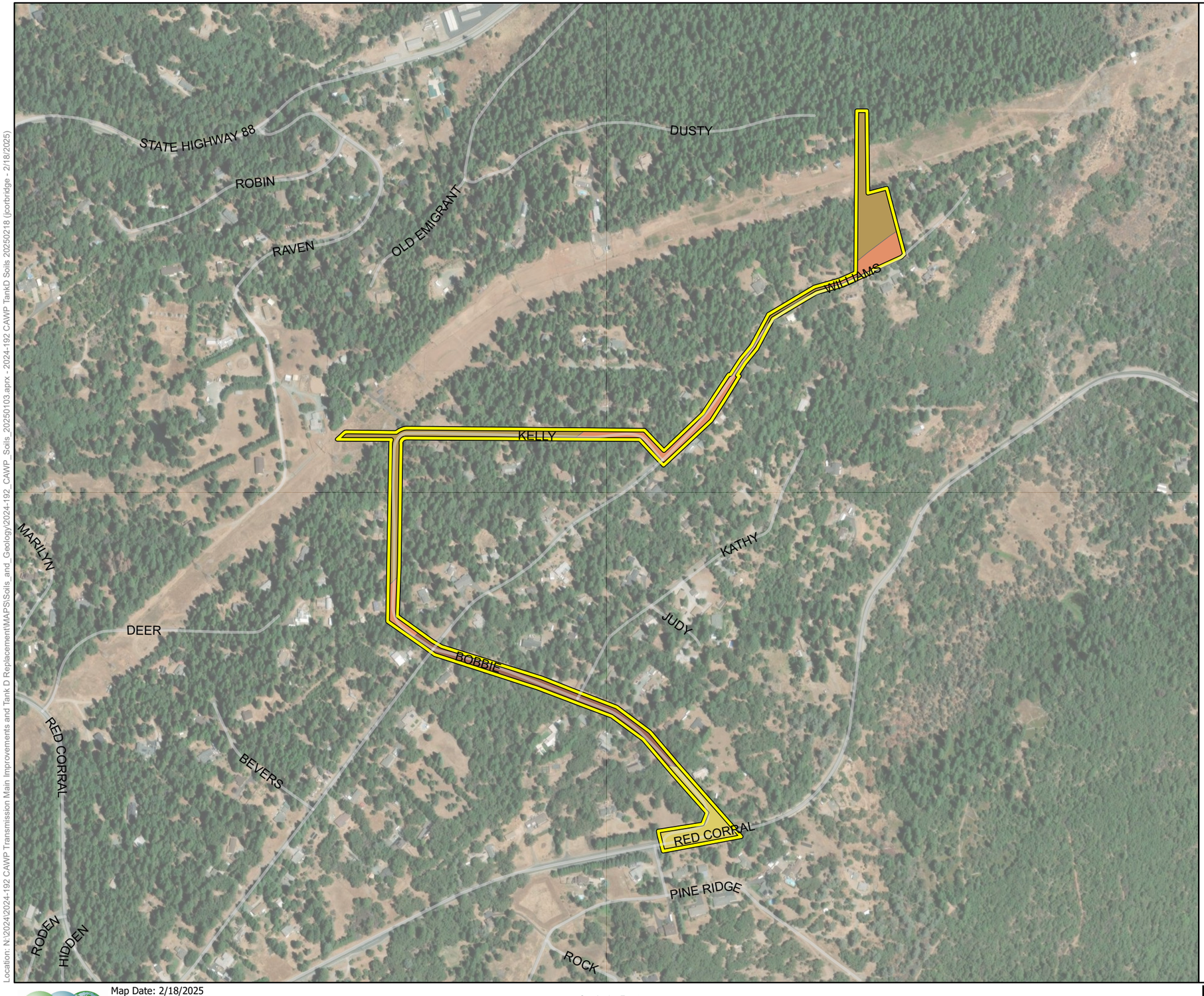
The term "asbestos" is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally occurring asbestos is commonly associated with ultramafic rocks and serpentinite. Ultramafic rocks, such as dunite, peridotite, and pyroxenite are igneous rocks comprised largely of iron-magnesium minerals. As they are intrusive in nature, these rocks often undergo metamorphosis, prior to their being exposed on the Earth's surface. The metamorphic rock serpentinite is a common product of the alteration process (U.S. Geological Survey [USGS] 2011).

The presence of ultramafic rocks within the region indicates the possibility of naturally occurring asbestos materials. Ultramafic rocks that are associated with shear zones are considerably denser than other rock formations in the area and many are serpentinized. Minerals known to contain asbestos-quality (i.e., asbestiform) fibers include ultramafic minerals of the amphibole group and phyllosilicates. Fibrous varieties of the amphibole group include tremolite, actinolite, amosite, crocidolite and anthophyllite. Serpentine is a phyllosilicate that occurs in a plately variety (antigorite) and an asbestiform variety (*chrysotile*) and is the most common variety of commercially mined asbestos. Amphibole asbestos, when disturbed emits needle-like fibers that can be inhaled into the lungs. Amphibole asbestos is more friable than *chrysotile*, which requires considerable flexing to break. Both forms of asbestos are found in serpentine commonly found in the Sierra Nevada foothills and in the areas surrounding the City of Jackson. When serpentine rock is disturbed by grading and construction activities, asbestos fibers may be released. Though Amador County and the surrounding region do possess deposits of these ultramafic materials, the nearest deposits of naturally occurring asbestos are identified approximately 2.75 miles to the north of the proposed Project, around Ashland Creek (Amador County 2016; USGS 2011).

4.7.1.3 Soils

ECORP staff obtained soil survey mapping for the project site from the NRCS *Web Soil Survey* accessed on January 2, 2025 (NRCS 2025b). Table 4.7-1 provides an overview of the soil series mapped within the BSA and key features of the soil series, such as hydric rating or presence of serpentine or gabbroic soil material. This also can be seen in Figure 4.7-1.

Table 4.7-1. Soil Series Mapped within the Project Area			
Map Unit Symbol	**Map Unit Name**	**Rating**	**Hydric Soil Rating**
AhC	Aiken loam, 9 to 16 percent slopes	andesitic conglomerate and/or residuum weathered from tuff breccia	No
CbC	Cohasset very cobbly loam, 3 to 16 percent slopes	weathered volcanic residuum weathered from volcanic rock	No
CcC	Cohasset very cobbly loam, moderately deep, 3 to 16 percent slopes	weathered volcanic residuum weathered from volcanic rock	No
CcE	Cohasset very cobbly loam, moderately deep, 16 to 51 percent slopes	weathered volcanic residuum weathered from volcanic rock	No
MvC	Musick very rocky sandy loam, 9 to 16 percent slopes	colluvium derived from granite and/or colluvium derived from granodiorite	No
MvE	Musick very rocky sandy loam, 16 to 51 percent slopes	colluvium derived from granite and/or colluvium derived from granodiorite	No



Map Features

- Project Alignment - 9.49 ac.

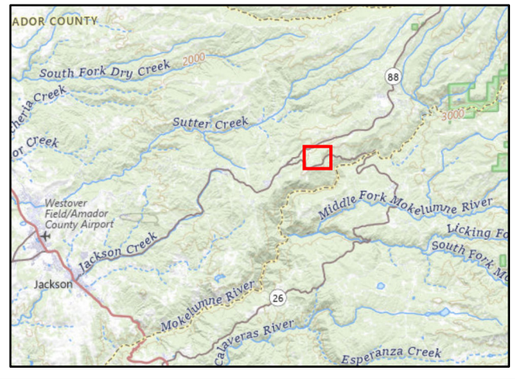
NRCS Soil Types

- AhC, Aiken loam, 9 to 16 percent slopes
- CbC, Cohasset very cobbly loam, 3 to 16 percent slopes
- CcC, Cohasset very cobbly loam, moderately deep, 3 to 16 percent slopes
- CcE, Cohasset very cobbly loam, moderately deep, 16 to 51 percent slopes
- MvC
- MvE, Musick very rocky sandy loam, moderately deep, 16 to 51 percent slope

Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Amador County, CA

Sources: Esri, Maxar

NCRS Soil Type



Location: N:\2024\2024-192 CAWP Transmission Main Improvements and Tank D Replacement\MAPS\Soils_and_Geology\2024-192_CAWP_Soils_20250103.aprx - 2024-192 CAWP TankD Soils 20250218 (jcoltbridge - 2/18/2025)

Map Date: 2/18/2025

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 4.7-1. Natural Resources Conservation Service Soil Types
2024-192 CAWP Transmission Main Improvements and Tank D Replacement

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4.7.1.4 Paleontological Resources

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both fossilized remains of ancient plants and animals and the traces thereof) e.g., trackways, imprints, burrows, etc.). Paleontological resources occur within bedrock geologic deposits that may or may not underly the soil layer and are almost exclusively preserved in sedimentary rocks; however, in rare cases, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions. The Society of Vertebrate Paleontology has defined fossils as being remains or traces of plants and animals that are greater than 5,000 years old (i.e., older than middle Holocene in age).

According to a records search of the University of California Museum of Paleontology, 61 fossils have been found and recorded within Amador County (University of California Museum of Paleontology [UCMP] 2025).

4.7.2 Regulatory Setting

4.7.2.1 State

Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Alquist-Priolo Earthquake Fault Zoning Act only pertains to geologic hazards associated with surface fault rupture. This law does not pertain to any other geologic hazards. There are no Alquist-Priolo Earthquake Fault Zones in Amador County.

California Building Standards Code

The State of California provides minimum standards for building design through the California Building Standards Code (CBC, California Code of Regulations [CCR] Title 24). Information on current code requirements can be found on the California Building Standard Commission's website (http://www.bsc.ca.gov/). The CBC applies to all occupancies throughout the state unless local amendments have been adopted, and includes regulations for seismic safety, excavation of foundations and retaining walls, and grading activities (including drainage and erosion control and construction on unstable soils).

4.7.2.2 Local

Amador County Multi-Hazard Mitigation Plan

In 2014, the Amador County Office of Emergency Service (OES) updated the Hazard Mitigation Plan (HMP) which identifies potential long-term risks to people and property from natural hazards and their effects. The Plan lays out a strategy that will enable Amador County to become less vulnerable to future disaster losses. The HMP was prepared to meet the requirements of the Disaster Mitigation Act of 2000 to maintain Amador County's eligibility for Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation (PDM) and Hazard Mitigation Grant Programs (HMGP). The HMP covers unincorporated

Amador County; the incorporated communities of Amador City, Ione, Jackson, Plymouth, and Sutter Creek; the Amador Water Agency; and the Jackson Valley Irrigation District. The HMP includes an examination of the recorded history of losses resulting from natural hazards, an analysis of future risks posed to Amador County by these hazards (e.g., wildfires, floods, and drought), and several mitigation goals and an objective based on the results of the risk assessment and includes specific recommendations for actions that can mitigate potential future disaster losses.

