**PUBLIC REVIEW DRAFT**

# INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

## IONE BAND OF MIWOK INDIANS WATER SYSTEM IMPROVEMENTS PROJECT

## AMADOR COUNTY, CALIFORNIA

LSA

March 2025

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# INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

## IONE BAND OF MIWOK INDIANS WATER SYSTEM IMPROVEMENTS PROJECT

## AMADOR COUNTY, CALIFORNIA

Submitted to:

State Water Resources Control Board
Division of Financial Assistance
1001 I Street
Sacramento, California 95814

Prepared by:

LSA
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Project No. MKN2201

LSA

March 2025

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AAQS | ambient air quality standards |
| AB | Assembly Bill |
| ACAPCD | Amador County Air Pollution Control District |
| ADD | average day demand |
| APN | Assessor's Parcel Number |
| BIOS | Biogeographic Information and Observation System |
| BMPs | best management practices |
| BSA | Biological Study Area |
| BTU | British thermal units |
| C&D | construction and demolition |
| CAA | Clean Air Act |
| CAFE | Corporate Average Fuel Economy |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CalEEMod | California Emissions Estimator Model |
| CalEPA | California Environmental Protection Agency |
| CALGreen | California Green Building Standards Code |
| California Register | California Register of Historical Resources |
| Cal/OSHA | California Division of Occupational Safety and Health |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CCAA | California Clean Air Act |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |

| | |
|---|---|
| CESA | California Endangered Species Act |
| CFC | California Fire Code |
| CFGC | California Fish and Game Code |
| CFR | Code of Federal Regulations |
| CGP | Construction General Permit |
| $CH_4$ | methane |
| CHP | California Highway Patrol |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| $CO_2e$ | carbon dioxide equivalent |
| Cortese List | Hazardous Waste and Substances Site List |
| CPUC | California Public Utilities Commission |
| CRPR | California Rare Plant Rank |
| CTS | California tiger salamander |
| CUPA | Certified Unified Program Agency |
| CWA | Clean Water Act |
| CWHR | California Wildlife Habitat Relationships |
| dB | decibel |
| dBA | A-weighted decibels |
| DDW | Division of Drinking Water |
| DFA | Division of Financial Assistance |
| DOC | Department of Conservation |
| DOT | United States Department of Transportation |
| DPS | Distinct Population Segment |
| DTSC | California Department of Toxic Substances Control |
| EIR | Environmental Impact Report |

| | |
|---|---|
| EO | Executive Order |
| FEMA | Federal Emergency Management Agency |
| FESA | federal Endangered Species Act |
| FHSZ | Fire Hazard Severity Zone |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| FMMP | Farmland Monitoring and Mapping Program |
| FPD | Fire Protection District |
| GC | General Conformity |
| GHG | greenhouse gas emissions |
| gpd | gallons per day |
| GWh | gigawatt-hour(s) |
| GWP | Global Warming Potential |
| HCD | California Department of Housing and Community Development |
| HDPE | high-density polyethylene |
| HFCs | hydrofluorocarbons |
| HMBP | Hazardous Materials Business Plan |
| HFHSZ | High Fire Hazard Severity Zone |
| IBMI | Ione Band of Miwok Indians |
| IHS | Indian Health Service |
| JVID | Jackson Valley Irrigation District |
| LAFCO | Local Agency Formation Commission |
| LBP | lead-based paint |
| $L_{dn}$ | day-night average level |
| $L_e$ | sound level |
| $L_{max}$ | noise levels |
| LOS | level of service |
| MBTA | Migratory Bird Treaty Act |

| | |
|---|---|
| MCAB | Mountain Counties Air Basin |
| MDD | maximum day demand |
| MLD | Most Likely Descendant |
| MMT | million metric tons |
| MPO | Metropolitan Planning Organization |
| MRZs | Mineral Resource Zones |
| MW | megawatt |
| $N_2O$ | nitrous oxide |
| NAHC | Native American Heritage Commission |
| National Register | National Register of Historic Places |
| NCIC | North Central Information Center |
| $NF_3$ | nitrogen trifluoride |
| NHPA | National Historic Preservation Act |
| NHTSA | National Highway Traffic Safety Administration |
| NPPA | California Native Plant Protection Act |
| NRCS | Natural Resources Conservation Service |
| $NO_2$ | nitrogen dioxide |
| $NO_X$ | nitrogen oxides |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| $O_3$ | ozone |
| OASA | out of agency service agreement |
| OHP | Office of Historic Preservation |
| OPR | Office of Planning and Research |
| PCBs | polychlorinated biphenyls |
| PFCs | perfluorocarbons |
| PG&E | Pacific Gas and Electric Company |
| ppm | parts per million |

| | |
|---|---|
| $PM_{10}$ | particulate matter less than 10 microns in diameter (coarse particulate matter) |
| $PM_{2.5}$ | particulate matter less than 2.5 microns in diameter (fine particulate matter) |
| Porter-Cologne Act | Porter-Cologne Water Quality Control Act |
| PRC | Public Resources Code |
| Procedures | State Wetland Definition and Procedures for the Discharge of Dredged or Fill Material to Waters of the State |
| Project | Ione Band of Miwok Indians Water System Improvements Project |
| psi | per square inch |
| PVC | polyvinyl chloride |
| RCRA | Resource Conservation and Recovery Act |
| RHNA | regional housing needs allocation |
| ROG | reactive organic gases |
| RPS | Renewable Portfolio Standard |
| RTP | Regional Transportation Plan |
| RWQCB | Regional Water Quality Control Board |
| SB | Senate Bill |
| SCS | Sustainable Communities Strategy |
| SDC | Seismic Design Category |
| $SF_6$ | sulfur hexafluoride |
| SFHA | Special Flood Hazard Area |
| SHMA | Seismic Hazard Mapping Act |
| SLF | Sacred Lands File |
| SMARA | Surface Mining and Reclamation Act |
| $SO_2$ | sulfur dioxide |
| $SO_X$ | sulfur oxides |
| SR | State Route |
| State | State of California |

| | |
|---|---|
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TACs | toxic air contaminants |
| TCR | tribal cultural resource |
| Technical Advisory | Technical Advisory on Evaluating Transportation Impacts in CEQA |
| TMDL | total maximum daily load |
| TSCA | Toxic Substances Control Act |
| UBC | Uniform Building Code |
| USACE | United States Army Corps of Engineers |
| USC | United States Code |
| USDA | United States Department of Agriculture |
| USEPA | United States Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| UST | underground storage tank |
| VMT | vehicle miles traveled |
| VOC | volatile organic compounds |
| ZEVs | zero-emission vehicles |
| ZNE | zero net energy |

# 1.0 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) addresses the proposed Ione Band of Miwok Indians (IBMI) Water System Improvements Project (Project). The Project site is located at Assessor's Parcel Number (APN) 005-180-005-000 in southwestern Amador County, approximately 3 miles southwest of Ione, California. The Initial Study (IS) has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the *State CEQA Guidelines* (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all State and local government agencies consider the environmental consequences of projects over which they have discretionary authority before they approve or implement those projects.

The IS is a public document used by the decision-making Lead Agency to determine whether a project may have a significant effect on the environment. The Project is proposed by the IBMI and has applied for funding with the State Water Resources Control Board (SWRCB) under the State Revolving Fund (SRF) Program. In the case of the proposed Project, the SWRCB is the Lead Agency and will use the IS to determine whether the proposed Project may have a significant effect on the environment.

This IS relies on *State CEQA Guidelines* Section 15064 in its determination of the significance of the environmental impacts. Per Section 15064, the finding as to whether a project may have one or more significant impacts shall be based on substantial evidence in the record. Controversy alone, without substantial evidence of a significant impact, does not trigger the need for an Environmental Impact Report (EIR).

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# 2.0 PROJECT INFORMATION

1. **Project Title:**

   Ione Band of Miwok Indians Water System Improvements Project

2. **Lead Agency Name and Address:**

   State Water Resources Control Board
   Division of Financial Assistance
   1001 I Street
   Sacramento, California 95814

3. **Contact Person and Phone Number:**

   Abbygayle Guevara, Environmental Scientist, Drinking Water Environmental Review Unit
   (916) 319-0180

4. **Project Location:**

   Assessor's Parcel Number (APN) 005-180-005-000 in southwestern Amador County, approximately 3 miles southwest of Ione, California

5. **Project Sponsor's Name and Address:**

   Ione Band of Miwok Indians
   9252 Bush Street
   Plymouth, California 95669

6. **General Plan Designation:**

   Agricultural General (AG)

7. **Zoning:**

   X – Special Use District of Amador County

8. **Description of Project:**

   The following describes the proposed Ione Band of Miwok Indians (IBMI) Water System Improvements Project. The Project would include the installation of a new water distribution system to provide potable water to 14 existing residences. The existing water distribution system would remain in place to provide water for irrigation and fire protection services only, while a new distribution system connected to the Jackson Valley Irrigation District (JVID) would provide potable water to the 14 existing residences. This section includes a summary description of the Project's location, existing site characteristics, the proposed Project components, and the required approvals for the proposed Project.

   The IBMI are a federally recognized tribe with tribal lands in Amador County and the surrounding area. The SWRCB Division of Financial Assistance (DFA) is the lead agency for review of the Project under CEQA.

For the purpose of describing the proposed Project, the Project site consists of the area in which the following components are or would be located: the existing IBMI water system, including a water tank, existing wells, booster pumps, chemical injection system, the existing 4-inch polyvinyl chloride (PVC) water distribution main, as well as the recently installed 4-inch-diameter stub extending from the JVID service main on Jackson Valley Road, and the proposed water distribution system connected to existing JVID infrastructure, including a master meter, a backflow preventer, a pressure reducing station, and an emergency chlorine injection point.

### *Project Site*

This section describes the location and characteristics of the Project site, discusses the existing regulatory setting, and provides a brief overview of the existing land uses within the vicinity of the Project site.

### *Regional Location and Access*

The Project site is located within an approximately 40-acre rural residential area (APN 005-180-005-000) approximately 3 miles southwest of Ione in Amador County (Figure 1). Surrounding land uses include pasture, orchards, and vineyards. A small active quarry is located to the east, and a large active quarry is located approximately 1 mile to the north.

Vehicular access to the Project site is provided via two entryways on Jackson Valley Road approximately 1,800 feet apart. The entryway on the west side of the Project site is approximately 500 feet from State Route (SR) 88, which connects to SR-124 approximately 2.2 miles northeast of the Project site and SR-104 approximately 4 miles northeast of the Project site.

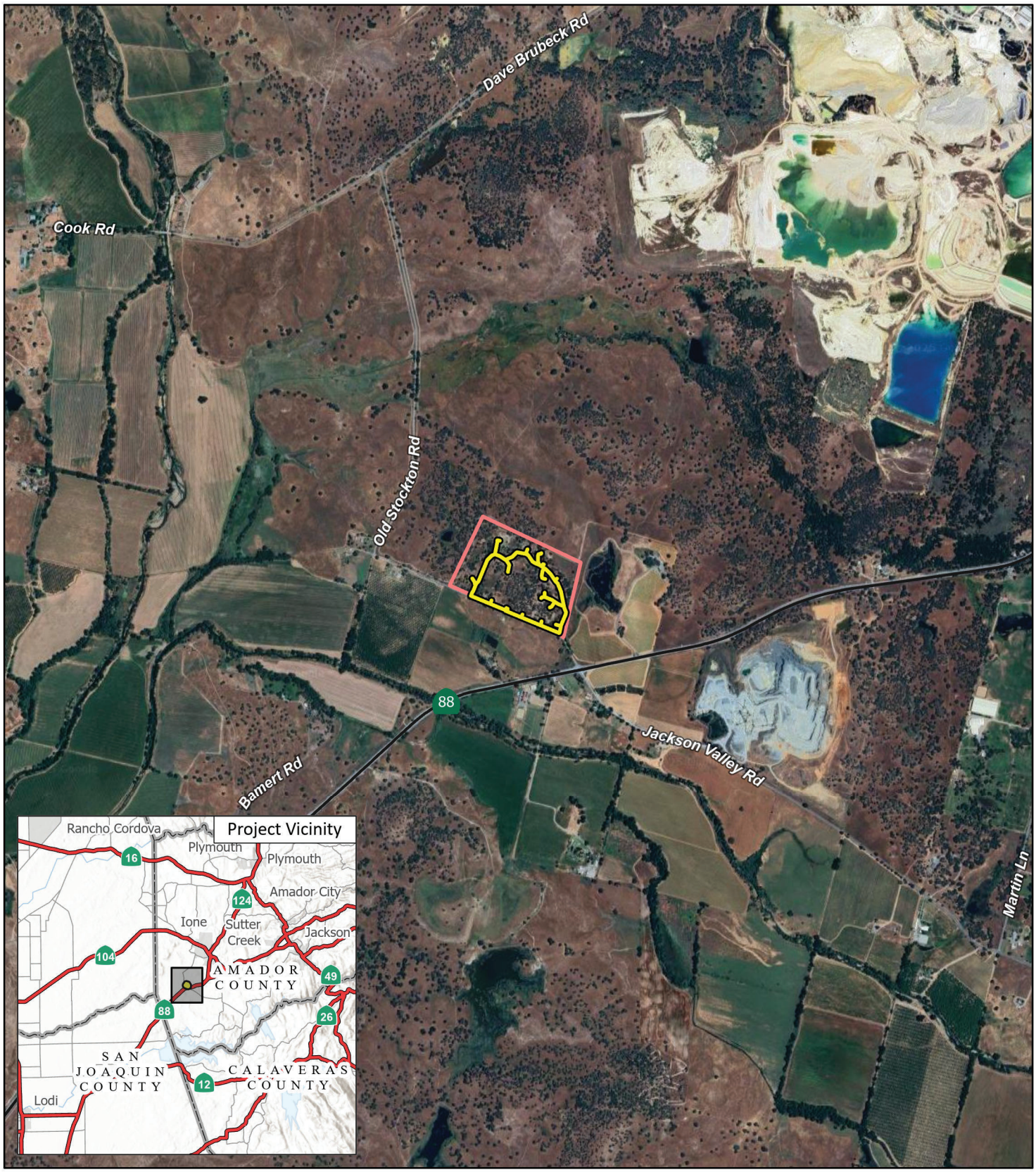
### *Regulatory Setting*

The Project site is located on privately owned land with a public water system operated by the IBMI. The SWRCB Division of Drinking Water (DDW) classifies the IBMI public water system as a D1 community system, which serves less than 1,000 people. The existing water system was previously transferred to the IBMI from the Indian Health Service (IHS) in 1981. However, the SWRCB DDW currently has jurisdiction over the IBMI system, and because the IBMI does not own or have easements on the land, access agreements from the property owners would be required before construction of the new water system can begin.

### *Site Characteristics and Current Site Conditions*

The Project site is characterized by gently rolling hills with scattered mature oak and pine trees. The Project site includes 14 existing residences and outbuildings, a series of unpaved roads, and a 36,000-gallon steel water tank for potable water.

The existing IBMI water distribution system includes one inactive well (Well 001) and one active well (Well 003), which was constructed in 1999 (Figure 2). An additional well (Well 002) was previously demolished. Water pumped from the active well is disinfected using a sodium hypochlorite injection system and then the water is pumped into the existing water tank. The distribution system uses three booster pumps and three bladder-style hydropneumatic tanks that maintain a system pressure of 55 pounds per square inch (psi).




LSA

Project Location

Parcel Boundary

FIGURE 1

N

0 1000 2000

FEET

SOURCE: Google Maps (2023)

*Ione Band of Miwok Indians Water System Improvements*
*Amador County, California*

Project Location and Vicinity

I:\M\MKN2201\GIS\Pro\Ione Water Main Replacement\Ione Water Main Replacement.aprx (2/24/2025)

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The approximately 1.2 miles of 4-inch PVC water main is aged and is experiencing breaks and leaks throughout the Project site. The JVID previously installed a 4-inch-diameter stub-up off of its existing infrastructure along the north side of Jackson Valley Road, approximately 40 feet south of the water tank, in anticipation of a future connection to the IBMI system.

***Proposed Project***

This section provides a description of the proposed Project as identified in the Water System Improvements Engineering Report dated June 6, 2024, and prepared by MKN & Associates, Inc.[1] The IBMI water improvements project seeks to provide potable water to 14 residences on the Project site as well as maintain the existing water distribution system to provide nonpotable water for irrigation and fire protection services. The Project proposes to install a new water distribution system on the Project site by consolidating with the JVID's system along Jackson Valley Road (Figure 3). The goal of the new system is to both provide and improve the quality and reliability of potable water for residents on the Project site.

***New Water Distribution System and Water Treatment***

The proposed Project would consolidate the IBMI water distribution system with the JVID's system in order to connect to existing JVID infrastructure along Jackson Valley Road and bring potable water to residents of the Project site. As previously noted, the JVID previously installed a 4-inch-diameter stub off of the Jackson Valley Road service main. The new distribution system, consisting of approximately 4,300 feet (0.81 mile) of 4-inch high-density polyethylene (HDPE) pipe, would connect to JVID's water supply at this location. Portions of the new pipeline alignment would be located adjacent to, or coincident with, the old pipeline. Installation of the new distribution system would require the cutting and capping of existing service lines to the 14 residences that IBMI currently serves; installation of new JVID system connections, including water meters for each customer; and installation of a dedicated flushing blowoff at the north end of the Project site. The system would also contain an emergency chlorine injection quill that would only be activated when needed. Because the new system would solely supply potable water for indoor use, it would minimize the strain on the JVID's water supply.

Under the proposed water system improvements project, the JVID would be responsible for ownership, operation, and maintenance of all infrastructure from the master meter upstream. Any infrastructure downstream of the master meter would be the responsibility of the IBMI. In addition, the JVID would be responsible for maintaining the potability of water entering the IBMI distribution system. The JVID relies on chlorination of its water supply to maintain potability; should residual chlorine levels drop below the JVID's established threshold, the JVID would utilize its flushing program and activate the emergency disinfection chlorine injection quill as needed.

[1] MKN & Associates, Inc. 2024. *Ione Band of Miwok Indians Water System Improvements Engineering Report,* Revision 2. June 6.

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IBMI Water Line
JVID Water Line
Water Well
Existing Water Storage Tank
Existing Fire Hydrant
Unconfirmed Fire Hydrant

FIGURE 2

N

0 110 220
FEET

SOURCE: Nearmap (July 2023)

*Ione Band of Miwok Indians Water System Improvements*
*Amador County, California*
IBMI Water System

I:\M\MKN2201\GIS\Pro\Ione Water Main Replacement\Ione Water Main Replacement.aprx (1/27/2025)


LSA

Parcel Boundary
Proposed Distribution Line
JVID Water Line
Dedicated Flushing Blowoff
Existing Well
JVID Connection

FIGURE 3

N

0 150 300
FEET

*Ione Band of Miwok Indians Water System Improvements*
*Amador County, California*
Proposed Project

SOURCE: Nearmap (July 2023)

I:\M\MKN2201\GIS\Pro\Ione Water Main Replacement\Ione Water Main Replacement.aprx (1/27/2025)

***Repurposing of Existing Distribution System***

The existing IBMI water system would remain but would be repurposed for use solely in fire protection and irrigation services; the existing system would no longer provide potable water for use by residents of the Project site. The repurposed system would operate in a similar fashion to its current operation, but without the use of chlorine injection. Wells 001 (currently inactive) and 003 (active) would be maintained to support this system, and the storage tank and booster pump would continue to be utilized in the repurposed system. Existing water lines to the 14 residences, as well as any other unauthorized connections, would be cut and capped, and the potability of the water would not be maintained in the repurposed system. The repurposed system would include three wharf-style fire hydrants located throughout the Project site to provide emergency access for fire protection services. It is anticipated that the IBMI would transfer ownership of the existing irrigation system once it has been repurposed to the residents, and it would be the residents' responsibility to operate and maintain the system for irrigation and fire protection services.

Additionally, in order to aid in fire protection services, the JVID has agreed to install an additional fire hydrant to the south of the Project site across Jackson Valley Road. This hydrant would draw from an existing irrigation system owned and operated by the JVID that is independent from the current or proposed infrastructure on the Project site. The installation of this hydrant would provide additional access to an emergency water supply for fire protection services.

***Construction***

In order to minimize service disruptions to current IBMI customers, the JVID would coordinate closely with the IBMI throughout the construction process. The majority of the new distribution system would be constructed independently of the existing water system, and any shutdowns to the current system would be coordinated to minimize disruptions to water services. Ground disturbance associated with the proposed Project would include clearing and grubbing of vegetation, trenching for pipeline installation, and equipment staging within an approximately 1.2-acre disturbance area. Most of the pipeline excavation would take place within the alignment of existing residential access roads. No tree removals would be required. Trenching is not anticipated to exceed 3 to 4 feet below existing grade. An estimated 625 cubic yards of soil import (sand) and 650 cubic yards of soil export (native soil) are anticipated during Project construction.

Because the IBMI do not own or have easements on the land where the new system would be installed, the IBMI would need to acquire access agreements from the property owners prior to the beginning of construction. An encroachment permit from Amador County would be required for traffic control during work along Jackson Valley Road. Construction of the proposed Project is expected to occur over an estimated 9-month period starting in May 2026, with construction completed and the system operational by February 2027.

**9. Surrounding Land Uses and Setting:**

The surrounding lands are used for agricultural purposes. Bordering the Project site to the east is an approximately 52-acre agricultural site currently under a Williamson Act Contract. The

immediate surrounding land to the north, south, and west is zoned Special Use and is largely undeveloped and similarly characterized by agricultural uses.

**10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):**

While the SWRCB is the CEQA lead agency for this Project, other agencies may also have discretionary authority related to the proposed Project and its approvals or serve as a responsible and/or trustee agency in connection with the proposed Project. A list of these agencies and potential permits and approvals that may be required is provided below.

- Amador County: Encroachment permit (Jackson Valley Road)
- Local Agency Formation Commission (LAFCO): Out-of-agency service agreement (OASA)
- Indian Health Service: Funding agreement
- California Department of Fish and Wildlife (CDFW) Incidental Take Permit

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

The SWRCB conducted tribal consultation consistent with Public Resource Code Section 210890.3.1. The results of this consultation are included in Section 4.18, Tribal Cultural Resources.

# 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant Impact with Mitigation" as indicated by the checklist in Chapter 3.0.

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

## 3.1 DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Bridget Binning, Senior Environmental Scientist
State Water Resources Control Board

Date

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# 4.0 CEQA ENVIRONMENTAL CHECKLIST

## 4.1 AESTHETICS

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway | ☐ | ☐ | ☒ | ☐ |
| 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 a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### 4.1.1 Existing Setting

#### 4.1.1.1 Environmental Setting

The approximately 40-acre Project site is located approximately 3 miles southwest of Ione in Amador County. Regional access to the Project site is provided via SR-88, which has nearby connections to SR-124 and SR-12.

The Project site lies in the western foothills of the central Sierra Nevada mountain range. The surrounding terrain is characterized by gently rolling hills, with mature oak and pine trees throughout the Project site. In the western portion of Amador County where the Project site is located, scenic resources include low-lying hills covered by annual grasslands as well as agricultural and rangelands. Small rural communities characterize Amador County. Ione and Jackson are the largest cities and are nearly the same in size at approximately 5,200 residents each. Natural landscapes and features, including lakes, reservoirs, rivers, and streams, dominate the rural character of the Project region and county.

#### 4.1.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to aesthetics for the proposed Project.

**State Regulations.**

***California Department of Transportation (Caltrans) Scenic Highway Program.*** Caltrans' California Scenic Highway Program, established in 1963, maps and describes all scenic highways

within the State. The program provides protection for State Scenic Highways and the adjacent corridors through special conservation treatment. There are no identified highways in or near the Project site that are designated by Caltrans as scenic highways in need of protection for maintaining and enhancing scenic viewsheds.

**Local Regulations.**

***Amador County General Plan.*** The General Plan contains policies aimed at preserving the County's "scenic beauty" in open space areas and "protecting local scenic highway corridors."[2] However, there are no specific General Plan policies pertaining to aesthetics that are applicable to the proposed Project.

### 4.1.2 Impact Analysis

*a. Would the Project have a substantial effect on a scenic vista?*

**Less Than Significant Impact.** Scenic vistas are generally defined as a public vantage point with an expansive view of significant landscape feature(s). Although there are no officially designated scenic vistas in the immediate area of the Project, distinct scenic features surrounding Ione and within Amador County include the open views of low-lying hills, landscapes of the Sierra Nevada foothills, forest lands, lakes, rangelands, annual grasslands, oak woodlands, wineries, and other general agricultural lands.

The Project site is characterized by gently rolling hills with scattered mature oak and pine trees typical of the Sierra Nevada foothills. The Project would include the installation of a new water distribution system to provide potable water to 14 residences. The majority of the new system would consist of piping and underground infrastructure that would not be visible above ground. Aboveground infrastructure could include water meters, pressure gauges, pipes at connection points, and other associated minor infrastructure that would not significantly alter the existing landscape. The Project would not construct any oversized elements that could obstruct distant views of scenic vistas in the vicinity of the Project site. Therefore, the proposed Project would not have a substantial effect on scenic vistas, and the impact would be less than significant.

*b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**Less Than Significant Impact.** According to Caltrans mapping of State Scenic Highways, there are no State-designated or eligible scenic highways in the vicinity of the Project site. However, both SR-49 and a section of SR-88 located approximately 13 miles east of the Project site have been identified by Caltrans as eligible for designation as State Scenic Highways. No Officially Designated or Eligible State Scenic Highways are located in the immediate vicinity of the Project site. Therefore, the

[2] Amador County. 2016d. Amador County General Plan, Open Space Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

proposed Project would not impact a State Scenic Highway or any scenic resources within a designated or eligible scenic highway. This would be a less than significant impact.

*c. In non-urbanized areas, would the project 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 a 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.** Implementation of the proposed Project could result in the following visual changes: installation of water meters, pressure gauges, and pipes at connection points. Within the Project site, the new water distribution system would increase the level of human-made elements. However, as described above in Section 4.1.2.a, the majority of the system would exist underground after construction is completed. Furthermore, the proposed Project would not conflict with zoning or other regulations governing scenic quality. This would be a less-than-significant 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?*

**Less Than Significant Impact.** Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare may also refer to the sensation experienced looking into an excessively bright light source that causes a reduction in the ability to see or causes discomfort. Glare generally does not result in illumination of off-site locations but results in a visible source of light viewable from a distance.

The proposed Project would not result in significant changes to lighting, shadows, or glare. The proposed Project does not include the installation of any new lighting equipment. Therefore, light and glare impacts would be less than significant.

## 4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, as well as the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☒ | ☐ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☒ | ☐ |

### 4.2.1 Existing Setting

#### 4.2.1.1 Environmental Setting

The proposed Project is located on private land in rural western Amador County. According to the most recently available information from the DOC Farmland Mapping and Monitoring Program (FMMP), in 2020, Amador County had approximately 2,699 acres of Prime Farmland, 1,445 acres of Farmland of Statewide Importance, 3,275 acres of Unique Farmland, 2,481 acres of Farmland of Local Importance, and 188,012 acres of Grazing Land.[3] According to the most recently available

[3] California Department of Conservation (DOC). 2024. *Farmland Mapping and Monitoring Program: Amador County 1984-2020 Land Use Summary*. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Amador.aspx (accessed October 2024).

Amador County annual progress report from 2023, the County currently has 101,132 acres of land under a Williamson Act contract.[4]

#### 4.2.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to agriculture and forestry resources for the proposed Project.

**State Regulations.**

***California Department of Conservation Farmland Mapping and Monitoring Program.*** In 1982, the DOC began coordinating with the United States Department of Agriculture (USDA) Soil Conservation Service in the preparation and completion of Important Farmland mapping for California through the establishment of the FMMP. The FMMP created a greater level of mapping compared to the USDA Soil Conservation Service by modifying the federal criteria for use in California and incorporating irrigation criteria for farmland significance. The primary purpose of the FMMP is to monitor the conversion of California's agricultural lands. The DOC Division of Land Resource Protection works with landowners, local governments, and researchers to conserve California's farmland and open space resources based on information provided in the FMMP.

The DOC FMMP produces maps and statistical data used for analyzing impacts on agricultural resources. Agricultural land is categorized according to soil quality and irrigation status. The maps are updated every 2 years through review of aerial photographs, a computer mapping system, public review, and field reconnaissance. The FMMP categories are defined as follows:

- **Prime Farmland.** The best combination of physical and chemical features and the ability to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Farmland of Statewide Importance.** Similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Unique Farmland.** Lesser-quality soils used for production of the State's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards. Land must have been cultivated at some time during the 4 years prior to the mapping date.

- **Farmland of Local Importance.** Land of importance to the local economy, as defined by each county's local advisory committee and adopted by its board of supervisors. In Amador County, this refers to all farmable lands in the county that do not meet the definitions of Prime,

[4] Amador County. 2023a. Amador County Annual Progress Report, 2023 Reporting Year. Available at: https://www.amadorgov.org/home/showpublisheddocument/54003/638641498459430000 (Accessed December 2024).

Statewide, or Unique. This includes land that is or has been used for irrigated pasture, dryland farming, confined livestock and dairy, poultry facilities, aquaculture, and grazing land.

- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban and Built-Up Land.** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land.** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and waterbodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

***California Land Conservation (Williamson) Act.*** The California Land Conservation Act, better known as the Williamson Act, has been the State's most important agricultural land protection program since its enactment in 1965. Fundamentally, the Williamson Act is a State policy administered by local governments. Local governments are not mandated to administer the act, but those that do have some latitude to tailor the program to suit local goals and objectives.

Williamson Act contracts have a minimum term of 10 years, with renewal occurring automatically each year (local governments can establish initial contract terms for longer periods of time). The contracts run with the land and are binding on all successors in interest of the landowner. Only land located within an agricultural preserve is eligible for Williamson Act contracts. An agricultural preserve defines the boundary of an area within which a city or county would enter into contracts with landowners. The boundary is designated by resolution of the board of supervisors or city council having jurisdiction. The rules of each agricultural preserve specify the uses allowed. Generally, any commercial agricultural uses would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit.

**Local Regulations.**

***Amador County General Plan.*** The Conservation Element of the Amador County General Plan includes goals and policies to protect and conserve Amador County's natural resources, including water supply and water quality, energy resources, agriculture and agricultural lands, air quality, timber, mineral resources, historic resources, and cultural resources.[5]

[5] Amador County. 2016b. Amador County General Plan, Land Use Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

### 4.2.2 Impact Analysis

*a. Would the project 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?*

**Less than Significant Impact.** The Project site is located on privately owned land in rural western Amador County. The most recent available data from the FMMP identifies the Project site as Grazing Land. Thus, the Project site is not land that is designated as Prime Farmland or Farmland of State Importance. Therefore, implementation of the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the FMMP mapping of Amador County. As such, the implementation of the proposed Project would result in a less-than-significant impact related to the conversion of farmland to non-agricultural uses.

*b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No Impact.** The Project site is not zoned for agricultural uses and is not currently enrolled in a Williamson Act contract. Therefore, the proposed Project would have no impact on zoning designations for agricultural and farmland use or land currently under a Williamson Act contract.

*c. Would the project 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.** The Project site is not zoned for, nor would it require the rezoning of, any existing parcels or land use designations, including forest land or timberland uses. Therefore, the proposed Project would result in no impact to forestland or timberland, including oak woodland.

*d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?*

**Less Than Significant Impact.** The proposed Project would not involve the removal of any trees and would not significantly impact the existing blue oak woodland community, or result in the loss or conversion of forest land. Therefore, the proposed Project would have a less than significant impact related to the loss or conversion of forest land.

*e. Would the project 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?*

**Less Than Significant Impact**. As stated previously, the proposed Project would not convert farmland to a non-agricultural use. In addition, the proposed Project would not contribute to environmental changes that would result in conversion of farmland to non-agricultural use. Therefore, the proposed Project would have a less than significant impact related to the conversion of farmland or forest land.

## 4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

### 4.3.1 Existing Setting

#### 4.3.1.1 Environmental Setting

The following discussion provides an overview of existing air quality conditions in the region and in Amador County. Ambient air quality standards (AAQS) and the regulatory framework are summarized, and air quality conditions and typical air pollutant types and sources are also described.

**Air Quality Background.** Air quality is a function of both local climate and local sources of air pollution. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

The Project site is located within the Amador County Air Pollution Control District (ACAPCD) which is responsible for overseeing the air resources in Amador County. Amador County is part of the larger Mountain Counties Air Basin (MCAB) as defined by the CARB.

Both the United States Environmental Protection Agency (USEPA) and the CARB have established health-based AAQS for the following criteria pollutants: carbon monoxide (CO), ozone ($O_3$), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), lead, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. These AAQS are levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The USEPA and the CARB designate air basins where AAQS are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or "form," of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring value exceeds the threshold per year. In contrast, the federal annual fine particulate matter (particulate matter less than 2.5 microns in diameter, or $PM_{2.5}$) standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. The current attainment designations for the MCAB are shown in Table A.

### Table A: Mountain Counties Air Basin Air Quality Attainment Status

| Pollutant | State | Federal |
|---|---|---|
| Ozone (1-hour) | Nonattainment-Transitional | N/A |
| Ozone (8-hour) | Nonattainment-Transitional | Nonattainment |
| $PM_{10}$ | Unclassified | Unclassified |
| $PM_{2.5}$ | Attainment | Unclassified/Attainment |
| Carbon Monoxide | Unclassified | Unclassified/Attainment |
| Nitrogen Dioxide | Attainment | Unclassified/Attainment |
| Lead | Attainment | Unclassified/Attainment |
| Sulfur Dioxide | Attainment | Unclassified/Attainment |
| Sulfates | Attainment | No Federal Standard |
| Hydrogen Sulfide | N/A | No Federal Standard |

Source: CARB and USEPA (2024).
CARB = California Air Resources Board
N/A = not applicable
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
$PM_{10}$ = particulate matter less than 10 microns in diameter
USEPA = United States Environmental Protection Agency

**Air Quality Monitoring Results.** Air quality monitoring stations are located throughout the nation and maintained by the local air pollution control district and State air quality regulating agencies. The CARB maintains ambient air quality monitoring stations throughout the State. The air quality monitoring stations closest to the Project site are the Jackson-Clinton Road Station, located at 201 Clinton Road in Jackson, and the San Andreas-Gold Strike Station, located at 501 Gold Strike Road in San Andreas.