4.7.3 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause 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?	☐	☐	☒	☐

Less Than Significant Impact.

i) There are no known active or potentially active faults, or Alquist-Priolo Earthquake Fault Zones, located within the proposed Project area. However, there are numerous faults located in the region and the proposed Project area could experience considerable ground shaking generated by faults outside of the area.

The proposed Project would be required to comply with all provisions of the California Building Code which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements.

The proposed Project would construct a new replacement Tank D water tank and install transmission water lines. The new tank will provide improved fire flow and potable water storage for an enlarged service area. As such, the proposed Project would not directly or indirectly result in the construction of occupied structures. For this reason, and because Amador County is located within an area with relatively

low seismic activity, the proposed Project is not anticipated to have significant effects that could result in risk of loss, injury, or death due to fault rupture or strong seismic ground shaking. Any impacts would be less than significant and no mitigation measures are required.

ii) See the above discussion i). Any impacts that would result from ground shaking would be less than significant and no mitigation measures are required.

iii) Liquefaction is a phenomenon whereby granular material (i.e., silt and sand) is transformed from a stable state into a freely moving liquid-like state as a result of an increase in pore-water (water between the grains) pressure due to an earthquake. The project site is underlain by soils with a low depth to rock (generally less than 40 inches) and therefore is not at high risk for liquefaction. In addition, the proposed Project would comply with applicable State seismic safety standards to minimize risk from liquefaction. Lastly, as described in Items i and ii above, the project would not directly or indirectly result in the construction of occupied structures. For these reasons, and because Amador County is located within an area with relatively low seismic activity, the proposed Project will have no adverse effects that could result in risk of loss, injury, or death due to liquefaction that may occur during a seismic event. Any impacts would be less than significant.

iv) Landslides refer to a wide variety of processes that result in the perceptible downward and outward movement of soil, rock, and vegetation under gravitational influence.

Construction of the new tank would require excavation activities within a relatively flat area on the Project site and would have little possibility of resulting in exposure of the site to increased incidence of erosion and site instability due to landslides. BMPs would be included as part of the SWPPP prepared for the proposed Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities (see *Section 4.10.3 Hydrology and Water Quality Environmental Checklist and Discussion*). With the implementation of the SWPPP, soils erosion during construction, project staging and the construction of related facilities would be minimized. With limited erosion anticipated from the project site due to the relatively flat nature of the site, the potential for project-induced landslides is considered less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less Than Significant Impact.

As mentioned above within Table 4.7-1 and Figure 4.7-1 there is six different types of soil located within the project area: Aiken loam, 9 to 16 percent slopes; Cohasset very cobbly loam, 3 to 16 percent slopes; Cohasset very cobbly loam, moderately deep, 3 to 16 percent slopes; Cohasset very cobbly loam, moderately deep, 16 to 51 percent slopes; Musick very rocky sandy loam, 9 to 16 percent slopes; and Musick very rocky sandy loam,16 to 51 percent slopes. During construction, trenching and fill on the

project site could create locally unstable soil conditions that could result in a localized increase in wind- or water- related soil erosion.

The Amador County General Plan Update illustrates erosion hazards that occur within Amador County. According to the illustration, erosion potential for soil types on the project site is considered moderate to severe (Amador County 2016).

All excavation activities, grading, and construction would be conducted according to standard construction practices and building codes. A NPDES permit would be required for construction activities from the RWQCB, requiring a Stormwater Pollution Prevention Plan (SWPPP). Implementation of the SWPPP, including the use of stormwater quality BMPs, would prevent erosion of soil in storm water runoff during project construction. [See Hydrology and Water Quality: Section 4.10 of this Environmental Checklist]. Once construction is completed, soils would be stabilized and monitored according to the SWPPP until a Notice of Termination for the NPDES construction permit is filed with the RWQCB. Consequently, the Proposed Project would not result in substantial erosion and/or unstable earth conditions from project construction or operation. This is applicable to all proposed phases of construction. For these reasons, erosion-related impacts are considered to be less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Less Than Significant Impact.

For reasons discussed in items a) and b) above, adequate measures would be employed during tank and transmission line installation, construction staging and the construction of related facilities to control and limit on and off-site soil erosion. With the limited potential for on- and off-site erosion and low depth to bedrock at the project site, the potential for project-induced landslides, lateral spreading, subsidence, liquefaction, and collapse is minimal. The impact, therefore, is considered less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

"Shrink-swell potential" is the potential for volume changes in a soil with a loss or gain in moisture. If the shrink-swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur. These limitations can vary substantially over short distances. Some clayey soils tend to expand when wet and contract upon drying, which can cause structural damage if not accounted for in construction designs. Exchequer soils have shallow depth, rocky composition, and have good drainage and a low shrink-swell potential and do not pose a hazard of this kind. Consequently, the potential effects due to shrink-swell characteristics of the soil within the project area is low. For these reasons, the impact is less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project would not directly or indirectly result in the installation of any new septic systems or alternative wastewater disposal systems. Any impacts would be less than significant and no mitigation required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated.

Ground disturbance will take place during the construction of the new tank and transmission lines. Although the proposed excavation depth would be limited, excavations may result in penetration of the underlying metavolcanic rock. As noted above, paleontological resources occur within bedrock geologic

deposits that may or may not underly the soil layer and are almost exclusively preserved in sedimentary rocks; however, in rare cases, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions.

Therefore, construction of the proposed Project may damage or destroy unknown paleontological resources. This potential impact can be mitigated to a level that is less than significant with the implementation of Mitigation Measure PALEO-1.

4.7.4 Mitigation Measures

PALEO-1: **Discovery of Unknown Resources.** If any paleontological resources (i.e., fossils) are found during Project construction, construction shall be halted immediately in the subject area and the area shall be isolated using orange or yellow fencing until the AWA is notified and the area is cleared for future work. A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

GHG emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system. Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps more than 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

4.8.2 Regulatory Setting

4.8.2.1 Thresholds of Significance

Currently, there are no GHG thresholds of significance established by the USEPA by which to evaluate projects. Furthermore, at the federal level, there are no standards or regulations regarding GHG emissions. The local air quality agency regulating Amador County is the AAD, the regional air pollution control officer for the basin. The AAD has not established GHG thresholds for land use projects in Amador County.

Therefore, Project emissions are compared to the thresholds issued by the California Air Pollution Control Officers Association (CAPCOA), which is an association of the air pollution control officers from all 35 local air quality agencies throughout California, including the AAD. CAPCOA recommends a significance threshold of 900 metric tons of CO_2e annually. This threshold is based on a capture rate of 90 percent of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions. The 900 metric ton threshold is considered by CAPCOA to be low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

4.8.3 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Less Than Significant Impact.

Construction-generated GHG emissions associated with the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

4.8.3.1 Construction-Generated Greenhouse Gas Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Area, and off-road construction equipment (e.g., backhoe, excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 4.8-1. Construction Related Greenhouse Gas Emissions

Description	CO_2e Emissions (Metric Tons/Year)
Construction Year One	567
CAPCOA Significance Threshold	*900*
Exceed Significance Threshold?	**No**

Notes: Construction emission calculations account for the paving of 13.93 acres and the export of 11,844 tons of pavement.
CAPCOA = California Air Pollutions Control Officers Association

Sources: California Energy Emissions Model (CalEEMod) version 2022.1.1. Refer to Attachment D for Model Data Outputs

As shown in Table 4.8-1, Project construction would result in the generation of a total of approximately 567 metric tons of CO_2e during the first year of construction and approximately 318 metric tons of CO_2e during the second year of construction, which is below the CAPCOA significance threshold. Once construction is complete, the generation of these GHG emissions would cease.

Furthermore, GHG emissions generated by the construction sector have been declining in recent years. For instance, construction equipment engine efficiency has continued to improve year after year. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 hp and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. Tier 3 engine standards reduce precursor and subset GHG emissions such as nitrogen oxide by as much as 60 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which were phased in over the period of 2008-2015. The Tier 4 standards require that emissions of nitrogen oxide be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

Operational Greenhouse Gas Emissions

The Project is proposing the construction of a replacement water tank with an operational capacity of 275,000-gallons and associated infrastructure. Operational GHG emissions associated with the Project would be associated with the one-time water tank filling. This process is estimated to result in approximately 0.0073 metric tons of CO_2e, which is well below the CAPCOA threshold of 900 metric tons. Therefore, no significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No Impact.

The Amador County EAP serves to provide goals, strategies, and actions to reduce the County's energy consumption and achieve greater energy efficiency (Amador County 2015). The Proposed Project would not conflict with any of the plans and policies set out by the EAP or impede progress towards the emission targets. As the AAD and USEPA have not established GHG thresholds for land use projects in Amador County, Project emissions are compared to the CAPCOA thresholds as shown in Tables 4.8-1 and 4.8-2. The Proposed Project would not exceed CAPCOA thresholds. The significance thresholds established by CAPCOA are prepared with the complying with statewide, as well as local, GHG-reduction efforts. Therefore, the Project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

4.8.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

4.9.1.1 Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness. Or hazardous material could pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

4.9.1.2 Hazardous Waste

Hazardous waste is the subset of hazardous materials that has been abandoned, discarded, or recycled and is not properly contained, including soil or groundwater that is contaminated with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be a hazardous waste. If a hazardous material site is unused, and it is obvious there is no realist intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosive explosives, oxidizes, poisons, materials that react violently with water, radioactive materials, and chemicals.

4.9.1.3 Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various Federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such

materials (California Vehicle Code Sections 31602(b), 32104(a)). The California Highway Patrol designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

4.9.1.4 Hazardous Sites

Envirostor Data Management System and Cortese List

The California Department of Toxic Substances Control (DTSC) maintains the Envirostor Data Management System, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation/Investigation Sites. The hazardous waste facilities include permitted-Operating, Post-Closure Permitted, and Historical Non-Operating (DTSC 2024).

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. California DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

The proposed Project site is not listed by the DTSC as a hazardous substances site or within the Cortese list. The closest site is approximately 2.5 miles south of the Project site, at Blackstone Mine in West Point, California.

GeoTracker

GeoTracker is the California Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks and land disposal sites.

The proposed Project is not listed on the SWRCB GeoTracker website but is within 2.5 miles of four Leaking Underground Storage Tank (LUST) Cleanup sites (SWRCB 2024). The sites and their status can be found in Table 4.9.1:

Table 4.9.1. SWRCB GeoTracker LUST Cleanup Sites within 0.5 Mile of the Project Site

Location Name	Address	Potential Contaminants of Concern	Status	Date
Pioneer Stage Stop	24140 Highway 88, Pioneer, CA 95666	Gasoline	Case Closed	11/24/1998

Bob's Chevron	24444 Highway 88, Pioneer, CA 95666	Gasoline	Case Closed	10/7/1992
Pioneer Elementary School	24625 Highway 88, Pioneer, CA, 95666	Diesel	Case Closed	2/3/1994
P&M Cedar	25270 Highway 88, Pioneer, CA 95666	Gasoline	Open Site Assessment	1/10/2003

Note: CA = California; LUST = Leaking Underground Storage Tank.
Source: State Water Resources Control Board (SWRCB). 2024.

4.9.1.5 Fire Hazard Severity Zones

The state has charged the California Department of Forestry and Fire Protection (CAL FIRE) with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas (SRA). In addition, CAL FIRE) must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. The proposed Project is within a very high fire hazard severity zone within an SRA (CAL FIRE 2024).

4.9.2 Regulatory Setting

4.9.2.1 Federal

Hazardous Materials Handling

At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the U.S. Environmental Protection Agency (USEPA), under the authority of the Resource Conservation and Recovery Act (RCRA). RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by USEPA. Under RCRA, USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984, which specifically prohibits the use of certain techniques for the disposal of various hazardous substances. The Federal Emergency Planning and Community Right to Know Act of 1986 imposes hazardous-materials planning requirements to help protect local communities in the event of accidental release of hazardous substances. The USEPA has delegated enforcement of many RCRA requirements to the California DTSC.

Hazardous Materials Transport

The U.S. Department of Transportation (USDOT) regulates transportation of hazardous materials between states. The USDOT Federal Railroad Administration enforces Hazardous Materials Regulations, which are promulgated by the Pipeline and Hazardous Materials Safety Administration for rail transportation. These regulations include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train their employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

4.9.2.2 State

Hazardous Waste and Substances Site List

The Hazardous Waste and Substances Sites List (Cortese list) is a planning document required by California Government Code Section 65962.5. DTSC is required to compile the list, which consists of potentially contaminated sites in the state. It is used by state agencies, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites.

Hazardous Waste and Substances Site List

The Hazardous Waste and Substances Sites List (Cortese list) is a planning document required by California Government Code Section 65962.5. DTSC is required to compile the list, which consists of potentially contaminated sites in the state. It is used by state agencies, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites.

4.9.3 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project consists of the construction of a new water storage tank and transmission lines to increase the flow and reliability of the Pioneer distribution system and is located within a rural residential area.

The proposed Project is anticipated to require the use of some hazardous materials such as diesel fuel during construction. The transport of hazardous materials by truck is regulated by federal safety standards under the jurisdiction of the U.S. Department of Transportation. The use of such materials would not create a significant hazard to the public and impacts would be less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

On-site storage and/or use of large quantities of hazardous materials capable of affecting soil and groundwater are not proposed. The potential risk associated with accidental discharge associated with use and storage of equipment-related hazardous materials during tank replacement is considered low because the handling of any such materials would be addressed through the implementation of BMPs associated with the SWPPP required for the project. The proposed Project is an infrastructure project that would not require the long-term use or storage of hazardous substances; therefore, no potential for the release of hazardous materials into the environment is expected. A less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project involves the construction of a new water storage tank and transmission lines to increase the flow and reliability of the Pioneer distribution system. The closest school to the proposed Project is the Pioneer Elementary School, located at 24625 Highway 88 in Pioneer, which is approximately 1 mile away from the project Area. The use of hazardous materials would be limited during construction activities and would include traditional materials typically associated with construction projects such as gasoline, diesel, oil, paint, resin and epoxy concrete. All hazardous materials, substances, or waste would be handled consistent with federal, state, and local regulations. Any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

Under Government Code Section 65962.5, both DTSC and the SWRCB are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the of the DTSC and SWRCB lists identified that the proposed Project Site is not located on a hazardous material site. The DTSC and SWRCB showed that there are sites within 2.5 miles of the Project site. Given that there are no existing hazardous waste sites within the Project Site area, the proposed Project will have no impact in this area and no mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 for people residing or working in the Project Area?	☐	☐	☐	☒

No Impact.

The proposed Project is located approximately 14 miles away from Westover Airport in Martell. The proposed Project is not located within an airport land use plan or within two miles of a public airport. Therefore, there would be no impact and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less Than Significant Impact.

The Amador County Sheriff's OES is also responsible for the administration of the county emergency management program on a day to day basis. The County is in the process of implementing the Amador

County Emergency Operations Plan, but has not been made publicly available at the time drafting this document (Amador County 2024a).

Amador County adopted a Local Hazard Mitigation Plan in 2020 which is considered the primary document when determining how disasters will be managed by the County. The purpose of hazard mitigation and this plan is to reduce or eliminate long-term risk to people and property from natural hazards and their effects in Amador County, California. This plan has been prepared to meet the Disaster Mitigation Act of 2000 requirements in order to maintain Amador's eligibility for the Federal Emergency Management Agency (FEMA) PDM and HMGP. More importantly, this plan and planning process lays out the strategy that will enable Amador County to become less vulnerable to future disaster losses.

The multi-jurisdictional plan includes the County, and the incorporated communities of Amador City, Ione, Jackson, Plymouth, and Sutter Creek. This plan also covers two participating districts: Amador Water Agency and the Jackson Valley Irrigation District.

Implementation of the proposed Project would benefit the area by providing better fire protection by increasing fire flow in the Project Area and would not interfere with the adopted Amador County Local Hazard Mitigation Plan (Amador County 2020a), which focuses on strategies that will enable Amador County to become less vulnerable to future disaster losses (Amador County 2020a). Therefore, any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Less Than Significant Impact.

The Project site is located in a very high fire hazard severity zone in a state responsibility area. The proposed Project would comply with all CAL FIRE SRA requirements including those for emergency vehicle access, turnarounds, and defensible space. All proposed construction would comply with County fire code requirements and access would follow requirements by CAL FIRE. The Project would better serve the existing community of Red Corral and Pioneer, and would not be growth inducing, and would not create any new residences or occupied structures in an area susceptible to wildlife. Any impacts would be less than significant. Please see the discussion of wildfire in Section 4.20 of this Initial Study/Mitigated Negative Declaration for more information.

4.9.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 Regional Hydrology

Amador County, located approximately 30 miles southeast of Sacramento on the western slope of the Sierra Nevada, is situated in a transitional zone between the San Joaquin Valley and the Sierra Nevada range and can be divided into two distinct physical regions, the forested "upcountry" to the east and the lower foothills to the west. (Amador County 2016)

The upcountry is generally steep and rugged, and the foothills are typically rolling hills, oak, and grassland habitat. Elevation ranges from 250 feet in the low foothills to over 9,000 feet in the Sierra Nevada peaks on the County's eastern boundary. Temperature and precipitation vary greatly between these regions. The Sierra Nevada foothill areas experience hot, dry summers and mild winters, with temperature ranging from the middle 30s to the high 90s degrees Fahrenheit. The higher elevations (approximately 5,000 feet and above) experience long and severe winters with heavy snowfall. The mountainous eastern region of the County is characterized by mild summers and cold winters with temperatures ranging from the low 20s to the middle 80s (Amador County 2016).

The primary sources of water in the County are the Upper Mokelumne and, to a lesser extent, the Upper Cosumnes River watersheds, and the South Fork American River watershed in the far northeast around the Kirkwood area, with snowmelt and rainfall from the Sierra transported via the rivers and their tributaries. In Amador County, only 2 percent of the public domestic or treated water supply is from groundwater and 98 percent of the total supply is from the Mokelumne River (Amador County 2016).

Multiple rivers, streams, creeks, and associated watersheds transect Amador County. The County is situated in a region that dramatically drops in elevation from the Sierra Nevada Mountains in the east to the central and western portions, where excess rain or snow can contribute to downstream flooding. The Cosumnes and Mokelumne Rivers are both tributary to the San Joaquin River. The North Fork Mokelumne River originates in the Sierra Nevada and flows west to its confluence with the San Joaquin River in the Central Valley. Annual precipitation and streamflow in the Mokelumne River is extremely variable both month to month and year to year. Stream flow is modified by upstream diversions and regulated by reservoir storage operations for hydroelectric power generation and water supply.

The Cosumnes River forms the northern boundary of the western portion of Amador County. The South and Middle Forks of the River converge into the main stem of the Cosumnes River near State Highway 49. The Cosumnes passes through southern Sacramento County in the Sacramento Valley, joining with the Mokelumne River in San Joaquin County and emptying into the Sacramento-San Joaquin Delta.

Other significant rivers or streams in the western foothills region include Sutter Creek and Jackson Creek. With headwaters near Pine Grove, Sutter Creek flows through the cities of Sutter Creek and Ione. West of Ione, below Lake Camanche, Sutter Creek flows into Dry Creek which eventually discharges to the Mokelumne River.

4.10.1.2 Regional Water Quality

Surface and groundwater water quality in Amador County is generally good. The western portion of Amador County holds the majority of population and associated developed land uses and therefore has the greatest potential for water quality problems. In the Sutter Creek watershed (encompassing more populated western foothill areas), Caltrans has identified several common contaminants from road runoff found in measurable quantities: Total Dissolved Solids, Total Suspended Solids, Dissolved and Total Organic Carbon, nutrients (ammonia, nitrate, phosphorus, and ortho-phosphate), and metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc) (Amador County 2016; USGS 2025).

4.10.1.3 Site Hydrology and Onsite Drainage

As mentioned in Section 4.4.4 of this IS/MND, a preliminary aquatic resources assessment was conducted to identify potential Waters of the U.S./State within the BSA concurrent with the reconnaissance-level field assessment and no aquatic features were identified onsite.

4.10.1.4 Flood Mapping

FEMA Flood Insurance Rate Map Number 06005C0400F does not show the Project Area within a flood hazard zone (FEMA 2025).