Pollutant monitoring results for years 2021–2023, shown in Table B, indicate that air quality in the vicinity of the Project site has generally been moderate. As indicated in the monitoring results, the federal coarse particulate matter (particulate matter less than 10 microns in diameter, or $PM_{10}$) standard was not exceeded in the 3-year period. The State $PM_{10}$ standard was exceeded eight times in 2021, with zero exceedances in 2022 and 2023. Similarly, the federal $PM_{2.5}$ standard had seven exceedances in 2021, with zero exceedances in 2022 and 2023. The State 1-hour $O_3$ standard had zero exceedances in 2021, one in 2022, and zero in 2023. The State 8-hour $O_3$ standard was exceeded six times in 2021, one time in 2022, and zero times in 2023. The federal 8-hour $O_3$

## Table B: Ambient Air Quality in the Project Vicinity

| Pollutant | Standard | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **Carbon Monoxide (CO)[1]** | | | | |
| Maximum 1-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 20 ppm | ND | ND | ND |
| | Federal: > 35 ppm | ND | ND | ND |
| Maximum 8-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 9 ppm | ND | ND | ND |
| | Federal: > 9 ppm | ND | ND | ND |
| **Ozone ($O_3$)[1]** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.094 | 0.118 | 0.079 |
| Number of days exceeded: | State: > 0.09 ppm | 0 | 1 | 0 |
| Maximum 8-hour concentration (ppm) | | 0.080 | 0.074 | 0.064 |
| Number of days exceeded: | State: > 0.07 ppm | 6 | 1 | 0 |
| | Federal: > 0.07 ppm | 4 | 1 | 0 |
| **Coarse Particulates ($PM_{10}$)[2]** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 121.4 | 43.4 | 43.8 |
| Number of days exceeded: | State: > 50 µg/m$^3$ | 8 | 0 | 0 |
| | Federal: > 150 µg/m$^3$ | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 20.0 | 12.0 | 12.7 |
| Exceeded for the year: | State: > 20 µg/m$^3$ | No | No | No |
| | Federal: > 50 µg/m$^3$ | No | No | No |
| **Fine Particulates ($PM_{2.5}$)[2]** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 94.3 | 25.9 | 29.3 |
| Number of days exceeded: | Federal: > 35 µg/m$^3$ | 7 | 0 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 8.4 | 6.0 | 5.5 |
| Exceeded for the year: | State: > 12 µg/m$^3$ | No | No | No |
| | Federal: > 15 µg/m$^3$ | No | No | No |
| **Nitrogen Dioxide ($NO_2$)** | | | | |
| Maximum 1-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 0.250 ppm | ND | ND | ND |
| Annual arithmetic average concentration (ppm) | | ND | ND | ND |
| Exceeded for the year: | Federal: > 0.053 ppm | ND | ND | ND |
| **Sulfur Dioxide ($SO_2$)[2]** | | | | |
| Maximum 1-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 0.25 ppm | ND | ND | ND |
| Maximum 24-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 0.04 ppm | ND | ND | ND |
| | Federal: > 0.14 ppm | ND | ND | ND |
| Annual arithmetic average concentration (ppm) | | ND | ND | ND |
| Exceeded for the year: | Federal: > 0.030 ppm | ND | ND | ND |

Sources: CARB (2024) and USEPA (2024).

[1] Data taken from the Jackson-Clinton Road Station at 201 Clinton Road, Jackson

[2] Data taken from the San-Andreas-Gold Strike Station at 501 Gold Strike Road, San Andreas

CARB = California Air Resources Board

ND = No data. There were insufficient (or no) data to determine the value.

ppm = parts per million

USEPA = United States Environmental Protection Agency

standard was exceeded four times in 2021, one time in 2022, and zero times in 2023. Data for CO, $SO_2$, and $NO_2$ standards were not available in this area during the 3-year period.

#### 4.3.1.2 Regulatory Setting

**Federal Regulations.** The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

**State Regulations.** In 1988, the California Clean Air Act (CCAA) required that all air districts in the state endeavor to achieve and maintain California AAQS for CO, $O_3$, $SO_2$, and $NO_2$ by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and areawide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in districtwide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants (TACs), and oversee compliance with air pollution rules and regulations.

**Regional Regulations.** The proposed Project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions.

***Amador County Air Pollution Control District.*** The ACAPCD has specific air quality-related rules and regulations.[6] This section summarizes the local rules and regulations that may be applicable to the Project as administered by the ACAPCD.

- **Rule 202: Visible Emissions.** The purpose of this rule is to limit discharge into the atmosphere from any single source of any air contaminant that aggregates for more than 3 minutes in any one hour such that:
    - Discharge is dark or darker in shade as that designated as No. 1 on the Ringlemann Chart; or
    - Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke

[6] Amador County Air Pollution Control District (ACAPCD). n.d. Rules and Regulations. Available at: https://www.amadorgov.org/home/showpublisheddocument/41448/637782875137670000 (accessed October 2024).

- **Rule 205: Nuisance.** This rule states that a person shall not discharge air contaminants or other materials from any source whatsoever that can cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.

- **Rule 218: Fugitive Dust Emissions.** The purpose of this rule is to prevent and control fugitive dust emissions to the atmosphere by using good housekeeping and/or work practices.

- **Rule 407: Pollutant Modeling.** This rule states that the Air Pollution Control Officer, in consultation with other Air Districts in the Mountain Counties Air Basin, shall designate air quality simulation models for use in determining air quality impacts of emissions from new and existing facilities and modifications. Each model shall utilize information relating to emission quantities and meteorological conditions for areas within and adjacent to the District. Each model designated shall be consistent with the requirements provided in the "Revisions to Guidelines on Air Quality Models," published in the Federal Register Vol. 82, January 17, 2017, unless the Air Pollution Control Officer finds that such model is inappropriate for use in the District.

- **Rule 408: Attainment Pollutant Air Quality Analysis.** This rule follows rule 407 and states that the Air Pollution Control Officer shall determine the increases in attainment pollutant concentrations in downwind District zones and other Air Districts that will occur as a result of operation of proposed facilities or modifications.

- **Rule 410: Calculation of Emissions.** This rule shows how projects should calculate emissions based on the potential to emit emissions from a new facility or modification.

- **Rule 413. Attainment Pollutant Increments.** The Air Pollution Control Officer shall deny an Authority to Construct for a proposed facility or modification which, pursuant to an analysis performed in accordance with the provisions of Rules 408 and 415, causes an ambient pollutant concentration to exceed the increments of increase for particulate matter, sulfur dioxide, ozone, oxides of nitrogen, hydrocarbons, and lead to above the baseline concentration.

- **Rule 415: Attainment Pollutant Increment Consumption**. Every two years, the Air Pollution Control Officer shall estimate emissions from all sources in the District, and utilize available information on emissions from upwind Air Districts to calculate the portion of each increment specified in Rule 413 having been consumed, provided the necessary computer resources are provided by the Air Resources Board or others.

- **Rule 419: Nonattainment Pollutant Air Quality Analysis.** Following Rule 407, the Air Pollution Control Officer shall determine the increases in ambient nonattainment pollutant concentrations in downwind District zones and other Air Districts that will occur as a result of operation of the proposed facility or modification.

**Local Regulations.**

***Amador County General Plan.*** Amador County addresses air quality in the Conservation Element. The Conservation Element includes goals and policies that work to improve air quality by meeting or exceeding all State and federal standards. The following polices from the Conservation Element are applicable to the proposed Project:[7]

- **Policy C-9**: Maintain and improve air quality.
- **Policy C-9.3**: Promote the separation of emission sources from sensitive receptors such as schools, day care centers, and health care facilities.
- **Policy C-9.4:** Encourage energy conservation and energy efficient design in new development projects.
- **Policy C-9.7**: Work with state and federal agencies to seek recognition of air pollutant movement from valley to mountain counties as a contributor to reduced air quality.

### 4.3.2 Impact Analysis

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. The ACAPCD does not have an air quality plan, nor has it established any thresholds of significance for air quality. Since the ACAPCD does not have specific thresholds of significance, the *de minimis* General Conformity (GC) thresholds will be used to determine if a project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation consistent with the CAA. Meeting the GC thresholds 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. The rule includes *de minimis* emissions levels—that is, the minimum thresholds for which a conformity determination must be performed. The GC rule states if an action is in a nonattainment area and the total emissions are below *de minimis* levels, a determination of whether the project is regionally significant is still needed. If it is not regionally significant, then the conformity requirements do not apply to this Project based on its projected emissions.

#### *a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

**Less Than Significant Impact.** An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the MCAB into attainment, the ACAPCD complies with Federal Offset Ratio Requirements by Area Designation and Pollutant. The ACAPCD Rule 413 states that attainment pollutant increments performance should be in accordance with the provisions of Rules

[7] Amador County. 2016a. Amador County General Plan, Conservation Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

408 and 415, as described in the preceding section, such that concentrations should not exceed baseline concentrations.

As discussed below, the proposed Project would not result in the generation of criteria air pollutants that would exceed the thresholds of significance. Therefore, the proposed Project would not conflict with or obstruct an applicable air quality plan and impacts would be less than significant.

*b. Would the project 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.** To determine the potential for significant off-site air quality impacts, the proposed Project's emissions are compared to the *de minimis* GC levels set forth in 40 Code of Federal Regulations (CFR) 93.153. As mentioned above, the ACAPCD does not have numeric thresholds of significance for air quality.

Project emissions of criteria pollutants are compared to GC *de minimis* levels, which are the minimum thresholds for which a conformity determination must be performed, for various criteria pollutants. Emissions are evaluated on a calendar-year basis for both construction and operational emissions. Table C presents the thresholds used in this analysis.

**Table C: General Conformity *De Minimis* Thresholds**

| Pollutant | Threshold (Tons/Year) |
|---|---|
| $PM_{10}$ | 100 |
| $PM_{2.5}$ | 100 |

Source: USEPA (2016)
Note: Levels from Code of Federal Regulations Title 40, Parts 51 and 93.
$PM_{10}$ = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
USEPA = United States Environmental Protection Agency

In the absence of a numeric threshold of significance for air quality, the proposed Project would be evaluated against the above GC thresholds to determine that the proposed Project would not result in a significant net increase of criteria pollutants.

Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

***Short-Term (Construction) Emissions.*** During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by

grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides ($NO_x$), reactive organic gases (ROG), directly emitted particulate matter ($PM_{2.5}$ and $PM_{10}$), and TACs such as diesel exhaust particulate matter.

The proposed Project would require linear grubbing and land clearing, grading and excavation, soil backfill, and paving activities during construction. Construction-related effects on air quality from the proposed Project would be greatest during the grading and excavation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. $PM_{10}$ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. $PM_{10}$ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust and reduce emissions. ACAPCD Rule 218 is designed to reduce fugitive dust emissions. With the implementation of Rule 218, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related $PM_{10}$ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, $SO_2$, $NO_x$, ROGs and some soot particulate ($PM_{2.5}$ and $PM_{10}$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles were delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

The California Emissions Estimator Model (CalEEMod), Version 2022.1, was used to estimate construction emissions for the proposed Project. Construction of the proposed Project is expected to occur over a 9-month period starting in the spring of 2026. Construction of the new distribution system would total 4,300 feet (0.81 mile), which was included in CalEEMod. The proposed Project would require the import of 625 cubic yards of soil and the export of 650 cubic yards of soil, which was also included in CalEEMod. This analysis also assumes use of Tier 2 construction equipment and that the proposed Project would comply with ACAPCD Rule 218 for fugitive dust control. Other detailed construction information is currently unavailable; therefore, this analysis utilizes CalEEMod default assumptions.

Construction emission results are summarized in Table D. CalEEMod output sheets are included in Appendix A.

## Table D: Project Construction Emissions (Tons per Year)

| Construction Year | VOC | $NO_x$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| 2026 | 0.1 | 3.4 | 2.7 | <0.1 | 0.2 | 0.1 |
| 2027 | <0.1 | 0.2 | 0.2 | <0.1 | <0.1 | <0.1 |
| **Maximum Construction Emissions** | **0.1** | **3.4** | **2.7** | **<0.1** | **0.2** | **0.1** |
| General Conformity *de minimis* Level | 50.0 | 100.0 | N/A | N/A | N/A | N/A |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA (October 2024).
CO = carbon monoxide
N/A = not applicable
$NO_X$ = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
$PM_{10}$ = particulate matter less than 10 microns in diameter
$SO_X$ = sulfur oxides
VOC = volatile organic compounds

As shown in Table D, construction emissions associated with the Project would be less than significant for emissions of volatile organic compounds (VOC), $NO_X$, CO, sulfur oxides (SO), $PM_{10}$, and $PM_{2.5}$. The ACAPCD requires the implementation of Rule 218 measures for dust control during construction. Implementation of Regulatory Compliance Measure AIR-1, below, would ensure that the proposed Project complies with ACAPCD Rule 218 and further reduces the short-term construction period air quality impacts.

**Regulatory Compliance Measure AIR-1** Consistent with Amador County Air Pollution Control District (ACAPCD) Rule 218, Fugitive Dust Emissions, the following controls are required to be included as specifications for the proposed Project and implemented at the construction site:

- No person may cause, allow, or permit fugitive dust emissions without first implementing good housekeeping and/or work practices that reduce and control the emissions to the atmosphere below 20% opacity or equivalent Ringlemann, as stated in Rule 202, Visible Emissions.

  Good housekeeping and/or work practices include, but are not limited to, the following:

  1. Application of water and/or approved chemicals to control emissions in the demolition of existing buildings or structures, construction operations, solid waste disposal operations, the grading of roads, and/or the clearing of land.

  2. Application of asphalt, water, and/or approved chemicals to road surfaces.

3. Application of water and/or suitable chemicals to material stockpiles and other surfaces that may generate fugitive dust emissions.

4. Maintenance of roadways in a clean condition by washing with water or sweeping promptly.

5. Covering or wetting material stockpiles and open-bodied trucks, trailers, or other vehicles transporting materials that may generate fugitive dust emissions when in motion.

6. Installation and use of paved entry aprons or other effective cleaning techniques to remove dirt accumulating on a vehicle's wheels on haul or access roads to prevent tracking onto paved roadways.

7. Ceasing operations until fugitive emissions can be reduced and controlled.

8. Using vegetation and other barriers to contain and reduce fugitive emissions, and using vegetation for windbreaks.

9. Instituting good housekeeping practices by regularly removing piles of material that have accumulated in work areas and/or are generated from equipment overflow.

10. Maintaining reasonable vehicle speeds while driving on unpaved roads in order to minimize fugitive dust emissions.

Implementation of Regulatory Compliance Measure AIR-1 further reduces the less than significant construction emissions impact. Therefore, construction of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or State AAQS.

***Long-Term (Operational) Emissions.*** Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity), and area sources (e.g., landscape maintenance equipment use) related to the proposed Project. The proposed Project includes improvement to the IBMI water distribution system through consolidation with the JVID in order to connect to existing JVID infrastructure located along Jackson Valley Road and bring potable water to residents of the Project site. The goal of the new system is to both provide and improve the quality and reliability of potable water for residents on the Project site. Upon completion of construction activities, operation and maintenance

associated with the proposed Project would remain the same as currently occurs for the existing pipelines.

As described in Section 4.17, Transportation, a minimal number of vehicle trips are anticipated due to implementation of the proposed Project (e.g., routine inspections and maintenance). As such, the Project would not result in a significant increase in the generation of vehicle trips or vehicle miles traveled (VMT) that would increase criteria pollutant emissions. Furthermore, as described in Section 4.6, Energy, operation of the proposed Project would have minimal to no effect on electricity and natural gas demand. As such, the Project would not be a substantial source of energy, area-, waste-, or water-source emissions. The proposed Project thus would not be a significant source of operational emissions. Therefore, operation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or State AAQS, and impacts would be less than significant.

### *c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant Impact.** Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include the 14 residential structures that are within the Project site.

Construction of the proposed Project may expose these surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement ACAPCD Rule 218 measures, as required by Regulatory Compliance Measure AIR-1, above. With implementation of Regulatory Compliance Measure AIR-1, Project construction emissions would be minimal. Additionally, due to the linear nature of the Project, construction activities at any one receptor location would occur for a limited duration. Once the Project is constructed, the operational activities associated with the proposed Project would not be a source of substantial emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during Project construction or operation, and potential impacts would be considered less than significant.

### *d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**Less Than Significant Impact.** During construction, the various diesel-powered vehicles and equipment in use on site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the Project site. The potential for diesel odor impacts is therefore considered less than significant. The water main is located in a remote area, relative to the existing structures within the area, and it is not anticipated that significant odor issues would result from the proposed Project. Therefore, the proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and potential impacts would be considered less than significant.

## 4.4 BIOLOGICAL RESOURCES

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

### 4.4.1 Existing Setting

#### 4.4.1.1 Environmental Setting

A Biological Resources Evaluation (Appendix B) was conducted for the proposed Project that describes and documents potential impacts to biological resources, including special-status species, associated with the proposed Project.[8] In addition, the Biological Resources Evaluation contains measures to reduce potentially significant Project-related impacts. The analysis below is based on the results of the Biological Resources Evaluation.

**Methodology.** For the purposes of the evaluation, two Biological Study Areas (BSAs) were developed: a 50-foot buffer around the pipelines to evaluate the potential for special-status resources in the immediate vicinity of where ground disturbance is planned, and a 500-foot buffer surrounding the Project site for evaluation of special-status resources in the greater vicinity of the Project. Prior to conducting the field survey, a list of sensitive plant and wildlife species potentially

[8] LSA Associates, Inc. 2024. *Biological Resources Evaluation for the Ione Band of Miwok Indians Water System Improvements Project in Amador County, California.* October.

occurring within the BSAs was compiled to evaluate potential impacts resulting from Project construction. Sources used to compile this list include the following: the California Natural Diversity Database (CNDDB), the CDFW's Biogeographic Information and Observation System (BIOS), CDFW's California Wildlife Habitat Relationships (CWHR) System, the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation system, the USFWS Critical Habitat Mapper, the USFWS National Wetlands Inventory, the United States Geological Survey (USGS) National Hydrography Dataset, the Natural Resources Conservation Service (NRCS) Web Soil Survey, and current and historical aerial imagery. For each of these data sources, the search was focused on the *Ione, California* USGS 7.5-minute quadrangle in which the Project is located, plus the surrounding eight quadrangles. For the CNDDB, a 10-mile search radius was used.

The results of the database inquiries were reviewed to identify the sensitive biological resources that may be present on and within the vicinity of the Project. This list was then evaluated against the existing conditions observed during the reconnaissance site visit of the BSA to determine which special-status resources have the potential to occur, as well as the potential for impacts to those resources from implementation of the Project.

A reconnaissance field survey of the BSA was conducted on April 25, 2024. The goal of the site survey was to characterize the existing biological conditions of the Project site and the greater BSA, and the survey consisted of pedestrian surveys of the roads and driveways where new water lines are proposed to be installed. Adjacent areas were visually scanned from the Project site and public roads for potential special-status resources. All plant and animal species detected were recorded and identified to the lowest taxonomic level necessary to determine rarity. All other potential sensitive biological resources, such as aquatic habitats, were also recorded.

A survey of aquatic features within the BSA was conducted during the reconnaissance field survey. Two wetland features are located within the 50-foot BSA; due to the fact that these features lack apparent connectivity to streams, they would likely fall under the jurisdiction of the Regional Water Quality Control Board (RWQCB). A formal delineation was not conducted because the wetland features are outside the Project's expected disturbance footprint.

Focused botanical surveys were conducted on April 25, 2024, and July 3, 2024, in accordance with the CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.*[9] The surveys were conducted by walking the 50-foot buffer around the pipelines and visually scanning beyond. All plant species were identified to a sufficient taxonomic level necessary to determine rarity. Names of plant species were documented

[9] California Department of Fish and Wildlife (CDFW). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California Natural Resources Agency.* March 20.

in accordance with The Jepson Manual[10] and the Jepson Online Interchange for California Floristics.[11]

**Existing Biological Conditions.** The BSA is regionally located in the western foothills of the central Sierra Nevada mountain range. Surrounding land uses include pasture, orchards, and vineyards. A small active quarry is located to the east, and a large active quarry is located approximately 1 mile to the north. Topography in the BSA, as well as the surrounding region, consists of rolling hills.

The BSA contains six habitat types, including blue oak woodland, fresh emergent wetland, annual grassland, urban, barren, and orchard and vineyard (Figure 4).

***Blue Oak Woodland.*** Blue Oak Woodland is present throughout the BSA. Blue oak (*Quercus douglasii*) is the dominant tree species; other native tree species are also present, such as box elder (*Acer negundo*), northern California black walnut (*Juglans hindsii*), valley oak (*Q. lobata*), polished willow (*Salix laevigata*), and gray pine (*Pinus sabiniana*). Tree density varied across the BSA and intergrades with nonnative trees and shrubs associated with the residences. Native shrub species include coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus mexicana*), and American mistletoe (*Phoradendron leucarpum*). The understory consists of annual grassland (described below) with a mix of herbs more commonly found in oak woodlands, such as common bedstraw (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), miner's lettuce (*Claytonia perfoliata* ssp*. perfoliata*), and California wild grape (*Vitis californica*).

***Fresh Emergent Wetland.*** Two fresh emergent wetlands were present within the BSA during the April site visit. During the July site visit, one of the wetlands had lower water levels and the other was completely dry. These wetlands were vegetated with several common emergent aquatic species, such as tall flatsedge (*Cyperus eragrostis*), common toad rush (*Juncus bufonius*), tall flatsedge (*Cyperus eragrostis*), and broadleaf cattail (*Typha latifolia*).

***Annual Grassland.*** Annual grassland is present within the northwestern portion of 500-foot BSA and is also present as an understory component of blue oak woodland throughout the BSA. This habitat includes several grass species (e.g., *Bromus* sp., *Avena* sp., *Hordeum* sp.) and a wide variety of herbs (e.g., *Brassica* sp., *Amsinckia* sp., *Clarkia* sp., *Erodium* sp., *Plantago* sp., *Trifolium* sp.).

***Urban.*** Urban habitat within the BSA includes several single-family residences, plus the water tank and Jackson Valley Road. Many of the residences include abandoned buildings, cars, and other debris. Domestic cats (*Felis catus*) and dogs (*Canis lupus familiaris*) were present. Several ornamental trees and shrubs are present, such as oleander (*Nerium oleander*), common fig (*Ficus carica*), Italian stone pine (*Pinus pinea*), Mexican fan palm (*Washingtonia robusta*), mission cactus (*Opuntia ficus-indica*), and common lilac (*Syringa vulgaris*).

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10 Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Editors. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded.* University of California Press. Berkeley, California.

11 Jepson Flora Project (Editors.). 2019. Jepson eFlora. Available at: www.ucjeps.berkley.edu/eflora/ (accessed July 10, 2024).

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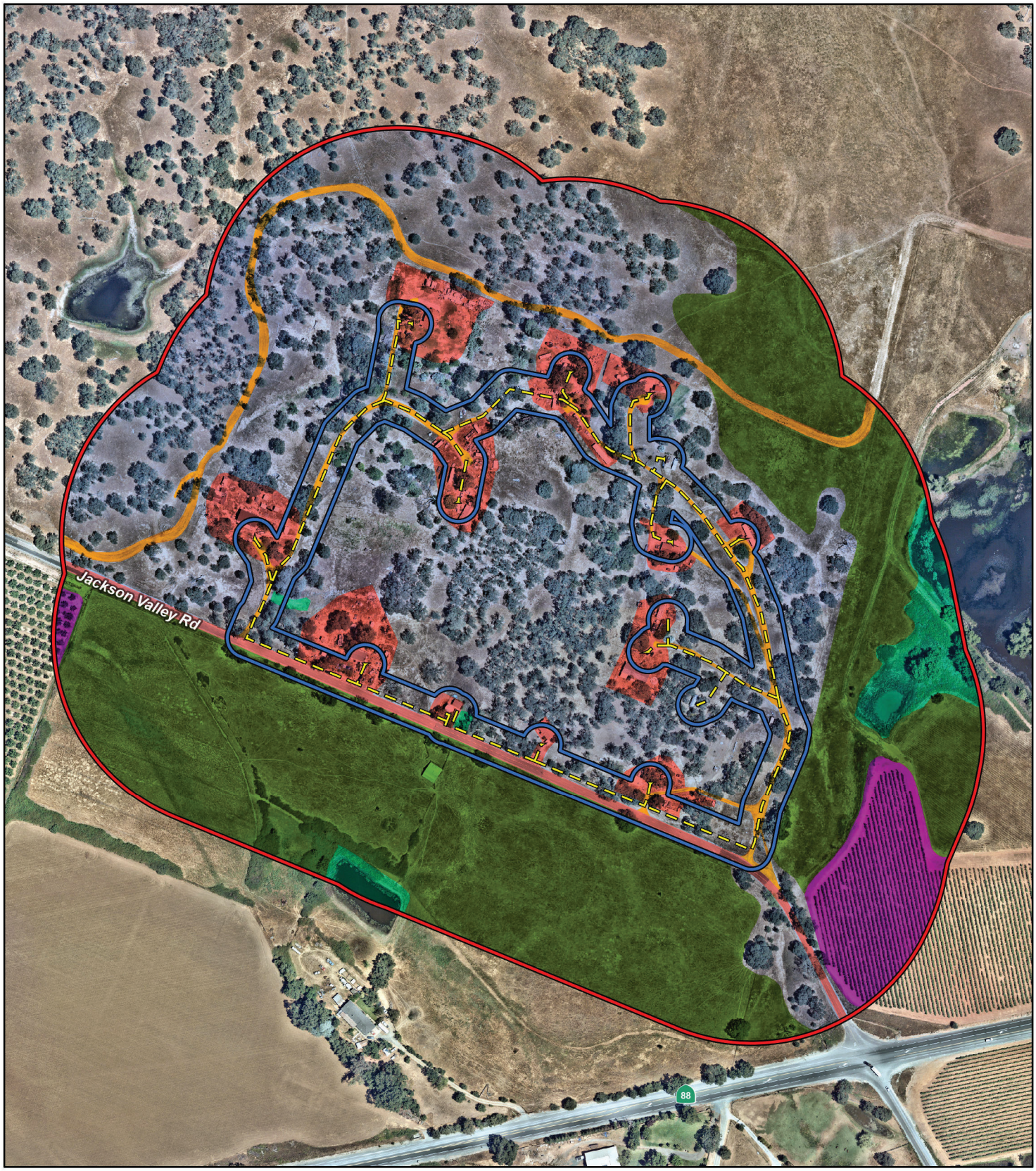


LSA

500-Foot Biological Study Area
50-Foot Biological Study Area
Proposed Distribution Line

Vegetation/Land Cover Type

Annual Grassland
Barren
Blue Oak Woodland
Fresh Emergent Wetland
Urban
Vineyard

N

0 175 350
FEET

FIGURE 4

*Ione Band of Miwok Indians Water System Improvements*
*Amador County, California*

Vegetation Communities Map

SOURCE: Nearmap (July 2023)

I:\M\MKN2201\GIS\Pro\Ione Water Main Replacement\Ione Water Main Replacement.aprx (1/27/2025)

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***Barren.*** Barren habitat within the BSA consisted of the dirt roads that lack vegetation.

***Vineyards and Orchards.*** Vineyards and orchards are present in the 500-foot BSA, but not within the Project site, and are characteristic of agricultural uses in the region within the Dry Creek and Jackson Creek floodways.

#### 4.4.1.2 Regulatory Setting

**Federal Regulations.**

***Federal Endangered Species Act.*** The USFWS administers the federal Endangered Species Act (FESA). FESA provides a process for listing species as either threatened or endangered and methods of protecting listed species. FESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A "threatened" species is a species that is likely to become endangered. A "proposed" species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

Per Section 9 of FESA, "take" of threatened or endangered species is prohibited. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct (codified at 16 United States Code [USC] § 1532(19)). "Take" can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of FESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

***Federal Clean Water Act.*** The Federal Water Pollution Control Act of 1972, often referred to as the Clean Water Act (CWA), is the nation's primary law for regulating discharges of pollutants into waters of the United States. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The regulations adopted pursuant to the act deal extensively with the permitting of actions in waters of the United States, including wetlands. The USEPA has primary authority under the CWA to set standards for water quality and for effluents, but the United States Army Corps of Engineers (USACE) has primary responsibility for permitting the discharge of dredge or fill materials into streams, rivers, wetlands, and other waters of the United States. Further, under Section 401 of the CWA, the USACE must obtain a certification from the State (in this case, the RWQCB) to ensure that any permitted discharge of dredge or fill materials is protective of State water quality standards.

***Migratory Bird Treaty Act.*** The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. Under the MBTA, "it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport

or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof …" (16 USC § 703(a)).

***Bald and Golden Eagle Protection Act.*** The Bald and Golden Eagle Protection Act (16 USC § 668-668d), enacted in 1940 and amended several times since, prohibits anyone without a permit issued by the Secretary of the Interior from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part (including feathers), nest, or egg thereof." The act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Regulations further define "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.6).

**State Regulations.**

***California Endangered Species Act.*** The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents. The purpose is to ensure that the State lead agency's actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species if there are reasonable and prudent alternatives available (California Fish and Game Code [CFGC] Section 2080). For projects that may result in take of State-listed species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species for CDFW to determine whether jeopardy would occur and to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGC Section 2081).

***California State Fish and Game Code.*** Under CFGC Sections 3503, 3503.5, and 3513, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds; or the taking of any nongame bird pursuant to CFGC Section 3800. CFGC Section 3513 adopts the federal Department of the Interior's take provisions under the MBTA.

***California Native Plant Protection Act.*** State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed the CDFW to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this state." The NPPA gave the California Fish and Wildlife Commission the power to designate native plants

as Endangered or Rare and to require permits for collecting, transporting, or selling such plants. CESA expanded upon the original NPPA and enhanced legal protection for plants. There are three listing categories for plants in California: rare, threatened, and endangered.

The CNPS, a non-governmental conservation organization, has developed the California Rare Plant Rank (CRPR) system for species of concern. Vascular plants included on these lists are defined as follows:

- **CRPR 1A:** Plants believed to be extirpated in California and either rare or extinct elsewhere.
- **CRPR 1B:** Plants rare, threatened, or endangered in California and elsewhere.
- **CRPR 2A:** Plants presumed extirpated in California but more common elsewhere.
- **CRPR 2B:** Plants rare, threatened, or endangered in California but more common elsewhere.
- **CRPR 3:** Plants about which more information is needed; a review list.
- **CRPR 4:** Plants of limited distribution; a watch list.

***Porter-Cologne Water Quality Control Act.*** The RWQCB is responsible for protecting surface, ground, and coastal waters within its boundaries, pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of the California Water Code. As described above, the RWQCB has jurisdiction under Section 401 of the federal CWA for activities that could result in a discharge of dredged or fill material to a water body. Federal authority is exercised whenever a proposed project requires a CWA Section 404 permit from the USACE in the form of a Section 401 Water Quality Certification. When a proposed project is not subject to federal authority, State authority is exercised under the Porter-Cologne Act in the form of a Notice of Coverage, Waiver of Waste Discharge Requirements. Many wetlands fall into RWQCB jurisdiction, including some wetlands and waters that are not subject to USACE jurisdiction. RWQCB jurisdiction of other waters, such as streams and lakes, extends to all areas below the Ordinary High Water Mark. On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for the Discharge of Dredged or Fill Material to Waters of the State (Procedures). The procedures became effective May 28, 2020. Applicants proposing to discharge dredged or fill material are required to comply with the procedures unless an exclusion applies, or the discharge qualifies for coverage under a General Order.

***California Public Resources Code – Section 21083.4 (b).*** As part of the determination made pursuant to Section 21080.1, a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:

- Conserve oak woodlands through the use of conservation easements.

- Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.

- The requirement to maintain trees pursuant to this paragraph terminates 7 years after the trees are planted.
- Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.
- The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.

- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the CFGC, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project.

**Local Regulations.**

***Amador County Code of Ordinances.*** The Amador County Code include several provisions aimed at protecting natural resources, specifically:

- **Chapter 7.23, Stormwater:** This ordinance provides definitions for aquatic features, such as wetlands, and prescribes avoidance and minimization requirements to prevent illicit discharge through implementation of Best Management Practices (BMPs).
- **Chapter 19.50.040, Standards and Findings to Protect Biological Resources for Discretionary Use Permits and New Subdivisions of Ten or More Lots:** This ordinance requires avoidance, minimization, and mitigation for impacts to the County's sensitive biological resources, including special-status species, sensitive natural communities, jurisdictional wetlands, and State-identified wildlife corridors, through the discretionary permit process.
- **Chapter 12.36.020, Cutting Trees or Shrubs Without Filing Notice of Intent:** This ordinance prohibits the cutting of any tree or shrub on public land or on land not owned by the person without written permission.

### 4.4.2 Impact Analysis

*a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Less Than Significant Impact with Mitigation.** Potential impacts related to candidate, sensitive, or special-status species would be less than significant with mitigation, as described below.

***Special-Status Plant Species.*** The literature review of the BSA and surrounding area identified 15 special-status plant species known to occur or with the potential to occur within the Project vicinity. The focused, seasonally timed botanical surveys did not detect any special-status plant species within the 50-foot BSA. Therefore, the Project would not result in impacts to special-status plants, and this impact would be less than significant.

***Special-Status Wildlife Species.*** The literature review of the BSA and surrounding area identified 15 special-status animal species known to occur or with the potential to occur within the Project vicinity. Of the identified special-status animal species, five were determined to have the potential to occur within the 500-foot BSA: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), California tiger salamander (*Ambystoma californiense*), western spadefoot (*Spea hammondii*), northwestern pond turtle (*Actinemys marmorata*), and Swainson's hawk (*Buteo swainsoni*). These species are discussed further below.

Valley Elderberry Longhorn Beetle. Valley elderberry longhorn beetle, whose status is federally threatened, is endemic to the Central Valley and has historically occurred from Shasta County to Madera County below 500 feet in elevation. The species is dependent on blue elderberry (*Sambucus* sp.) shrubs for all portions of its lifecycle. The nearest recorded occurrence of the species is approximately 3 miles north of the BSA. A single elderberry shrub was observed during the site visit next to one of the driveways. Given the isolated nature of the shrub, it is unlikely that it would support a population of valley elderberry longhorn beetles. Furthermore, this elderberry shrub will be avoided during construction of the Project. As such, no mitigation measures are required.

California Tiger Salamander. The Central Valley Distinct Population Segment (DPS) of the California tiger salamander (CTS) is classified as threatened at both the federal and State levels and is identified as a California State Species of Special Concern. It occurs along the foothills of the Central Valley and Inner Coast ranges from San Luis Obispo, Kern, and Tulare counties in the south to Sacramento and Yolo counties in the north.

The CTS is a lowland inhabitant restricted to grasslands and open woodland habitats where small mammal burrows are available and within approximately 1.3 miles of breeding ponds. CTS breed in ephemeral pools (e.g., vernal pools) that are often turbid. They may also breed in permanent ponds that are free of predators and contain water for a long enough period to support breeding and larval development. Adults migrate from upland refuge sites to the pools to breed during relatively warm winter or spring rains. Juveniles emigrate in mass at night from the drying pool to upland refuge sites (typically rodent burrows). CTS are primarily nocturnal but have been documented moving during the daytime during periods of high humidity, dense fog, or rainfall.

No vernal pools were observed during the biological field surveys. Two fresh emergent wetlands were observed within the 500-foot BSA adjacent to roads (Figure 4), and several other aquatic features are visible on aerial imagery within the known dispersal distance from the Project site. Several CTS occurrences are recorded in the vicinity of the BSA, the nearest of which is approximately 0.8 mile to the south.

Review of historic aerial imagery indicates that the wetlands on site are not present every year, including during normal rainfall years, while the wetlands just east and just west of the Project site hold water most years but may go dry during drought conditions. The field surveys were conducted following a wetter-than-average winter. The wetland adjacent to Jackson Valley Road next to the existing tank still had some water in it. The wetland adjacent to the dirt road on the west side of the Project site held substantial water during the April site visit but was dry during the July site visit.

Given the lack of consistent ponding in the two wetlands on site, it is unlikely that they would support CTS breeding. However, CTS may migrate through the Project site during the winter and spring, when there is sufficient moisture to support surface activity. Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species would be avoided if construction is scheduled during the summer and fall, when CTS are aestivating underground. Indirect impacts could include sedimentation of adjacent wetlands due to soil disturbance during construction. As such, implementation of Mitigation Measures BIO-1 through BIO-3, below, would ensure that impacts to CTS are less than significant.

**Mitigation Measure BIO-1** The following measures shall be implemented to reduce impacts to California tiger salamander (CTS) and western spadefoot toad:

1. If feasible, Project construction shall be limited to the summer and fall from June 1 to October 31, when California tiger salamanders are aestivating and unlikely to enter the Project site.