4.10.2 Regulatory Setting

4.10.2.1 Federal Plans, Policies, Regulations, and Laws

Clean Water Act

The Clean Water Act of 1972 (CWA) is the primary federal law that governs and authorizes water quality control activities by the USEPA, the lead federal agency responsible for water quality management. By establishing water quality standards, issuing permits, monitoring discharges, and managing polluted runoff, the CWA seeks to restore and maintain the chemical, physical, and biological integrity of surface waters to support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water." The USEPA is the federal agency with primary authority for implementing regulations adopted pursuant to CWA and has delegated the state of California as the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969 described below.

Water Quality Criteria and Standards

The USEPA has published water quality regulations under Volume 40 of the Code of Federal regulations (40 CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question and (2) criteria that protect the designated uses. Section 304(a) requires the USEPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected

from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Section 303(d) mandates the creation of a list of waterbodies and associated pollutants that exceed water quality criteria.

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program was established to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges including point source municipal waste discharges and nonpoint source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

In November 1990, the USEPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase I of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Amador County is subject to the requirements of Phase II of the NPDES stormwater permit regulations, which became effective in March 2003 and required NPDES permits be issued for construction activity for projects that disturb between 1 and 5 acres. Phase II of the municipal permit system (i.e., known as the NPDES General Permit for Small municipal separate storm sewer system [MS4s]) required small municipality areas of less than 100,000 persons to develop stormwater management programs. The Regional Water Quality Control Boards (RWQCBs) in California are responsible for implementing the NPDES permit system (refer to additional details in the section "State Plans, Policies, Regulations, and Laws" below).

Section 401 Water Quality Certification or Waiver

Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirements is delegated by the SWRCB to the nine regional boards.

U.S. Army Corps of Engineers

The USACE is responsible for issuing permits for discharge of dredged or fill material into waters of the United States. These permits are required under Sections 401 and 404 of the Clean Water Act. Water supply projects that involve instream construction, such as dams or other types of diversion structures, trigger the need for these permits and related environmental reviews by USACE. USACE is also responsible for flood control planning and assisting state and local agencies with the design and funding of local flood control projects.

4.10.2.2 State Plans, Policies, Regulations, and Laws

State Water Resources Control Board

In California, the SWRCB has broad authority over water-quality control issues for the state. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the state by the federal government under the CWA. Other state agencies with jurisdiction over water quality regulation in California include California Department of Public Health (for drinking-water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Wildlife (CDFW), and the Office of Environmental Health and Hazard Assessment. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt Basin Plans for all areas in the region and establish water quality objectives in the plans. California water quality objectives (or "criteria" under the Clean Water Act) are found in the Basin Plans adopted by the State Water Resources Control Board and each of the nine Regional Water Quality Control Boards. The Central Valley RWQCB is responsible for Amador County.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is California's statutory authority for the protection of water quality. Under the act, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update Basin Plans. Basin Plans are the regional water quality control plans required by both the CWA and Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The act also requires waste dischargers to notify the RWQCBs of their activities through the filing of Reports of Waste Discharge (RWDs) and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWDs and/or WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.

California General Construction Activity Storm Water Permit

The USEPA and the SWRCB regulate point sources of pollution, such as construction sites, that have the potential to discharge pollutants into the waters of the United States. This is accomplished through the issuance of NPDES storm water discharge permits. NPDES Phase II regulations took effect in March 2003, requiring that applicants proposing construction activities involving disturbance of from one to five acres, and associated storm water discharge, must obtain an NPDES permit from the State. Construction activities larger than five acres were already regulated, under NPDES Phase I (1990). (Phase II also required that small [population of less than 100,000] MS4 operators obtain a NPDES permit.) Landowners are responsible for applying for coverage under the permit and complying with permit requirements but may delegate specific duties to developers and contractors by mutual consent.

Permit applicants are required to prepare, and retain at the construction site, a SWPPP, which describes the site, erosion and sediment controls, means of waste disposal, implementation of local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-storm water management control. Dischargers are also required to inspect construction sites before and after storms to identify storm water discharge from construction activity, and to identify and implement controls where necessary.

4.10.2.3 Regional

Integrated Regional Water Management Plan

As a result of the passage in 2002 of Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act, Integrated Regional Water Management Plans (IRWMP) were authorized for regional management of water resources in at least four main areas: water supply, groundwater management, ecosystem restoration, and water quality. Projects and programs included in the Integrated Regional Water Management Plan (IRWMP) are designed to integrate multiple strategies and projects in order to provide multiple benefits both locally and regionally. An Integrated Regional Water Management region encompassing Amador County was formed in 2006 by various cooperating agencies including: Amador Water Agency (AWA), Calaveras County Water District, Amador County, City of Jackson, City of Sutter Creek, City of Plymouth, Amador Regional Sanitation Authority, and East Bay Municipal Utility District. These agencies entered into a Memorandum of Understanding for the purpose of coordinating water resources planning and implementation activities associated with the IRWMP (Amador County 2016).

4.10.2.4 Local

Amador County Code of Ordinances: 1690 – Erosion Control

The Amador County General Plan does not include relevant hydrology and water quality policies that are directly applicable to the Proposed Project. The County outlines rules and recommendations to minimize potential erosion hazards associated with grading construction activities, as described in the Amador County Guidelines for Grading and Erosion Control, Pursuant to Ordinance No. 1581 and in the Amador County Code of Ordinances, Chapter 15.40 - Ordinance No. 1619: Erosion Control

Amador County Code of Ordinances: 15.16.170 - Standards for Utilities

Ordinance 15.16.170 of the Amador County Code states:

A. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

   1. Infiltration of floodwaters into the system; and

   2. Discharge from systems into floodwaters.

B. On-site waste disposal systems shall be located to avoid impairment to them, or contamination from them during flooding. (Ord. 1503(part), 2000).

4.10.3 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

Less Than Significant Impact.

4.10.3.1 Project Operation

The proposed Project would replace the CAWP Tank D water tank and include additional transmission lines. This would result in no alteration in water source or treatment relative to current conditions. The project as designed will increase storage capacity and will allow for improved fire flow in the system. As such, long-term operation of the proposed Project will have no impact on existing water quality standards or waste discharge requirements.

Project Construction

Site preparation and construction activities associated with the Project will involve temporary/short-term earth-moving activities including trenching and grading. Construction activities that are subject to the NPDES Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, which result in soil disturbances of at least one acre of total land area. The SWRCB permits all regulated construction activities under Order No. 98-08-DWQ (1999). This Order requires that prior to beginning any construction activities, the permit applicant must obtain coverage under the General Construction Permit by preparing and submitting a Notice of Intent (NOI) and appropriate fee to the SWRCB. Additionally, coverage will not occur until an adequate Stormwater Pollution Prevention Plan (SWPPP) has been prepared. A separate NOI shall be submitted to the SWRCB for each construction site.

Required elements of a SWPPP include (1) site description addressing the elements and characteristics specific to the site; (2) descriptions of BMPs for erosion and sediment controls; (3) BMPs for construction waste handling and disposal; (4) implementation of approved local plans; (5) proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and (6) non-stormwater management.

Typical construction BMPs include, but are not necessarily limited to, scheduling or limiting activities to certain times of year; prohibiting certain construction practices; implementing equipment maintenance schedules and procedures; implementing a monitoring program; other management practices to prevent or reduce pollution, such as using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks do not enter the

storm drain system or surface waters; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water. Typical operation BMPs include, but are not necessarily limited to, controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs. Because construction of the Proposed Project would cumulatively disturb more than one acre, all activities would be subject to these permit requirements.

With preparation of the required SWPPP, implementation of BMPs associated with that plan and listed above and compliance with the Amador County Erosion Control Ordinance 1690, the construction activities for the proposed Project would fully comply with all relevant water quality standards and waste discharge requirements as described above. The impact, therefore, is less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

Less Than Significant Impact.

Construction and operation of the Proposed Project would in no way alter current use of groundwater within the CAWP service area. Due to the existing conditions of the construction area and construction details any localized effects of the project on groundwater recharge would be unsubstantial. Therefore, this impact is less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 that would:				
i) result in substantial erosion or siltation onsite or offsite;	☐	☐	☒	☐

ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite 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?	☐	☐	☒	☐

Less Than Significant Impact.

Construction of the proposed Project will not alter the existing drainage pattern of the area nor will it alter the course of a stream or river through addition of impervious surfaces. Project construction and staging activities will result in soil disturbances of at least one acre of total land area. As such, an NPDES Construction General Permit will be required prior to the start of construction. Additionally, coverage will not occur until an adequate SWPPP has been prepared.

As noted, required elements of a SWPPP include (1) site description addressing the elements and characteristics specific to the site; (2) descriptions of BMPs for erosion and sediment controls; (3) BMPs for construction waste handling and disposal; (4) implementation of approved local plans; (5) proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and (6) non-stormwater management.

Excavation and grading activities associated with the Proposed Project will expose bare soil surfaces making these surfaces more susceptible to erosion and sediment transport. To comply with the requirements of the NPDES Construction General Permit AWA will be required to file a Notice of Intent (NOI) with the State of California and submit a SWPPP defining BMPs for construction and post-construction related control of the Proposed Project site runoff and sediment transport. Requirements for the SWPPP include incorporation of both erosion and sediment control BMPs. The SWPPP should include the following applicable elements:

- diversion of offsite run-off away from the construction area;
- prompt revegetation of proposed landscaped areas;
- perimeter straw wattles or silt fences and/or temporary basins to trap sediment before it leaves the site;
- regular sprinkling of exposed soils to control dust during construction during the dry season;
- installation of a minor retention basin(s) to alleviate discharge of increased flows;
- specifications for construction waste handling and disposal;
- erosion control measures maintained throughout the construction period;

- preparation of stabilized construction entrances to avoid trucks from imprinting debris on surrounding roadways;
- contained wash out and vehicle maintenance areas;
- training of subcontractors on general construction area housekeeping;
- construction scheduling to minimize soil disturbance during the wet weather season; and
- regular maintenance and storm event monitoring.

Note that the SWPPP is a "live" document and should be kept current by the person responsible for its implementation. Preparation of, and compliance with a required SWPPP would effectively prevent Proposed Project on-site erosion and sediment transport off-site. This will reduce potential runoff, erosion, and siltation associated with construction and operation of the Proposed Project. The effects of the Proposed Project on on-site and off-site erosion and siltation, therefore, would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☐	☒

No Impact.

The proposed Project is not located within an area that experiences floods or tsunamis. Therefore, no impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Less Than Significant Impact.

As discussed under a) and c) above, with acquisition of the required SWPPP, and compliance with standard permit measures for the control and management of construction-related erosion and polluted runoff, the proposed Project impacts on the quality and quantity of runoff during construction would be less than significant. With restoration of the project site to pre-project conditions relative to topography and cover after project completion, the long-term impact of the Project on water quality is less than significant. No mitigation is required.

4.10.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The proposed Project is located within the Pioneer community of Amador County. The Project Site is designated as Rural Residential (RBS) in the Amador County General Plan and the zoning designation is Single Family Residential (R1) or Single Family Residential Agricultural District (R1A) (Amador County 2024b, 2024c). The proposed Project is an allowed use.

4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project consists of the replacement of installation of a new water Tank, demolition of the existing Tank D water tank, and associated transmission lines within the Pioneer Community. While most construction work associated with construction of the transmission lines will be within existing roads. The proposed Project would not physically divide an established community. A less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project involves the construction of a new water storage tank and construction of new transmission lines to the new tank. The proposed Project is consistent with Amador County's plans and policies; and therefore, the proposed Project would not conflict with any applicable land use plan, policy or regulation. A less than significant impact would occur and no mitigation is required.

4.11.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the Project Area. The conservation, extraction, and processing of mineral resources is essential to meeting the needs of society.

The Surface Mining and Reclamation Act of 1975 (SMARA) states that cities and counties shall adopt ordinances "...that establish procedures for the review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations..." (PRC Section 2774). The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (PRC Section 2712).

SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZ) according to the known or inferred mineral potential of that land. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land use decisions, which could preclude mining, are made. Areas subject to California mineral land classification studies are divided into the following Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral potential:

- MRZ-1: Areas of no mineral resource significance
- MRZ-2: Areas of identified mineral resource significance
- MRZ-3: Areas of undetermined mineral resource significance
- MRZ-4: Areas of unknown mineral resource significance

According to the Department of Conservation mapping and Amador County General Plan, the Project Area is listed as MRZ-3a, which are areas of identified mineral resource significance (Loyd 1987; Amador County 2016). MRZ-3a specifically means "Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories".

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project is located within an MRZ classification as MRZ-3a. As defined above in 4.12.1 Environmental Setting, MRZ-3a is known as "Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories". Although mineral resources may exist around the proposed Project area, construction and operation of the Project does not preclude the extraction of these mineral resources in the future. Therefore, implementation of the proposed Project would not result in the loss of availability of a known mineral resource. As less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project is not located within a current locally important mineral resources recovery site and it has not been historically mined (Amador County 2016). As described in item a), the proposed Project site is classified as MRZ-3a, however it has not been delineated within the general plan or other land use plans as a locally important mineral resource recovery site. No mitigation is required.

4.12.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.13 Noise

4.13.1 Environmental Setting

4.13.1.1 Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10 A-weighted decibel (dBA) "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by several sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 decibels (dB) for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (FHWA 2011).

The manner in which older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (Harris Miller & Hanson Inc. 2006).

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The Proposed Project involves the installation of a new water tank and associated infrastructure varying distances to sensitive receptors, as it is a linear project spanning multiple acres. Sensitive receptors in the Project Area consist of rural single-family residences, some of which are located directly adjacent to the proposed improvements.

4.13.1.2 Vibration Sources and Characteristics

Ground vibration can be measured several ways to quantify the amplitude of vibration produced, including through peak particle velocity (PPV) or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively.

Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.13.1.3 Existing Ambient Noise Environment

The Project Area, which is located in rural Amador County, is impacted by the noise sources of a typical rural community. The most prevalent noise source within the County is traffic on highways and local roadways (Amador County 2016). The American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present" provides a table of approximate background sound levels in L_{dn}, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density. The ANSI standard estimation divides land uses into six distinct categories. Descriptions of these land use categories, along with the typical daytime and nighttime levels, are provided in Table 4.13-1. At times, one could reasonably expect the occurrence of periods that are both louder and quieter than the levels listed in the table. ANSI notes, "95% prediction interval [confidence interval] is on the order of +/- 10 dB" (ANSI 2013). The majority of the Project Area would be considered ambient noise Category 6.

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
1	Noisy Commercial & Industrial Areas and Very Noisy Residential Areas	Very heavy traffic conditions, such as in busy, downtown commercial areas; at intersections for mass transportation or other vehicles, including elevated trains, heavy motor trucks, and other heavy traffic; and at street corners where many motor buses and heavy trucks accelerate.	63,840	67 dBA	66 dBA	58 dBA
2	Moderate Commercial & Industrial Areas and Noisy Residential Areas	Heavy traffic areas with conditions similar to Category 1, but with somewhat less traffic; routes of relatively heavy or fast automobile traffic, but where heavy truck traffic is not extremely dense.	20,000	62 dBA	61 dBA	54 dBA

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
3	Quiet Commercial, Industrial Areas and Normal Urban & Noisy Suburban Residential Areas	Light traffic conditions where no mass-transportation vehicles and relatively few automobiles and trucks pass, and where these vehicles generally travel at moderate speeds; residential areas and commercial streets, and intersections, with little traffic, compose this category.	6,384	57 dBA	55 dBA	49 dBA
4	Quiet Urban & Normal Suburban Residential Areas	These areas are similar to Category 3, but for this group, the background is either distant traffic or is unidentifiable; typically, the population density is one-third the density of Category 3.	2,000	52 dBA	50 dBA	44 dBA
5	Quiet Residential Areas	These areas are isolated, far from significant sources of sound, and may be situated in shielded areas, such as a small-wooded valley.	638	47 dBA	45 dBA	39 dBA

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density						
Category	**Land Use**	**Description**	**People per Square Mile**	**Typical L_{dn}**	**Daytime L_{eq}**	**Nighttime L_{eq}**
6	Very Quiet Sparse Suburban or Rural Residential Areas	These areas are similar to Category 4 but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound.	200	42 dBA	40 dBA	34 dBA

Note: dBA = A-weighted decibels; L_{dn} = Day-Night Average Sound Level; L_{eq} = Equivalent Noise Level
Source: American National Standards Institute (ANSI) 2013

4.13.2 Regulatory Framework

4.13.2.1 Amador County General Plan Noise Element

The County's General Plan Noise Element establishes several policies and implementation measures to help maintain or abate ambient noise levels and protect the residents of Amador County from excessive noise exposure. Compatibility guidelines varying by land use for interior and exterior noise levels help to protect sensitive receptors and land uses. The following policies are applicable to the Proposed Project:

Policy N-1.1: Enforce noise standards to maintain acceptable noise limits, especially near noise-sensitive uses. Noise measurement methods are subject to County approval.

Policy N-1.3: Evaluate potential noise conflicts for individual sites and projects and require mitigation of all significant noise impacts (including construction and short-term noise impacts) as a condition of project approval.

Table 4.13-2 summarizes County stationary source noise standards. These standards represent the acceptable exterior noise levels at the sensitive receptor's property line.

Table 4.13-2. Noise Level Performance Standards for Non-Transportation Noise Sources		
Noise Level Descriptor	**Daytime (7:00 a.m. – 10:00 p.m.)**	**Nighttime (10:00 p.m. – 7:00 a.m.)**
Hourly Average Level (L_{eq})	60 dBA	45 dBA
Maximum Equivalent Levels (L_{max})	75 dBA	65 dBA

Sources: Amador County 2016

Notes: Each of the noise levels specified shall be lowered by 5 decibels for simple tone noises, noises consisting primarily of speech, or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). The noise standard is to be applied at the property planes of the affected land use. dBA = A-weighted decibels; L_{eq} = Equivalent Noise Level; L_{max} = Maximum Noise Level

4.13.2.2 Amador County Municipal Code

The Amador County Code does not include ordinances specifically related to noise. However, Chapter 9.44 Section 9.44.010, Public Nuisance Noise, of the code does include a discussion of noise sources that are considered to be a nuisance. According to the code, "it shall be unlawful for any person to make, continue, or cause to be made or continued, within the limits of the unincorporated county, any disturbing, excessive, or offensive noise which causes discomfort or annoyance to any reasonable person of normal sensitivity." Note that this only applies to residential uses and does not apply to the operation of commercial or industrial uses. In addition, this does not apply to construction activities.

4.13.3 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in 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?	☐	☐	☒	☐

Less Than Significant Impact.

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The Proposed Project includes the installation of a new water tank, waterlines, and associated infrastructure extending over a linear Project Area at varying distances to sensitive receptors. Sensitive receptors in the Project Area consist of rural single-family residences, some of which are located directly adjacent to the proposed improvements.

4.13.3.1 Onsite Construction Noise Impacts

Construction noise associated with the Proposed Project would be temporary and would vary depending on the specific nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, excavation, paving). Noise generated by

construction equipment, including earth movers, pile drivers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site. This construction noise would be temporary, short term, intermittent in nature, and would cease on completion of the Project.

Sensitive receptors in the Project Area consist of single-family residences, some of which are located directly adjacent to the proposed improvements. The County's General Plan and Municipal Code do not provide guidance on regulating noise associated with construction. However, as Project construction would occur in close proximity to noise sensitive land uses, an analysis is included for disclosure purposes. Due to the linear nature of construction along the water pipeline, the distance between construction activities and sensitive receptors will vary. For this analysis, a reasonable proxy distance of 100 feet between Project construction activity and any given residential receptor was used. While it is acknowledged that some construction activities may occur closer than 100 feet to certain residences, the activity will not be concentrated at a single location but will instead move intermittently throughout the linear Project Site as construction progresses.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors and in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, the construction equipment noise levels were calculated using the Federal Highway Administration's Roadway Noise Construction Model and compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

Recent CEQA case law has held that the use of an absolute noise threshold for evaluating all ambient noise impacts violated CEQA because it did not provide a "complete picture" of the noise impacts that may result from implementation of the ordinance. As such, the Proposed Project's construction noise is estimated and then added to the average daily ambient noise level in the Project Area as determined by referencing the ANSI Standard 12.9-2013/Part 3 Quantities and Procedures for Description and Measurement of Environmental Sound identified in Table 4.13-1 above. As identified, the Project Area would be considered ambient noise Category 6, which generally experiences 40 dBA L_{eq} during the daytime. As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. For example, a 65-dB source of sound, such as a

truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Furthermore, when combining two separate sources where one of the noise sources is 10 dB or greater than the other noise source, the noise contribution of the quieter source is completely obscured by the louder source.

The anticipated short-term construction noise levels generated for each phase of construction are presented in Table 4.13-4.