2. During the dry season, the Project site shall be surveyed for CTS and western spadefoot if a substantial rain event (i.e., at least 0.25 inches) occurs during construction to avoid affecting CTS and western spadefoot that may have emerged from their burrows and relocated in the Project site (e.g., under equipment). Construction may not begin until the qualified biologist has confirmed that no CTS or western spadefoot are present in the work area. A qualified biologist shall inspect all equipment left in a work area overnight to ensure that no CTS or western spadefoot are present before work begins.

3. Following completion of construction-related ground disturbance, temporarily and permanently impacted areas and other soil disturbed areas shall be revegetated with a native seed mix, except where disturbance occurs in existing dirt driveways and roads.

4. All Project personnel shall have stop-work authority if a CTS or western spadefoot is observed within an active work area. A qualified biologist shall be contacted, the United States Fish and Wildlife Service's (USFWS) Northern Sierra Division Supervisor shall be contacted at (916) 414-6600, and the California Department of Fish and Wildlife's (CDFW) North Central Region office shall be contacted at (916) 358-2900.

5. If construction must occur between November 1 and May 31, the following measures are required:

    a. A qualified biologist shall conduct a survey for CTS and western spadefoot no more than 48 hours prior to the initiation of ground-disturbing activities within 50 feet of the disturbance footprint, including staging and access areas. The biologist shall survey work areas for individuals and for rodent burrows before equipment is moved in and work begins. All burrows shall be flagged for avoidance and the biologist shall work with the construction crew to avoid all burrows. If construction is delayed or halted for more than 30 days, another preconstruction survey shall be conducted.

    b. A qualified biologist shall be present during initial ground-disturbing activities.

    c. Staging areas shall be enclosed by ERTEC E-Fence exclusion fencing installed per manufacturers specifications. The fencing shall include climbing barriers as well as exit funnels every 100 feet to allow animals to leave the work area. Staging areas shall have gates outfitted with the ERTEC fencing such that no openings are permitted when the gates are closed. Gravel bags shall be placed along the bottom of the gate fencing to prevent CTS and western spadefoot from crossing under the fencing. Gates shall be thoroughly closed at the end of each workday.

    d. Exclusion fencing shall be inspected daily during construction, and any damage or failure observed shall be repaired immediately. Exclusion fencing shall be removed once construction is complete.

e. All excavated trenches and holes deeper than 6 inches shall be covered or ramped at the end of the workday. Earthen ramps at a slope of not more than 1:1 shall be constructed at each end of the active trench and boards shall be placed in open holes. Each day that a trench or hole is open and prior to backfilling, these areas shall be inspected by a qualified monitor.

f. A qualified biologist shall thoroughly inspect all construction pipes, culverts, or similar structures that are stored for one or more overnight periods before the structure is subsequently moved, buried, or capped. If, during inspection, one of these animals is discovered inside the structure, workers shall notify the biologist and allow the animal to safely escape that section of the structure before moving and utilizing the structure.

g. Work shall occur only during daylight hours.

h. The National Weather Service 72-hour forecast for the Project area shall be monitored daily. A qualified biologist shall survey active work areas (including access roads) every morning relative to rain and fog events. Construction may not begin until the biologist has confirmed that no CTS and western spadefoot are present in the work area. Work shall not occur during precipitation events, including dense fog, in areas where suitable habitat is present, unless the site is completely enclosed with exclusion fencing and has been inspected by a qualified biologist before work begins on the affected days. Work outside of fenced areas may occur as the discretion of the qualified biologist, who may require monitoring.

i. The area under vehicles and equipment parked overnight shall be inspected for animals prior to moving each morning.

j. Erosion control around staging areas shall consist of ERTEC S-Fence attached to the bottom of the E-Fence. No straw wattles shall be used around the base of the fencing.

**Mitigation Measure BIO-2** Prior to the start of construction activities, a qualified biologist shall conduct a mandatory biological resources awareness training for all personnel. For each species with potential to occur, the training shall cover the status, habitats, natural history, appearance (using representative photographs), and legal status of the species; regulatory protections, penalties for noncompliance, and benefits of compliance; and the avoidance measures to be implemented. The training shall also identify other special-status resources, including aquatic areas, and the protection measures associated with them. Participants shall be required to sign a form that states they have received and understood the training. The applicant shall maintain the record of training and make it available to the USFWS upon request. The Project foreman shall verify that the new personnel brought onto the Project receive the mandatory training before starting work.

**Mitigation Measure BIO-3** The following construction best management practices shall be implemented to reduce impacts to biological and aquatic resources:

1. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared in accordance with typical provisions associated with a Regional General Permit for Construction Activities. The SWPPP will contain best management practices to minimize effects associated with erosion and siltation during construction, as well as a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.

2. All staging areas shall be located in previously disturbed areas outside of aquatic resources.

3. All access routes shall be limited to existing roadways and crossings. Personnel driving vehicles shall observe the posted speed limit on paved roads and a 15 mile-per-hour speed limit on unpaved roads during travel in the Project area.

4. Vehicle and equipment fueling shall occur at least 50 feet from aquatic and riparian resources. Containment measures shall be in place to capture any potential spills or leakages.

5. All vehicles and equipment shall be staged at least 50 feet from aquatic resources when not in operation.

6. Spoils piles shall be placed where they cannot be washed into aquatic resources.

7. Food-related trash shall be disposed of in closed containers and removed from the work area daily. All other trash and solid wastes shall be disposed of in closed containers and regularly removed from the various structures and facilities. Following construction, all trash and construction debris shall be removed from the work area.

8. Personnel shall not feed or otherwise attract fish or wildlife to the work site.

9. Spill cleanup kits shall be kept at work sites in or near aquatic resources.

Western Spadefoot. The western spadefoot toad is a candidate for listing under FESA and a State Species of Special Concern. The western spadefoot toad occurs primarily in open, treeless grasslands; scrub; or savannah habitats and requires temporary ponds for breeding and larval development. This species spends most of the year in underground burrows, which they construct themselves, although some individuals may use small mammal burrows. They are primarily active on the surface at night. Breeding and egg laying occur almost exclusively in vernal pool habitat; however, they may also utilize nonflowing, ponded water within natural drainages. They may migrate as far as 1,900 feet between upland and breeding habitat, with shorter distances traveled during drier years. The western spadefoot toad is an opportunistic species and can exploit short-lived pools of water; therefore, this species is able to survive in areas where other highly aquatic species could not.

There is one record of western spadefoot within 5 miles of the BSA. This occurrence, from 2008, is located 2.3 miles west of the BSA. As previously noted in the discussion regarding CTS, there are two wetlands adjacent to the Project site and several other aquatic features in the vicinity. Western spadefoot may move through the Project site during the winter and spring periods, when there is sufficient moisture to support surface activity. The roads and driveways are compacted and would be difficult for western spadefoot to dig burrows in, but areas adjacent to the roads may be suitable. Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species would be avoided if construction is scheduled during the summer and fall, when western spadefoot are aestivating underground. Indirect impacts could include sedimentation of adjacent wetlands due to soil disturbance during construction. As such, implementation of Mitigation Measures BIO-1 through BIO-3, above, would ensure that impacts to western spadefoot are less than significant.

Northwestern Pond Turtle. The northwestern pond turtle, a candidate for listing under FESA and a State Species of Special Concern, is a highly aquatic species that can be found in a wide variety of permanent and ephemeral aquatic habitats. Adjacent upland habitat that can support nesting and overwintering is key, as are basking sites, such as partially submerged logs, vegetation mats, or open mud banks. Northwestern pond turtles will spend most of their time in upland habitats, usually within 500 feet of suitable aquatic habitat. They lay eggs in the banks of creeks and other sunny slopes with little to no vegetative cover, usually within 1,300 feet of aquatic habitat. Hatchlings then migrate to the water, where they require areas of shallow water with dense vegetation. Adults may overwinter/aestivate in aquatic habitat in some locations, but they often prefer upland areas where they have access to sunlight for a portion of the day, spending much of their time under leaf litter.

No northwestern pond turtles were observed during the site visits. One unprocessed CNDDB record of the species from 2012 is mapped approximately 0.71 mile to the southwest of the BSA, beyond Jackson Valley Road. The fresh emergent wetlands on site may be suitable when water is present. There are numerous aquatic features in the vicinity, including the wetlands immediately to the east and west of the Project site and Jackson Creek, approximately 1,900 feet to the south. The potential for the species to be present is low, and the species would be easily detected if attempting to traverse the Project site.

Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species is easily detected and could either be allowed to leave on its own or be easily captured and relocated. Indirect impacts could include sedimentation of adjacent wetlands due to soil disturbance during construction, as well as construction-related noise and human presence altering normal behaviors if western pond turtles are near the construction site. As such, implementation of Mitigation Measure BIO-4, below, in addition to Mitigation Measures BIO-2 and BIO-3, above, would ensure that impacts to northwestern pond turtle are less than significant.

**Mitigation Measure BIO-4** Prior to the start of Project activities, a survey of suitable aquatic habitat within 100 feet of the disturbance footprint, where access is available, shall be conducted for northwestern pond turtle. If a northwestern pond turtle is present, a qualified biologist shall monitor all Project activities near the northwestern pond turtle to prevent harm. If a northwestern pond turtle enters the construction site, the animal shall be allowed to leave the area on its own without harassment. If the animal does not leave the construction site, a qualified biologist shall capture and relocate it to the nearest aquatic area, unless the species becomes listed under the federal Endangered Species Act,

in which case the individual shall be left alone and the USFWS be consulted for next steps.

Swainson's Hawk. Swainson's hawk, a State-listed as threatened species, occurs in grassland, desert, and agricultural landscapes throughout the Central Valley and Antelope Valley. Some hawks may be resident, especially in the southern portion of their range, while others may migrate between winter and breeding habitats. They prefer larger isolated trees or small woodlots for nesting, usually with grassland or dry-land grain fields nearby for foraging, and have been known to nest in large eucalyptus trees along heavily traveled freeway corridors. Swainson's hawks forage in grassland, open scrub, pasture, and dry-land grain agricultural habitats, primarily for rodents. Swainson's hawks exhibit a moderate to high nest site fidelity for successful nest sites.

The nearest occurrence was recorded in 2003 at the Camanche Reservoir, approximately 5 miles south of the BSA. The record was of a nest in a blue oak tree that produced two fledglings. Many of the trees within the 500-foot buffer and surrounding area could support nests, and there is ample grassland habitat and dry-land grain fields available for foraging. Nests could become established when construction could occur.

Construction of the Project is not expected to impact any trees or impact foraging habitat. Direct impacts could include the abandonment of an active nest if construction activities disturb the nesting pair. No indirect impacts are anticipated. Implementation of Mitigation Measures BIO-5 and BIO-6, below, in addition to Mitigation Measures BIO-2 and BIO-3, above, would ensure that impacts to Swainson's hawk are less than significant.

**Mitigation Measure BIO-5** If Project activities must occur during the nesting season (February 15–August 31), pre-activity surveys shall be conducted for Swainson's hawk nests within 14 days prior to the start of construction. The surveys shall be conducted within the Project site plus a 0.5-mile buffer. The survey shall be conducted in accordance with the methodology outlined in existing CDFW protocols. Note that Swainson's hawks may establish a nest at any time from February through June; multiple Swainson's hawks nest surveys may be necessary in one season at the direction of a qualified biologist, depending on the timing of Project construction. If no Swainson's hawk nests are found, no further action is required.

**Mitigation Measure BIO-6** If an active Swainson's hawk nest is discovered at any time within 0.5 mile of active construction, a qualified biologist shall complete an assessment of the potential for current construction activities to impact the nest. The assessment shall consider the type of construction activities, the location of construction relative to the nest, the visibility of construction activities from the nest location, and other

existing disturbances in the area that are not related to construction activities for this Project. Based on this assessment, the biologist shall determine if construction activities can proceed and if nest monitoring will be required. At a minimum, construction activities shall not occur within 100 feet of an active nest and shall require monitoring if within 500 feet of an active nest. These buffers may need to increase depending on the sensitivity of the nest location.

Nesting Birds. The BSA contains suitable habitat that could support a variety of ground- and tree-nesting bird species protected under the MBTA and the CFGC. Impacts to active nests could occur from noise and vibration caused by construction activities. Implementation of Mitigation Measure BIO-7, below, in addition to Mitigation Measure BIO-2, above, would ensure that impacts to nesting birds are less than significant.

**Mitigation Measure BIO-7** If Project activities must occur during the nesting season (February 1–August 31), pre-activity nesting bird surveys shall be conducted no more than 7 days prior to the start of construction at the construction site plus a 250-foot buffer for songbirds and a 500-foot buffer for raptors (other than Swainson's hawk). If no active nests are found, no further action is required; however, note that nests may become active at any time throughout the nesting season, including when construction activities are occurring. If active nests are found during the survey or at any time during Project construction, an avoidance buffer ranging from 50 feet to 350 feet shall be required, as determined by a qualified biologist. The avoidance buffer shall remain in place until the biologist has determined that the young are no longer reliant on the nest. Work may occur within the avoidance buffer under the approval and guidance of the biologist. The biologist shall have the ability to stop construction if nesting adults show signs of distress.

*b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**No Impact.** During the records search, two sensitive natural communities were identified within 10 miles of the Project site: Northern Hardpan Vernal Pool and Ione Chaparral. Neither community is present within the 500-foot BSA. The BSA does not overlap with a federally designated critical habitat or any other sensitive natural community. Therefore, the Project would have no impacts to sensitive natural communities, and no mitigation measures are required.

*c. Would the project 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?*

**Less Than Significant Impact with Mitigation.** Two wetland features are located within the 50-foot BSA (Figure 4). These features appear to lack connectivity to streams and would thus likely fall under the jurisdiction of the RWQCB alone. Both wetland features are outside the proposed Project's disturbance footprint, which would be constructed within the existing roadway in the vicinity of these wetlands. Potential impacts would be limited to sediment runoff into the wetlands during rain events. Such impacts would be reduced to less than significant through implementation of a Stormwater Pollution Prevention Plan (SWPPP) and other construction best practices, as required under Mitigation Measure BIO-3, above.

*d. Would the project 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?*

**No Impact.** Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. Wildlife movement corridors can be large tracts of land that connect regionally important habitats that support wildlife in general, such as stop-over habitat that supports migrating birds or large, contiguous natural habitats that support animals with very large home ranges (e.g., coyotes [*Canis latrans*], mule deer [*Odocoileus hemionus californicus*]). They can also be small-scale movement corridors, such as riparian zones, that provide connectivity and cover to support movement at a local scale.

The Project region is largely undeveloped and could be conducive to general wildlife movement. However, the BSA is not located within an identified wildlife movement corridor. There are no features on site that would lend themselves specifically to wildlife movement (e.g., riparian corridors). The Jackson Creek riparian corridor is located immediately south of the BSA, and the Dry Creek riparian corridor is located to the west. Both have been identified by the CDFW as potential movement corridors as part of the northern Sierra Nevada Foothills Wildlife Connectivity Project; however, the Project would not result in any impacts to either identified movement corridor. Therefore, the Project would have no impacts to established wildlife corridors or wildlife nursery sites, and it would not otherwise impact local wildlife movement or inhibit the ability of local wildlife to access the BSA. No mitigation measures are required.

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Less than Significant Impact with Mitigation.** As described above, the Amador County Code includes several provisions aimed at protecting natural resources. Resources within the BSA that would be protected under these ordinances include various tree species, including native blue oaks, nesting birds, and special-status species with potential to occur. The proposed Project would implement the above mitigation measures (i.e., Mitigation Measures BIO-1 through BIO-7) to avoid impacts to special-status species, including nesting birds. No trees would be removed as part of the Project. No

direct impacts to the wetlands present are anticipated. Potential stormwater runoff into the wetlands would be avoided through implementation of a SWPPP and other construction best practices as described in Mitigation Measure BIO-3, above. No additional mitigation measures are required.

*f. Would the project 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 Project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other habitat conservation plan. Development of the Project would not conflict with any habitat conservation plan, and no mitigation measures are required.

## 4.5 CULTURAL RESOURCES

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

### 4.5.1 Existing Setting

#### 4.5.1.1 Environmental Setting

A Phase 1 Archaeological Resource Survey Study was conducted for the IBMI Water System Improvements Project in Amador County, California.[12] The study was prepared in order to (1) identify archaeological deposits that may meet the CEQA definition of a historical resource (PRC Section 21084.1) or a unique archaeological resource (PRC Section 21083.2) and that may be impacted by the proposed Project; (2) assess the potential for human remains; and (3) recommend procedures for avoiding or mitigating impacts to archaeological deposits, if warranted.

On March 29, 2023, a record search at the North Central Information Center (NCIC) of the California Historical Resources Information System at California State University, Sacramento, was conducted. The NCIC, an affiliate of the California Office of Historic Preservation (OHP), is the official repository of cultural resources records and reports for Amador County. The record search included a review of all recorded historic-period and precontact cultural resources within a 0.5-mile radius of the Project site, as well as a review of known cultural resources surveys and excavation reports. The results of the search indicated that no previous cultural resources studies have included a portion of the Project site and that 10 previous cultural resources studies have included a portion of the 0.5-mile search radius. Based on the previous studies, it is estimated that 10 percent of the Project site and the 0.5-mile radius have been previously studied.

The results of the previous studies concluded that no cultural resources have been recorded directly on the Project site. However, five cultural resources have been recorded within the search radius. One of these resources has been assigned a status code of 2S2, meaning that the site has been determined eligible for the National Register of Historic Places (National Register) by consensus through the Section 106 process and that the site is also listed in the California Register of Historical Resources (California Register).

A request was submitted to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF) for the presence of Native American cultural resources that the

[12] LSA Associates, Inc. 2023. *Results of the Phase I Archaeological Resources Survey Study for the Ione Band of Miwok Indians Water System Improvements Project in Amador County, California.*

proposed Project might impact. The NAHC maintains the SLF database and is the official State repository of Native American sacred-site location records in California. The search resulted in positive results, and the NAHC recommended coordination with the IBMI. An archaeologist conducted a pedestrian survey of the Project site with accompaniment of representatives of the IBMI. The survey was conducted along the proposed pipeline alignment of the Project. During this survey, Jereme Dutschke, the IBMI Cultural Resources Coordinator, provided additional information regarding the cultural sensitivity of the Project site. Monitoring of geotechnical testing excavations was also conducted by an archaeologist and IBMI representatives.

#### 4.5.1.2 Regulatory Setting

**Federal Regulations.**

***National Historic Preservation Act.*** The National Historic Preservation Act (NHPA; 1966) is the most concise and effective federal law dealing with historic preservation. While federal preservation law does not apply to the proposed Project, applicable State and local requirements have been derived from this legislation. The NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our cultural heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for federal landholding agencies, but also includes regulations (known as Section 106) that pertain to all projects that are funded, permitted, or approved by any federal agency and that have the potential to affect cultural resources. In addition, the NHPA authorizes the Secretary of the Interior to establish a National Register. The National Register is an inventory of districts, sites, buildings, structures, and objects significant at a national, State, or local level in American history, architecture, archaeology, engineering, and culture. The National Register is wholly maintained by the National Park Service, the Advisory Council on Historic Preservation, and the State OHP and grants-in-aid programs.

**State Regulations.**

***California Register of Historical Resources.*** The California Register is an inventory of significant architectural, archaeological, and historical resources in the State of California. Important cultural resources can be listed in the California Register through a number of methods, and listing requires approval from the State Historical Resources Commission. Properties can be nominated to the California Register by local governments, private organizations, or citizens. State Historical Landmarks and National Register-listed properties gain automatic listing in the California Register. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register. In order for a cultural resource to be significant, or in other words eligible, for listing in the California Register, it must reflect one or more of the following criteria (PRC Section 5024.1c):

- **Criterion 1 (Events):** Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States

- **Criterion 2 (Persons):** Resources that are associated with the lives of persons important to local, California, or national history

- **Criterion 3 (Architecture):** Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values

- **Criterion 4 (Information Potential):** Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation

***California Environmental Quality Act.*** CEQA requires that public agencies assess the effects on historical resources of public or private projects that the agencies finance or approve. Historical resources are defined as buildings, sites, structures, objects, areas, places, records, or manuscripts that the lead agency determines to have historical significance, including architectural, archaeological, cultural, or scientific significance. CEQA requires that if a project results in an effect that may cause a substantial adverse change in the significance of a historical resource, alternative plans or mitigation measures must be considered. However, only significant historical resources need to be addressed. Therefore, before the assessment of effects or development of mitigation measures, the significance of cultural resources must be determined. The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

1. Identify potential historical resources.
2. Evaluate the eligibility of historical resources.
3. Evaluate the effects of the project on all eligible historical resources.

In addition, properties that are listed in or eligible for listing in the National Register are considered eligible for listing in the California Register and thus are significant historical resources for the purposes of CEQA (PRC Section 5024.1[d][1]).

According to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant impact on the environment (*State CEQA Guidelines* 15064.5[b]). CEQA also states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of an historical resource or its immediate surroundings such that the significance of the resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or materially and adversely alter the physical characteristics of a historical resource that convey its historical significance and qualify or justify its eligibility for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Sections 5020.1(k) and 5024.1(g).

***Significant Historical Resources under State CEQA Guidelines.***In completing an analysis of a project under CEQA, it must first be determined if the project site possesses a historical resource. A site may qualify as a historical resource if it falls within at least one of four categories listed in *State CEQA Guidelines* Section 15064.5(a). The four categories are:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1 (g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register (PRC Section 5024.1; CCR Title 14, Section 4852). These conditions are related to the eligibility criteria for inclusion in the California Register (PRC Sections 5020.1[k], 5024.1, and 5024.1[g]). A cultural resource may be eligible for inclusion in the California Register if it:

    - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    - Is associated with the lives of persons important in our past;

    - Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or

    - Has yielded, or may be likely to yield, information important in prehistory or history.

4. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register; is not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)); or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

A lead agency must consider a resource that has been listed in or determined eligible for listing in the California Register (Category 1) as a historical resource for CEQA purposes. In general, a resource that meets any of the other three criteria listed in *State CEQA Guidelines* Section 15064.5(a) is also considered to be a historical resource unless "the preponderance of evidence demonstrates that the resource is not historically or culturally significant."

***State Health and Safety Code.*** The discovery of human remains is regulated according to California Health and Safety Code Section 7050.5, which states that if human remains are

encountered, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be pre-contact, the Coroner will notify the NAHC, which will determine and notify the Most Likely Descendant (MLD). With the permission of the landowner or his or her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

**Local Regulations.** There are no applicable local regulations related to cultural resources for the proposed Project.

### 4.5.2 Impact Analysis

*a and b. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less Than Significant Impact with Mitigation.** The results of the previous studies concluded that no cultural resources have been recorded directly on the Project site. However, five cultural resources have been recorded within the 0.5-mile search radius. One of these resources has been assigned a status code of 2S2, meaning that the resource has been determined eligible for the National Register by consensus through Section 106 of the NHPA process and that the site is also listed in the California Register. Because the resources are not located directly within the boundaries of the Project site, they are not expected to be affected by the Project.

Although not anticipated, there is the potential to identify previously undiscovered cultural resources during construction. With the implementation of Mitigation Measures CUL-1 and CUL-2, significant impacts to resources identified during construction would be avoided.

**Mitigation Measure CUL-1** Monitoring of all construction-related disturbance associated with the Project (including vegetation clearing and staking activities) shall be conducted by an appropriately qualified archaeologist and a representative of the Ione Band of Miwok Indians (IBMI).

**Mitigation Measure CUL-2** If deposits of pre-contact or historic-period archaeological materials are encountered during Project activities, all work within 50 feet of the discovery shall be redirected and protective fencing shall be placed to ensure the area is not inadvertently impacted by construction activities. An appropriately qualified archaeologist should assess the situation; immediately notify the State Water Resources Control Board (SWRCB), the Indian Health Service, and the IBMI; consult with the agencies as appropriate; and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. Archaeological materials can include flaked-stone tools (e.g.,

projectile points, knives, and choppers) or obsidian, chert, basalt, or quartzite toolmaking debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, bones, and other cultural materials); and stone milling equipment (e.g., mortars, pestles, and handstones). Pre-contact archaeological sites often contain human remains. Historic-period materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse. It is recommended that impacts to archaeological resources be avoided by Project activities to the extent feasible. The IBMI shall, in consultation with the SWRCB and the Indian Health Service, make a reasonable effort to avoid or minimize significant impacts. If treatment is required, a plan shall be developed in consultation with the IBMI, SWRCB, and the Indian Health Service to mitigate, avoid, or minimize impacts to cultural resources. Treatment may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings, and community outreach. If feasible, it is the preference of the IBMI that any recovered archaeological materials be reburied on site, as close to the original discovery location as possible, once analysis is complete. All reports produced as part of the evaluation and treatment of cultural resources identified during the Project shall be submitted to the IBMI, the SWRCB, and the Indian Health Service for review and comment. All final documents shall be submitted to the North Central Information Center.

### *c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?*

**Less Than Significant Impact with Mitigation.** In the course of preparing the cultural resources assessment, no human remains were identified directly on the Project site. Although not anticipated, it is possible that human remains may be present at subsurface levels. Implementation of Mitigation Measure CUL-3 would ensure that potentially significant impacts would be reduced to less-than-significant levels with mitigation incorporated.

**Mitigation Measure CUL-3** In the event that human remains are encountered at any time during Project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC)

within 24 hours, which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

## 4.6 ENERGY

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

### 4.6.1 Existing Setting

#### 4.6.1.1 Environmental Setting

**Electricity.** The Project site would receive its electricity from Pacific Gas and Electric Company (PG&E). According to the California Energy Commission (CEC), total electricity consumption in the PG&E service area in 2022 was 104,695.0 gigawatt-hours (GWh) (35,245.7GWh for the residential sector and 69,449.3 GWh for the nonresidential sector).[13] Total electricity consumption in Amador County in 2022 was 349.1 GWh (151.5GWh for the residential sector and 197.6 GWh for the nonresidential sector).[14]

**Natural Gas.** PG&E is the natural gas service provider for the Project site. According to the CEC, total natural gas consumption in the PG&E service area in 2022 was 4,449.2 million therms (1,866.2 million therms for the residential sector and 2,583.0 million therms for the nonresidential sector).[15] Total natural gas consumption in Amador County in 2022 was 7.5 million therms (2.2 million therms for the residential sector and 5.3 million therms for the nonresidential sector).[16]

**Fuel.**Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to 2021 data, total gasoline consumption in California was 319,514 thousand barrels (13.4 billion gallons) or 1,613.5 trillion British thermal units (BTU) in 2021.[17] Of the total gasoline consumption, 302,881 thousand barrels (12.7 billion gallons) or 1,529.5 trillion BTU were consumed for transportation.[18] Based on

13 California Energy Commission (CEC). 2021a. Electricity Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed October 2024).

14 California Energy Commission (CEC). 2021b. Electricity Consumption by County. Available at: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2024).

15 California Energy Commission (CEC). 2021c. Gas Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed October 2024).

16 California Energy Commission (CEC). 2021d. Gas Consumption by County. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2024).

17 1 BTU is defined as the amount of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

18 United States Energy Information Administration. 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2021. Available at: http://eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed October 2024).

fuel consumption obtained from the United States Energy Information Administration, approximately 106.8 million gallons of gasoline and approximately 0.5 million gallons of diesel will be consumed from vehicle trips in Amador County in 2024.

#### 4.6.1.2 Regulatory Setting

**Federal Regulations.**

***Energy Policy Act of 2005.*** The Energy Policy Act of 2005 seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under this act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

***Corporate Average Fuel Economy Standards.*** On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industrywide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026 by increasing fuel efficiency by 8 percent annually for model years 2024–2025 and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 and 2050.

**State Regulations.**

***Assembly Bill 1575, Warren-Alquist Act.*** In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended PRC Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require EIRs to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

***Senate Bill 1389, Energy: Planning and Forecasting.*** In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The

plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted reports include the *2023 Integrated Energy Policy Report Update.*[19] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand projections, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

***Renewable Portfolio Standards.*** SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all State's electricity to come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[20]

***California Energy Efficiency Strategic Plan.*** On September 18, 2008, the California Public Utilities Commission (CPUC) adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

[19] California Energy Commission (CEC). 2023. *2023 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 23-IEPR-01.

[20] California Public Utilities Commission (CPUC). 2020. Renewables Portfolio Standard (RPS) Program. Available at: https://www.cpuc.ca.gov/rps/ (accessed October 2024).

**Local Regulations.**

***Amador County General Plan.*** Amador County addresses energy in the Conservation Element of the County's General Plan. The Conservation Element contains goals and policies that work to conserve energy resources through the use of available technology and conservation practices. The following polices from the Conservation Element are applicable to the proposed Project:[21]

- **Goal C-6: 6:** Reduce energy use and promote renewable and locally available sources of energy.
- **Policy C-6.5:** Support use of renewable and locally-available sources of energy where feasible.
- **Policy C-9.4:** Encourage energy conservation and energy efficient design in new development projects.
- **Policy C-10.5:** Require new development projects to incorporate building placement and design features to increase energy efficiency in new structures.
- **Policy C-10.7: 7:** Support parcel-scale energy generation, including addition of solar panels for residential structures and cogeneration for larger commercial or industrial uses.

### 4.6.2 Impact Analysis

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

**Less Than Significant Impact.** The proposed Project would include the construction and operation of a new water main and associated water collection system on Jackson Valley Road and would demand energy during construction and operation of the Project.

***Construction-Period Energy Use.*** The anticipated construction schedule assumes that the proposed Project would be built over a 9-month period. The proposed Project would require linear grubbing and land clearing, grading and excavation, soil backfill, and paving activities during construction.

Construction of the proposed Project would require energy for manufacturing and transporting building materials, preparation of the site for grading activities, and utility installation. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Impacts related to energy use during construction would be temporary and relatively small in comparison to Amador County's overall use of the State's available energy resources. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State.

[21] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors, which would conserve the use of their supplies to minimize their costs on the Project. The proposed Project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

***Operational Energy Use.*** The proposed Project would provide improvements to the IBMI water distribution system through consolidation with the JVID in order to connect to existing JVID infrastructure located along Jackson Valley Road and bring potable water to residents of the Project site. Operation of the proposed Project would have minimal to no effect on electricity and natural gas demand. As described in Section 2.0, Proposed Project, installation of the new distribution system would include water meters for each customer and the installation of a dedicated flushing blowoff at the north end of the Project site. Water lines do not require electricity for operation; therefore, the proposed Project is not anticipated to result in the consumption of electricity or natural gas during operation. Furthermore, the JVID would be responsible for ownership, operation, and maintenance of all infrastructure from the master meter upstream. Upon completion of construction activities, operation and maintenance associated with the proposed Project would remain the same as currently occurs for the existing pipelines. As described in Section 4.17, Transportation, minimal additional vehicle trips are anticipated due to implementation of the proposed Project (e.g., routine inspections and maintenance); as such, the proposed Project is not expected to generate a substantial increase in fuel used for vehicle trips.

Moreover, PG&E currently provides electricity to properties in the immediate vicinity of the Project site. It is not anticipated that operation of the proposed Project would significantly impact PG&E's ability to provide electricity in the region. Therefore, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and a less-than-significant impact would occur.

### *b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

**Less Than Significant Impact.** In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. The CEC recently adopted the 2023 Integrated Energy Policy Report, which provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

As indicated above, energy usage in the Project area during construction would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Once operational, the proposed Project would not substantially increase energy use.

Because California's energy conservation planning actions are conducted at a regional level, and because the Project's total impact to regional energy supplies would be minor, the proposed Project would not conflict with California's energy conservation plans as described in the 2023 Integrated Energy Policy Report. Thus, as shown above, the proposed Project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy, and potential impacts would be less than significant.

## 4.7 GEOLOGY AND SOILS

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

### 4.7.1 Existing Setting

#### 4.7.1.1 Environmental Setting

The Project site is located in the Sierra Nevada foothills approximately 3 miles south of Ione. The Project site is characterized by rolling hills and includes multiple occupied single-family residential units. Soil surveys indicate that two types of near-surficial natural sediments exist within the Project site: the Red Bluff-Mokelumne complex deposits (which typically consist of alluvium deposits of gravelly loam from 0 to 7 inches deep, loam from 7 to 11 inches deep, and gravelly clay from 11 to 40 inches deep) and Snelling sandy loam deposits (which typically consist of sandy loam from 0 to 24 inches deep and loam from 24 to 50 inches deep). Geologic deposits exist under surficial sediments of the Project site, specifically sandstone, shale, conglomerate, and fanglomerate deposits that date to the Miocene (23.03 to 5.3 million years ago).[22]

[22] LSA Associates, Inc. 2023. op. cit.

#### 4.7.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to geology and soils for the proposed Project.

**State Regulations.**

***Uniform Building Code.*** The Uniform Building Code (UBC) ensures all buildings maintain the public health and safety by regulating the design, construction, quality of materials, certain equipment, location, grading, use, occupancy, and maintenance of all buildings and structures. UBC standards address foundation design, shear wall strength, and other structurally related conditions.

***Alquist-Priolo Earthquake Fault Zoning.*** The Alquist-Priolo Earthquake Fault Zoning Act (PRC Sections 2621 et seq.) requires the California Geologic Survey to compile maps of traces of active faults and requires a State Geologist to delineate earthquake fault zones along faults that are "sufficiently active" and "well defined." The act requires disclosure in real estate transactions and requires cities and counties to withhold development permits for a site in an earthquake fault zone until geologic investigations demonstrate that the site is not threatened by surface displacements from future faulting. An active fault is one showing expression of surface rupture within the last 11,000 years. Pursuant to this act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault. Single-family wood-frame or steel-frame dwellings up to two stories high and not part of a development of four or more dwelling units is the only exemption to this act.

***Seismic Hazard Mapping Act.*** The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 in response to the Loma Prieta Earthquake in 1989. This act protects the public from the effects of nonsurface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey has been required under this act to prepare "seismic hazard zone" maps available to local governments. These maps identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. Buildings designed for human occupancy proposed to be built within a "seismic hazard zone" require a geotechnical investigation and mitigation measures to be implemented. SHMA requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and, if so, the inclusion of appropriate mitigation(s). Reports must be stamped by a Registered Civil Engineer or Certified Engineering Geologist with a specialty in seismic hazard evaluation. In addition, the SHMA requires real estate sellers and agents to provide full disclosure if the property is within a seismic hazard zone at the time of sale. Single-family dwellings up to two stories high and part of a development of no more than three units are the only exemption to this act.

***2022 California Building Code.*** Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by

the California Building Standards Commission, and the code is updated every 3 years. The CBC is in Title 24, Part 2, of the CCR. The most recent building standard adopted by the Legislature and used throughout the State is the 2022 CBC, which took effect on January 1, 2023. Local jurisdictions may add amendments based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and people by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC's provisions for earthquake safety are based on factors such as occupancy type, the types of soil and rock on site, and the strength of ground motion with a specified probability at the site.

In the context of earthquake hazards, the CBC's design standards have a primary objective of assuring public safety and a secondary goal of minimizing property damage and maintaining function during and following a seismic event. Recognizing that the risk of severe seismic ground motion varies from place to place, the CBC seismic code provisions will vary depending on location (Seismic Zones 0, 1, 2, 3, and 4, with 0 being the least stringent and 4 being the most stringent). The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

***California Building Code Section 1803 (Requirements for Geotechnical Investigations).*** Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other types of structures are in the California Health and Safety Code, Sections 17953 to 17955, and in Section 1803 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Investigations must be conducted by a registered design professional and involve in-situ testing, laboratory testing, or engineering calculations. Studies must be done as needed to evaluate slope stability, soil strength, position, and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

**Local Regulations.**

***Amador County General Plan.*** The County acknowledges that the risk of seismic hazards is low in the county due to its lack of proximity to any known, active faults. However, the County has chosen to adopt the standards set forth in the CBC in order to ensure the structural integrity of buildings during seismic events. Additionally, the County has committed to emergency preparedness, including its disaster response, in coordination with other relevant local agencies. Currently developed emergency preparedness plans include, but are not limited to, the Amador County Emergency Operations Plan, the Amador County Long Term Care Facility Evacuation

Plan, the Amador County Hazardous Materials Plan, and the Amador County Auxiliary Communications Plan.[23]

***Amador County Erosion Control Ordinance.*** The Erosion Control Ordinance was established by the County in order to "set forth rules and regulations by which excavation, grading, and earthwork construction, including fills and cuts, embankments and impoundment structures (collectively "excavation") are to be reviewed and permitted by the county."[24] Under this ordinance, the County maintains jurisdiction over the issuance of permits required for excavation activities and maintains the authority to inspect and enforce compliance with erosion control measures.

### 4.7.2 Impact Analysis

*a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

*i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

**Less Than Significant Impact.** Based on the geotechnical study prepared for the proposed Project, the Project area is not within an Alquist-Priolo Earthquake Fault Zone. The 10 closest faults to the Project site are approximately 50 to 66 miles from the Project site.[25] Because no active faults with the potential for surface rupture are known to pass through or underneath the Project site, the potential for rupture due to faulting is considered low. As the site does not fall within an Alquist-Priolo Fault Zone, it is therefore not subject to any building restrictions. The proposed Project would be constructed to standards consistent with CBC guidelines, particularly those pertaining to earthquake design, in order to safeguard against major structural failures and loss of life. Therefore, no people or structures would be exposed to potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As a result, impacts would be less than significant.

*ii. Strong seismic ground shaking?*

**Less Than Significant Impact.** As discussed above, because of the distance between the Project site and known faults and the historic seismic record of the area, the risk of seismic ground

[23] Amador County. 2016. Amador County General Plan, Safety Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

[24] Amador County. 2024. Amador County Code, Erosion Control Ordinance. Available at: https://www.codepublishing.com/CA/AmadorCounty/html/AmadorCounty15/AmadorCounty1540.html#15.40.070 (accessed November 2024).

[25] Salem Engineering Group, Inc. 2023. *Geotechnical Engineering Investigation Report for the Proposed Water Distribution System Piping, Ione Band of Miwok Indians. Ione, California.*

shaking is considered relatively low for the Project site. Therefore, impacts related to strong seismic ground shaking would be less than significant.

*iii. Seismic-related ground failure, including liquefaction?*

**Less Than Significant Impact.** Soil liquefaction can occur as a result of seismic conditions. Liquefaction is the temporary transformation of saturated, noncohesive material from a relatively stable, solid condition to a liquefied state as a result of increased soil pore water pressure. Soil pore water pressure is the water pressure between soil particles. Liquefaction can occur if three factors are present: seismic activity, loose sand or silt, and shallow groundwater.

The Project site has not been previously mapped by the State of California Seismic Hazard Zonation Program, and the Project site is not located within any locally designated seismic hazard zone.[26] Based on the shallow depth and relatively dense sedimentary conditions of the Valley Springs Formation found beneath the Project site, the potential for liquefaction within the site is considered low. Therefore, the proposed Project would not expose people or structures to potential hazards associated with seismic-related ground failure, including liquefaction, and the impact would be less than significant.

*iv. Landslides?*

**Less Than Significant Impact.** While the Amador County General Plan notes that landslides are a potential hazard within the county, there have been no known landslides at the Project site and the site is not in the path of any potential landslides. [27] [28] Therefore, impacts related to landslides would be less than significant.

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

**Less Than Significant Impact.** Soil erosion is a process whereby soil materials are worn down and transported off site to another area, typically by wind or water. The rate of erosion typically varies depending on the type of soil, placement, and human activity. Soils that contain high amounts of silt are more easily eroded, while sandy soils are generally less susceptible to erosion. Excessive soil erosion can have adverse effects on building foundations and roadways. Generally, erosion is most likely to occur on sloped areas with exposed soil, especially when unnatural slopes are created by cut-and-fill activities. Construction phases have the potential to cause elevated erosion rates. The potential for erosion is typically reduced once the soil has been graded and covered with concrete, structures, or asphalt.

Construction of the proposed Project would require grading and earthwork, leaving bare earth that could result in temporary soil erosion and loss of topsoil on the Project site. The proposed Project would consolidate the IBMI water distribution with the JVID in order to provide potable water to 14

[26] Salem Engineering Group, Inc. 2023. *Geotechnical Engineering Investigation Report for the Proposed Water Distribution System Piping, Ione Band of Miwok Indians. Ione, California*.
[27] Amador County. 2016. Amador County General Plan, Safety Element. op. cit.
[28] Salem Engineering Group, Inc. 2023. op. cit.

residences on the Project site. The installation of approximately 4,300 feet of new 4-inch HDPE piping is expected to occur. Trenching is not anticipated to exceed 3 to 4 feet below existing grade. An estimated 625 cubic yards of soil import (sand) and 650 cubic yards of soil export (native soil) are anticipated during Project construction. The proposed Project would comply with the County's Erosion Control Ordinance, which specifies that all permits issued by the County causing land disturbance include standard erosion control measures. Soil erosion and loss of topsoil would also be minimized through compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements (see Section 4.10, Hydrology and Water Quality). Therefore, the Project would not result in substantial erosion of loss of topsoil. The impact would be less than significant.

*c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant Impact.** See the discussions above in Section 4.7.2a. The proposed Project would not produce a substantial change in grading or topography. The Project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, the impact would be less than significant.

*d. Would the project 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.** Expansive soils can swell or shrink in response to changes in moisture, which could cause damage to infrastructure located on expansive soils. The Project site is not located in an area with high potential for expansive soils to cause risks to life or property due to expansive soils. Additionally, the proposed Project would be required to comply with any applicable building codes. The impact would be less than significant.

*e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

**Less Than Significant Impact.** The proposed Project would consolidate the IBMI water distribution with the JVID in order to provide potable water to 14 residences on the Project site. The installation of approximately 4,300 feet of new 4-inch HDPE piping is expected to occur. Trenching is not anticipated to exceed 3 to 4 feet below existing grade. The wastewater management system is separate from the potable water distribution system the Project would install. The proposed Project does not include any plans to make alterations to any septic tanks or provide alternative wastewater disposal systems. As such, the impact would be less than significant.

*f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less Than Significant Impact with Mitigation.** Paleontological resources are the mineralized (fossilized) remains of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock

formations) where they were originally buried. Fossil remains are considered important because they provide indicators of the Earth's chronology and history. These resources are afforded protection under CEQA as they are limited and nonrenewable, and provide invaluable scientific and educational data. Due to the sensitive nature of these paleontological resources, they are not mapped.

Implementation of the proposed Project would require ground-disturbing construction activities that may inadvertently encounter and damage paleontological resources. Should this occur, Project construction may result in the destruction of a unique paleontological site, resulting in a potentially significant impact. Mitigation Measure GEO-1 would reduce this impact to less than significant.

**Mitigation Measure GEO-1** The Ione Band of Miwok Indians (IBMI) shall inform its contractor(s) of the sensitivity of the Project area for paleontological resources. Should paleontological resources be encountered during Project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist shall be contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found to be significant and Project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, preparing a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the IBMI for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology. The IBMI shall verify that the above directive has been included in the appropriate contract documents.

## 4.8 GREENHOUSE GAS EMISSIONS

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

### 4.8.1 Existing Setting

#### 4.8.1.1 Environmental Setting

The following discussion describes existing greenhouse gas (GHG) emissions in Amador County and the ACAPCD, beginning with a discussion of typical GHG types and sources, impacts of global climate changes, the regulatory framework surrounding these issues, and current emission levels.

**Global Climate Change.** GHGs are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although manmade GHGs include naturally occurring GHGs such as carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$), some gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride ($NF_3$), and sulfur hexafluoride ($SF_6$) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to $CO_2$, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of $CO_2$ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of carbon dioxide equivalent ($CO_2e$).

#### 4.8.1.2 Regulatory Setting

**Federal Regulations.** The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate $CO_2$ emissions under the CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that six GHGs ($CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

**State Regulations.** CARB is the lead agency for implementing climate change regulations in the state. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

***Assembly Bill 32 (2006), California Global Warming Solutions Act.*** California's major initiative for reducing GHG emissions is AB 32, passed by the State Legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of $CO_2e$. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires CARB to prepare a Scoping Plan that outlines the main state strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT $CO_2e$, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT $CO_2e$ under a business-as-usual scenario (this is a reduction of 42 MMT $CO_2e$, or almost 10 percent, from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards: Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT $CO_2e$);

- The Low-Carbon Fuel Standard (15.0 MMT $CO_2e$);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT $CO_2e$); and
- A Renewable Portfolio Standard (RPS) for electricity production (21.3 MMT $CO_2e$).

CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First

Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. This update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32.[29]

The 2022 Scoping Plan was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045.[30] The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

***Senate Bill 375 (2008).*** Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every 4 years and must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction target, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

***Executive Order B-30-15 (2015).*** Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target and, therefore, is moving forward with the update process. The midterm target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

[29] California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. November.
[30] California Air Resources Board (CARB). 2022. 2022 Scoping Plan. November 16. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

***Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act.*** SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's RPS from 33 percent to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved using existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

***Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197.*** In summer 2016 the Legislature passed, and the Governor signed, SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32, described above, and keeps California on the path toward achieving its 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million (ppm) $CO_2e$ and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data collected by CARB was posted in December 2016.

***Senate Bill 100 (SB 100).*** On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

***Executive Order B-55-18.*** EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of $CO_2e$ from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

***Assembly Bill (AB) 1279.*** AB 1279 was signed in September 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant State agencies to achieve these goals.

**Local Regulations.**

***Amador County General Plan.*** Amador County addresses GHGs in the Conservation Element of the County's General Plan. This element includes goals and policies that work to reduce emissions of GHGs that contribute to global climate change in accordance with federal and State law. The following polices from the Conservation Element are applicable to the proposed Project:[31]

- **Goal C-10:** Reduce GHG emissions associated with automobile travel, electrical power generation and energy use.
- **Policy C-10.1:** Evaluate the potential effects of climate change on the county's human and natural systems and prepare strategies that allow the County to appropriately respond and adapt.
- **Policy C-10.2:** Develop and adopt a comprehensive strategy to reduce GHGs within Amador County by at least 15 percent from current levels by 2020.
- **Policy C-10.5:** Require new development projects to incorporate building placement and design features to increase energy efficiency in new structures.
- **Policy C-10.8:** Expand recycling and waste minimization efforts, including recycling of construction and demolition materials.

### 4.8.2 Impact Analysis

*a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less Than Significant Impact.** This section discusses the proposed Project's potential impacts related to the release of GHG emissions for both construction and Project operation. Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the Project may increase or reduce GHG emissions as compared to the existing environmental setting, whether

[31] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

the Project emissions exceed a threshold of significance that the lead agency determines applies to the Project, and the extent to which the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Neither Amador County nor the ACAPCD has developed or adopted numeric GHG significance thresholds. Therefore, this analysis evaluates the GHG emissions based on the proposed Project's consistency with State GHG reduction goals.

***Construction Greenhouse Gas Emissions.*** Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as $CO_2$, $CH_4$, and $N_2O$. Furthermore, $CH_4$ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As discussed above, neither the County nor ACAPCD has an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed Project would generate a total of approximately 463.54 metric tons of $CO_2e$. When considered over the 30-year life of the Project, the total amortized construction emissions for the proposed Project would be 15.5 metric tons of $CO_2e$ per year. These emissions would be minimal; therefore, Project-level and cumulative GHG emissions during construction activities would be less than significant, and no mitigation would be required.

***Operational Greenhouse Gas Emissions.*** Long-term GHG emissions are typically generated from mobile, area, waste, and water sources, as well as indirect emissions from sources associated with energy consumption.

As discussed in Section 4.3, Air Quality, the proposed Project would include improvements to the IBMI water distribution system through consolidation with the JVID's system located along Jackson Valley Road. Upon completion of construction activities, operation and maintenance associated with the proposed Project would remain the same as currently occurs for the existing pipelines. As described in Section 4.17, Transportation, minimal additional trips are anticipated due to implementation of the proposed Project (e.g., routine inspections and maintenance). As such, the proposed Project would not result in a significant increase in the generation of vehicle trips or VMT that would increase GHG emissions. The Project also would also not be a substantial source of energy-, area-, waste-, or water-source emissions. Therefore, the proposed Project would not generate GHG emissions that would have a significant impact on the environment. Therefore, impacts would be less than significant.

*b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Less Than Significant Impact.** The proposed Project is further analyzed for consistency with the goals of the 2022 Scoping Plan and AB 1279.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32.[32] SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving its 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil-fuel-combustion vehicles.

Energy-efficient measures are intended to maximize energy efficiency building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in Section 4.6.1.b, energy usage on the Project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed

[32] California Air Resources Board (CARB). 2017. op. cit.

Project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Therefore, the proposed Project would not conflict with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The purpose of the proposed Project is to provide portable water to 14 residences on the Project site as well as maintain existing water distribution systems, including irrigation and fire protection systems. Therefore, the proposed Project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. As specified by the 2022 Scoping Plan, GHG emissions from new cars are anticipated to be reduced by 34 percent from 2016 levels by 2025. Specific regional emission targets for transportation emissions would not directly apply to the proposed Project. Therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

The proposed Project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279 and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

## 4.9 HAZARDS AND HAZARDOUS MATERIALS

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |

### 4.9.1 Existing Setting

#### 4.9.1.1 Environmental Setting

The Project site is located within a 40-acre rural residential area approximately 3 miles southwest of Ione in Amador County. Surrounding land uses include pasture, orchards, and vineyards. The nearest schools to the Project site are Ione Elementary School and Ione Junior High School, both located in Ione approximately 3.1 miles and 3.3 miles, respectively, north of the Project site.

**Hazardous Sites Near Proposed Project.** The California Environmental Protection Agency (CalEPA) is required to compile, maintain, and update lists annually of hazardous material releases under California Government Code Section 65962.5. The California Department of Toxic Substances Control (DTSC) is responsible for maintaining the Hazardous Waste and Substances Site List (Cortese List) along with other State and local government agencies to provide additional hazardous material release information for annual updates. The DTSC also maintains the online EnviroStor database, which includes records of hazardous material release sites along with other categories of sites or

facilities specific to each agency's jurisdiction. A review of the DTSC's online EnviroStor database[33] and the Cortese List[34] indicates that the closest active hazardous materials site is located approximately 4 miles east of the Project site and not in the immediate vicinity of the Project site.

#### 4.9.1.2 Regulatory Setting

**Federal Regulations.**

***Toxic Substances Control Act.*** Established in 1976 and amended on December 31, 2002, the Toxic Substances Control Act (TSCA) (15 USC Section 2601-2692) grants the USEPA power to require proper reporting, recordkeeping, and testing requirements related to chemical substances and/or mixtures. Specifically, the TSCA addresses the production, importation, use, and disposal of specific chemicals, including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paints (LBP). The TSCA establishes the USEPA's authority to require the notification of the use of chemicals, require testing, maintain a TSCA inventory, and require those importing chemicals under Sections 12(b) and 13 to comply with certification and/or other reporting requirements. This federal legislation also phased out the use of asbestos-containing materials in new building materials and sets requirements for the use, handling, and disposal of asbestos-containing materials. Disposal standards for LBP wastes are also detailed in the TSCA.

***Hazardous Materials Transportation Act – Safe Transport of Hazardous Materials.*** The United States Department of Transportation (DOT) regulates hazardous materials transportation between states under CFR Title 49, Chapter 1, Part 100-185. Within California, Caltrans and the California Highway Patrol (CHP) enforce federal law. Together, these agencies determine driver training requirements, load labeling procedures, and specifications for container types to be used.

***Federal Emergency Management Agency.*** With respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, State, and local levels. Enforcement of these laws and regulations is delegated to State and local environmental regulatory agencies.

***Resource Conservation and Recovery Act.*** The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and nonhazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous materials handling facilities.

The 1984 RCRA amendments provide the framework for a regulatory program designed to prevent releases from underground storage tanks (USTs). The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks

33 California Department of Toxic Substances Control (DTSC). 2024a. Envirostor: Facilities with Corrective Actions. Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES (accessed October 2024).

34 Ibid.

must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards.

**State Regulations.**

***California Health and Safety Code and Code of Regulations.*** Business emergency plans and chemical inventory reporting is mandated under California Health and Safety Code Chapter 6.95 and CCR Title 19, Section 2729. Businesses are required to provide emergency response plans and procedures, training program information, and a hazardous materials chemical inventory disclosing hazardous materials stored, used, or handled on site. If a business uses hazardous materials in certain quantities (standalone or in use with other product), an emergency plan must be provided.

***California Environmental Protection Agency.*** CalEPA is authorized by the USEPA to enforce and implement certain laws and regulations regarding hazardous materials. Under CalEPA, the DTSC protects the State and people from hazardous waste exposure under RCRA and the California Health and Safety Code. The DTSC requirements include written programs and response plans such as the preparation of a Hazardous Materials Business Plan (HMBP). Programs under the DTSC include aftermath cleanup of improper hazardous waste management; evaluation of samples taken from sites; regulation enforcement regarding use, storage, and disposal of hazardous materials; and encouragement of pollution prevention.

***California Division of Occupational Safety and Health (Cal/OSHA).*** Cal/OSHA is the State-level agency responsible for ensuring workplace safety and is responsible for adoption and enforcement of workplace safety standards and safety practices. If a site is contaminated, a Site Safety Plan must be created and implemented for the safety of workers. A Site Safety Plan establishes policies, practices, and procedures for workers and the public to follow to prevent exposure to hazardous materials originating from a contaminated site or building.

***California Building Code.*** The CBC, contained in CCR Title 24, Part 2, identifies building design standards and includes standards for fire safety. The CBC is updated every 3 years, with the most recent version of the code effective January 1, 2023. The CBC is effective statewide; however, local jurisdictions may adopt more restrictive standards based on a locality's conditions. A local city and country building official must check plans for commercial and residential buildings to ensure compliance with the CBC. Fire safety compliance with the CBC includes fire sprinkler installation in all new residential, high rise, and hazardous materials buildings; establishment of fire-resistant standards for fire doors, building materials, and certain types of construction; and debris and vegetation clearance within a prescribed distance from occupied structures in wildfire hazard areas.

***California Department of Forestry and Fire Protection (CAL FIRE).*** PRC 4201-4204 and Government Code 51175-89 require CAL FIRE to evaluate fire threat potential and hazard severity according to areas of responsibility (i.e., State and local). Evaluations are based on topography, fire history, and climate, and include fire threat rankings. In 2012, CAL FIRE produced the Strategic Plan for California, which contains goals, objectives, and policies to prepare and mitigate for the effects of fire on California's natural and built environments. The

Strategic Plan was updated in 2019 to reaffirm, with minor adjustments, the Mission, Vision, and Values of the 2012 Strategic Plan.

***California Fire Code.*** The California Fire Code (CFC) is updated every 3 years, with the most current update effective January 1, 2023. The CFC contained in CCR Title 24, Part 9, incorporates by adoption the International Fire Code of the International Code Council with California amendments. Local jurisdictions can also adopt more restrictive standards based on local conditions, as previously mentioned with the CBC. The CFC regulates building standards, fire department access, fire protection systems and devices, fire and explosion hazard safety, hazardous materials storage and use, and building inspection standards.

**Local Regulations.** The Amador County Office of Emergency Services is in charge of preparing the Emergency Operations Plan for Amador County. The following plans would be applicable to the Project:

***Amador County Local Hazard Mitigation Plan.*** [35] This plan is a multijurisdictional effort among the County and the cities of Amador, Ione, Jackson, Plymouth, and Sutter Creek, as well as the Amador Water Agency and the JVID. The plan's goal is to reduce or eliminate long-term risk to people and property from natural hazards and their effect. The plan also meets the Disaster Mitigation Act of 2000 to maintain the County's eligibility for FEMA's Pre-Disaster Mitigation and Hazard Mitigation Grant Programs. The plan also lays out the County's strategy to become less vulnerable to any future disasters.

***Amador County Hazardous Materials Area Plan.*** [36] This plan covers pre-incident preparedness and planning for the release of hazardous materials. It covers the County's hazardous materials incident response program, training, communications, and post-incident recovery procedures. The plan meets the Certified Unified Program Agency (CUPA) regulatory program requirements established by State law.

### 4.9.2 Impact Analysis

*a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less Than Significant Impact.** Hazardous materials are chemicals that could potentially cause harm as the result of an accidental release and are defined as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer. Hazardous substances include all chemicals that fall under the DOT's "hazardous materials" regulations and the USEPA's "hazardous waste" regulations. Because of their potential to damage public health and the environment, hazardous waste requires special handling and proper disposal.

35 Amador County. 2020. Local Hazard Mitigation Plan. Available at: amadorgov.org/home/showpublisheddocument/51830/638375527942730000 (accessed October 2024).

36 Amador County. 2014. Hazardous Materials Area Plan. Available at: https://www.amadorgov.org/departments/environmental-health/hazardous-materials-cupa/area-plan (accessed October 2024).

***Construction.*** Exposure to hazardous materials during the construction of the proposed Project could result from the improper handling or use of hazardous substances or an inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake). The severity of any such exposure is dependent upon the type, amount, and characteristic of the hazardous material involved; the timing, location, and nature of the event; and the sensitivity of the individual or environment affected.

Construction of the proposed Project would likely require the use of limited quantities of hazardous materials, such as fuels, oils, lubricants, and solvents. The small quantities of hazardous materials that would be transported, used, or disposed of would be well below reportable quantities. The improper use, storage handling, transport, or disposal of hazardous materials during construction could result in accidental release exposing construction workers, the public, and the environment, including soil and/or ground or surface water to adverse effects. Construction activities would be conducted with standard construction practices and in accordance with all applicable Cal/OSHA and other safety regulations to minimize the risk to the public. Compliance with federal, State, and local hazardous materials laws and regulations would minimize the risk to the public presented by these potential hazards during Project construction. Transportation of any hazardous materials generated by excavation is regulated by the DOT and Caltrans. As such, transportation of hazardous materials off site must be handled by licensed hazardous waste haulers.

***Operation.*** Operation and maintenance of the new water distribution system would also involve the transport, use, storage, and disposal of minimal quantities of hazardous materials (e.g., cleaners, fuels, lubricants, hydraulic fluids). Any business with hazardous materials storage, use, handling, or disposal is required to comply with federal, State, and local requirements for managing hazardous materials and wastes. Businesses that use hazardous materials are required to submit a Hazardous Materials Business Plan to the local CUPA, which performs inspections to ensure compliance with hazardous materials labeling, training, and storage regulations.[37]

In summary, the proposed Project would be required to comply with all applicable safety regulations and widely accepted industry standards, which would minimize the hazard to the public and environment. The proposed Project is not expected to require the transportation or use of large quantities of hazardous materials. Construction and operation of the Project would be required to comply with the Uniform Fire Code and local building codes regarding the storage of hazardous materials and construction of structures containing hazardous materials. Therefore, potential impacts associated with the transport, use, storage, handling, and disposal of hazardous materials during operation of the Project would be less than significant, and no mitigation is required.

[37] Amador County. n.d. *Instructions for Completing CERS Consolidated Emergency Response/Contingency Plan.* Available at: https://www.amadorgov.org/home/showpublisheddocument/10460/635219509683530000 (accessed November 2024).

*b. Would the project 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.** As specified under the response above, the Project would be required to comply with existing safety regulations and industry standards that would minimize the hazard to the public and the environment. Therefore, the proposed Project would not result in a significant hazard to the public or the environment through a reasonably foreseeable upset or accident condition related to the release of hazardous materials. The impact would be less than significant.

*c. Would the project 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 Project site is located within an approximately 40-acre rural residential area approximately 3 miles southwest of Ione in Amador County. Surrounding land uses include pasture, orchards, and vineyards. The nearest schools to the Project site are Ione Elementary School and Ione Junior High School, both located in Ione approximately 3.1 miles and 3.3 miles, respectively, north of the Project site. Therefore, the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. The impact would be less than significant, and no mitigation is required.

*d. Would the project 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.** As discussed under the environmental setting section above, the Project site does not contain hazardous materials and is not in the immediate vicinity of a hazardous materials site. The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, no impacts related to this issue are anticipated, and no mitigation is required.

*e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

**No Impact.** The proposed Project is not located within 2 miles of a public or public use airport. The nearest public use airport is the Westover Field Amador County Airport, located approximately 10.5 miles northeast of the Project site. The closest private use airports—Howard Private Airport and Camanche Skypark Airport—are located approximately 4.5 miles southeast of the Project site. The proposed Project would install a new water distribution system on the Project site and would not result in a safety hazard or excessive noise for people residing or working in the Project area. As a result, no impact would occur.

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** The proposed Project would not result in interference with any adopted emergency response plan or evacuation plan. Regional access to the Project site is provided via Jackson Valley Road, which connects nearby to SR-88 and Dave Brubeck Road. The proposed Project would install a new water distribution system on the Project site and would not result in the development of structures or alterations to existing roadways. Therefore, development and operation of the proposed Project is not anticipated to interfere with any emergency evacuation plan, and no impact would occur.

*g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

**Less Than Significant Impact.** CAL FIRE generates statewide maps to assess an area's Fire Hazard Severity. According to the most recent data available, the Project site is categorized as a High Fire Hazard Severity Zone.[38] However, the proposed Project would construct a new water distribution system to provide potable water to residents of the Project site, and the existing water distribution system would be repurposed to provide nonpotable water for irrigation and fire protection services. The repurposed system would include three wharf style fire hydrants to provide access to an emergency water supply throughout the Project site. Changes to the existing fire protection services system is not anticipated, and the proposed Project includes the installation of one additional fire hydrant located to the south across Jackson Valley Road. This hydrant would be connected to an existing JVID irrigation system providing access to an additional water supply independent of the repurposed on-site irrigation system. At a minimum, the proposed Project would maintain the existing level of fire protection services at the Project site. Additionally, the proposed Project would not result in the development of structures or alterations to existing roadways that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Therefore, the impact would be less than significant.

[38] California Department of Forestry and Fire Protection. 2024. Fire Hazard Severity Zones Maps. Available at: https://www.fire.ca.gov/osfm/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022 (accessed October 2024).

## 4.10 HYDROLOGY AND WATER QUALITY

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

### 4.10.1 Existing Setting

#### 4.10.1.1 Environmental Setting

Aquatic resources in the vicinity of the Project site include fresh emergent wetland ponds to the east, west, and south and an ephemeral stream on the opposite side of Jackson Valley Road. There are no aquatic features within the Project site; however, two fresh emergent wetland areas are located within 500 feet of the Project area. The largest bodies of water near the Project site are Lake Amador and Pardee Reservoir, which are located approximately 5 and 6 miles east of the Project site, respectively.

#### 4.10.1.2 Regulatory Setting

**Federal Regulations.**

***Clean Water Act.*** The CWA, enacted in 1977, provides the framework for regulating discharges of pollutants into water and regulating surface water quality standards. The USEPA is the federal responsible agency and is authorized under the CWA to implement water-quality regulations to reduce water contamination and restore the integrity of the nation's waters. Under Section 402(p) of the CWA, otherwise known as the NPDES, stormwater discharges are regulated to

prevent water pollution. California has an approved State NPDES program, and the SWRCB and nine RWQCBs implement the program.

The CWA, under Section 303(d) also requires each state to identify water bodies or segments of water bodies that are considered "impaired" if they do not meet one or more of the water-quality standards established by the state. Impaired waters are considered polluted and need further attention to support their beneficial uses. A total maximum daily load (TMDL) must be established for the pollutant causing the conditions of impairment. TMDL is the maximum amount of a pollutant that a water body can receive and still meet water-quality standards. Categories 5, 4a, and 4b are considered part of Section 303(d), indicating water quality parameters are not being met. Section 401 requires a federal permit if an activity may result in discharge to "waters of the United States." Discharge must comply with other provisions of the act. Discharging other pollutants into waters of the United States are covered in Sections 402 and 403.

***National Pollutant Discharge Elimination System Permit.*** Section 402 of the CWA established the NPDES to control water pollution by regulating point sources that discharge pollutants into waters of the United States. In the State of California, the USEPA has authorized the SWRCB and the RWQCBs as the permitting authorities to implement the NPDES program. The SWRCB issues two-baseline general permits, including one for industrial operations and the other for construction activities (Construction General Permit [CGP], Order WQ 2022-0057-DWQ, NPDES NO. CAS000002). Additionally, the NPDES program includes the regulation of stormwater discharges from cities, counties, and other municipalities.

Under the CGP, stormwater discharges from construction sites with a disturbed area of 1 or more acres are required to obtain either individual NPDES permits for stormwater discharges or be covered by the CGP. Coverage under the CGP is accomplished by completing and filing a Notice of Intent with the SWRCB or RWQCB. Each applicant under the CGP is required to both prepare a SWPPP prior to the commencement of grading activities and to ensure implementation of the SWPPP during construction activities. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction activities. BMPs may include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. The SWPPP would also address BMPs developed specifically to reduce pollutants in stormwater discharges following the completion of construction activities.

***National Flood Insurance Program.*** The National Flood Insurance Act passed in 1968 and is mandated by FEMA to evaluate flood hazards. The Flood Disaster Protection Act of 1973 also supports this act. Flood Insurance Rate Maps (FIRMs) for local and regional planners are provided by FEMA to promote sound land use and floodplain development and identify potential flood areas based on current conditions. Flood Insurance Studies are conducted by FEMA engineers and cartographers in order to delineate Special Flood Hazard Areas (SFHAs) on FIRMs.

**State Regulations.**

***Porter-Cologne Water Quality Control Act of 1970.*** The federal CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Act. The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the federal CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste.

**Local Regulations.**

***Amador County General Plan.*** The Amador County General Plan includes policies that address hydrology and water use applicable to the proposed Project, as described below. [39]

- **Policy C-1.3:** Limit reliance on groundwater wells as sources for community water systems. Where possible, encourage connection of developments to existing water supply systems.

- **Policy C-2.2:** Encourage conjunctive use of groundwater and surface water by water agencies to improve water supply reliability.

### 4.10.2 Impact Analysis

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

**Less Than Significant Impact.** The proposed Project would construct a new water distribution system to provide potable water to residents on the Project site. The existing water distribution system has experienced bacteriological contamination and cracks and failures in the piping. The proposed Project would improve water quality for residents by consolidating the water distribution system with the JVID, which would be responsible for maintaining the quality of the water. The existing water distribution system would be maintained for nonpotable water uses only, including

[39] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

fire suppression, and it would be the responsibility of the IBMI to maintain functionality of the repurposed system.

Potential impacts related to water quality standards, waste discharge requirements, and surface and groundwater quality would be less than significant. During construction, potential pollutants of concern could include sediment, trash, petroleum products, sanitary waste, and chemicals. On their own or when combined with other pollutants, each of these has the potential to cause detrimental effects on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Stormwater runoff has the potential to carry uncontained pollutants away from the Project site.

Because the proposed Project would disturb more than 1 acre of soil, the Project is subject to the requirements of the SWRCB's 2022 CGP. On-site construction activities subject to the CGP include clearing, grading, excavation, and soil stockpiling. The CGP also requires the development of a SWPPP by a Qualified SWPPP Developer. A SWPPP is required to identify all potential pollutants and their sources, including erosion, sediments, and construction materials, and must include a list of BMPs to reduce the risk of discharge caused by construction. The SWPPP must also include a detailed description of controls to reduce pollutants and outline a project's maintenance and inspection procedures. Typical BMPs for the management of sediment and erosion include protecting storm drain inlets and maintaining perimeter controls to avoid transporting sediment onto adjacent roadways. The SWPPP must also define proper building materials, establish staging and storage areas, describe proper equipment fueling and maintenance, and include a spill prevention and response plan.

Required compliance with relevant regulations regarding stormwater during construction would ensure that the proposed Project would result in less than significant impacts to water quality during construction. In addition, the Project would improve the quality of potable water being used by residents of the site. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

### *b. Would the project 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.** MKN & Associates, Inc. prepared an updated Water System Improvement Engineering Report in June 2024.[40] The report estimated the average day demand (ADD) for the 14 residences served by the current IBMI system at 5,253 gallons per day (gpd). Adjusted for the peak factor established by California Code Standard Waterworks, the projected maximum day demand (MDD) is estimated at 11,819 gpd.

[40] MKN & Associates, Inc. 2024. op. cit.

The proposed Project would provide improvements to the IBMI's water distribution system through consolidation with the JVID to provide potable water to 14 residences on the Project site. The IBMI's existing distribution system would be repurposed to provide nonpotable water for irrigation and fire protection services. The JVID maintains water rights from nearby Lake Pardee, which is its primary water source, as well as Lake Amador, which serves as a secondary water source. Because the JVID would only be responsible for supplying potable water for indoor uses associated with a small number of residences, this would result in a minimal strain on the JVID's existing water supply. The JVID has confirmed its ability to meet the demand for indoor potable water use without overstraining the capacity of its system.[41]

One groundwater well located on the Project site would remain active to supply nonpotable water for irrigation and fire protection services. Because this well would no longer be used to supply water for indoor use, groundwater use on the Project site would also be significantly reduced. In addition, the proposed Project would not significantly increase impervious area or prevent water from infiltrating. Therefore, the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin. The impact would be less than significant.

*c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*i. Result in substantial erosion or siltation on- or off-site;*

**Less Than Significant Impact.** Implementation of the proposed Project would include excavation for the installation of new 4-inch HDPE piping and other water distribution infrastructure. The proposed Project expects to export approximately 650 cubic yards of native soil during construction and import approximately 625 cubic yards of sand. Exposed soils are susceptible to erosion when they are subjected to wind and surface flows. As previously discussed in Section 4.7.2.b above, the Project would be required to comply with the Amador County Erosion Control Ordinance, including obtaining all applicable permits (i.e., NPDES permit). Due to the size and scale of the proposed Project, as well as compliance with the County's Erosion Control Ordinance, the proposed Project would not result in substantial erosion or siltation on or off site. The impact would be less than significant.

*ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*

**Less Than Significant Impact.** An approximately 2-acre portion of the Project site in the southwest corner adjacent to Jackson Valley Road is identified by FEMA as a high-risk flood zone (Zone A). In addition, the proposed site is bordered to the south by a high-risk flood zone, and high-risk flood zones are found throughout southwestern Amador County. However, the proposed Project would not prevent water from infiltrating the groundwater. Permanent changes to impervious surfaces are not expected to occur as a result of the proposed Project.

41 MKN & Associates, Inc. 2024. op. cit.

Therefore, implementation of the proposed Project would not substantially increase the rate or amount of surface runoff that would result in flooding on or off site. This impact would be less than significant.

*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*

**Less Than Significant Impact.** As discussed above, implementation of the proposed Project would not cause permanent alterations to impervious surfaces, and the Project would not substantially increase the rate or amount of surface runoff that would exceed the capacity or existing or planned stormwater drainage systems or provide additional sources of polluted runoff. This impact would be less than significant.

*iv. Impede or redirect flood flows?*

**Less Than Significant Impact.** As discussed above in the responses above, the proposed Project would not prevent water from infiltrating groundwater or cause permanent changes to impervious surfaces within the vicinity of the Project site. While a small section of the Project site is located within a high-risk flood zone and other high-risk flood zones are located nearby, the proposed Project would not impede or redirect a flood flow. The risk of flooding due to implementation of the Project would be less than significant.