Table 4.13-4. Construction Average (dBA) Noise Levels at Nearest Receptors

Construction Phase	Average Ambient Noise Level* (dBA L_{eq})	Existing Ambient Noise + Exterior Construction Noise Levels (dBA L_{eq})	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?
Demolition	40.0	80.4	*85*	**No**
Site Preparation		81.6	*85*	**No**
Grading		82.2	*85*	**No**
Building Construction, Paving & Architectural Coating		83.1	*85*	**No**

Notes: *Average ambient noise levels of the Project Area were estimated using the American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 Quantities and Procedures for Description and Measurement of Environmental Sound identified in Table 4.13-1 above.
Construction equipment used during construction derived from the California Emissions Estimator Model (CalEEMod). CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters.
L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

Source: Construction noise levels were calculated by ECORP using the Federal Highway Administration (FHWA) Roadway Noise Construction Model (FHWA 2006). Refer to Appendix E for Model Data Outputs.

As shown in Table 4.13-4, the Project's contribution of noise during construction activities would not exceed the 85 dBA NIOSH construction noise threshold at 100 feet. It is noted that construction noise was modeled on a worst-case basis. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residences. Project construction noise impacts would be less than significant.

4.13.3.2 Operational Noise Impacts

Operational Offsite Traffic Noise

The Project is proposing the construction of a replacement water tank with an operational capacity of 275,000-gallons and associated infrastructure. Upon completion of construction, the Project would not generate noise beyond the one-time water tank filling. Operational noise impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Less Than Significant Impact.

4.13.3.3 Construction Vibration Impacts

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Proposed Project would be primarily associated with short-term construction-related activities. Construction in the Project Area would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance, and it is acknowledged that construction activities would occur throughout the Project Area and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 4.13-5.

Table 4.13-5. Typical Construction Equipment Vibration Levels

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Source: Federal Transit Administration (FTA) 2018

Amador County does not regulate or have a numeric threshold associated with construction vibrations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.3 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. Due to the linear nature of construction along the waterline, the distance between construction activities and the distance to structure will vary.

For this analysis, a reasonable proxy distance of 100 feet between Project construction activity and any given structure was used. It is acknowledged that some construction activities may occur closer than 100 feet to structures however the construction activity will not be concentrated at a single location but will instead move intermittently throughout the Project Site as construction progresses:

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-5 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential project construction vibration levels. The FTA provides the following equation:

$$[PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}]$$

Table 4.13-6 presents the expected Project related vibration levels at a distance of 100 feet.

Table 4.13-6 Construction Vibration Levels at 100 Feet

Receiver PPV Levels (in/sec)[1]					Peak Vibration	Threshold	Exceed Threshold?
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jackhammer	Small Bulldozer/ Tractor	Vibratory Roller			
0.011	0.009	0.004	0.000	0.026	**0.026**	*0.3*	**No**

Notes: [1]Based on the Vibration Source Levels of Construction Equipment included on Table 4.13-6 (FTA 2018). Distance to the nearest structure of concern was modeled at 100 feet.
in/sec = inches per section; PPV = Peak Particle Velocity

As shown in Table 4.13-6, vibration as a result of onsite construction activities in the Project Area would not exceed 0.3 PPV at 100 feet. Thus, onsite Project construction would not exceed the recommended threshold. Impacts would be less than significant.

4.13.3.4 Operational Vibration Impacts

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. Therefore, the Project would result in no groundborne vibration impacts during operations.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The Project Area is located approximately 10 miles northeast of the Amador County Airport, also known as Westover Field. According to the Amador County General Plan Exhibit 4.11-1, the Project Area is located outside of the 65 CNEL noise contour for the Amador County Airport. The Proposed Project would not expose workers in the Project Area to excess airport noise levels. Therefore, no impact would occur.

4.13.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.14 Population and Housing

4.14.1 Environmental Setting

According to the Department of Finance, in 2023 the total population for Amador County was estimated to be 39,924 and in 2024 was estimated to be 39,611, which resulted in approximate negative 0.8 precent change (California Department of Finance 2025). The population in Pioneer is estimated to be 1,360 (World Population Review 2024).

4.14.2 Regulatory Setting

4.14.2.1 Local

Amador County Housing Element

Each local government in California is required to adopt a comprehensive, long-term general plan for the physical development of the city or county. The Housing Element is one of the mandated elements of the County's General Plan. State law requires that local governments address the existing and projected housing needs of all economic segments of the community through their housing elements.

Amador County is currently leading the effort, in coordination with the cities of Amador City, Ione, Plymouth, Jackson, and Sutter Creek to prepare the Countywide 6th Cycle Housing Element Update. The Countywide Housing Element addresses the housing needs of all jurisdictions in the County, with an

Annex for each jurisdiction that addresses the specific housing sites and development requirements applicable to that jurisdiction.

4.14.3 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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)?	☐	☐	☐	☒

No Impact.

Implementation of the proposed Project would not extend service to areas that do not currently have service. The proposed Project would upgrade existing deficient infrastructure and would not induce substantial population growth in the area. Furthermore, minimal operation and maintenance would be required and no permanent employees would be hired as a result of the proposed Project. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact.

The proposed Project would not displace any existing housing, and would not impact any existing housing. Therefore, no impact would occur and no mitigation is required.

4.14.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 Police Services

The Amador County Sheriff's Department (ACSD) service area includes the unincorporated portions of Amador County. ACSD also provides contractual law enforcement services to Plymouth and Amador County. ACSD's mission is to protect life and property and enforce civil and criminal laws while respecting

the rights of all, recognizing the diversity of the community served, identifying and maintaining a high level of professionalism, integrity and readiness, and delivering consistent and humane treatment to those under care and custody. The Sheriff's Department provides boating patrol service, dispatch and communications, Search and Rescue, internal affairs, records and clerical, recruitment, the Amador Narcotics Enforcement Unit, the coroner division, Crime Specific Units, a detective division, the Marijuana Suppression Unit, patrol operations, a Special Weapons and Tactics Team, transportation, and jail operations (Amador County Sheriff's Office 2025).

The California Highway Patrol also assists with the Amador County Sherriff's Department with mutual law enforcement assistance as well as traffic violations.

4.15.1.2 Fire Services

The Amador Fire Protection District (AFPD) provides fire protection services for the unincorporated Amador County communities. The AFPD provides fire suppression and emergency medical services to unincorporated areas of Amador County. AFPD serves approximately 85 percent of the unincorporated area of Amador County.

The proposed Project is located within the AFPD boundary. The closest AFPD is Fire Station 112, which is located at 23770 Van De Hei Ranch Road, approximately 0.5 miles away from the proposed Project. Fire Station 112 is staffed by volunteer personnel. The apparatus assigned to Fire Station 112 includes Engine 5228 and Water Tender 5126 (AFPD 2025).

4.15.1.3 Schools

The Amador County Unified School District (ACUSD) provides public school services for elementary and high schools (grade K-12) throughout Amador County. ACUSD currently operates 13 schools throughout Amador County including two high schools, as well as a County Office of Education operated opportunity school (Amador County Unified School District 2025). The closest school to the Project site is the Pioneer Elementary School, located at 24625 Highway 88 within the community of Pioneer, approximately 1 mile away.

4.15.1.4 Other Public Facilities

Library Services

The Amador County Library Pioneer Branch Library is located in Pioneer, at 25070 Buckhorn Ridge Road. The Library offers computer workstations, Wi-Fi, and a printer (Amador County 2025).

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒

No Impact.

The proposed Project consists of the installation of a new water tank and associated transmission lines. The proposed Project would be maintained by AWA and would not require public services beyond existing conditions. The increased fire flow would assist local firefighters in providing improved fire protection service to the local community. Implementation would not interfere with emergency response times or the use of schools, parks, or other facilities. There would be no impact and no mitigation is required.

4.15.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.16 Recreation

4.16.1 Environmental Setting

Amador County, the Pine Grove Community Services District, and the Volcano Community Services District provide parkland in Amador County. A total of 118.4 acres of parkland are currently located within the County, including 11.8 acres of neighborhood parks, 98.0 acres of community parks, 6.2 acres of regional parks, 0.3 acre of special use areas, 0.5 acre of landscaped area, and 1.6 acres of undeveloped parkland. Amador County Recreation Agency does not operate any trails or other undeveloped recreation areas; however, trails and undeveloped recreation areas are available both within National Forest areas in the eastern portion of the County and in EBMUD's lands along Pardee and Camanche reservoirs.

Amador County has adopted a policy requiring provision of five acres of parkland for every 1,000 residents. In 2012, the County's parkland acreage to population ratio in the planning area is currently 7.2 acres per 1,000, which is greater than the current land dedication requirement of 5 acres per 1,000 residents (Amador County 2016).

The two major parks within the Pioneer Community are the Mollie Joyce Park and the Pioneer Park. The Mollie Joyce Park is a 76-acre woodland that was donated to Amador County Recreation Agency (ACRA) by the Joyce Family in 2008, and has picnic tables, ball fields, batting cage, and disc golf course. Pioneer Park offers picnic areas, tennis and basketball courts, horseshoe pits, and ball fields (ACRA 2025).

4.16.2 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒

No Impact.

The proposed Project consists of the installation of a new water tank and associated transmission lines within the community of Pioneer. The population would not increase as a result of the project; and therefore, use of the existing neighborhood, regional parks, or other recreational facilities would not change from the current use. As such, the proposed Project would not increase the use of existing recreational facilities that could cause substantial physical deterioration of the facilities. Therefore, no impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

No Impact.

See discussion under item a). No recreational facilities are proposed as part of the project, and therefore, no impact would occur and no mitigation is required.

4.16.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.17 Transportation

4.17.1 Environmental Setting

The proposed Project is located in Amador County, California approximately 50 miles southeast of the City of Sacramento on the western slope of the Sierra Nevada. The project transects the Pioneer community area, located approximately 12 miles northeast of the City of Jackson along State Route SR 88.

The majority of the proposed Project alignment is located within the existing roadways of Williams Road, Bobbie Lane, Kelly Lane, Kathy Lane, Judy Lane, Bevers Way and Dusty Way within the community of Pioneer. These are two-lane rural roadways and are primarily surrounded by private rural residences amidst a mixed conifer forest setting.

4.17.2 Regulatory Setting

4.17.2.1 Amador County Regional Transportation Plan

The Regional Transportation Plan (RTP) produced by the Amador County Transportation Commission was adopted in 2020. The RTP serves as the backbone of transportation fiscal planning by providing capital program planning for all regional, state, and federally funded projects in the County. The RTP states that its purpose is to "identify the region's short-term and long-range transportation needs and to establish policies, programs, and projects designed to meet those needs. Transportation improvement projects that are included in the RTP are prioritized for funding through the Regional Transportation Improvement Program (RTIP)." The RTP also demonstrates compliance with air quality conformity requirements under the federal Clean Air Act (Amador County 2020b).

4.17.2.2 Amador County Emergency Operations Plan

The Amador County Sheriff's Office of Emergency Services (County OES) is responsible for the administration of the county emergency management program on a day-to-day basis and during disasters. The office is charged with providing the necessary planning, coordination, response support, and communications with all agencies affected by large scale emergencies or disasters. County OES works cooperatively with other agencies and districts (e.g., law enforcement, fire, emergency medical services, state and federal agencies, utilities, private industry, volunteer groups) to provide a coordinated response to disasters, and manages the County's Emergency Operations Center, which is located in the Sheriff's Office (Amador County Sheriff's Office 2025).

4.17.3 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated.

Because the proposed Project would not directly or indirectly introduce a new population into the region, the total number of trips generated by the project is not expected to change significantly from existing conditions. Project construction will, however, result in temporary increases in local traffic due to the transport of construction personnel, equipment and material to the project site.

As noted in Section 2 of this document, the proposed Project would be completed in approximately 12 months. Construction activities would require the use of diesel construction equipment such as cranes, excavators, loaders, cement mixers, rollers, pavers, and other paving equipment.

Project construction would have a temporary impact on traffic flow in the vicinity of the proposed Project. Existing traffic levels would increase on the project roadways due to deliveries of materials and equipment to the project site and by workers commuting to the site on a daily basis. It is assumed that construction workers would travel to and from the construction site in personal vehicles.

Although construction is considered to have only short-term effects on traffic and circulation conditions in within the project area, the proposed project's impact on local traffic conditions during construction is considered potentially significant. With implementation of mitigation measure TRA-1 below, this impact is considered less than significant with mitigation incorporated.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated.

As noted, the proposed Project would not directly or indirectly result in long-term increases in vehicle traffic in the Project Area or within the community of Pioneer. As such, the proposed Project would not be inconsistent with any adopted local or regional transportation plans or CEQA guidelines. Traffic disruption that may occur during project construction, however, may adversely affect implementation of adopted plans including, but not limited to, the Amador County Emergency Operations Plan. This is considered a short-term but potentially significant impact. Implementation of Mitigation Measure TRA-1 will reduce this impact to less than significant with mitigation incorporated.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated.

No long-term modifications to roadway features are proposed as part of the project. Traffic disruption that may occur during project construction, however, could exacerbate existing roadway hazards, and adversely affect roadway safety due to pipeline construction and the transport of construction equipment and materials. This is considered a short-term but potentially significant impact. Implementation of Mitigation Measure TRA-1 will reduce this impact to less than significant with mitigation incorporated.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated.

No long-term modifications to roadway features are proposed as part of the project. Therefore, implementation of the proposed Project would not result in any long-term adverse impact on emergency access. Traffic disruption during project construction, however, may adversely affect emergency access due to lane closures and the transport of construction equipment and materials. This is considered a short-term but potentially significant impact. Implementation of Mitigation Measure TRA-1 will reduce this impact to less than significant with mitigation incorporated.

4.17.4 Mitigation Measures

TRA-1: **Construction Traffic Management Plan.** If construction activities require roadway closures, a construction traffic management plan (Traffic Plan) shall be prepared, prior to construction, by the Contractor, in coordination with the AWA, California Department of Transportation (if necessary), and the City of Ione. The management plan shall be detailed and comprehensive to adequately mitigate potential conflicts between baseline and construction-related traffic. The Traffic Plan will include, at a minimum, the following measures:

- Adequate off-street worker parking shall be provided.
- A flagman or signal-controlled one-way traffic-control operation shall be provided where two-way traffic operation is impractical or unsafe.

- Roadway disturbances shall be minimized during non-working hours; open trenches shall be covered with steel plates or by the use of temporary backfill during non-working hours.
- Temporary steel plate trench crossings shall be provided as needed to maintain access to homes, farms, and businesses.
- Construction sites shall be posted with appropriate warning signage at least one week prior to construction to allow local residents to select an alternative travel route.
- Construction staging areas shall be provided to minimize storage of equipment and materials in the traffic lanes.
- All paved surfaces disturbed during construction shall be repaved when work is complete.
- The Contractor shall provide traffic control and diversion plans for review and approval by each appropriate jurisdiction.
- To minimize delays in emergency response during project construction, emergency providers shall be notified in advance. Police, fire protection, and ambulance services shall be notified in advance of the times, duration, and location of construction activities throughout the project's construction process.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

Prior to the arrival of European-Americans in the region, indigenous groups speaking more than 100 different languages and occupying a variety of ecological settings inhabited California. Scholars recognized the uniqueness of California's indigenous groups and classified them as belonging to the California culture area. Scholars further subdivided California into four subculture areas: Northwestern, Northeastern, Southern, and Central.

When the first European explorers entered the regions between 1772 and 1821, an estimated 100,000 people, about one third of the state's native population, lived in the Central Valley. At least seven distinct languages of Penutian stock were spoken among these populations: Wintu, Nomlaki, Konkow, River Patwin, Nisenan, Miwok, and Yokuts. Common linguistic roots and similar cultural and technological characteristics indicate that these groups shared a long history of interaction (Rosenthal et al. 2007). The APE is situated in the traditionally recognized territory of the Penutian speaking Sierra Miwok.

At the time of contact, the Miwok were one of the largest groups in California, occupying vast stretches of land extending from the Sierra Nevada, across the Great Valley, and into portions of the North Coast above San Francisco. The Miwok people have been divided by anthropologists into four regional groups: the Bay Miwok, Coast Miwok, Plains Miwok, and Sierra Miwok. The Sierra Miwok are further identified by three subgroups, the Northern Sierra Miwok, Central Sierra Miwok and Southern Sierra Miwok. The Northern Sierra Miwok occupied the "the foothill and mountain portions of the Stanislaus and Tuolumne drainages". The Central Sierra Miwok occupied the foothill region south of the Cosumnes River to the

upper drainages of the Chowchilla and Merced Rivers. The Southern Sierra Miwok occupied the upper drainages of the Merced and Chowchilla rivers. The APE is located in the territory of the Northern Sierra Miwok.

Miwok settlement and subsistence patterns were coordinated with the seasonal ripening of plant foods and the movements and migration of game animals. Valley flooding may have prompted certain species, such as elk, antelope, and bears, to migrate to higher ground in the lower valley foothill belt of the Sierra. Anadromous fish, such as steelhead and salmon, migrated up the main rivers and tributaries.

The primary political unit was the "tribelet" with a range of 100 to 300 people. Each tribelet was an independent socio-political organization with territorial boundaries associated with the control of natural resources. Each tribelet had a few permanent settlements (villages) and several seasonal campsites.

The typical mountain dwelling was the conical bark house. Semi-subterranean earth roundhouses were constructed for ceremonial purposes. After the death of a chief, the roundhouse would be burned as part of the Miwok mourning ceremony.

Sierra Miwok used bows and arrows as their primary weapon for hunting and warfare. They made their bows from ash, oak, willow, pepperwood, maple, or hazel. Flaked and ground stone tools included knives, arrow and spear points, arrow straighteners, scrapers, rough cobble pestles and shaped pestles, and bedrock mortars. Non-utilitarian artifacts included pipes and charmstones. Obsidian was highly valued as a raw material for stone tools.

Sierra Miwok groups moved with the seasons to obtain resources within their territory. The most important subsistence resources were acorns (acorns from tan oak and black oak were preferred), seeds, nuts (pine nuts derived from the grey pine were prized) and other plant resources, deer, antelope, rabbits, and fish.

Trade with groups on the eastern side of the Sierras was important. The Sierra Miwok exchanged grass seeds, fish, and shell beads (obtained from the coast) for obsidian, tobacco, pottery, and clay pipes.

4.18.1.1 Summary of Consultation

On January 14, 2025, the AWA sent Project notification letters to the three California Native American tribes (United Auburn Indian Community of the Auburn Rancheria, Buena Vista Rancheria of Me-Wuk Indians, and Shingle Springs Band of Miwok Indians) that had previously submitted general consultation request letters pursuant to Section 21080.3.1(d) of the PRC. The letter provided each tribe with a brief description of the Project and its location, the contact information for the AWA's authorized representative, and a notification that the tribe has 30 days to request consultation.

4.18.1.2 United Auburn Indian Community of the Auburn Rancheria

The United Auburn Indian Community of the Auburn Rancheria did not respond to the AWA's notification letter, and therefore, the threshold for conducting tribal consultation with that tribe under PRC 21080.3.1(e) was not met. No further attempts at consultation were required by state law.

4.18.1.3 Buena Vista Rancheria of Me-Wuk Indians

Buena Vista Rancheria of Me-Wuk Indians did not respond to the AWA's notification letter, and therefore, the threshold for conducting tribal consultation with that tribe under PRC 21080.3.1(e) was not met. No further attempts at consultation were required by state law.

4.18.1.4 Shingle Springs Band of Miwok Indians

Shingle Springs Band of Miwok Indians did not respond to the AWA's notification letter, and therefore, the threshold for conducting tribal consultation with that tribe under PRC 21080.3.1(e) was not met. No further attempts at consultation were required by state law.

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated.

The records search and the 2025 field survey yielded one previously recorded resource: P-3-1995 (West Point to Valley Springs 60kV Transmission Line). ECORP's 2025 field survey yielded seven new historic-period cultural resources within the APE: an CAWP-01 (isolated glass bottle) and the network of roads within the APE, including CAWP-02 (State Route 26/Red Corral Road), as well as sections of CAWP-03

(Williams Road), CWAP (Bobbie Lane), CAWP-05 (Kelly Lane), CAWP-06 (Kathy Lane), and CAWP-07 (Deer Lane).

Resource P-3-1995, including the sections within the APE, was previously evaluated as not eligible for the NRHP/CRHR; ECORP concurs with this finding. Isolated finds, such as CAWP-01 (glass wine bottle), are not eligible for the NRHP/CRHR. ECORP evaluated the network of roads within the APE and determined that it is not eligible for the NRHP/CRHR. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project.

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources or sacred lands in the Project Area.

None of the tribes listed above responded to AWA's notification letter, therefore, other sources were reviewed to determine potential impacts to Tribal Cultural Resources (TCRs). Sources consulted included the ethnographic history context, ethnographic maps, and results of the records search with the California Historical Resources Information System, which are all incorporated into the cultural resources report. In summary, the ethnographic information reviewed for the Project did not identify any villages, occupational areas, or resource procurement locations in or around the current Project Area. The cultural resources records search did not reveal any Native American archaeological sites within the Proposed Project Area.