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

**Less Than Significant Impact.** As previously discussed, a small section of the Project site is classified as a high-risk flood zone and other high-risk flood zones are located near the Project site. During construction of the Project, the risk of pollutant exposure and runoff would be increased. However, compliance with the SWPPP would include the proper storage of pollutants during construction and include a spill prevention and response plan. After completion of construction of the proposed Project, the risk of release of pollutants due to Project inundation would not be substantially increased. The Project site is not located within a tsunami or seiche zone. The impact would be less than significant.

*e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**Less Than Significant Impact.** As discussed above in Section 4.10.2.a, pollutants of concern during construction could include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. These pollutants may percolate to shallow groundwater from construction activities. However, required compliance with State and local regulations regarding stormwater during

construction would ensure that the proposed Project would result in less than significant impacts to water quality during construction.

As discussed above in Section 4.10.2.b, the proposed Project would consolidate the IBMI's water distribution system with the JVID to provide potable water to 14 residences on the Project site. The IBMI's existing distribution system would be repurposed to provide nonpotable water for irrigation and fire protection services. Indoor potable water would be supplied by the JVID, which relies on surface water sourced from nearby lakes Pardee and Amador. Because the JVID would only be responsible for supplying potable water for indoor uses associated with a small number of residences, this would result in a minimal strain on the JVID's water supply, and the JVID has confirmed its ability to meet the proposed Project's water use demand. In addition, the Project would improve the quality of potable water being used by residents of the site. Therefore, operation of the proposed Project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The impact would be less than significant.

## 4.11 LAND USE AND PLANNING

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

### 4.11.1 Existing Setting

#### 4.11.1.1 Environmental Setting

The Project site is located within an approximately 40-acre rural residential area approximately 3 miles southwest of Ione in Amador County. The Project site contains 14 residences and is currently zoned as a special use district by Amador County. Surrounding land uses include pasture, orchards, and vineyards.

#### 4.11.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to land use and planning for the proposed Project.

**State Regulations.**

***The Cortese-Knox-Hertzberg Local Government Reorganization Act.*** The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56300 et seq.) governs the establishment and revision of local government boundaries. The act was a comprehensive revision of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 1985. The act is a policy of the State to encourage orderly growth and development that is essential to the social, fiscal, and economic well-being of the State. The intent of the act is to promote orderly development while balancing competing State interests of discouraging urban sprawl, preserving open space and prime agricultural lands, and efficiently extending government services.

***Comprehensive Long-Range General Plan.*** California planning law requires cities and counties to prepare and adopt a "comprehensive, long-range general plan" to guide development (Government Code Section 65300). In order to successfully guide long-range development, a general plan requires a complex set of analyses, comprehensive public outreach and input, and public policy for a vast range of topic areas. State law also specifies the content of general plans. A general plan must contain development policies, diagrams, and text that describe objectives, principles, standards, and plan proposals.

**Local Regulations.**

***Amador County General Plan.*** The Amador County General Plan contains the following land use and planning policy that would apply to the proposed Project[42]:

- **Policy LU-1.3:** Encourage development patterns which support water quality objectives; protect agricultural land and natural resources; promote community identities; minimize environmental impacts; enable viable transit, bicycle and pedestrian transportation; reduce greenhouse gas emissions; and promote public health and wellness.

***Amador County Zoning Ordinance.*** The County's zoning ordinance establishes zoning districts and regulations applicable to each district to establish orderly development in Amador County. The zoning ordinance classifies the Project site within the County's X District, which is a special-use district.

### 4.11.2 Impact Analysis

*a. Would the project physically divide an established community?*

**No Impact.** The Project site is an approximately 40-acre rural residential area in western Amador County. The Project site contains 14 residences and is currently zoned as a special-use district by the County. The proposed Project would install a new water distribution system to bring potable water for indoor use to residents of the Project site. The Project would involve water infrastructure improvements and would not encroach upon or divide an established community. No impact would occur.

*b. Would the project 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?*

**No Impact.** As discussed above in 3.11.2.a, the Project site is classified as a special-use district. The proposed Project would install a new water distribution system that would improve water quality for residents on the Project site. The proposed Project would not alter the land use of the Project site and, as specified in this Initial Study, would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

[42] Amador County. 2016. Amador County General Plan, Land Use Element. op. cit.

## 4.12 MINERAL RESOURCES

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

### 4.12.1 Existing Setting

#### 4.12.1.1 Environmental Setting

The Project site is located within an approximately 40-acre rural residential area approximately 3 miles southwest of Ione in western Amador County. A small active quarry is located to the east of the Project site, and a large active quarry is located approximately 1 mile to the north. In addition, Amador County has identified mineral resource zones directly north and east of the Project site. The County's mineral products include clay, sand, gravel, aggregate, quartz sand, copper, silver, gold, soapstone, marble, slate, greenstone, river rip rap, road base, limestone, sandstone, zinc, chromite, talc, lignite, and diamonds.[43]

#### 4.12.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to mineral resources for the proposed Project.

**State Regulations.**

***Surface Mining and Reclamation Act.*** In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA), which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):**MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.

- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.

[43] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being "regionally significant." Such designations require that a lead agency's land use decisions involving designated areas are to be made in accordance with its mineral resource management policies and that it considers the importance of the mineral resource to the region or the State as a whole, not just to the lead agency's jurisdiction.

**Local Regulations.**

***Amador County General Plan.*** The Amador County General Plan does not list specific policies for the management of the County's MRZs, but it does note that "the continued viability of mineral and aggregate resources in the county should be a factor when considering future development proposals."[44]

### 4.12.2 Impact Analysis

*a. Would the project 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?*

**No Impact.** In California, surface mining is regulated by SMARA, which was adopted in 1975 to protect the State's need for a continuing supply of mineral resources, as well as to protect public health and the environment. The project site is not currently classified as an MRZ by Amador County and is characterized by existing rural residential uses. However, MRZs are located adjacent to the project site. Construction of the proposed project would require small trenches approximately 3 to 4 feet deep to install the new water distribution infrastructure. The majority of construction would occur where the ground has previously been disturbed. Due to the limited ground disturbance within previously disturbed areas and the intent of the proposed project to provide potable water to existing residences, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State. There would be no impact.

*b. Would the project 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?*

**No Impact.** As discussed above in 3.12.2.a, the project site is not classified as a MRZ by Amador County. While there are identified mineral resources adjacent to the project site, ground disturbance would be minimal and would largely occur in previously disturbed areas associated with the existing residential development. Therefore, the project would not result in the loss of

[44] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. There would be no impact.

## 4.13 NOISE

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project result in: | | | | |
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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? | ☐ | ☐ | ☐ | ☒ |

### 4.13.1 Existing Setting

#### 4.13.1.1 Environmental Setting

Noise is generally defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Identified major noise sources in Amador County include roadway noise, railroad noise, aircraft-source noise, and stationary-source noise. According to the Amador County General Plan, the Project site is located adjacent to two traffic noise contours located along Jackson Valley Road and SR-88.

Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, Amador County. The County addresses noise in its General Plan and Ordinance Code, described below under Section 4.13.1.2, Regulatory Setting.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The nearest sensitive receptors are the approximately 45 residents living at the Project site.

Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level ($L_e$) is perceived as approximately a doubling of loudness; similarly, each 10 dB decrease in $L_e$ is perceived as half as loud. Sound intensity is normally measured in A-weighted decibels (dBA). The A-weighted scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the $L_e$ to attenuate or be reduced,

resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

#### 4.13.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to noise for the proposed Project.

**State Regulations.** There are no applicable State regulations related to noise for the proposed Project.

**Local Regulations.*Amador County General Plan.*** The Amador County General Plan contains an element dedicated to noise and noise reduction. As stated in the General Plan, the purpose of the Noise Element "is to reduce noise through a combination of land use planning, site criteria, site and building design approaches, and enforcement strategies."[45] Applicable strategies in the Noise Element include:

- **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.

### 4.13.2 Impact Analysis

*a. Would the project 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 with Mitigation.** The proposed Project would generate short-term construction impacts that would be less than significant with mitigation. The proposed Project would not generate operational noise.

The proposed Project includes the installation of a new water distribution system to provide potable water for 14 residences. Construction of the Project would require the use of construction equipment for trenching and other general excavation activities. Table E lists typical construction equipment noise levels ($L_{max}$) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise

[45] Amador County. 2016. Amador County General Plan, Noise Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

## Table E: Typical Construction Equipment Noise Levels

| Equipment Description | Acoustical Usage Factor (%) | Maximum Noise Level ($L_{max}$) at 50 Feet[1] |
|---|---|---|
| Backhoes | 40 | 80 |
| Compactor (ground) | 20 | 80 |
| Compressor | 40 | 80 |
| Cranes | 16 | 85 |
| Dozers | 40 | 85 |
| Dump Trucks | 40 | 84 |
| Excavators | 40 | 85 |
| Flat Bed Trucks | 40 | 84 |
| Forklift | 20 | 85 |
| Front-end Loaders | 40 | 80 |
| Graders | 40 | 85 |
| Impact Pile Drivers | 20 | 95 |
| Jackhammers | 20 | 85 |
| Pickup Truck | 40 | 55 |
| Pneumatic Tools | 50 | 85 |
| Pumps | 50 | 77 |
| Rock Drills | 20 | 85 |
| Rollers | 20 | 85 |
| Scrapers | 40 | 85 |
| Tractors | 40 | 84 |
| Welder | 40 | 73 |

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
$L_{max}$ = maximum instantaneous sound level

levels would be higher than existing ambient noise levels currently in the Project area but would no longer occur once construction of the proposed Project is completed.

Two types of short-term noise impacts could occur during construction of the proposed Project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table E, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA $L_{max}$ with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the Project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics (e.g., vegetation clearing, site grading, trench excavation and backfill, and site cleanup and winterization). These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table E lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 85 dBA $L_{max}$ at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Typical project construction would require the use of scrapers, bulldozers, and water trucks/pickup trucks. Noise associated with the use of construction equipment is estimated to be between 55 dBA $L_{max}$ and 85 dBA $L_{max}$ at a distance of 50 feet from the active construction area for the site preparation phase. As shown in Table E, the maximum noise level generated by each scraper is assumed to be approximately 85 dBA $L_{max}$ at 50 feet. Each dozer would generate approximately 85 dBA $L_{max}$ at 50 feet. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA $L_{max}$ at 50 feet from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA $L_{max}$ at a distance of 50 feet from the active construction area. Based on a usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA $L_{eq}$ at a distance of 50 feet from the active construction area. Project construction would not require the use of pile driving.

The closest sensitive receptors to construction related noise would be the 14 existing residences of the Project site. These residences could be exposed to noise levels exceeding 88 dBA $L_{max}$ and 84 dBA $L_{eq}$ when construction is occurring. However, construction equipment would operate at various locations within the Project site and would only generate maximum noise levels when operations occur closest to the receptor.

The proposed Project would not include any nighttime construction. Mitigation Measure NOI-1 would reduce potential construction period noise impacts for the indicated sensitive receptors to less than significant levels.

**Mitigation Measure NOI-1**

The Project contractor shall implement the following measures during construction of the proposed Project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active Project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related

noise sources and noise-sensitive receptors nearest the active Project site during all construction activities.

- Designate a "disturbance coordinator" at Amador County who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would require the construction contractor to implement noise reducing measures during construction, which would reduce short-term construction noise impacts to a less than significant level.

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant Impact.** The proposed Project included the construction of a new water distribution system to replace/upgrade the existing distribution system. The majority of the proposed system would exist underground and would not be visible after completion of Project-related construction activities. Construction of the proposed Project would involve ground clearing, excavation, foundations, erection, and finishing activities but would not involve the use of construction equipment that would result in substantial ground-borne vibration or ground-borne noise on properties adjacent to the Project site. No pile driving, blasting, or significant grading activities are proposed. Furthermore, Project operation associated with infrastructure improvements would not generate substantial ground-borne noise and vibration. Any noise or vibration generated by operation of the Project would be comparable to that generated by the current water distribution system. Therefore, the Project would not result in the generation of excessive ground-borne noise or ground-borne vibration and impacts are considered less than significant, and no mitigation would be required.

*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 2 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?*

**No Impact.** The proposed Project is not located within 2 miles of a public or public use airport. The nearest public use airport is Westover Field Amador County Airport, located approximately 10.5 miles northeast of the Project site. In addition, Howard Private Airport and Camanche Skypark Airport, both private airports, are located approximately 4.5 miles southeast of the Project site. The Project site is not located within an Airport Noise Contour as designated in the Amador County General Plan Noise Element. Therefore, the proposed Project would not result in the exposure of people residing or working in the Project area to excessive noise levels associated with a public airport or public use airport. As a result, there would be no impact.

## 4.14 POPULATION AND HOUSING

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

### 4.14.1 Existing Setting

#### 4.14.1.1 Environmental Setting

The Project site is located within an approximately 40-acre rural residential area approximately 3 miles southwest of Ione in western Amador County. The Project site contains 14 single-family homes.

#### 4.14.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to population and housing for the proposed Project.

**State Regulations.*California Department of Housing and Community Development (HCD).*** Housing is one of the most-important parts of any community and housing-planning has wide-reaching impacts on the environment, education, health, and the economy. HCD plays a critical role in the housing-planning process, which was designed to ensure that communities plan for housing that meets the needs of everyone in California's communities. Since 1969, California has required that all local governments (cities and counties) adequately plan to meet the housing needs of everyone in the community. This process starts with the State determining how much housing at a variety of affordability levels is needed for each region in the State, and then regional governments developing a methodology to allocate that housing need to local governments. California's local governments then adopt housing plans (called housing elements) as part of their "general plan" (also required by the State) to show how the jurisdiction will meet local housing needs.

**Local Regulations.**

***Amador County General Plan.*** The County's general plan includes the Amador Countywide 2021-2029 Housing Element, which includes in its policies "Program 19: Water and Wastewater Infrastructure Capacity," which applies to all jurisdictions withing Amador County. The Program specifies that each jurisdiction within the County shall "regularly monitor the capacity of the

water and sewer systems serving its community to ensure the regional housing needs allocation (RHNA) can be accommodated."[46]

### 4.14.2 Impact Analysis

*a. Would the project 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)?*

**Less Than Significant Impact.** The proposed Project would construct a new water distribution system to provide potable water to 14 single-family residences. The proposed Project does not include the construction of any new homes or businesses. Therefore, the proposed Project would not result in direct population growth or increase permanent residency within the Project site. In addition, the JVID has agreed to solely supply potable water to the existing 14 residences on the Project site, and the proposed Project includes the installation of meters at each residence to deter the installation of any unauthorized connections. As such, the proposed Project would not directly or indirectly induce population growth, and the impact would be less than significant.

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The proposed Project would install a new water distribution system to provide potable water to 14 single-family residences. The proposed Project does not include the demolition of any existing residences on the Project site. Therefore, the proposed Project would not displace existing people or housing and would not necessitate the construction of replacement housing elsewhere. The Project would result in no impact.

[46] Amador County. 2023b. Amador Countywide 2021-2029 Housing Element. Available at: https://www.amadorgov.org/departments/planning/2022-housing-element (accessed October 2024).

## 4.15 PUBLIC SERVICES

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| 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: | | | | |
| i. Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii. Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii. Schools? | ☐ | ☐ | ☒ | ☐ |
| iv. Parks? | ☐ | ☐ | ☒ | ☐ |
| v. Other public facilities? | ☐ | ☐ | ☒ | ☐ |

### 4.15.1 Existing Setting

#### 4.15.1.1 Environmental Setting

**Fire Protection.** Fire protection services in Amador County are provided by seven separate but cooperative districts, including: Amador Fire Protection District, Ione Fire Department, Jackson Fire Department, Jackson Valley Fire Protection District, Lockwood Fire Protection District, Sutter Creek Fire Protection District, and Kirkwood Public Utilities District. In addition, the United States Forest Service provides fire protection to federally owned lands within the county, and CAL FIRE provides fire protection services to all State responsibility areas, as well as federal and local areas, by way of local agreements. The Project site is located in the Jackson Valley Fire Protection District (FPD), within a State Fire Responsibility Area. The nearest fire stations to the Project site are Jackson Valley FPD #172, located approximately 3.5 miles east of the Project site, and Jackson Valley FPD #171, located approximately 4.5 miles south of the Project site.

**Police Protection.** The Project site is located in an unincorporated area of western Amador County and therefore falls within the jurisdiction of the Amador County Sheriff's Department. The Sheriff's Department provides law enforcement functions for the County and is responsible for the administration and coordination of the County's emergency management and response.

**School Services.** Public schools in Amador County are part of the Amador County Unified School District. The district serves approximately 5,000 students and includes two comprehensive high schools, one alternative high school, two junior high schools, six elementary schools, and an independent study program. The nearest schools to the Project site are Ione Elementary School and Ione Junior High School, both located in Ione approximately 3.1 miles and 3.3 miles, respectively, north of the Project site.

#### 4.15.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to public services for the proposed Project.

**State Regulations.** There are no applicable State regulations related to public services for the proposed Project.

**Local Regulations.**

***Amador County General Plan.*** The Amador County General Plan established goals and policies related to public services and facilities within the county, including the following:[47]

- **Policy LU-3.1:** Ensure that effective public safety facilities, staffing, and equipment are provided to maintain service levels as the county's population and development change.
- **Policy LU-3.2:** Coordinate with fire districts to maintain and improve fire service levels in the county.

### 4.15.2 Impact Analysis

*a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

*i. Fire protection?*
*ii. Police protection?*
*iii. Schools?*
*iv. Parks?*
*v. Other public facilities?*

**Less Than Significant Impact.** The Project site is located in an area that is already served by established public service systems. The Project site lies within the Jackson Valley FPD, within a State Fire Responsibility Area. Police protection services are provided by the Amador County Sheriff's Office. The Amador County Unified School District provides education services for all of Amador County. In addition, Amador County provides several types of parks and other public facilities.

The proposed Project consists of the installation of a new water distribution system to provide potable water to 14 residences on the Project site. The proposed Project is not expected to result in an increase in population that would result in an increased need for public services, schools, parks, or other public facilities. Therefore, the proposed Project would have a less than significant impact.

[47] Amador County. 2016. Amador County General Plan, Land Use Element. op. cit.

## 4.16 RECREATION

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

### 4.16.1 Existing Setting

#### 4.16.1.1 Environmental Setting

Amador County provides a variety of recreational activities, including hiking, swimming, camping, fishing, etc., that take advantage of natural resources found throughout the county. The county contains over 30 parks and recreational facilities. Major recreational facilities near the Project site include Lake Amador, Pardee Reservoir, and Camanche Reservoir.

#### 4.16.1.2 Regulatory Setting.

**Federal Regulations.** There are no applicable federal regulations related to recreation for the proposed Project.

**State Regulations.** There are no applicable State regulations related to recreation for the proposed Project.

**Local Regulations.**

***Amador County General Plan.*** The Open Space Element of the Amador County General Plan contains policies related to recreation within the county, including:[48]

- **Policy OS-1.1:** Support efforts by Amador County Recreation Agency (ACRA) to maintain and enhance existing parks.
- **Policy OS-1.2:** Support efforts by ACRA to provide a range of recreational facilities and programming to serve all county residents, including facilities and programs geared toward youth and seniors.

[48] Amador County. 2016. Amador County General Plan, Open Space Element. op. cit.

### 4.16.2 Impact Analysis

*a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**Less Than Significant Impact.** The proposed Project would install a new water distribution system to provide potable water for 14 residences. The proposed Project is not expected to contribute to population growth and therefore would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of a facility would occur or be accelerated. The impact would be less than significant.

*b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**Less Than Significant Impact.** The proposed Project is limited to infrastructure improvements, and is not expected to result in an increase to the use of parks or other recreational facilities. In addition, the proposed Project, and it would not require the construction or expansion of existing recreational facilities that could have an adverse physical effect on the environment. The impact would be less than significant.

## 4.17 TRANSPORTATION

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

### 4.17.1 Existing Setting

#### 4.17.1.1 Environmental Setting

The Project site is located within an approximately 40-acre rural residential area approximately 3 miles southwest of Ione in Amador County. Vehicular access to the Project site is provided via two entryways on Jackson Valley Road approximately 1,800 feet apart. The entryway on the west side of the Project site is located approximately 500 feet from SR-88, which connects to SR-124 approximately 2.2 miles northeast of the Project site and SR-104 approximately 4 miles northeast of the Project site.

#### 4.17.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to transportation for the proposed Project.

**State Regulations.**

***Senate Bill 743.*** On September 27, 2013, Governor Jerry Brown signed SB 743 into law and codified a process that changed transportation impact analysis as part of CEQA compliance. SB 743 directs the California Office of Planning and Research (OPR) to administer new CEQA guidance for jurisdictions that removes automobile vehicle delay and level of service (LOS) or other similar measures of vehicular capacity or traffic congestions from CEQA transportation analysis. SB 743 requires the analysis of VMT or other measures that "promote the reduction of greenhouse gas emissions, the development of multi-modal transportation networks, and a diversity of land uses," to be used as a basis for determining significant impacts to circulation in California. The goal of SB 743 is to appropriately balance the needs of congestion management with statewide goals related to reducing GHG emissions, encourage infill development, and promote public health through active transportation.

**Local Regulations.** There are no applicable local regulations related to transportation for the proposed Project.

### 4.17.2 Impact Analysis

*a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**Less Than Significant Impact.** The proposed Project would install a new water distribution system on the Project site in order to provide potable water for 14 residences. Construction of the proposed Project is expected to occur over an estimated 9-month period starting in May 2026, with construction completed and the system operational by February 2027. During construction, the transportation of construction equipment and materials to the Project site, as well as the commuting of workers, would generate a small but temporary increase in overall traffic volume in the vicinity of the Project site. However, the increase would not be substantial and would not significantly increase traffic congestion. Furthermore, the Project site is not located near an identified congestion problem area as identified in the Circulation and Mobility Element of the Amador County General Plan.

After completion of the Project, routine inspections and maintenance of the water distribution system would be required. The increase in trips to the site would be minimal and are not expected to have a significant impact on traffic in the vicinity of the Project. As such, the addition of Project traffic is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the Project site vicinity. In addition, implementation of the proposed Project would not disrupt or otherwise prevent roadway improvements, including the addition of bike paths or sidewalks in the vicinity of the Project site. The proposed Project would also not disrupt existing transit services. Therefore, the proposed Project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. This impact would be less than significant.

*b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?*

**Less Than Significant Impact.** The intent of SB 743 is to align CEQA transportation study methodology with and promote the statewide goals and policies for reducing VMT and GHGs. Three objectives of SB 743 related to development are to reduce GHGs, diversify land uses, and focus on creating a multimodal environment. VMT is calculated as the product of a number of trips and those trips' lengths. The Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), circulated by the OPR, acknowledges that lead agencies should set criteria and thresholds for VMT and transportation impacts. The Technical Advisory also notes that land uses may have a less than significant impact if located within low-VMT areas of a region and suggests the use of screening maps to make a determination.

The proposed Project would include the installation of a new water distribution system to provide potable water to 14 residences. The proposed Project does not include any additional housing or permanent residences on the Project site. After completion of construction of the proposed Project, routine inspections and maintenance of the water distribution system would be required. The increase in trips to the Project site would be minimal and are not expected to have a significant impact on traffic in the vicinity of the Project. Therefore, the Project would not conflict or be inconsistent with the CEQA Guidelines, and the impact to VMT would be less than significant.

*c. Would the project 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.** The proposed Project does not include any permanent changes to existing roadways. During Project construction, internal roadways may be narrowed or altered in order to allow for the installation of pipelines associated with the Project. These alterations would be temporary and would only impact residents of the Project site. As such, the proposed Project would not produce any hazards due to a geometric design feature or incompatible uses. The impact would be less than significant.

*d. Would the project result in inadequate emergency access?*

**Less Than Significant Impact.** The proposed Project would not result in the development of structures or alterations of any existing roadways that would impede or obstruct emergency access and/or emergency response plans and evacuations. During construction of the proposed Project, internal roadways may be narrowed or altered in order to allow for the installation of pipelines associated with the proposed Project. These alterations would be temporary. Therefore, the development and operation of the proposed Project would not result in inadequate emergency access. The impact would be less than significant.

## 4.18 TRIBAL CULTURAL RESOURCES

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ |

### 4.18.1 Existing Setting

#### 4.18.1.1 Environmental Setting

On March 7, 2024, Project notification letters with invitations to consult on the Project were sent by email to representatives of the three tribes on the SWRCB's AB 52 list for Amador County: the Buena Vista Rancheria of Me-Wuk Indians, the United Auburn Indian Community of the Auburn Rancheria, and the Wilton Rancheria. No response has been received from those tribes. Because the IBMI is the Project proponent, an AB 52 letter was also sent to their representatives on March 7, 2024.

IBMI representatives accompanied LSA archaeologists during the pedestrian survey of the Project site and also assisted with monitoring the geotechnical testing excavations. LSA also reached out to the IBMI for input during development of the cultural report.[49]

A site visit on October 22, 2024, was also attended by IBMI and SWRCB representatives. The Project area was reviewed and known cultural resources in the vicinity, but outside, of the Project site were discussed. The SWRCB consulted with the IBMI and provided the tribe the opportunity to review and approve the mitigation measures proposed in this document.

[49] LSA Associates, Inc. 2023. op. cit.

#### 4.18.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to tribal cultural resources for the proposed Project.

**State Regulations.**

***Assembly Bill 52.*** AB 52, the Native American Historic Resource Protection Act (PRC Section 21080.3.1), sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American tribes and development interests. Projects subject to AB 52 are those that file a Notice of Preparation for an EIR or Notice of Intent to adopt a Negative or Mitigated Negative Declaration on or after July 1, 2015. AB 52 adds tribal cultural resources (TCRs) to the specific cultural resources protected under CEQA. Under AB 52, a TCR is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB 52 also mandates lead agencies to consult with Native American tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

**Local Regulations.** There are no applicable local regulations related to TCRs for the proposed Project.

### 4.18.2 Impact Analysis

*a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

*i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or*

*ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

**Less Than Significant Impact with Mitigation.** No tribal cultural resources were identified in the Project area. Although not anticipated, there is the potential to identify previously unidentified tribal cultural resources during construction of the Project. With the implementation of Mitigation Measures CUL-1 through CUL-3, impacts to these resources will be less than significant.

## 4.19 UTILITIES AND SERVICE SYSTEMS

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

### 4.19.1 Existing Setting

#### 4.19.1.1 Environmental Setting

**Electricity and Natural Gas.** PG&E is the electricity and natural gas service provider for the Project site. No new service connections for electricity or natural gas would be required as a result of the proposed Project, and PG&E would not build any new infrastructure as a result of the Project.

**Water and Wastewater.** Water service for the Project site is currently supplied by groundwater wells on the Project site. The proposed Project would install a new water distribution system that would fall under the jurisdiction of the JVID, which relies on surface water drawn primarily from Lake Pardee and secondarily from Lake Amador. Wastewater service is provided via privately owned on-site septic tanks.

**Solid Waste.** Waste management in Amador County is provided by ACES Waste Services, Inc. The proposed Project would not require any changes to waste management services at the Project site.

#### 4.19.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to utilities and service systems for the proposed Project.

**State Regulations.**

***California Green Building Standards Code (CALGreen)—Part 11, Title 24.*** CALGreen requires covered projects to recycle and/or salvage for reuse a minimum 65 percent of the nonhazardous

construction and demolition waste or meet a local construction and demolition waste management ordinance, whichever is more stringent.

***Assembly Bill 939, California Integrated Waste Management Act.*** California's Integrated Waste Management Act of 1989 requires cities and counties to reduce the amount of waste disposed of in landfills. The Local Government Construction and Demolition (C&D) Guide of 2002 (SB 1374) amended this act to include construction and demolition material.

***California Senate Bill 1383.*** Passed in September 2017, SB 1383 aims to reduce $CH_4$ emissions created by organic waste and requires every jurisdiction to provide organic waste collection service for all residents and businesses.

**Local Regulations.**

***Amador County General Plan.*** The Amador County General Plan contains policies related to utilities and conservation of public resources, including the following:[50]

- **Policy C-2.2:** Encourage conjunctive use of groundwater and surface water by water agencies to improve water supply reliability.
- **Policy C-10.8:** Expand recycling and waste minimization efforts, including recycling of construction and demolition materials.

### 4.19.2 Impact Analysis

*a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater 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 would construct a new water distribution system to provide potable water for indoor use to 14 residences. The new water distribution system would be maintained and supplied by the JVID, which relies on surface water drawn from nearby Lake Amador and Lake Pardee. The existing IBMI groundwater well would be maintained in order to supply nonpotable water for outdoor and irrigation use. JVID has stated that its existing water supply is adequate to serve the additional 14 residences. In addition, the new water distribution system would connect to existing JVID infrastructure along Jackson Valley Road via a 4-inch-diameter stub-up that was installed by the JVID in anticipation of future consolidation with the IBMI water distribution system. Therefore, the proposed Project would not require the JVID to expand or relocate any of its existing infrastructure in order to supply water to the Project site. The proposed Project would not involve an expansion of capacity to accommodate new growth or result in the construction of water infrastructure facilities that would result in significant environmental effects.

[50] Amador County. 2016. Amador County General Plan, Conservation Element. op. cit.

The proposed Project solely includes installation of the new water distribution system. It does not include changes to wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could result in significant environmental effects. Furthermore, the proposed Project would not construct any new residential units and thus would not increase the population of the Project site, resulting in an increase in the demand for wastewater service. As such, the Project's impacts would be less than significant.

*b. Would the project 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 discussed above in 3.19.2.a, the proposed Project would construct a new water distribution system to supply potable water for indoor use by 14 residences. The JVID would be responsible for supplying potable water to the new distribution system and has determined that its existing surface water supplies drawn primarily from Lark Pardee and secondarily from Lake Amador would be sufficient to supply water to the Project site. The JVID has sufficient water supplies available to serve the Project now and in the reasonably foreseeable future during normal, dry, and multiple dry years. The impact would be less than significant.

*c. Would the project 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 is solely concerned with the construction of a new water distribution system to provide potable water for indoor use by residents of the Project site. The Project does not propose any changes to wastewater infrastructure or the management of wastewater for residents of the Project. Furthermore, the proposed Project would not construct any new residential units and thus would not increase the population of the Project site, resulting in an increase in the demand for wastewater service. There would be no impact.

*d. Would the project 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.** Project construction would generate waste, including construction materials, trenching spoils, and general refuse, and the proposed Project's generated waste would need to be disposed of in local or regional facilities. The quantity of solid waste materials associated with the Project would be limited to the construction period and would not pose a significant impact upon existing landfills. It is not anticipated that construction waste would exceed the capacity of local landfills or the transfer station.

Waste management in Amador County is provided by ACES Waste Services, Inc. The nearest ACES transfer station to the Project site is located approximately 3.2 miles east of the Project site at 6500 Buena Vista Road in Ione. Solid waste materials produced by the Project would be limited to the duration of construction. Therefore, the proposed Project would not result in an excess of solid waste or an excess in capacity of local infrastructure and would not otherwise impair the attainment of solid waste reduction goals. The impact would be less than significant.

*e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**Less Than Significant Impact.** As discussed above in 3.19.2.d, the proposed Project would produce waste related to construction of the proposed Project. However, the proposed Project would be required to comply with all federal, State, and local regulations related to solid waste and its management/disposal. Furthermore, the proposed Project would be required to comply with all applicable standards related to solid waste diversion, reduction, and recycling in regard to waste generated by the Project. Therefore, any impacts would be less than significant.

## 4.20 WILDFIRE

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

### 4.20.1 Existing Setting

#### 4.20.1.1 Environmental Setting

The Project site is located within an approximately 40-acre rural residential area 3 miles southwest of Ione in Amador County. Surrounding land uses include pasture, orchards, and vineyards. CAL FIRE generates statewide maps to assess an area's Fire Hazard Severity. According to the most recent data available, the Project site is categorized as a High Fire Hazard Severity Zone.[51]

#### 4.20.1.2 Regulatory Setting

**Federal Regulations.** There are no applicable federal regulations related to wildfire for the proposed Project.

**State Regulations.**

***California Department of Forestry and Fire Protection.*** CAL FIRE publishes maps that predict the threat of fire for each county within the State. Local Responsibility Areas and State or Federal Responsibility Areas are classified as either Moderate, High, or Very High Fire Hazard Severity Zones (FHSZs) based on factors such as fuel availability, topography, fire history, and climate. The 2019 Strategic Fire Plan for California was generated by CAL FIRE to provide guidelines and objectives to account for associated fire impacts.

***California Fire Code.*** The CFC includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-

[51] California Department of Forestry and Fire Protection. 2024. op. cit.

rise buildings; establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

***Executive Order N-05-19.*** On January 9, 2019, Governor Gavin Newsom announced an EO that requires CAL FIRE and other State agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. The EO requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

**Local Regulations.** Goal S-3 of the Amador County General Plan seeks to maintain or improve fire response times. Its associated policies are listed below: [52]

- **Policy S-3.1:** Support efforts by fire districts to obtain adequate funding to provide fire protection at desired levels. Implement impact fees if needed to provide adequate fire service.

- **Policy S-3.2:** Encourage cooperation and regional agreements among fire districts and state and federal fire agencies to maximize fire protection capabilities across the county.

### 4.20.2 Impact Analysis

#### *a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

**Less Than Significant Impact.** Wildland fires typically occur in geographic areas that contain specific conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires, which can be caused by lightning, campfires, cigarettes, vehicles, or other ignition sources. According to the most recent data available, the Project site is categorized as a High Fire Hazard Severity Zone (HFHSZ). However, the proposed Project would construct a new water distribution system to provide potable water to residents of the Project site. The existing water distribution system would be repurposed to provide nonpotable water for irrigation and fire protection services. The repurposed system would include three wharf-style fire hydrants placed throughout the Project site, and an additional hydrant attached to an independent JVID irrigation system would be installed to the south across Jackson Valley Road to provide additional emergency access to an alternative water supply. Maintenance and functionality of the repurposed water system for nonpotable uses, including fire protection services, would be the responsibility of the IBMI.

At a minimum, the proposed Project would maintain the existing level of fire protection services throughout the Project site. The proposed Project would not result in the development of structures or alterations to existing roadways that could impair an adopted emergency response or emergency evacuation plan. The proposed Project does not include alterations to existing fire protection services. This impact would be less than significant.

[52] Amador County. 2016. Amador County General Plan, Safety Element. op. cit.

*b. Would the project, 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.** As previously stated in 3.20.2.a, the Project site is designated as an HFHSZ. However, the proposed Project only includes the construction of a new water distribution system to replace and upgrade the existing system. Therefore, the proposed Project would not exacerbate any wildfire risks caused by slope, prevailing winds, or other factors, thereby exposing occupants of the Project site to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. This impact would be less than significant.

*c. Would the project 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.** As stated previously in 3.20.1.a, the Project site is characterized as an HFHSZ. However, the proposed Project concerns the installation of a new water distribution system to provide potable water for residents of the Project site. The existing irrigation system would be repurposed to provide nonpotable water for irrigation and fire protection services only. Three wharf-style fire hydrants would be installed throughout the Project site, and an additional independent hydrant would be installed to the south across Jackson Valley Road to provide additional access to an emergency water source. The proposed Project does not require the installation of power lines or other telecommunication infrastructure. Therefore, implementation of the proposed Project would not exacerbate fire risk or result in ongoing impacts to the environment. This impact would be less than significant.

*d. Would the project 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.** An approximately 2-acre portion of the Project site in the southwest corner contains an area identified by FEMA as a high-risk flood zone. In addition, the site is bordered to the south by a high-risk flood zone, and high-risk flood zones are found throughout southwestern Amador County. However, the proposed Project would not prevent water from infiltrating into the groundwater. Permanent changes to impervious surfaces are not expected to occur as a result of the Project. In addition, while the Amador County General Plan notes that landslides are a potential hazard within the county, there have been no known landslides at the Project site and the site is not in the path of any potential landslides. Furthermore, the proposed Project would install a new water distribution system for existing residents of the Project site and is not expected to induce any population growth. The proposed Project would not 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. This impact would be less than significant.