Examination of the lines of evidence summarized above, indicate that this Project will not have an impact on known TCRs. However, there exists a potential for the discovery of previously unknown TCRs during Project construction. If TCRs are encountered, the Project activity could result in a significant impact to those resources. Implementation of unanticipated discovery procedures, as provided in mitigation measure TCR-1 below, would reduce that impact to less than significant.

4.18.3 Mitigation Measures

TCR-1: **Unanticipated Discovery of Tribal Cultural Resources.** If potentially significant TCRs are discovered during ground disturbing activities, all work shall cease within 50 feet of the find. A Native American Representative from traditionally and culturally affiliated Native American Tribes that requested consultation on the Project shall be immediately contacted and invited to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. If deemed necessary by the AWA, a qualified cultural resources specialist, who meets the Secretary of Interior's Standards and Qualifications for Archaeology, may also assess the significance of the find in joint consultation with Native American representatives to ensure that Tribal values are considered. Work at the discovery location cannot resume until the AWA, in consultation as appropriate and in good faith, determines that the discovery is either not a TCR, or has been subjected to culturally appropriate treatment, if avoidance and preservation cannot be accommodated.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 Potable Water Service

As described in Section 2.1 Project Background, AWA owns and operates the CAWP and serves as the main water supplier for the central and western portions of Amador County. There are approximately 2,700 connections within AWA's CAWP service area including wholesale connections. CAWP receives water from the Bear River and the North Fork Mokelumne River via PG&E's Tiger Creek Regulator Reservoir. Water supplied to CAWP customers is treated at the Buckhorn Water Treatment Plant located in the Pioneer community area. The CAWP provides wholesale treated water to the upcountry communities of Mace Meadows, Pine Grove, and Rabb Park. In addition to delivering wholesale water, AWA also sells domestic water to approximately 2,600 homes in the communities of Jackson Pines, Pine Acres, Pioneer, Ridgeway Pines, Ranch House Estates, Silver Lake Pines, and the Sunset Heights area (Amador County 2016; AWA 2021).

4.19.1.2 Wastewater

Wastewater collection, conveyance, and treatment services are provided by several agencies in various geographic locations throughout Amador County. These agencies include AWA, Amador Regional Sanitation Authority, East Bay Municipal Utility District, River Pines Public Utility District, Fiddletown Community Services District, Kirkwood Meadows Public Utility District, and State facilities such as California Department of Corrections and Rehabilitation (CDCR) Mule Creek State Prison, CAL FIRE Academy, and the CDCR Preston Youth Correctional Facility (Amador County 2016).

The Pioneer community area functions through individual on-site septic tanks, as there is no formal wastewater system in the community area.

4.19.1.3 Solid Waste

Amador County contracts waste disposal with Republic Services. Waste collected by Republic Services is take to the Western Amador Recycling Facility (WARF), also known as the Buena Vista Landfill Transfer Station, located in Ione. WARF is permitted to accept a maximum daily disposal of 333 tons per day (tpd). Any recyclable materials are sorted and separated at the WARF. Residual municipal waste is disposed of at the Keifer Landfill in Sacramento County (Amador County 2016).

Waste collected in the eastern unincorporated communities, such as Pioneer, is taken to the Pine Grove Transfer Station in Pine Grove. The transfer station is permitted to accept a maximum of 150 tpd of solid waste. The Pine Grove Transfer Station accepts industrial waste and mixed municipal waste. Solid waste that is brought to the Pine Grove Transfer Station is transferred to the Kiefer Landfill (Amador County 2016).

4.19.1.4 Electricity and Natural Gas

Pacific Gas and Electric Company (PG&E) provides natural gas and electric services to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California, including Amador County (PG&E 2024).

4.19.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project involves the construction of a new water tank and new water pipeline in order to increase fire flow and improve the distribution system reliability in the Pioneer area. The Project will install a new electrical service off of the existing PG&E power lines located in Williams Road. Minimal operations and maintenance is required and includes annual flushing of hydrants on the proposed pipeline alignment and exercising valves. Installation of the proposed water pipeline would not generate an increase in population and therefore, would not exceed wastewater treatment requirements as stipulated by the RWQCB. Any impact would be less than significant, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

Less Than Significant Impact.

As previously stated in discussion item a), the proposed Project includes construction of a new water tank and new water pipeline in order to increase fire flow and improve the distribution system reliability in the Pioneer area. The proposed Project would not have a substantial impact on the water supply for the area. Therefore, a less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

The proposed Project does not require wastewater services. Therefore, no Impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

No recycling or waste disposal would be required for operation and maintenance of the proposed Project and therefore would not affect landfill capacity because the amount of construction debris requiring disposal would be minor and would only occur during the construction and demolition period. Construction may create some debris that will need to be disposed of at a facility that receives construction-material; however, the Project implementation will not create a significant amount of solid waste that will tax the capacity of receiving facilities. The Project contractors would be responsible for disposing of construction-related debris in local construction-material receiving areas. A less than significant impact would occur. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Less Than Significant Impact.

As previously described, no recycling or waste disposal would be required for operation and maintenance of the proposed Project. AWA contractors would be responsible for disposing of construction-related debris in local construction-material receiving facilities and would comply with all federal, state, and local

statues and regulations related to solid waste. Therefore, any impacts would be less than significant and no mitigation is required.

4.19.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.20 Wildfire

4.20.1 Environmental Setting

Typically, the California fire season extends from spring to late fall. Fire conditions arise from a combination of hot weather, an accumulation of vegetation, and low moisture content in the air. These conditions, when combined with high winds and years of drought, increase the potential for wildfire to occur.

The state has charged CAL FIRE with the identification of FHSZs within SRA. In addition, CAL FIRE must recommend VHFHSZ identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. The proposed Project is within a very high fire hazard severity zone within an SRA (CAL FIRE 2023).

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated.

The proposed Project is in an area identified as a Very High Fire Hazard Severity zone. No long-term modifications to roadway features are proposed as part of the project. Therefore, implementation of the proposed Project would not result in any long-term adverse impact on emergency access. Traffic disruption during project construction, however, may adversely affect emergency access due to lane closures and the transport of construction equipment and materials. This is considered a short-term but potentially significant impact. Implementation of Mitigation Measure TRA-1, above, will reduce this impact to less than significant with mitigation incorporated.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed Project includes replacing the Tank D water tank and installing transmission lines. The new tank site will be cleared of trees and vegetation and will have security fencing around the perimeter, which will create a fire break in the area in case a wildfire does break out. The new tank will provide a larger storage capacity and will help increase fire flow conditions in the existing system. The tank will not be made of flammable materials and the surrounding area will be cleared of flammable materials as well. Therefore, the proposed Project would not expose nearby occupants to pollutants or increased wildfire risk. Impacts are less than significant.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The Project site for the new water tank would be accessed via Williams Road, which would be accessed via an existing easement. The Project would enhance the road's function as a fuel break and may help to limit the spread of future wildfire in the area. The proposed Project would include the installation of transmission lines and fire hydrants. The fire hydrants and the proposed water storage tank could aid in the suppression of future wildfires and would protect homes and infrastructure.

During construction and operation of the proposed facility, the presence of humans and associated equipment may expose the area to increased risk of fire ignition. However, staff and contractors would follow all best management practices to reduce fire risk, including avoiding smoking in non-designated areas; using spark arrestors as warranted; maintaining equipment in its proper working order; ensuring that all loads are properly secured and no chains or metal drag; avoiding work that could potentially produce sparks during red flag warnings; and adhering to all requirements for burn permits. Fire suppression equipment, including fire extinguishers and hand tools, would be available onsite for the containment of small, incipient fires if it is safe for workers to do so and they have received proper

training in the use of such tools. The Project would be required to comply with CAL FIRE SRA requirements during construction. Compliance with these requirements, along with the above measures, would reduce any impacts to less than significant.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact.

The proposed construction of the Project would comply with the CBC requirements and would follow all recommendations outlined within the BMPs that are included as part of the SWPPP prepared for the proposed Project. This would manage erosion and the loss of topsoil during construction-related activities (see *Section 4.10.3 Hydrology and Water Quality Environmental Checklist and Discussion*). With the implementation of the SWPPP, soil erosion during construction, project staging, and the construction of related facilities would be minimized. With limited erosion anticipated from the Project site due to the relatively flat nature of the site, the potential for Project-induced landslides is considered less than significant. No mitigation is required.

4.20.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated.

As stated previously in Section 4.4, Biological Resources, with implementation of Mitigation Measures BIO-1 through BIO-5 the proposed Project would result in a less than significant impact on the habitat of wildlife species or population, on any plant or animal community, and would not restrict the range of a rare or endangered plant or animal. Furthermore, as stated above in Section 4.5, Cultural Resources, with the implementation of proposed Mitigation Measures CUL-1, development of the Proposed Project would not result in significant impacts to Cultural Resources.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) 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)?	☐	☐	☒	☐

Less Than Significant Impact.

Project impacts would not be cumulatively considerable. No mitigation is required relevant to potential cumulative impacts.

For natural resource subjects (Aesthetics, Agriculture and Forest Resources, Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, and Mineral Resources), there would be no cumulative effects because all impacts would be less than significant or would be reduced to less than

significant with mitigation incorporated. The project would temporarily involve minimal hazardous materials use associated with construction and would not result in a cumulative effect on the environment.

The nature of the Proposed Project would not induce population growth or result in the development of new housing or employment-generating uses. Therefore, the proposed Project would not result in a cumulative effect regarding increased demand or expansion for services or utilities. Furthermore, there are no approved or planned projects within proximity to the proposed Project that would contribute to cumulative effects.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated.

Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

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LIST OF APPENDICES

AVAILABLE UPON REQUEST

Appendix A – Air Quality and Greenhouse Gas Emissions Report
ECORP Consulting, Inc. 2025

Appendix B – Biological Resources Assessment for the Central Amador Water Project Transmission Main Improvements and Tank D Replacement Project,
ECORP Consulting, Inc. 2025

Appendix C – Historic Properties Identification and Evaluation Report for the CAWP Transmission Main Improvements
ECORP Consulting, Inc. 2025

Appendix D – Energy Consumption Analysis,
ECORP Consulting, Inc. 2025

Appendix E – Noise Impact Results,
ECORP Consulting, Inc. 2025

Appendix F- CAWP Transmission Main Improvements and Tank D Replacement Project Engineering Report,
Bailey Engineering, December 30, 2024

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