## 4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

### 4.21.1 Impact Analysis

*a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Less Than Significant Impact with Mitigation.** Adoption of the recommended mitigation measures for the proposed Project found in this Initial Study would ensure that neither construction nor operation of the proposed Project would substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

*b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less Than Significant Impact with Mitigation.** The *State CEQA Guidelines* require a discussion of significant environmental impacts that would result from Project-related actions in combination with "closely related past, present, and probably future projects: located in the immediate vicinity" (*State CEQA Guidelines* Section 15130[b][1][A]). Cumulative environmental impacts are those impacts that, by themselves are not significant, but when considered with impacts occurring from other projects in the vicinity would result in a cumulative impact. Related projects considered to

have the potential of creating cumulative impacts in association with the proposed Project consist of projects that are reasonably foreseeable and that would be constructed or operated during the life of the proposed Project.

The proposed Project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures include the topics of biological resources, cultural resources, geology and soils, noise, and tribal cultural resources. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics. For the topic of biological resources, implementation of Mitigation Measures BIO-1 through BIO-7 would ensure that impacts to special-status species, including the California tiger salamander, western spadefoot, northwestern pond turtle, Swainson's hawk, and nesting birds, are reduced to a less than significant level. For the topics of cultural resources and tribal cultural resources, potentially significant impacts would be reduced to less than significant levels with implementation of Mitigation Measures CUL-1 through CUL-3. For the topic of geology and soils, implementation of Mitigation Measure GEO-1 would ensure that impacts related to seismic activity and paleontological resources are reduced to less than significant levels. For the topic of construction noise, implementation of Mitigation Measure NOI-1 would ensure that sensitive noise receptors are not impacted during Project construction activities.

For the topics of aesthetics, agriculture and forestry resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, wildfire, the proposed Project would have no impacts or less than significant impacts and, therefore, would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed Project would be reduced to a less than significant level through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the proposed Project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be less than significant with mitigation incorporated.

### *c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Less Than Significant Impact with Mitigation.** The proposed Project would be constructed and operated in accordance with all applicable regulations that govern hazardous materials, noise, and geotechnical considerations. Due to the fact that all potentially significant impacts of the proposed Project are expected to be mitigated to a less than significant level, it is unlikely that the proposed Project would cause substantial adverse effects on human beings either directly or indirectly. Therefore, implementation of the Project would not result in significant human health impacts.

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# 6.0 REFERENCES

Amador County. 2014. Hazardous Materials Area Plan. Available at: https://www.amadorgov.org/departments/environmental-health/hazardous-materials-cupa/area-plan (accessed October 2024).

_____. 2016a. Amador County General Plan, Conservation Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

_____. 2016b. Amador County General Plan, Land Use Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

_____. 2016c. Amador County General Plan, Noise Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

_____. 2016d. Amador County General Plan, Open Space Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

_____. 2016e. Amador County General Plan, Safety Element. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan (accessed October 2024).

_____. 2020. Local Hazard Mitigation Plan. Available at: amadorgov.org/home/showpublisheddocument/51830/638375527942730000 (accessed October 2024).

_____. 2023a. Amador County Annual Progress Report, 2023 Reporting Year. Available at: https://www.amadorgov.org/home/showpublisheddocument/54003/638641498459430000 (Accessed December 2024).

_____. 2023b. Amador Countywide 2021-2029 Housing Element. Available at: https://www.amadorgov.org/departments/planning/2022-housing-element (accessed October 2024).

_____. 2024. Amador County Code, Erosion Control Ordinance. Available at: https://www.codepublishing.com/CA/AmadorCounty/html/AmadorCounty15/AmadorCounty1540.html#15.40.070 (accessed November 2024).

_____. n.d. *Instructions for Completing CERS Consolidated Emergency Response/Contingency Plan.* Available at: https://www.amadorgov.org/home/showpublisheddocument/10460/635219509683530000 (accessed November 2024).

Amador County Air Pollution Control District (ACAPCD). n.d. Rules and Regulations. Available at: https://www.amadorgov.org/home/showpublisheddocument/41448/637782875137670000 (accessed October 2024).

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Editors. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded.* University of California Press. Berkeley, California.

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. November.

_____. 2022. 2022 Scoping Plan. November 16. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed October 2024).

California Department of Conservation. 2022. *The Williamson Act Status Report 2020-21*. Available at: https://www.conservation.ca.gov/dlrp/wa/Documents/stats_reports/2022%20WA%20Status%20Report.pdf (accessed October 2024).

_____. 2024. *Farmland Mapping and Monitoring Program: Amador County 1984-2020 Land Use Summary*. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Amador.aspx (accessed October 2024).

California Department of Fish and Wildlife (CDFW). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California Natural Resources Agency.* March 20.

California Department of Forestry and Fire Protection. 2024. Fire Hazard Severity Zone Maps. Available at: https://www.fire.ca.gov/osfm/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022 (accessed October 2024).

California Department of Toxic Substances Control (DTSC). 2024. Envirostor: Facilities with Corrective Actions. Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES (accessed October 2024).

California Energy Commission (CEC). 2021a. Electricity Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed October 2024).

_____. 2021b. Electricity Consumption by County. Available at: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2024).

_____. 2021c. Gas Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed October 2024).

_____. 2021d. Gas Consumption by County. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2024).

_____. 2023. *2023 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 23-IEPR-01.

California Public Utilities Commission (CPUC). 2020. Renewables Portfolio Standard (RPS) Program. Available at: https://www.cpuc.ca.gov/rps/ (accessed October 2024).

Jepson Flora Project (Editors.). 2019. Jepson eFlora. Available at: www.ucjeps.berkley.edu/eflora/ (accessed July 10, 2024).

LSA Associates, Inc. 2023. *Results of the Phase I Archaeological Resources Survey Study for the Ione Band of Miwok Indians Water System Improvements Project in Amador County, California.*

_____. 2024. *Biological Resources Evaluation for the Ione Band of Miwok Indians Water System Improvements Project in Amador County, California.* October.

MKN & Associates, Inc. 2024. *Ione Band of Miwok Indians Water System Improvements Engineering Report,* Revision 2. June 6.

Salem Engineering Group, Inc. 2023. *Geotechnical Engineering Investigation Report for the Proposed Water Distribution System Piping, Ione Band of Miwok Indians. Ione, California.*

United States Energy Information Administration. 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2021. Available at: http://eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed October 2024).

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# APPENDIX A

# CALEEMOD OUTPUTS

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# IBMI Water Consolidation Project Custom Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | IBMI Water Consolidation Project |
| Construction Start Date | 5/4/2026 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 43.8 |
| Location | 38.31366462708482, -120.9751305960862 |
| County | Amador |
| City | Unincorporated |
| Air District | Amador County APCD |
| Air Basin | Mountain Counties |
| TAZ | 3004 |
| EDFZ | 4 |
| Electric Utility | Pacific Gas & Electric Company |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.28 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Road Construction | 0.81 | Mile | 0.40 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.77 | 50.0 | 40.9 | 0.06 | 1.58 | 1.61 | 3.19 | 1.45 | 0.22 | 1.67 | — | 7,043 | 7,043 | 0.28 | 0.10 | 7,081 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.36 | 41.7 | 32.5 | 0.05 | 1.21 | 1.31 | 2.52 | 1.10 | 0.18 | 1.28 | — | 5,958 | 5,958 | 0.25 | 0.06 | 5,981 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.65 | 18.9 | 15.0 | 0.02 | 0.58 | 0.60 | 1.18 | 0.53 | 0.08 | 0.62 | — | 2,666 | 2,666 | 0.11 | 0.03 | 2,678 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.12 | 3.45 | 2.75 | < 0.005 | 0.11 | 0.11 | 0.22 | 0.10 | 0.01 | 0.11 | — | 441 | 441 | 0.02 | 0.01 | 443 |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.77 | 50.0 | 40.9 | 0.06 | 1.58 | 1.61 | 3.19 | 1.45 | 0.22 | 1.67 | — | 7,043 | 7,043 | 0.28 | 0.10 | 7,081 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.36 | 41.7 | 32.5 | 0.05 | 1.21 | 1.31 | 2.52 | 1.10 | 0.18 | 1.28 | — | 5,958 | 5,958 | 0.25 | 0.06 | 5,981 |
| 2027 | 0.67 | 14.2 | 12.7 | 0.01 | 0.63 | 0.20 | 0.83 | 0.60 | 0.05 | 0.64 | — | 1,809 | 1,809 | 0.08 | 0.02 | 1,818 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.65 | 18.9 | 15.0 | 0.02 | 0.58 | 0.60 | 1.18 | 0.53 | 0.08 | 0.62 | — | 2,666 | 2,666 | 0.11 | 0.03 | 2,678 |
| 2027 | 0.04 | 0.95 | 0.85 | < 0.005 | 0.04 | 0.01 | 0.05 | 0.04 | < 0.005 | 0.04 | — | 121 | 121 | 0.01 | < 0.005 | 121 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.12 | 3.45 | 2.75 | < 0.005 | 0.11 | 0.11 | 0.22 | 0.10 | 0.01 | 0.11 | — | 441 | 441 | 0.02 | 0.01 | 443 |
| 2027 | 0.01 | 0.17 | 0.16 | < 0.005 | 0.01 | < 0.005 | 0.01 | 0.01 | < 0.005 | 0.01 | — | 20.0 | 20.0 | < 0.005 | < 0.005 | 20.1 |

# 3. Construction Emissions Details

## 3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 4.25 | 3.43 | < 0.005 | 0.19 | — | 0.19 | 0.18 | — | 0.18 | — | 490 | 490 | 0.02 | < 0.005 | 492 |
| Dust From Material Movement | — | — | — | — | — | 0.21 | 0.21 | — | 0.02 | 0.02 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.23 | 0.19 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 26.9 | 26.9 | < 0.005 | < 0.005 | 27.0 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 4.45 | 4.45 | < 0.005 | < 0.005 | 4.46 |
| Dust From Material Movement | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.77 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 81.3 | 81.3 | < 0.005 | < 0.005 | 82.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.08 | 4.08 | < 0.005 | < 0.005 | 4.14 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.67 | 0.67 | < 0.005 | < 0.005 | 0.69 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.3. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.51 | 49.5 | 37.5 | 0.06 | 1.58 | — | 1.58 | 1.45 | — | 1.45 | — | 6,495 | 6,495 | 0.26 | 0.05 | 6,517 |
| Dust From Material Movement | — | — | — | — | — | 1.24 | 1.24 | — | 0.13 | 0.13 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 10.6 | 8.02 | 0.01 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 1,388 | 1,388 | 0.06 | 0.01 | 1,393 |
| Dust From Material Movement | — | — | — | — | — | 0.27 | 0.27 | — | 0.03 | 0.03 | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 1.93 | 1.46 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 230 | 230 | 0.01 | < 0.005 | 231 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.25 | 0.20 | 3.32 | 0.00 | 0.00 | 0.32 | 0.32 | 0.00 | 0.08 | 0.08 | — | 352 | 352 | 0.02 | 0.01 | 358 |
| Vendor | < 0.005 | 0.05 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 30.2 | 30.2 | < 0.005 | < 0.005 | 31.6 |
| Hauling | < 0.005 | 0.32 | 0.03 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 166 | 166 | < 0.005 | 0.03 | 174 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.55 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 68.9 | 68.9 | < 0.005 | < 0.005 | 70.0 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 6.46 | 6.46 | < 0.005 | < 0.005 | 6.75 |
| Hauling | < 0.005 | 0.07 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 35.4 | 35.4 | < 0.005 | 0.01 | 37.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.10 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 11.4 | 11.4 | < 0.005 | < 0.005 | 11.6 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.07 | 1.07 | < 0.005 | < 0.005 | 1.12 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.87 | 5.87 | < 0.005 | < 0.005 | 6.14 |

## 3.5. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.18 | 41.5 | 30.4 | 0.05 | 1.21 | — | 1.21 | 1.10 | — | 1.10 | — | 5,693 | 5,693 | 0.23 | 0.05 | 5,712 |
| Dust From Material Movement | — | — | — | — | — | 1.03 | 1.03 | — | 0.11 | 0.11 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.18 | 41.5 | 30.4 | 0.05 | 1.21 | — | 1.21 | 1.10 | — | 1.10 | — | 5,693 | 5,693 | 0.23 | 0.05 | 5,712 |
| Dust From Material Movement | — | — | — | — | — | 1.03 | 1.03 | — | 0.11 | 0.11 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.22 | 7.72 | 5.67 | 0.01 | 0.23 | — | 0.23 | 0.21 | — | 0.21 | — | 1,061 | 1,061 | 0.04 | 0.01 | 1,064 |
| Dust From Material Movement | — | — | — | — | — | 0.19 | 0.19 | — | 0.02 | 0.02 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.41 | 1.03 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 176 | 176 | 0.01 | < 0.005 | 176 |
| Dust From Material Movement | — | — | — | — | — | 0.04 | 0.04 | — | < 0.005 | < 0.005 | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.21 | 0.17 | 2.81 | 0.00 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | — | 298 | 298 | 0.02 | 0.01 | 303 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.22 | 2.05 | 0.00 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | — | 265 | 265 | 0.02 | 0.01 | 269 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.04 | 0.40 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 50.8 | 50.8 | < 0.005 | < 0.005 | 51.6 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.41 | 8.41 | < 0.005 | < 0.005 | 8.54 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.7. Linear, Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.54 | 14.1 | 11.3 | 0.01 | 0.63 | — | 0.63 | 0.60 | — | 0.60 | — | 1,619 | 1,619 | 0.07 | 0.01 | 1,625 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 22.2 | 22.2 | < 0.005 | < 0.005 | 22.3 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.67 | 3.67 | < 0.005 | < 0.005 | 3.68 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.16 | 1.49 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 193 | 193 | 0.01 | 0.01 | 196 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 2.72 | 2.72 | < 0.005 | < 0.005 | 2.76 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.45 | 0.45 | < 0.005 | < 0.005 | 0.46 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.9. Linear, Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.54 | 14.1 | 11.3 | 0.01 | 0.63 | — | 0.63 | 0.60 | — | 0.60 | — | 1,619 | 1,619 | 0.07 | 0.01 | 1,625 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.94 | 0.75 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 108 | 108 | < 0.005 | < 0.005 | 108 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.01 | 0.17 | 0.14 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 17.8 | 17.8 | < 0.005 | < 0.005 | 17.9 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.12 | 0.15 | 1.39 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 190 | 190 | 0.01 | 0.01 | 193 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.10 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 13.0 | 13.0 | < 0.005 | < 0.005 | 13.2 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 2.15 | 2.15 | < 0.005 | < 0.005 | 2.18 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

# 4. Operations Emissions Details

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Linear, Grubbing & Land Clearing | Linear, Grubbing & Land Clearing | 5/4/2026 | 6/1/2026 | 5.00 | 20.0 | — |
| Linear, Grading & Excavation | Linear, Grading & Excavation | 6/2/2026 | 9/19/2026 | 5.00 | 78.0 | — |
| Linear, Drainage, Utilities, & Sub-Grade | Linear, Drainage, Utilities, & Sub-Grade | 9/20/2026 | 12/24/2026 | 5.00 | 68.0 | — |
| Linear, Paving | Linear, Paving | 12/25/2026 | 2/3/2027 | 5.00 | 29.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Linear, Grubbing & Land Clearing | Crawler Tractors | Diesel | Tier 2 | 1.00 | 8.00 | 87.0 | 0.43 |
| Linear, Grubbing & Land Clearing | Excavators | Diesel | Tier 2 | 1.00 | 8.00 | 36.0 | 0.38 |
| Linear, Grubbing & Land Clearing | Signal Boards | Electric | Average | 1.00 | 8.00 | 6.00 | 0.82 |
| Linear, Grading & Excavation | Crawler Tractors | Diesel | Tier 2 | 1.00 | 8.00 | 87.0 | 0.43 |
| Linear, Grading & Excavation | Excavators | Diesel | Tier 2 | 3.00 | 8.00 | 36.0 | 0.38 |
| Linear, Grading & Excavation | Graders | Diesel | Tier 2 | 1.00 | 8.00 | 148 | 0.41 |
| Linear, Grading & Excavation | Rollers | Diesel | Tier 2 | 2.00 | 8.00 | 36.0 | 0.38 |
| Linear, Grading & Excavation | Rubber Tired Loaders | Diesel | Tier 2 | 1.00 | 8.00 | 150 | 0.36 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Linear, Grading & Excavation | Scrapers | Diesel | Tier 2 | 2.00 | 8.00 | 423 | 0.48 |
| Linear, Grading & Excavation | Signal Boards | Electric | Average | 1.00 | 8.00 | 6.00 | 0.82 |
| Linear, Grading & Excavation | Tractors/Loaders/Backhoes | Diesel | Tier 2 | 2.00 | 8.00 | 84.0 | 0.37 |
| Linear, Drainage, Utilities, & Sub-Grade | Air Compressors | Diesel | Tier 2 | 1.00 | 8.00 | 37.0 | 0.48 |
| Linear, Drainage, Utilities, & Sub-Grade | Generator Sets | Diesel | Tier 2 | 1.00 | 8.00 | 14.0 | 0.74 |
| Linear, Drainage, Utilities, & Sub-Grade | Graders | Diesel | Tier 2 | 1.00 | 8.00 | 148 | 0.41 |
| Linear, Drainage, Utilities, & Sub-Grade | Plate Compactors | Diesel | Tier 2 | 1.00 | 8.00 | 8.00 | 0.43 |
| Linear, Drainage, Utilities, & Sub-Grade | Pumps | Diesel | Tier 2 | 1.00 | 8.00 | 11.0 | 0.74 |
| Linear, Drainage, Utilities, & Sub-Grade | Rough Terrain Forklifts | Diesel | Tier 2 | 1.00 | 8.00 | 96.0 | 0.40 |
| Linear, Drainage, Utilities, & Sub-Grade | Scrapers | Diesel | Tier 2 | 2.00 | 8.00 | 423 | 0.48 |
| Linear, Drainage, Utilities, & Sub-Grade | Signal Boards | Electric | Average | 1.00 | 8.00 | 6.00 | 0.82 |
| Linear, Drainage, Utilities, & Sub-Grade | Tractors/Loaders/Backhoes | Diesel | Tier 2 | 2.00 | 8.00 | 84.0 | 0.37 |
| Linear, Paving | Pavers | Diesel | Tier 2 | 1.00 | 8.00 | 81.0 | 0.42 |
| Linear, Paving | Paving Equipment | Diesel | Tier 2 | 1.00 | 8.00 | 89.0 | 0.36 |
| Linear, Paving | Rollers | Diesel | Tier 2 | 3.00 | 8.00 | 36.0 | 0.38 |
| Linear, Paving | Signal Boards | Electric | Average | 1.00 | 8.00 | 6.00 | 0.82 |
| Linear, Paving | Tractors/Loaders/Backhoes | Diesel | Tier 2 | 2.00 | 8.00 | 84.0 | 0.37 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Linear, Grubbing & Land Clearing | — | — | — | — |
| Linear, Grubbing & Land Clearing | Worker | 7.50 | 14.1 | LDA,LDT1,LDT2 |
| Linear, Grubbing & Land Clearing | Vendor | 0.00 | 8.98 | HHDT,MHDT |
| Linear, Grubbing & Land Clearing | Hauling | 0.00 | 20.0 | HHDT |
| Linear, Grubbing & Land Clearing | Onsite truck | — | — | HHDT |
| Linear, Grading & Excavation | — | — | — | — |
| Linear, Grading & Excavation | Worker | 32.5 | 14.1 | LDA,LDT1,LDT2 |
| Linear, Grading & Excavation | Vendor | 1.00 | 8.98 | HHDT,MHDT |
| Linear, Grading & Excavation | Hauling | 2.05 | 20.0 | HHDT |
| Linear, Grading & Excavation | Onsite truck | — | — | HHDT |
| Linear, Drainage, Utilities, & Sub-Grade | — | — | — | — |
| Linear, Drainage, Utilities, & Sub-Grade | Worker | 27.5 | 14.1 | LDA,LDT1,LDT2 |
| Linear, Drainage, Utilities, & Sub-Grade | Vendor | 0.00 | 8.98 | HHDT,MHDT |
| Linear, Drainage, Utilities, & Sub-Grade | Hauling | 0.00 | 20.0 | HHDT |
| Linear, Drainage, Utilities, & Sub-Grade | Onsite truck | — | — | HHDT |
| Linear, Paving | — | — | — | — |
| Linear, Paving | Worker | 20.0 | 14.1 | LDA,LDT1,LDT2 |
| Linear, Paving | Vendor | 0.00 | 8.98 | HHDT,MHDT |
| Linear, Paving | Hauling | 0.00 | 20.0 | HHDT |
| Linear, Paving | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Linear, Grubbing & Land Clearing | 0.00 | 0.00 | 0.40 | 0.00 | — |
| Linear, Grading & Excavation | 625 | 650 | 0.40 | 0.00 | — |
| Linear, Drainage, Utilities, & Sub-Grade | 0.00 | 0.00 | 0.40 | 0.00 | — |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Road Construction | 0.40 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 117 | 204 | 0.03 | < 0.005 |
| 2027 | 29.4 | 204 | 0.03 | < 0.005 |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Off-Road Equipment | default construction equipment with Tier 2 engines |

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# APPENDIX B

# BIOLOGICAL RESOURCES EVALUATION

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# BIOLOGICAL RESOURCES EVALUATION

## IONE BAND OF MIWOK INDIANS (IBMI) WATER SYSTEM IMPROVEMENTS PROJECT

## AMADOR COUNTY, CALIFORNIA


LSA

October 2024

# BIOLOGICAL RESOURCES EVALUATION

## IONE BAND OF MIWOK INDIANS (IBMI) WATER SYSTEM IMPROVEMENTS PROJECT

## AMADOR COUNTY, CALIFORNIA

Submitted to:

Brian McCauley, PE
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8405 North Fresno Street, Suite 120
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Prepared by:

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Project No. MKN2201

LSA

October 2024

# EXECUTIVE SUMMARY

LSA has prepared this Biological Resources Evaluation to examine the potential for special-status biological resources to be impacted by the proposed Ione Band of Miwok Indians (IBMI) Water System Consolidation Project (Project) in Amador County, California.

The proposed Project consists of the consolidation of the IBMI water system with the Jackson Valley Irrigation District. Ground disturbance associated with the Project would include clearing and grubbing of vegetation and trenching for pipeline installation. Most of the pipeline excavation would take place within the alignment of existing residential access roads.

A database review, reconnaissance site visit, and focused, seasonally timed botanical surveys were conducted on the Project site to identify special-status resources. Aquatic resources adjacent to the Project site include two fresh emergent wetlands. Special-status species with potential to be impacted by the Project include:

- California tiger salamander (*Ambystoma californiense*) Central California Distinct Population Segment (DPS)—federally and State Threatened, State Species of Special Concern
- Western spadefoot (*Spea hammondii*)—federal Candidate, State Species of Special Concern
- Northwestern pond turtle (*Actinemys marmorata*)—federal Candidate, State Species of Special Concern
- Swainson's hawk (*Buteo swainsoni*)—State Threatened

Impacts to these species could include injury or mortality during construction. Impacts to special-status species would be largely avoided due to the timing of construction and location of ground disturbance primarily within existing roads/driveways. Additional avoidance and minimization measures are prescribed.

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# FIGURES AND TABLES

## FIGURES



## TABLES

# LIST OF ABBREVIATIONS AND ACRONYMS

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|---|---|
| BGEPA | Bald and Golden Eagle Protection Act of 1940 |
| BIOS | Biogeographic Information and Observation System |
| BRE | Biological Resources Evaluation |
| BSA | Biological Study Area |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CRPR | California Rare Plant Rank |
| CWA | Clean Water Act |
| CWHR | California Wildlife Habitat Relationships |
| DPS | Distinct Population Segment |
| EONDX | Element Occurrence Index |
| FESA | Federal Endangered Species Act |
| HDPE | high-density polyethylene |
| IBMI | Ione Band of Miwok Indians |
| IPaC | Information for Planning and Consultation |
| JVID | Jackson Valley Irrigation District |
| MBTA | Migratory Bird Treaty Act |

| | |
|---|---|
| MM | Mitigation Measure |
| NHD | National Hydrography Dataset |
| NPPA | Native Plant Protection Act |
| NRCS | Natural Resources Conservation Service |
| NWI | National Wetlands Inventory |
| SWRCB | State Water Resources Control Board |
| SWPPP | Stormwater Pollution Prevention Plan |
| USACE | United States Army Corps of Engineers |
| USEPA | United States Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |

# 1.0 INTRODUCTION

## 1.1 PROJECT LOCATION

The proposed Ione Band of Miwok Indians (IBMI) Water System Consolidation Project (Project) site is on Assessor's Parcel Number 005-180-005-000 in southwestern Amador County, approximately 3 miles south of the city of Ione (Figure 1). The approximately 40-acre Project site is in the United States Geological Survey (USGS) *Ione, California* 7.5-minute topographic quadrangle.

## 1.2 PROJECT DESCRIPTION

The IBMI water consolidation Project seeks to provide potable water to 14 residences on the Project site as well as maintain the existing water distribution system to provide non-potable water to the irrigation and fire protection systems. The Project proposes to install a new water distribution system on the Project site by consolidating with Jackson Valley Irrigation District's (JVID's) system along Jackson Valley Road. The goal of the new system is to both provide and improve the quality and reliability of potable water for residents on the Project site.

The proposed Project would consolidate the IBMI water distribution system with JVID to connect to existing JVID infrastructure along Jackson Valley Road and bring potable water to residents of the Project site. JVID previously installed a 4-inch diameter stub off the Jackson Valley Road service main and the new distribution system, comprised of approximately 4,300 feet (0.81 mile) of 4-inch high-density polyethylene (HDPE) pipe, would connect to JVID's water supply at this location. Portions of the new pipeline alignment would be located adjacent to the IBMI pipeline. Installation of the new distribution system would require the cutting and capping of existing service lines to the 14 residences IBMI currently serves, installation of new JVID system connections including water meters for each customer, and the installation of a dedicated flushing blowoff at the north end of the Project site. The system would also contain an emergency chlorine injection quill that would only be activated when needed.

The existing IBMI water system would be repurposed for fire protection and irrigation services. Wells 001 (currently inactive) and 003 (active) would be maintained to support this system. Existing water lines to the 14 residences, as well as any other unauthorized connections, would be cut and capped, and the potability of the water would not be maintained in the repurposed IBMI system. Water from Well 003 would continue to be pumped into the water storage tank and would operate in the same manner it does now, with the chemical injection system disabled.

Ground disturbance associated with the proposed Project would include clearing and grubbing of vegetation and trenching for pipeline installation. Most of the pipeline excavation would take place within the alignment of existing residential access roads. No tree removals would be required. Trenching is not anticipated to exceed 3 to 4 feet below existing grade. Construction of the proposed Project is expected to occur over an estimated 9-month period starting in May 2026 with construction completed and the system operational by February 2027.

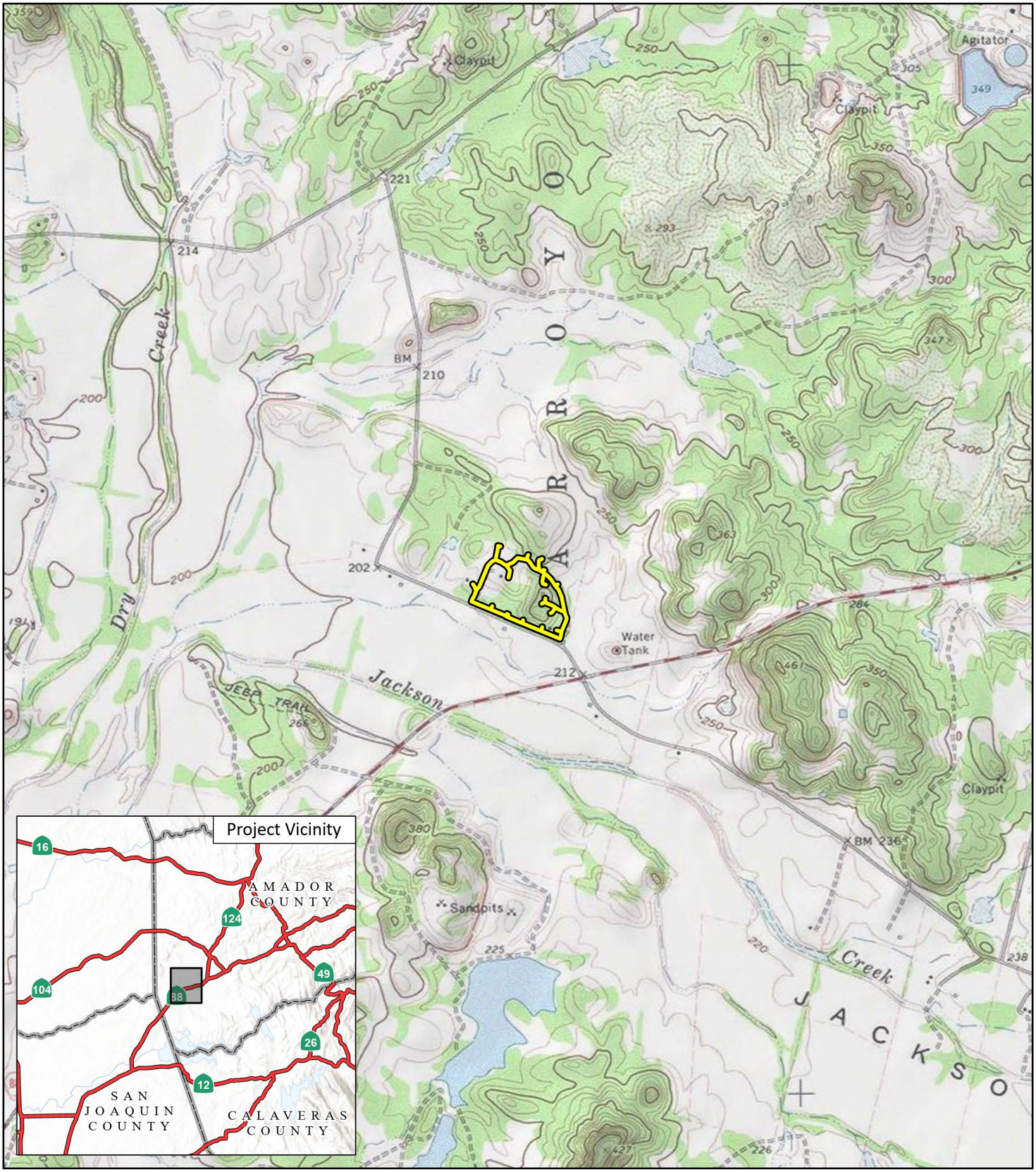


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FIGURE 1

*Ione Band of Miwok Indians Water System Improvements Project*

Project Location and Vicinity

SOURCE: USGS 7.5' Quad - *Ione (1962)*, CA

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## 1.3 PURPOSE, GOALS, AND OBJECTIVES

The purpose of this Biological Resources Evaluation (BRE) is to identify where potential special-status biological resources may occur within the Project site, determine how those resources may be impacted by the proposed Project, and recommend mitigation measures to reduce the potential for impacts to a less than significant level. This BRE has been prepared to support an analysis of biological conditions as required by the California Environmental Quality Act (CEQA), and to support regulatory permit applications, if needed.

# 2.0 METHODS

## 2.1 DEFINITION OF BIOLOGICAL STUDY AREA

For the purposes of this report, two Biological Study Areas (BSAs) are used: a 50-foot buffer around the pipelines to evaluate the potential for special-status resources in the immediate vicinity of where ground disturbance is planned, and a 500-foot buffer surrounding the Project site for evaluation of special-status resources in the greater vicinity of the Project (Figure 2).

## 2.2 DEFINITION OF SPECIAL-STATUS RESOURCES

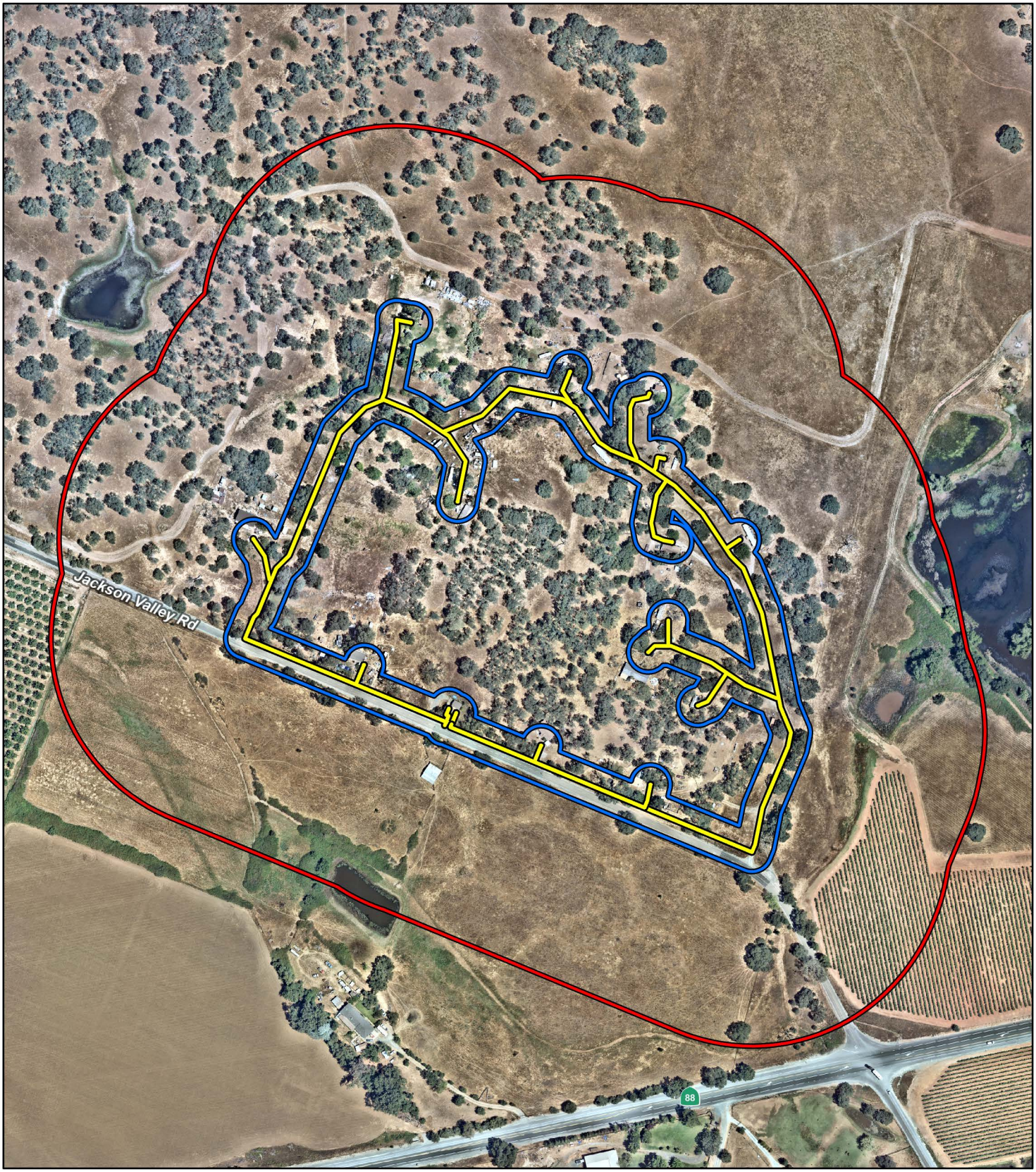
For the purposes of this report, special-status resources include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); species that are under review may be included if there is a reasonable expectation of listing within the life of the Project;
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA);
- Species designated as Fully Protected or Species of Special Concern by the California Department of Fish and Wildlife (CDFW);
- Plant species with a California Rare Plant Rank (CRPR) in categories 1 or 2;
- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance or local policy;
- Sensitive natural communities as defined by the CDFW or local agencies; and
- Aquatic features.

## 2.3 DATABASE SEARCH AND BACKGROUND REVIEW

The following sources were reviewed for information on special-status biological resources in the Project vicinity:

- CDFW's California Natural Diversity Database (CNDDB; CDFW 2024a)
- CDFW's Biogeographic Information and Observation System (BIOS; CDFW 2024b)
- CDFW's California Wildlife Habitat Relationships (CWHR) System (Mayer and Laudenslayer 1990)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2024)




LSA

Proposed Project Location

50-Foot Biological Study Area

500-Foot Biological Study Area

FIGURE 2

N

0 170 340

FEET

SOURCE: Nearmap (July 2, 2023)

*Ione Band of Miwok Indians Water System Improvements Project*

Biological Study Areas

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- United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation system (USFWS 2024b)
- USFWS Critical Habitat Mapper (USFWS 2024a)
- USFWS National Wetlands Inventory (NWI; USFWS 2024c)
- USGS National Hydrography Dataset (NHD; USGS 2024)
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2024a, 2024b)
- Current and historical aerial imagery (Google LLC 2024)

For each of these data sources, the search was focused on the *Ione, California* USGS 7.5-minute quadrangle in which the Project is located, plus the surrounding eight quadrangles. For the CNDDB, a 10-mile search radius was used.

The CNDDB provides element-specific spatial information on individually documented occurrences of special-status species and sensitive natural communities. Some of the information available in the CNDDB is still undergoing review by the CDFW; these records are identified as unprocessed data. The CNPS database provides similar information as the CNDDB, but at a much lower spatial resolution. Much of this information in these databases is obtained opportunistically and is often focused on protected lands or on lands where development has been proposed. Neither database represents a comprehensive survey for special-status resources in the region. As such, the absence of recorded occurrences in these databases at any specific location does not preclude the possibility that a special-status resource could be present. The NWI and Web Soil Survey provide comprehensive data but at a low resolution, requiring confirmation in the field.

The results of the database inquiries were reviewed to develop a list of special-status resources that may be present on and within the vicinity of the Project. This list was then evaluated against the existing conditions observed during the reconnaissance site visit of the BSA to determine which special-status resources have the potential to occur, as well as the potential for impacts to those resources from implementation of the Project.

## 2.4 FIELD SURVEYS

Table A provides the dates and conditions for the field surveys.

### Table A: Field Surveys Personnel and Timing

| Date | Personnel | Timing | Weather Conditions | Survey Type |
|---|---|---|---|---|
| 4/25/2024 | Carie Wingert, Anna Van Zuuk | 1030–1430 | Sunny and clear, light breeze, 61°F–74°F | Reconnaissance; botanical |
| 7/3/2024 | Carie Wingert, Anna Van Zuuk | 0900–1100 | Sunny and clear, light breeze, 88°F–93°F | Botanical |

°F = degrees Fahrenheit

### 2.4.1 Reconnaissance-Level Field Surveys

The reconnaissance-level site survey of the BSA characterized the existing biological conditions of the Project site and the greater BSA. The site survey consisted of pedestrian surveys of the roads and driveways where new water lines are proposed for installation. Adjacent areas were visually scanned from the Project site and public roads for potential special-status resources. One residential area was not surveyed out of safety concerns.

All plant and animal species detected were recorded and identified to the lowest taxonomic level necessary to determine rarity. The locations of any special-status species detected were documented using GPS. All other potential sensitive biological resources, such as aquatic habitats, were also recorded.

### 2.4.2 Focused Botanical Surveys

LSA botanists surveyed the Project site in accordance with the CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) by walking the 50-foot buffer around the pipelines and visually scanning beyond. All plant species were identified to a sufficient taxonomic level necessary to determine rarity. Names of plant species are consistent with The Jepson Manual (Baldwin et al. 2012) and the Jepson Online Interchange for California Floristics (Jepson Flora Project 2019).

## 2.5 POTENTIAL FOR OCCURRENCE ASSESSMENT

Assessments for the potential occurrence of special-status species are based on known ranges, habitat preferences for the species, species occurrence records from the CNDDB and CNPS, species occurrence records from other sites in the vicinity of the survey area, previous reports for the Project site, and the results of surveys of the Project site. The potential for each special-status species to occur in the BSA was evaluated according to the following criteria:

- **No:** Habitat on and adjacent to the site is clearly unsuitable to meet the needs of the species (i.e., foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and the species would have been identifiable on site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect the species.

- **Yes:** Conditions within the BSA may in some way support a portion of the species' ecology (e.g., foraging, reproduction, movement/migration). Protocol surveys (if conducted) were conducted, but negative results do not exclude the potential for the species to occur.

- **Present:** The species was observed within the BSA or has been recorded (e.g., CNDDB, other reports) in the BSA recently (within the last 5 years)

# 3.0 REGULATORY SETTING

Regulated or sensitive resources that were studied and analyzed include special-status plant and animal species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement areas, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of Amador).

Potential impacts to biological resources were analyzed based on the following list of statutes. Summaries of these statues are provided in Appendix A.

- CEQA
- FESA
- CESA
- Federal Clean Water Act
- California Fish and Game Code
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- County of Amador General Plan and Local Ordinances

# 4.0 RESULTS

## 4.1 ENVIRONMENTAL SETTING

### 4.1.1 Physical Characteristics

Photographs of the Project site are provided in Appendix B.

### 4.1.2 Climate

The Project is in an area with a Mediterranean climate of hot summers and mild, wet winters. Average high temperatures range from 53 degrees Fahrenheit (°F) in January to 95°F in July, with daily temperatures exceeding 100°F several days in the summer (WWRC 2024). Average low temperatures range from 38°F in January to 62°F in July. Precipitation occurs primarily as rain, most of which falls from November to April, with an average of 21.5 inches of rainfall per year. Precipitation may also occur as a dense fog during the winter. Rain rarely falls during the summer months.

### 4.1.3 Topography and Land Use

The Project site is characterized by rolling hills and includes several occupied single-family residences. Surrounding land uses include pasture, orchards and vineyards. A small active quarry is located to the east, and a large active quarry is located to the north.

### 4.1.4 Soils

The BSA is underlain by five soil types (Figure 3; NRCS 2024a).

#### 4.1.4.1 Red Bluff-Mokenlumne Complex, 0 to 5 Percent Slopes (RbB)

This soil complex consists of a gravelly loam to gravelly sandy loam soil underlain with clay. The soils are very deep and well drained with medium to high runoff and moderate permeability, and are formed of alluvium derived from a variety of sources (metamorphic rock, sandstone, etc.). This complex is typically found on terraces near the base of hills and mountains. It is typically used for pasture and dryland farming but can support irrigated agriculture. Native vegetation typically consists of oak woodlands and annual grasslands. This soil may be hydric in drainages and depressions (NRCS 2024b).

#### 4.1.4.2 Red Bluff-Mokelumne Complex, 5 to 16 Percent Slopes (RbD)

This soil complex is the same as the one described above except that it tends to be found on slightly steeper slopes. It is also not considered hydric (NRCS 2024b).

#### 4.1.4.3 Snelling Sandy Loam, 9 to 16 Percent Slopes (SwD)

This soil type is very deep and well-drained sandy loam derived primarily from granitic sources. It is typically found on dry alluvial fans and terraces. It typically has slow to rapid runoff with moderate permeability. It is often used for irrigated agriculture or pasture. Native vegetation typically consists of annual grassland. This soil may be hydric in depressions where ponding occurs for sufficient durations (NRCS 2024b).

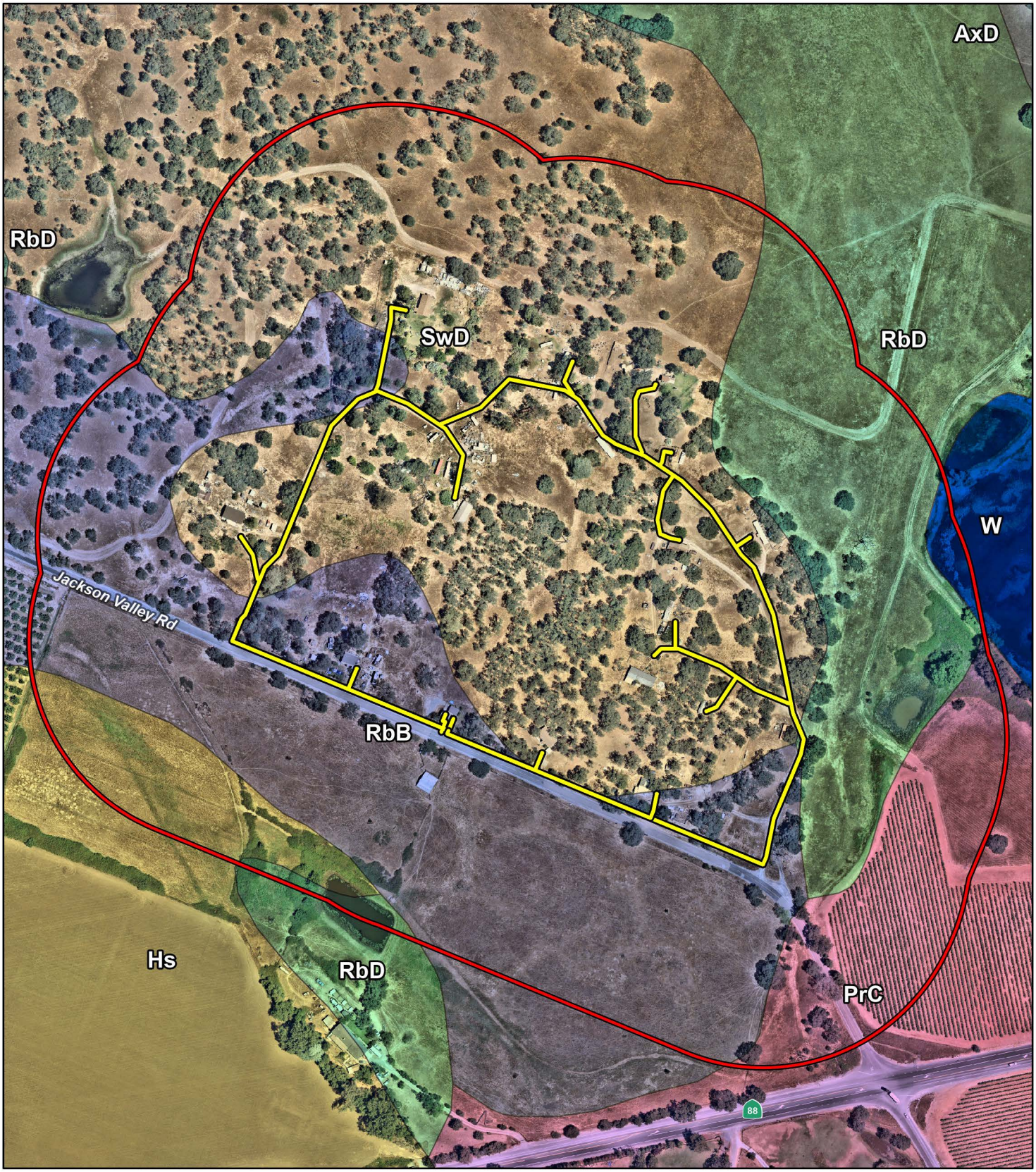


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FIGURE 3

Proposed Project Location

500-Foot Biological Study Area

Auburn-Argonaut very rocky silt loams, 3 to 31 percent slopes (AxD)

Honcut very fine sandy loam, moderately well drained (Hs)

Perkins loam, 3 to 16 percent slopes (PrC)

Red Bluff-Mokelumne complex, 5 to 16 percent slopes (RbD)

Red Bluff-Mokenlumne complex, 0 to 5 percent slopes (RbB)

Snelling sandy loam, 9 to 16 percent slopes (SwD)

Water (W)

N

0 160 320

FEET

SOURCE: Nearmap (July 2023), NRCS (2024)

*Ione Band of Miwok Indians Water System Improvements Project*

Soils Mapped within the BSA

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#### 4.1.4.4 Honcut Very Fine Sandy Loam, Moderately Well Drained (Hs)

Honcut soils are very deep, well-drained soils formed of alluvium from igneous and granitic rocks. They are found on terraces, floodplains, valley floors, and alluvial fans, often at the toe slope of gentle hills. They exhibit slow to medium runoff and moderately rapid permeability. Honcut soils are highly productive under irrigation and commonly used for irrigated grains, orchards, and vineyards. Natural vegetation typically consists of oak savannahs and annual grasslands. This soil may be hydric in depressions where ponding occurs for sufficient durations (NRCS 2024b).

#### 4.1.4.5 Perkins Loam, 3 to 16 Percent Slopes (PrC)

Perkins soils are very deep, well-drained soils with slow to rapid runoff and moderately slow permeability. They are gravelly loam soils formed in alluvium from mixed rock sources and are found on terraces and hillslopes. They are often used for growing field crops, orchards, and dry grains. Natural vegetation typically consists of annual grassland and oak savannahs and woodlands. It is also not considered hydric (NRCS 2024b).

### 4.1.5 Hydrology

Aquatic resources mapped within the vicinity of the Project by the NWI and NHD are shown on Figure 4 (USGS 2024, USFWS 2024c). Two wetlands were observed adjacent to the proposed pipeline locations, but they do not intersect the roadways where construction is planned (Figure 4). These wetlands are not depicted in NWI or NHD, nor are they shown on topographic maps.

## 4.2 VEGETATION AND OTHER LAND COVER

As shown below in Table B, six habitat types were observed within the BSA: blue oak woodland, fresh emergent wetland, annual grassland, urban, barren, and orchard and vineyard (Figure 5). The habitats observed on site have been described in the context of the CWHR (Mayer and Laudenslayer 1988). A full list of plant species detected is provided in Appendix C.

**Table B: Habitat Acreages Observed**

| Habitat Type | Acreages | |
|---|---|---|
| | 50-Foot BSA | 500-Foot BSA |
| Blue Oak Woodland | 7.3 | 45.9 |
| Fresh Emergent Wetland | 0.0 | 2.4 |
| Annual Grassland | 0.5 | 30.9 |
| Urban | 4.1 | 8.2 |
| Barren | 1.4 | 3.0 |
| Orchard and Vineyard | 0 | 3.4 |

BSA = Biological Study Area


LSA

Proposed Project Location

500-Foot Biological Study Area

National Hydrography Dataset Features

Ephemeral Stream

Ephemeral Pond

NWI Features

Palustrine

Riverine

N

0 190 380

FEET

FIGURE 4

*Ione Band of Miwok Indians Water System Improvements Project*

NWI and NHD Map

SOURCE: Nearmap (July 2023), USFWS (2024), USGS (2024)

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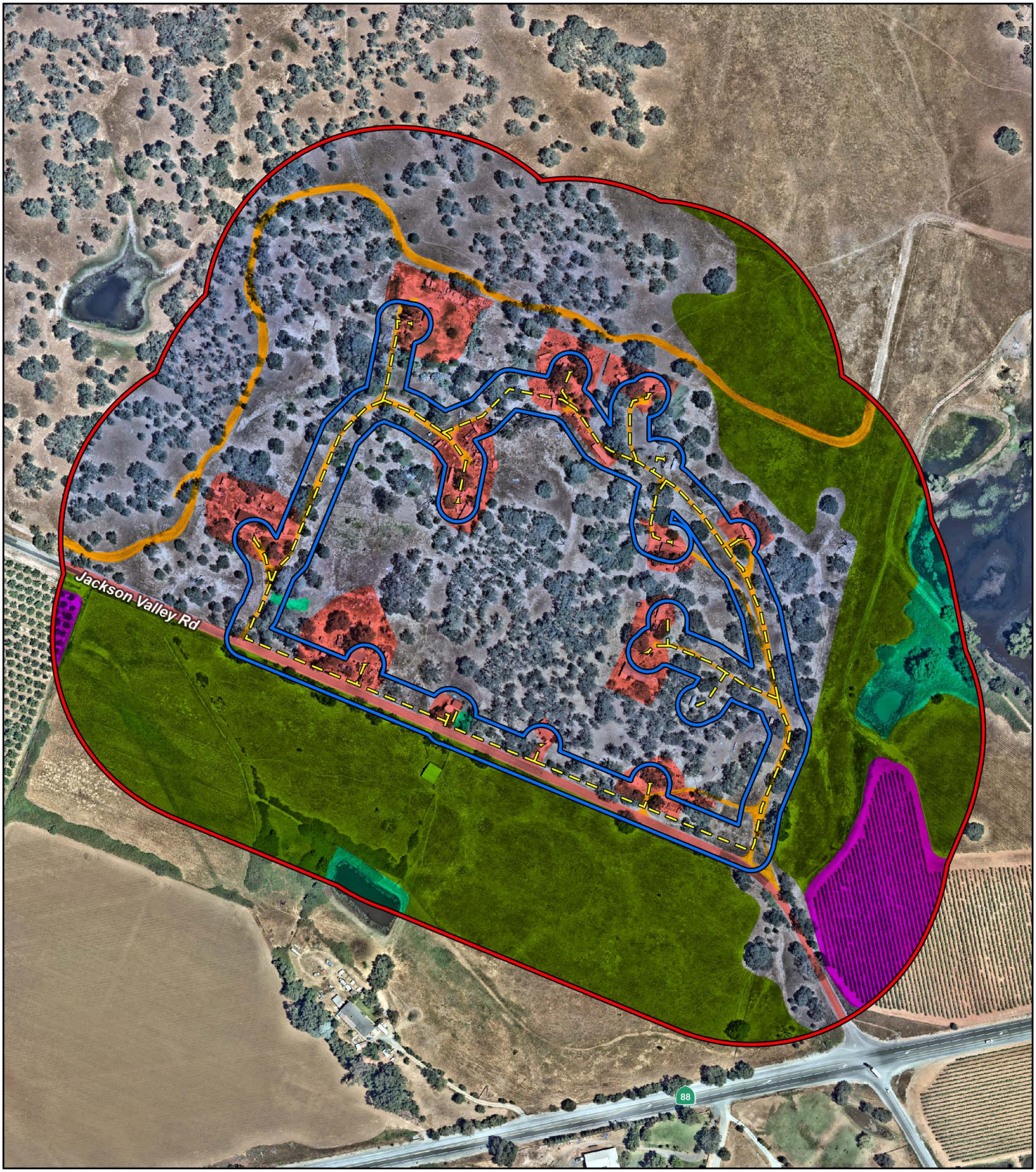


LSA

Proposed Project Location
50-Foot Biological Study Area
500-Foot Biological Study Area

Vegetation/Land Cover Type

Annual Grassland
Barren
Blue Oak Woodland
Fresh Emergent Wetland
Urban
Vineyard

0 175 350
FEET

SOURCE: Nearmap (July 2023)

FIGURE 5

*Ione Band of Miwok Indians Water System Improvements Project*

Vegetation Communities Map

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### 4.2.1 Blue Oak Woodland

Blue Oak Woodland is present throughout the BSA (Figure 5). Blue oak (*Quercus douglasii*) is the dominant tree species; other native tree species are also present, such as box elder (*Acer negundo*), northern California black walnut (*Juglans hindsii*), valley oak (*Q. lobata*), polished willow (*Salix laevigata*), and gray pine (*Pinus sabiniana*). Tree density varied across the BSA and intergrades with nonnative trees and shrubs associated with the residences. Native shrub species include coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus mexicana*), and American mistletoe (*Phoradendron leucarpum*). The understory consists of annual grassland (described below) with a mix of herbs more commonly found in oak woodlands, such as common bedstraw (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), miner's lettuce (*Claytonia perfoliata* ssp. *perfoliata*), and California wild grape (*Vitis californica*).

### 4.2.2 Fresh Emergent Wetland

Two fresh emergent wetlands were present within the BSA during the April site visit (Figure 5). During the July site visit, one of the wetlands had lower water levels and the other was completely dry. These wetlands were vegetated with several common emergent aquatic species, such as tall flatsedge (*Cyperus eragrostis*), common toad rush (*Juncus bufonius*), tall flatsedge (*Cyperus eragrostis*), and broadleaf cattail (*Typha latifolia*).

### 4.2.3 Annual Grassland

Annual grassland is present within the northwestern portion of 500-foot BSA and is also present as an understory component of blue oak woodland throughout the BSA. This habitat includes several grass species (e.g., *Bromus* sp., *Avena* sp., *Hordeum* sp.) and a wide variety of herbs (e.g., *Brassica* sp., *Amsinckia* sp., *Clarkia* sp., *Erodium* sp., *Plantago* sp., *Trifolium* sp.).

### 4.2.4 Urban

Urban habitat (as defined by the CWHR) within the BSA includes several single-family residences scattered throughout the BSA, plus the water tank and Jackson Valley Road (Figure 5). Many of the residences include abandoned buildings, cars, and other debris. Domestic cats (*Felis catus*) and dogs (*Canus lupus familiaris*) were present. Several ornamental trees and shrubs are present, such as oleander (*Nerium oleander*), common fig (*Ficus carica*), Italian stone pine (*Pinus pinea*), Mexican fan palm (*Washingtonia robusta*), mission cactus (*Opuntia ficus-indica*), and common lilac (*Syringa vulgaris*).

### 4.2.5 Barren

Barren habitat within the BSA consisted of the dirt roads throughout the parcel, which lack vegetation (Figure 5).

### 4.2.6 Vineyards and Orchard

Vineyards and orchards are present in the 500-foot BSA, but not within the Project site, and are characteristic of agricultural uses in the region within the Dry Creek and Jackson Creek floodways.

## 4.3 GENERAL WILDLIFE OBSERVATIONS

Wildlife species detected during the site visits were those typically observed in these habitats, including acorn woodpeckers (*Melanerpes formicivorus*), mourning doves (*Zenaida macroura*), northern mockingbirds (*Mimus polyglottos*), European starlings (*Sturnus vulgaris*), turkey vultures (*Cathartes aura*), western scrub jays (*Aphelocoma californica*), red-winged blackbirds (*Agelaius phoeniceus*), cliff swallows (*Petrochelidon pyrrhonota*), pea fowl (*Pavo* sp.), domestic cats, and domestic dogs. The full list of animals detected is provided in Appendix C.

# 5.0 IMPACT EVALUATION AND MITIGATION MEASURES

Local, State, and federal agencies regulate special-status species and other sensitive biological resources and require an assessment of their presence or potential for presence to be on site prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based on known ranges, habitat preferences for the species, species occurrence records from the CNDDB and CNPS, species occurrence records from other sites in the vicinity of the survey area, previous reports for the Project site, and the results of surveys of the Project site.

This section describes the potential biological resources impacts associated with development of the Project based on the thresholds of significance listed in the *State CEQA Guidelines,* Appendix G, Environmental Checklist, which are listed throughout, along with consideration for other federal and State laws.

For the purposes of this analysis, it is assumed that all ground-disturbing activities will occur within existing driveways and roads.

## 5.1 SPECIAL-STATUS SPECIES

The proposed Project would have a significant effect on biological resources if it would:

***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.***

Table C presents the list of special-status plant and animal species determined to have potential to occur on site and identifies whether the Project may affect the species and threaten the viability of the species' population. The complete list of species evaluated for this Project is included in Appendix D. Each species is further discussed in the subsections below.

### 5.1.1 Project Impacts to Special-Status Plant Species

The literature review identified 15 special-status plant species known or with the potential to occur in the vicinity of the Project (see the evaluation table in Appendix D). Focused, seasonally timed botanical surveys did not detect any special-status plant species within the 50-foot BSA.

### 5.1.2 Project Impacts to Special-Status Animal Species

The literature review identified 15 special-status animal species known or with the potential to occur in the vicinity of the Project (see the evaluation table in Appendix D). Of those, five were determined to have the potential to occur within the 500-foot BSA (Table C).

## Table C: Special-Status Species with Potential to Occur Within the 500-Foot BSA

| Scientific Name<br>Common Name | Status | Potentially Affected by Project? Yes/No | Viability Threat? Yes/No |
|---|---|---|---|
| **Invertebrates** | | | |
| *Desmocerus californicus dimorphus*<br>valley elderberry longhorn beetle | US: T<br>CA: - | No | No |
| **Amphibians** | | | |
| *Ambystoma californiense*<br>California tiger salamander—Central California DPS | US: T<br>CA: T, SSC | Yes | No |
| *Spea hammondii*<br>western spadefoot | US: C<br>CA: SSC | Yes | No |
| **Reptiles** | | | |
| *Actinemys marmorata*<br>northwestern pond turtle | US: C<br>CA: SSC | Yes | No |
| **Birds** | | | |
| *Buteo swainsoni*<br>Swainson's hawk | US: -<br>CA: T | Yes | No |

Source: LSA (2024)
Notes:

**US: Federal Classifications**
T Listed as threatened.
C Candidate for federal Listing

**CA: State Classifications**
T State-listed as threatened.
SSC Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.

BSA = Biological Study Area
DPS = Distinct Population Segment

### 5.1.2.1 Valley Elderberry Longhorn Beetle

**Scientific Name: *Desmocerus californicus dimorphus***
**Status: Federally Threatened**

Valley elderberry longhorn beetle is endemic to the Central Valley and has historically occurred from Shasta County to Madera County below 500 feet in elevation (USFWS 2019). The species is dependent on blue elderberry (*Sambucus* sp.) shrubs for all portions of its lifecycle. Females lay eggs on leaves and stems, and when the eggs hatch, the larvae burrow into stems at least 1 inch in diameter and feed on the pith as they progress through four larval stages, which can take up to 2 years. Adults may live up to 3 months, spending most of their time under leaf litter at the base of the elderberry shrub. Valley elderberry longhorn beetles require patches of elderberry plants without barriers to dispersal to maintain a population.

The nearest recorded occurrence of the species is approximately 3 miles north of the Project site (EONDX 3777; CDFW 2024a). A single elderberry shrub was observed during the site visit next to one of the driveways. Given the isolated nature of the shrub, it is unlikely that it would support a population of valley elderberry longhorn beetles. Furthermore, this elderberry shrub can be avoided during construction of the Project.

As such, no mitigation measures are required.

#### 5.1.2.2 California Tiger Salamander

**Scientific Name: *Ambystoma californiense***
**Status: Federally Threatened, State Threatened, State Species of Special Concern**

The Central Valley Distinct Population Segment (DPS) of the California tiger salamander (CTS) is a federally and State threatened. It occurs along the foothills of the Central Valley and Inner Coast Ranges from San Luis Obispo, Kern, and Tulare counties in the south to Sacramento and Yolo counties in the north.

The CTS is a lowland inhabitant restricted to grasslands and open woodland habitats where small mammal burrows are available and within approximately 1.3 miles of breeding ponds. CTS breed in ephemeral pools (e.g., vernal pools) that are often turbid. They may also breed in permanent ponds that are free of predators and contain water for a long enough period to support breeding and larval development (USFWS 2017). Adults migrate from upland refuge sites to the pools to breed during relatively warm winter or spring rains. Juveniles emigrate in mass at night from the drying pool to upland refuge sites (typically rodent burrows). CTS are primarily nocturnal but have been documented moving during the daytime during periods of high humidity, dense fog, or rainfall.

No vernal pools were observed during the site visits. Two fresh emergent wetlands were observed adjacent to roads (Figure 5). Several other aquatic features are visible on aerial imagery within the known dispersal distance from the Project site. Several CTS occurrences are recorded in the vicinity of the project site, the nearest of which is approximately 0.8 mile to the south (EONDX 96619; CDFW 2024a).

The site visits were conducted following a wetter than average winter. The wetland adjacent to Jackson Valley Road next to the existing tank still had some water in it. The wetland adjacent to the dirt road on the west side of the Project site held substantial water during the April site visit but was dry during the July site visit. Review of historic aerial imagery indicates that the wetlands on site are not present every year, including during normal rainfall years, while the wetlands just east and just west of the Project site hold water most years but may go dry during drought conditions.

Given the lack of consistent ponding in the two wetlands on site, it is unlikely that they would support CTS breeding. However, they may migrate through the Project site during the winter and spring, when there is sufficient moisture to support surface activity.

Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species would be easily avoided if construction is scheduled during the summer and fall, when CTS are aestivating underground. Indirect impacts could include sedimentation of adjacent wetlands due to soil disturbance during construction. As such, mitigation measures are prescribed below.

#### 5.1.2.3 Western Spadefoot

**Scientific Name: *Spea hammondii***
**Status: Federal Candidate, State Species of Special Concern**

The western spadefoot toad is a Candidate for listing under FESA and a State Species of Special Concern. The western spadefoot toad occurs primarily in open, treeless grasslands; scrub; or

savannah habitats and requires temporary ponds for breeding and larval development (USFWS 2023b). This species spends most of the year in underground burrows, which they construct themselves, although some individuals may use small mammal burrows. They are primarily active on the surface at night. Breeding and egg laying occur almost exclusively in vernal pool habitat; however, they may also utilize nonflowing, ponded water within natural drainages. They may migrate as far as 1,900 feet between upland and breeding habitat, with shorter distances traveled during drier years. The western spadefoot toad is an opportunistic species and can exploit short-lived pools of water; therefore, this species is able to survive in areas where other highly aquatic species could not.

Similar to CTS discussion above, there are two wetlands adjacent to the Project site and several other aquatic features in the vicinity. Western spadefoot may move through the Project site during the winter and spring periods, when there is sufficient moisture to support surface activity. The roads and driveways are compacted and would be difficult for western spadefoot to dig burrows in, but areas adjacent to the roads may be suitable.

Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species would be easily avoided if construction is scheduled during the summer and fall, when western spadefoot are aestivating underground. Indirect impacts could include sedimentation of adjacent wetlands due to soil disturbance during construction. As such, mitigation measures are prescribed below.

#### 5.1.2.4 Northwestern Pond Turtle

**Scientific Name: *Actinemys [=Emys] marmorata***
**Status: Federal Candidate, State Species of Special Concern**

The northwestern pond turtle is a highly aquatic species that can be found in a wide variety of permanent and ephemeral aquatic habitats (USFWS 2023a). Adjacent upland habitat that can support nesting and overwinter is key, as are basking sites, such as partially submerged logs, vegetation mats, or open mud banks. They will spend most of their time in upland habitats, usually within 500 feet of suitable aquatic habitat. They lay eggs in the banks of creeks and other sunny slopes within little to no vegetative cover, usually within 1,300 feet of aquatic habitat. Hatchlings then migrate to the water, where they require areas of shallow water with dense vegetation. Adults may overwinter/aestivate in aquatic habitat in some locations, but they often prefer upland areas where they have access to sunlight for a portion of the day, spending much of their time under leaf litter.

No northwestern pond turtles were observed during the site visit. One unprocessed CNDDB record of the species from 2012 is mapped approximately 0.71 mile to the southwest. The fresh emergent wetlands on site may be suitable when water is present. There are numerous aquatic features in the vicinity, including the wetlands immediately to the east and west of the Project site and Jackson Creek approximately 1,900 feet to the south. The potential for the species to be present is low, and the species would be easily detected if attempting to traverse the Project site.

Direct impacts could include harm or mortality of individuals moving through the Project site during construction; however, the species is easily detected and could either be allowed to leave on its own or be easily captured and relocated. Indirect impacts could include sedimentation of adjacent

wetlands due to soil disturbance during construction, as well as construction-related noise and human presence altering normal behaviors if western pond turtles are near the construction site. As such, mitigation measures are prescribed below.

#### 5.1.2.5 Swainson's Hawk

**Scientific Name: *Buteo swainsoni***
**Status: State Threatened**

Swainson's hawks occur in grassland, desert, and agricultural landscapes throughout the Central Valley and Antelope Valley (Bechard et al. 2010; Zeiner et al. 1990). Some hawks may be resident, especially in the southern portion of their range, while others may migrate between winter and breeding habitats. They prefer larger isolated trees or small woodlots for nesting, usually with grassland or dry-land grain fields nearby for foraging, and have been known to nest in large eucalyptus trees along heavily traveled freeway corridors. Swainson's hawks forage in grassland, open scrub, pasture, and dry-land grain agricultural habitats, primarily for rodents. Swainson's hawks exhibit a moderate to high nest site fidelity for successful nest sites.

The nearest CNDDB occurrence was recorded 2003 at Camanche Reservoir, approximately 5 miles south of the Project site. The record was of a nest in a blue oak tree that produced 2 fledglings. Many of the trees within the 500-foot buffer and surrounding area could support nests, and there is ample grassland habitat and dry-land grain fields available for foraging. Nests could become established when construction could occur.

No trees will be impacted, and the Project will not impact foraging habitat. Direct impacts could include the abandonment of an active nest if construction activities disturb the nesting pair. No indirect impacts are anticipated. Mitigation measures are prescribed below.

#### 5.1.2.6 Nesting Birds

The BSA contains suitable habitat that could support a variety of ground- and tree-nesting bird species protected under the MBTA and the California Fish and Game Code. Impacts to active nests could occur from noise and vibration caused by construction activities. Mitigation measures are prescribed below.

### 5.1.3 Mitigation Measures for Potential Impacts to Special-Status Species

The following mitigation measures (MMs) are recommended to reduce impacts to California tiger salamander, western spadefoot, northwestern pond turtle, Swainson's hawk, and nesting birds to less than significant under CEQA.

**BIO-MM-1 California Tiger Salamander and Western Spadefoot Avoidance.**

1. If feasible, project construction shall be limited to the summer and fall from June 1 to October 31 when California tiger salamanders are estivating and unlikely to enter the Project site.

2. During the dry season, the Project site shall be surveyed for California tiger salamanders and western spadefoot if a substantial rain event (i.e., at least 0.25 inches) occurs during construction to avoid affecting California tiger salamanders and western spadefoot that may have emerged from their burrows and relocated in the Project site (e.g., under equipment). Construction may not begin until the qualified biologist has confirmed that no California tiger salamanders and western spadefoot are present in the work area. A qualified biologist shall inspect all equipment left in a work area overnight to ensure that no California tiger salamanders and western spadefoot are present before work begins.

3. Following completion of construction-related ground disturbance, temporarily and permanently impacted areas and other soil disturbed areas shall be revegetated with a native seed mix, except where disturbance occurs in existing dirt driveways and roads.

4. All Project personnel shall have stop work authority if a California tiger salamander is observed within an active work area. A qualified biologist shall be contacted, the USFWS's Northern Sierra Division Supervisor shall be contacted at (916) 414-6600, and CDFW's North Central Region office shall be contacted at (916) 358-2900.

5. If construction must occur between November 1 and May 31, the following measures are required:

    a. A qualified biologist shall conduct a survey for California tiger salamanders and western spadefoot not more than 48 hours prior to the initiation of ground disturbing activities within 50 feet of the disturbance footprint, including staging and access areas. The biologist shall survey work areas for individuals and for rodent burrows before equipment is moved in and work begins. All burrows shall be flagged for avoidance and the biologist shall work with the construction crew to avoid all burrows. If construction is delayed or halted for more than 30 days, another pre-construction survey shall be conducted.

    b. A qualified biologist shall be present during initial ground disturbing activities.

    c. Staging areas will be enclosed by ERTEC E-Fence exclusion fencing installed per manufacturers specifications. The fencing will include climbing barriers as well as exit funnels every 100 feet to allow animals to leave the work area. Staging areas will have gates outfitted with the ERTEC fencing such that no opening are permitted when the gates are closed. Gravel bags will be placed along the bottom of the gate fencing to prevent California tiger salamander and western spadefoot from crossing under the fencing. Gates will be thoroughly closed at the end of each workday.

d. Exclusion fencing shall be inspected daily during construction, and any damage or failure observed shall be repaired immediately. Exclusion fencing shall be removed once construction is complete.

e. All excavated trenches and holes deeper than 6 inches shall be covered or ramped at the end of the workday. Earthen ramps at a slope of not more than 1:1 shall be constructed at each end of the active trench and boards shall be placed in open holes. Each day that a trench or hole is open and prior to backfilling, these areas shall be inspected by a qualified monitor.

f. A qualified biologist shall thoroughly inspect all construction pipes, culverts, or similar structures that are stored for one or more overnight periods before the structure is subsequently moved, buried, or capped. If, during inspection, one of these animals is discovered inside the structure, workers shall notify the biologist and allow the animal to safely escape that section of the structure before moving and utilizing the structure.

g. Work shall occur only during daylight hours.

h. The National Weather Service 72-hour forecast for the Project area will be monitored daily. A qualified biologist shall survey active work areas (including access roads) every morning relative to rain and fog events. Construction may not begin until the biologist has confirmed that no California tiger salamanders and western spadefoot are present in the work area. Work shall not occur during precipitation events, including dense fog, in areas where suitable habitat is present, unless the site is completely enclosed with exclusion fencing and has been inspected by a qualified biologist before work begins on the affected days. Work outside of fenced areas may occur as the discretion of the qualified biologist, who may require monitoring.

i. The area under vehicles and equipment parked overnight shall be inspected for animals prior to moving each morning.

j. Erosion control around staging areas will consist of ERTEC S-Fence attached to the bottom of the E-Fence. No straw wattles will be used around the base of the fencing.

**BIO-MM-2** **Northwestern Pond Turtle Avoidance.** Prior to start of Project activities, a survey of suitable aquatic habitat within 100 feet of the disturbance footprint, where access is available, shall be conducted for northwestern pond turtle. If a northwestern pond turtle is present, a qualified biologist shall monitor all Project activities near the northwestern pond turtle to prevent harm. If a northwestern pond turtle enters the construction site, the animal shall be allowed to leave the area on its own without harassment. If the animal does not leave the construction site, a qualified biologist shall capture and relocate it to the nearest aquatic area, unless the species becomes

listed under the federal ESA, in which case the individual will be left alone and the USFWS will be consulted for next steps.

**BIO-MM-3** **Pre-Activity Surveys for Swainson's Hawk Nests.** If Project activities must occur during the nesting season (February 15 to August 31), pre-activity surveys shall be conducted for Swainson's hawk nests within 14 days prior to the start of construction. The surveys shall be conducted within the Project site plus a 0.5-mile buffer. The survey shall be conducted in accordance with the methodology outlined in existing CDFW protocols. Note that Swainson's hawks may establish a nest at any time from February through June; multiple Swainson's hawks nest surveys may be necessary in one season at the direction of a qualified biologist, depending on the timing of Project construction.

If no Swainson's hawk nests are found, no further action is required.

**BIO-MM-4** **Swainson's Hawk Nest Avoidance.** If an active Swainson's hawk nest is discovered at any time within 0.5 mile of active construction, a qualified biologist shall complete an assessment of the potential for current construction activities to impact the nest. The assessment shall consider the type of construction activities, the location of construction relative to the nest, the visibility of construction activities from the nest location, and other existing disturbances in the area that are not related to construction activities for this Project. Based on this assessment, the biologist shall determine if construction activities can proceed and if nest monitoring will be required. At a minimum, construction activities shall not occur within 100 feet of an active nest and shall require monitoring if within 500 feet of an active nest. These buffers may need to increase depending on the sensitivity of the nest location.

**BIO-MM-5** **Pre-Activity Nesting Bird Surveys**. If Project activities must occur during the nesting season (February 1 to August 31), pre-activity nesting bird surveys shall be conducted no more than 7 days prior to the start of construction at the construction site plus a 250-foot buffer for songbirds and a 500-foot buffer for raptors (other than Swainson's hawk). If no active nests are found, no further action is required; however, note that nests may become active at any time throughout the nesting season, including when construction activities are occurring. If active nests are found during the survey or at any time during Project construction, an avoidance buffer ranging from 50 feet to 350 feet shall be required, as determined by a qualified biologist. The avoidance buffer shall remain in place until the biologist has determined that the young are no longer reliant on the nest. Work may occur within the avoidance buffer under the approval and guidance of the biologist. The biologist shall have the ability to stop construction if nesting adults show sign of distress.

**BIO-MM-6** **Worker Environmental Awareness Training.** Prior to the start of construction activities, a qualified biologist shall conduct a mandatory biological resources awareness training for all personnel. For each species with potential to occur, the training shall cover the status, habitats, natural history, appearance (using

representative photographs), legal status of the species, regulatory protections, penalties for noncompliance, benefits of compliance, as well as the avoidance measures to be implemented. The training shall also identify other special-status resources, including aquatic areas, and the protection measures associated with them. Participants shall be required to sign a form that states they have received and understood the training. The applicant shall maintain the record of training and make it available to the USFWS upon request. The Project foreman shall verify that the new personnel brought onto the Project receive the mandatory training before starting work.

**BIO-MM-7 Construction Best Management Practices to Avoid Impacts to Biological and Aquatic Resources.**

1. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared in accordance with typical provisions associated with a Regional General Permit for Construction Activities. The SWPPP will contain best management practices to minimize effects associated with erosion and siltation during construction, as well as a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.

2. All staging areas shall be located in previously disturbed areas outside of aquatic resources.

3. All access routes shall be limited to existing roadways and crossings. Personnel driving vehicles shall observe the posted speed limit on paved roads and a 15 mile-per-hour speed limit on unpaved roads during travel in the project area.

4. Vehicle and equipment fueling shall occur at least 50 feet from aquatic and riparian resources. Containment measures shall be in place to capture any potential spills or leakages.

5. All vehicles and equipment shall be staged at least 50 feet from aquatic resources when not in operation.

6. Spoils piles shall be placed where they cannot be washed into aquatic resources.

7. Food-related trash shall be disposed of in closed containers and removed from the work area daily. All other trash and solid wastes shall be disposed of in closed containers and regularly removed from the various structures and facilities. Following construction, all trash and construction debris shall be removed from the work area.

8. Personnel shall not feed or otherwise attract fish or wildlife to the work site.

9. Spill cleanup kits shall be kept at work sites in or near aquatic resources.

**Significance After Mitigation**. Implementation of the mitigation measures above will reduce Project impacts to special-status species to a less than significant level.

## 5.2 SENSITIVE NATURAL COMMUNITIES AND CRITICAL HABITAT

The proposed Project would have a significant effect on biological resources if it would:

***b) Have a substantial adverse impact 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 US Fish and Wildlife Service.***

The records search identified two sensitive natural communities within 10 miles of the Project site: Northern Hardpan Vernal Pool and Ione Chaparral. Neither community is present within the 500-foot BSA. The BSA does not overlap federally designated critical habitat (Figure 6). Therefore, the Project would have no impacts to sensitive natural communities and no mitigation measures are required.

## 5.3 JURISDICTIONAL AQUATIC RESOURCES

The proposed Project would have a significant effect on biological resources if it would:

***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.***

Two wetland features are located within the 50-foot BSA (Figure 5). These features appear to lack connectivity to streams and would thus likely fall under the jurisdiction of the Regional Water Quality Control Board alone. Note that a formal delineation was not conducted, as it is anticipated that these wetlands will be avoided during Project construction.

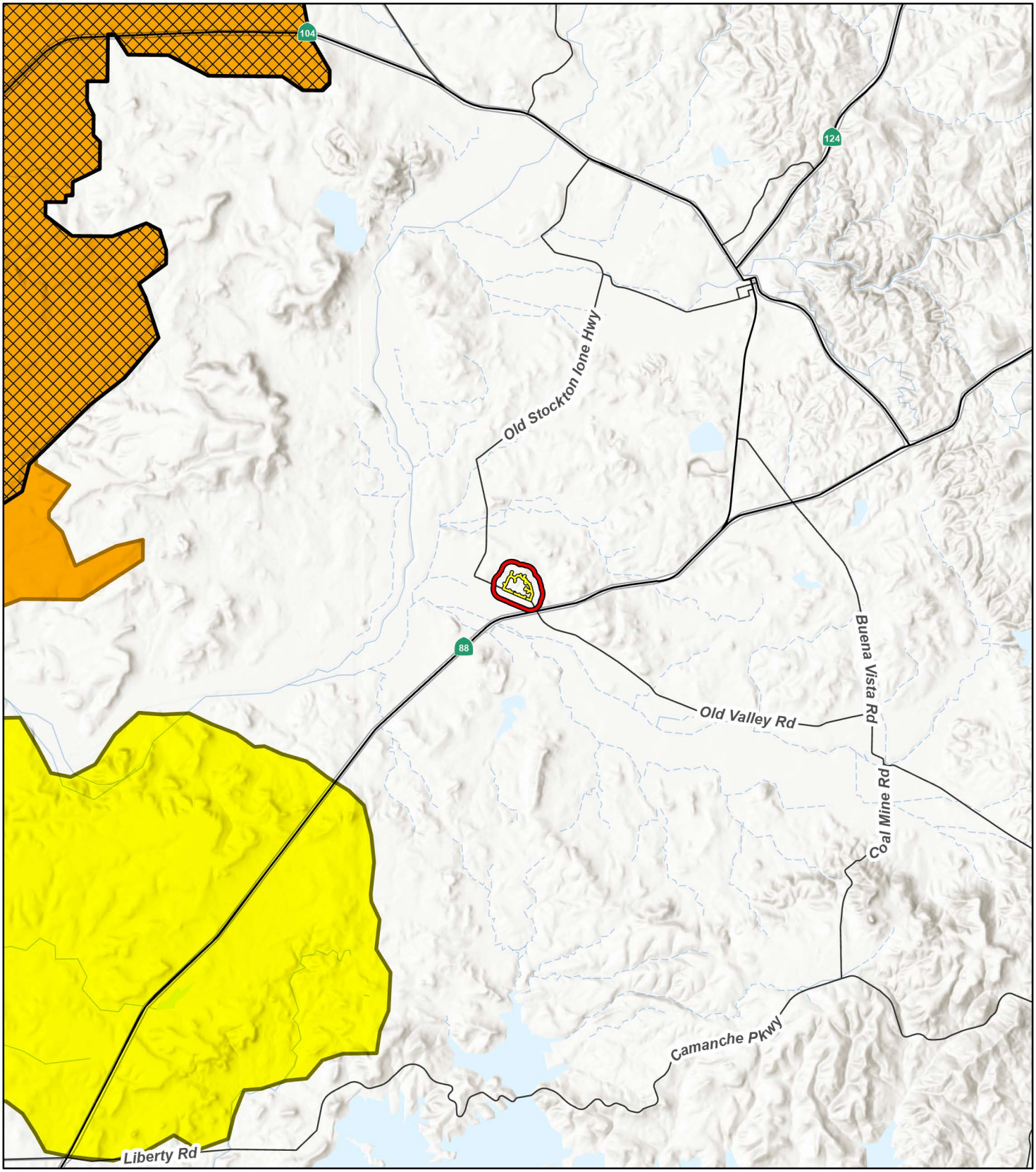
Both wetland features are outside the proposed Project's disturbance footprint, which would be constructed within the existing roadway in the vicinity of these wetlands. Potential impacts would be limited to sediment runoff into the wetlands during rain events. Such impacts would be reduced to less than significant through implementation of a SWPPP and other construction best practices, as required under BIO-MM-7 above. No additional mitigation measures are required.

## 5.4 WILDLIFE MOVEMENT

The proposed Project would have a significant effect on biological resources if it would:

***d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.***

Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. Wildlife movement corridors can be large tracts of land that connect regionally




LSA

FIGURE 6

Proposed Project Location

500-Foot Biological Study Area

Critical Habitat

Sacramento Orcutt Grass (Endangered)

California tiger Salamander (Threatened)

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp (Threatened)

0 0.6 1.2
MILES

*Ione Band of Miwok Indians Water System Improvements Project*

Critical Habitat

SOURCE: Esri Terrain Basemap, US Fish and Wildlife Service (2024)

I:\M\MKN2201\GIS\Pro\Ione Water Main Replacement\Ione Water Main Replacement.aprx (7/19/2024)

important habitats that support wildlife in general, such as stop-over habitat that supports migrating birds or large, contiguous natural habitats that support animals with very large home ranges (e.g., coyotes [*Canis latrans*], mule deer [*Odocoileus hemionus californicus*]). They can also be small-scale movement corridors, such as riparian zones, that provide connectivity and cover to support movement at a local scale.

The Project region is largely undeveloped and could be conducive to general wildlife movement. However, the BSA is not located within an identified wildlife movement corridor (CDFW 2024b). There are no features on site that would lend themselves specifically to wildlife movement (e.g., riparian corridors). The Jackson Creek riparian corridor is located immediately south of the BSA, and the Dry Creek riparian corridor is located to the west. Both have been identified by the CDFW as potential movement corridors as part of the northern Sierra Nevada Foothills Wildlife Connectivity Project (CDFW 2024b); however, the project would not result in any impacts to either identified movement corridor. Therefore, the Project would have no impacts to established wildlife corridors or wildlife nursery sites and it would not otherwise impact local wildlife movement or inhibit the ability of local wildlife to access the BSA. No mitigation measures are required.

## 5.5 LOCAL POLICIES AND ORDINANCES

The proposed Project would have a significant effect on biological resources if it would:

***e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.***

The Amador County Code include several provisions aimed at protecting natural resources (see Appendix A, Subsection A.1.3, for details), specifically:

- **Chapter 7.23, Stormwater**. This ordinance provides definitions for aquatic features, such as wetlands, and prescribes avoidance and minimization requirements to prevent illicit discharge through implementation of Best Management Practices (BMPs).

- **Chapter 19.50.040, Standards and findings to protect biological resources for discretionary use permits and new subdivisions of ten or more lots**. This ordinance requires avoidance, minimization, and mitigation for impacts to the County's sensitive biological resources, including native trees, through the discretionary permit process.

- **Chapter 12.36.020, Cutting trees or shrubs without filing notice of intent**. This ordinance prohibits the cutting of any tree or shrub on public land or on land not owned by the person without written permission.

Resources within the BSA that would be protected under these ordinances include various tree species, including native blue oaks, nesting birds, and special-status species with potential to occur.

The proposed Project would implement the above mitigation measures (i.e., BIO-MM-1 through BIO-MM-7) to avoid impacts to special-status species, including nesting birds. No trees would be removed as part of the Project. No direct impacts to the wetlands present are anticipated. Potential

stormwater runoff into the wetlands would be avoided through implementation of a SWPPP and other construction best practices as described in BIO-MM-7, above.

## 5.6 ADOPTED OR APPROVED PLANS

The proposed Project would have a significant effect on biological resources if it would:

***f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.***

The Project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other habitat conservation plan. Development of the Project would not conflict with any habitat conservation plan, and no mitigation measures are required.

# 6.0 LIMITATIONS, ASSUMPTIONS, AND USE RELIANCE

This BRE has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, focused surveys (if performed), and specified historical and literature sources. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular nesting period or portion of the season when positive identification would be expected if present and, therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and would not be discovered in the future within the site. For example, mobile animal species could occupy the site on a transient basis or reestablish populations in the future. No other guarantees or warranties, expressed or implied, are provided.

# 7.0 REFERENCES

Amador, County of. 2016. Amador County General Plan. Open Space Element. Website: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan.

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Editors. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded*. University of California Press. Berkeley, California.

Bechard, M.J., C.S. Houston, J.H. Sarasola, and A.S. England. 2020. Swainson's Hawk (*Buteo swainsoni*), version 1.0. In *Birds of the World* (A.F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, New York. Website: https://doi.org/10.2173/bow.swahaw.01 (accessed July 11, 2024).

California Department of Fish and Wildlife (CDFW). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.* State of California Natural Resources Agency. March 20.

_____. 2024a. California Natural Diversity Database (CNDDB) – Commercial version dated January 24, 2024. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx (accessed July 10, 2024).

_____. 2024b. Biogeographic Information and Observation System (BIOS). Website: www.wildlife.ca.gov/data/BIOS (accessed July 10, 2024).

California Native Plant Society (CNPS). 2024. Inventory of Rare and Endangered Plants. V.7-08c-Interim 8-22-02. Updated online and accessed via: www.rareplants.cnps.org (accessed July 10, 2024).

Google LLC. 2024. Google Earth Pro.

Jepson Flora Project (Editors). 2019. Jepson eFlora. Website: www.ucjeps.berkley.edu/eflora/ (accessed July 10, 2024).

Mayer, K.E., and W.F. Laudenslayer, Jr. 1988. *A guide to wildlife habitat of California*. State of California, Resources Agency, California Department of Fish and Wildlife. Sacramento, California 166 pp.

Natural Resources Conservation Service (NRCS). 2024a. Web Soil Survey. Soil Survey Area: Amador Area, California (CA628). Soil Survey Data: Spatial Data Version 5, September 16, 2019. USDA Natural Resources Conservation Service. Website: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm (accessed July 11, 2024).

_____. 2024b. Lists of Hydric Soils. National Cooperative Soil Survey, USDA Natural Resources Conservation Service. Website: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/ (accessed July 11, 2024).

United States Fish and Wildlife Service (USFWS). 1973. The Endangered Species Act of 1973, as amended (16 U.S.C 1531 et seq.).

_____. 2017. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). Region 8. Sacramento, California.

_____. 2019. Revised Recovery Plan for Valley Elderberry Longhorn Beetle. October 2019. Pacific Southwest Region, Sacramento, California.

_____. 2023a. Species status assessment report for the northwestern pond turtle (*Actinemys marmorata*) and southwestern pond turtle (*Actinemys pallida*), Version 1.1. April. Ventura Fish and Wildlife Office, Ventura, California.

_____. 2023b. Species Status Assessment Report for Western Spadefoot (*Spea hammondii*) Version 1.1, May 2023. Sacramento Fish and Wildlife Office, Sacramento, California.

_____. 2024a. Critical Habitat Portal. Website: https://ecos.fws.gov/ecp/report/table/critical-habitat.html (accessed July 10, 2024).

_____. 2024b. Information for Planning and Consultation online Project planning tool. Website: https://ecos.fws.gov/ipac/ (accessed July 10, 2024).

_____. 2024c. National Wetlands Inventory Wetlands Mapper. Website: https://www.fws.gov/wetlands/data/mapper.html (accessed July 10, 2024).

United States Geological Survey (USGS). 2024. National Hydrography Dataset. Website: https://www.usgs.gov/core-science-systems/ngp/national-hydrography (accessed July 10, 2024).

Western Regional Climate Center (WRCC). 2024. Cooperative Climatological Data Summaries, NOAA Cooperative Station Camp Pardee, California (041428).

Zeiner, D., W.F. Laudenslayer, Jr., and K.E. Mayer. 1990. *California's Wildlife. California Statewide Wildlife Habitat Relationship System, Volumes I, II, & III,* with online updates. California Department of Fish and Wildlife. May.

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# APPENDIX A

# REGULATORY SETTING

# A.1 REGULATORY SETTING

## A.1.1 Federal Laws and Regulations

### A.1.1.1 Federal Endangered Species Act of 1973 (USC Title 16, Sections 1531–1543)

The federal Endangered Species Act (FESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. FESA defines species as threatened or endangered and provides regulatory protection for listed species. FESA provides a program for the conservation and recovery of threatened and endangered species, as well as the protection of designated critical habitat that the United States Fish and Wildlife Service (USFWS) determines is required for the survival and recovery of listed species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering FESA.

Section 9 of FESA prohibits the "take" of species listed by the USFWS as threatened or endangered. Although take of a listed species is prohibited, it is allowed when it is incidental to an otherwise legal activity. As defined by FESA, taking means "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct." The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 7 of FESA requires federal agencies, in consultation with and with assistance from the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction of adverse modification of critical habitat for these species. Regulations governing interagency cooperation under Section 7 are found in California Code of Regulations (CCR) Title 50, Part 402. If an activity could result in "take" of a listed species as an incident of an otherwise lawful activity, then a biological opinion can be issued with an incidental take statement that exempts the activity from FESA's take prohibitions.

Section 10 provides a means whereby a nonfederal action with the potential to result in take of a listed species can be allowed under an incidental take permit. Application procedures are found at Code of Federal Regulations (CFR) Title 50, Sections 13 and 17, for species under the jurisdiction of USFWS and CFR, Title 50, Sections 217, 220, and 222, for species under the jurisdiction of NMFS. Section 10 would apply to the Project if take of a species (as defined in Section 9) were determined to occur.

Sections 4(a)(3) and (b)(2) of FESA require the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in Section 3(5)(A) of FESA as: (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

### A.1.1.2 Migratory Bird Treaty Act (USC Title 16, Sections 703–711)

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, is the result of a series of treaties that the United States has with Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird" (United States Code [USC] Title 16, Section 703). The MBTA currently includes several hundred species and includes all birds native to the United States.

### A.1.1.3 Bald and Golden Eagle Protection Act of 1940 (USC Title 16, Section 668)

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 protects bald eagles (*Haliaeetus leucoephalus*) and golden eagles (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species and established civil penalties for violation of this act. Take of bald and golden eagles includes to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." To disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially inferring with normal breeding, feeding, or sheltering behavior (Federal Register, volume 72, page 31132; 50 CFR 22.3).

The BGEPA was amended in 2022 to allow USFWS to issue permission for take of bald and golden eagles under specific circumstances as outlined in 50 CFR 22 Subpart C. Take permits may be issued where "the take is compatible with the preservation of the bald eagle and the golden eagle; is necessary to protect an interest in a particular locality; is associated with, but not the purpose of, the activity; and cannot practicably be avoided" (50 CFR 22.80).

### A.1.1.4 Federal Clean Water Act (USC, Title 33, Sections 1521–1376)

The federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 404 establishes a permit program administered by the United States Army Corps of Engineers (USACE) that regulates the discharge of the dredged or fill material into waters of the United States, including wetlands. The USACE implementing regulations are found in CFR Title 33, Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency (USEPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Section 401 requires that a Project applicant that is pursuing a federal license or permit allowing a discharge to waters of the United States obtain State Certification of Water Quality, thereby ensuring that the discharge will comply with provisions of the CWA. The State Water Resources Control Board (SWRCB) administers the certification program in California, primarily through its

regional boards. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States.

Under Section 10 of the Rivers and Harbors Act, the USACE regulates the construction of any structure in or over any navigable water of the United States. Navigable waters are defined as "those waters of the U.S. that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce."

## A.1.2 Applicable State Laws and Regulations

### A.1.2.1 California Environmental Quality Act (California Public Resources Code, Sections 21000–21178, and Title 14 CCR, Section 753, and Chapter 3, Sections 15000–15387)

The California Environmental Quality Act (CEQA) is California's broadest environmental law. CEQA helps guide the issuance of permits and approval of projects. Courts have interpreted CEQA to afford the fullest protection of the environment within the reasonable scope of the statutes. CEQA applies to all discretionary projects proposed to be conducted or approved by a State, county, or city agency, as well as private projects requiring discretionary government approval.

The purpose of CEQA is to disclose to the public the significant environmental effects of a proposed discretionary project; prevent or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring; disclose to the public the agency decision-making process to approve discretionary projects; enhance public participation in the environmental review process; and improve interagency coordination.

*State CEQA Guidelines* Section 15380(b) provides that a species not listed on the federal or State list of protected species nonetheless may be considered rare or endangered for purposed of CEQA if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals.

### A.1.2.2 California Endangered Species Act (California Fish and Game Code Section 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would result in take of a species listed under CESA, a project proponent would need to obtain a take permit under Section 2081(b). Alternatively, the California Department of Fish and Wildlife (CDFW) has the option of issuing a Consistency Determination (Section 2080.1) for projects that would affect a species listed under both CESA and FESA, as long as compliance with FESA would satisfy the "fully mitigate" standard of CESA and other applicable conditions.

### A.1.2.3 Porter-Cologne Water Quality Control Act

"Waters of the State" are broadly defined by the Porter-Cologne Water Quality Control Act (§ 1305(e)) as "any surface water or groundwater, including saline waters, within the boundaries of the state." Under this definition, isolated wetlands that may not be subject to regulations under federal law are waters of the State.

The California Water Code defines "waters of the State" to include any surface water or groundwater, including saline waters, within the boundaries of the State.

On April 2, 2019, the SWRCB adopted its *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (revised April 6, 2021), herein referred to as Procedures, in which it defined wetlands as follows:

> *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

All artificial wetlands that are less than 1 acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the State.

All waters of the United States, including that meet the current and any historic definition, are also considered waters of the State (CCR 23 3831 (w)). Therefore, waters of the State include features that have been determined by the USEPA or the USACE to be "waters of the United States" in an approved jurisdictional determination; "waters of the United States" identified in an aquatic resource report verified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the United States" or any current or historic federal regulation defining "waters of the United States" under the federal CWA.

The State's definition of a wetland deviates from the USACE procedures in that a lack of vegetation does not disqualify a feature from identification as a wetland water of the State, otherwise referred to as nonfederal waters of the State.

The State is further required to comply with Executive Order W-59-93 published August 23, 1993, which states that the "Water Boards' regulation of dredge and fill activities must ensure "no net loss" and long-term net gain in the quantity, quality, and permanence of wetlands acreages and values…"

### A.1.2.4 Various Sections of the California State and Fish and Game Code

**Section 460 and Sections 4000-4003.** Chapter 5 of the California Fish and Game Code describes regulations concerning the take of furbearing mammals, including defining methods of take, seasons of take, bag and possession limits, and areas of the State where take is allowed. Sections 4000–4003 define furbearing mammals and the issuance of permits by the Department. Sections 460 and 4000

identify fisher, marten, river otter, desert kit fox, and red fox as furbearing mammals, and Section 460 prohibits take of these species at any time. This section of the California Fish and Game Code has historically been interpreted to apply to restrictions on furbearer trapping permits but has recently been expanded by CDFW to apply to any forms of take and treated as if these species were listed under CESA.

**Sections 1600 through 1616.** CDFW regulates all activities (construction, discharge, dredge, diversion, etc.) within rivers, streams, and lakes, and associated riparian vegetation, under California Fish and Game Code Section 1600 *et seq*. This includes all such features on public and private lands throughout California. The regulatory limits of their jurisdiction are generally considered to include all area within the bed, bank, and channel of a river, stream, or lake, plus the outer extent of riparian vegetation immediately adjacent to these aquatic features. Recently CDFW has asserted jurisdiction as far out as the limits of the 100-year floodplain around rivers, streams, and lakes. This also includes man-made and/or channelized streams located where natural streams historically occurred, or that are connected to natural streams. Isolated wetlands that are not located within the jurisdictional limits described here are not regulated by CDFW.

**Sections 3511, 4700, 5050, and 5515.** The protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statues prohibit the take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species, except as allowed for in an approved Natural Communities Conservation Plan (NCCP) or through direct legislative action.

**Sections 1900 through 1913—Native Plant Protection Act.** California's Native Plant Protection Act (NPPA) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provision of the NPPA prohibit that taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. A project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

## A.1.3 Local and Regional Laws, Regulations, and Policies

### A.1.3.1 Amador County General Plan

The following objectives and implementing policies related to biological resources are applicable to the Project site.

### A.1.3.2 Local Ordinances

**Chapter 7.23 Stormwater.** The purpose and intent of this chapter is to meet the requirements of the California State Water Resources Control Board Order No. 2013-0001-DWQ and any subsequent amendments thereto; and protect and promote the health, safety, and general welfare of citizens; and protect and enhance the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C. 1251 et seq.), and the Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) by

## Table A.1: Open Space Element

| | |
|---|---|
| Goal OS-3: | Protect wildlife habitats, including sensitive environments and aquatic habitats, consistent with State and federal law. |
| Policy OS-3.1: | Encourage preservation of oak woodlands in accordance with Public Resources Code Section 21083.4. |
| Policy OS-3.2: | Encourage the conservation of corridors for wildlife movement, particularly in oak woodland areas and along rivers and streams. |
| Policy OS-3.3 | Support voluntary conservation easements to protect wildlife habitat, including oak woodlands |
| Policy OS-3.4 | Use site planning techniques, including, but not limited to, buffers, setbacks, and clustering of development to protect sensitive environments, including wetlands, riparian corridors, vernal pools, and sensitive species |
| Policy OS-3.5 | Protect aquatic habitats from the effects of erosion, siltation, and alteration |
| Policy OS-3.6 | Encourage the use of appropriate native species for reclamation and revegetation components of development projects. Restrict the introduction of invasive exotic species. The County will amend Chapter 15.40 of the County Code (governing grading and erosion control) to include a section addressing the requirement to limit the potential for introduction and spread of invasive species during soil disturbance and construction activities |
| Goal OS-4 | Protect special status species, including threatened and endangered species, consistent with State and federal law |
| Policy OS-4.1 | Ensure that new development complies with State and federal laws concerning special-status species preservation |

Source: (Amador County, 2016)

reducing pollutants in storm water discharges to the maximum extent practicable and by prohibiting nonstorm discharges to the storm drainage system. (Ord. 1751 §2 (part), 2015).

**Chapter 19.50 Design Standards and Findings.**

***19.50.040 Standards and findings to protect biological resources for discretionary use permits and new subdivisions of ten or more lots.*** Approval of discretionary use permits and subdivisions of ten lots or more is subject to the county making all of the following findings concurrent with project approval:

A. The project has specific, measurable public benefits that outweigh its harm to the county's sensitive biological resources identified as special status, sensitive natural communities, jurisdictional wetlands and state-identified wildlife corridors.

B. Where avoidance of adverse impacts to these biological resources is infeasible, such impacts will be mitigated to the extent feasible.

C. Native trees and tree canopies will be maintained to the extent feasible unless removal or modification is required to comply with fire-safe building standards or to otherwise protect lives and property.

D. New residential, commercial, industrial, or agricultural structures, excluding bridges and appurtenant roads constructed in compliance with state standards, shall meet the following standards:

1. The structure is set back one hundred feet on either side of year-round and perennial streams or fifty feet from intermittent streams, where an "intermittent stream" is defined as a stream that may receive appreciable quantities of water from numerous sources including snowmelt and groundwater, and that ceases to flow during dry periods.

2. In the event that a structure cannot meet the above standard, the applicant may apply for a variance for the structure subject to a finding that the structure cannot feasibly be relocated on the parcel to avoid adverse impacts to aquatic resources, in which case any adverse impacts shall be mitigated to ensure no net loss of riparian habitat consistent with adopted general plan EIR Mitigation Measure 4.4-2: Riparian Habitat Protection reproduced below in full.

***Mitigation Measure 4.4-2: Riparian Habitat Protection.*** If projects require encroachment into the riparian habitat, project applicants will be required to develop a riparian habitat mitigation plan. The mitigation plan will include the following:

- implementation of Best Management Practices (BMPs) while working near riparian habitats to avoid inadvertent damage to riparian vegetation to be retained. BMPs will include establishment of nodisturbance buffers around the outer edge of the riparian vegetation to prevent root and crown damage, soil compaction, and implementation of standard BMPs to reduce erosion and water quality impacts, and introduction and spread of invasive species. Exceptions to riparian buffers will be granted to permit necessary road and bridge repair and construction, trails construction, and other recreational access structures that are water dependent, such as docks and piers;

- methods to be implemented to avoid and/or compensate for impacts on riparian habitat at a ratio adequate to offset the loss of riparian habitat functions and values. At a minimum, riparian habitat losses will be compensated at a 1:1 ratio;

- identification of mitigation sites and criteria for selecting these sites;

- site-specific management procedures to benefit establishment and maintenance of native riparian plant species;

- monitoring protocol, including schedule and annual report requirements (compensatory riparian habitats shall be monitored for a minimum period of five years);

- ecological performance standards and corrective measures if performance standards are not met;

- responsible parties for monitoring and preparing reports; and

- responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

Mitigation may be accomplished through preservation, replacement, restoration or enhancement of degraded habitat, reestablishing riparian vegetation in areas that historically supported it, or purchase of credits at an established mitigation bank, such as the Cosumnes Floodplain Mitigation Bank. Compensatory mitigation will be provided within Amador County to the extent feasible and available; however, certain impacts may be compensated at an agency-approved mitigation bank in an adjacent county if required by CDFW and an agency-approved mitigation bank is not available in Amador County. If a proposed project requires work on the bed or bank of a stream, or other water body, the project applicant will also obtain a streambed alteration agreement under Section 1602 of the Fish and Game Code from CDFW prior to project implementation, and will implement all requirements of the agreement in the timeframes required therein. (Ord. 1777 §2 (part), 2018).

**Chapter 12.36 Trees and Shrubbery.**

***12.36.020 Cutting trees or shrubs without filing notice of intent.*** It is unlawful for any person to cut any tree or shrub, or any portion thereof, growing upon public land, or upon land not owned by him in the unincorporated territory of Amador County, without having previously obtained and having in his immediate possession written permission for such cutting, dated and signed by the owner of the land upon which such trees or shrubs are growing, or by his or its duly authorized agent, and it is unlawful to cut more than five such trees or more than one hundred pounds of such shrubbery without having previously filed with both the sheriff of Amador County and with the Federal or State Forest Ranger or Peace officer having jurisdiction of the district in which such trees or shrubs are cut, a notice of intention to cut such trees or shrubbery containing the following:

A. A statement of the approximate number and quantity of trees or shrubbery to be cut;

B. A general description of the land upon which such trees or shrubbery are to be cut;

C. The approximate dates between which such trees or shrubbery are to be cut;

D. The signature of the person proposing to cut such trees; and

E. The written consent to such cutting, dated and signed by the owner of the land upon which such trees or shrubbery are to be cut or by his or its duly authorized agent. (Ord. 290 §2, 1957).

# APPENDIX B

# REPRESENTATIVE SITE PHOTOGRAPHS


**Photo 1**: View of typical roadway in which mainline will be installed.


**Photo 2:** Service lines to individual homes will be installed in driveways.


**Photo 3**: An existing water main is located under Jackson Valley Road.

**Photo 4**: Existing tank off Jackson Valley Road.

# APPENDIX C

# PLANT AND ANIMAL SPECIES OBSERVED WITHIN THE BIOLOGICAL STUDY AREA

# Table C.1: Plant Species Observed within the Biological Study Area

| Scientific Name | Common Name | Status | Native or Introduced |
|---|---|---|---|
| **Trees** | | | |
| *Acer negundo* | Box elder | None | Native |
| *Celtis sinensis* | Chinese hackberry | None | Introduced |
| *Eucalyptus camaldulensis* | Red gum | None | Introduced; Cal-IPC Limited |
| *Ficus carica* | Common fig | None | Introduced; Cal-IPC Moderate |
| *Juglans hindsii* | Northern California black walnut | None | Native |
| *Morus alba* | White mulberry | None | Introduced |
| *Nerium oleander* | Oleander | None | Introduced |
| *Olea europaea* | Olive | None | Introduced; Cal-IPC Limited |
| *Pinus pinea* | Italian stone pine | None | Introduced |
| *Pinus sabiniana* | Gray pine | None | Native |
| *Quercus douglasii* | Blue oak | None | Native |
| *Quercus lobata* | Valley oak | None | Native |
| *Quercus wislizeni* | Interior live oak | None | Native |
| *Salix laevigata* | Polished willow | None | Native |
| *Washingtonia robusta* | Mexican fan palm | None | Introduced; Cal-IPC Moderate |
| **Shrubs** | | | |
| *Agave americana* | American century plant | None | Introduced |
| *Baccharis pilularis* | Coyote brush | None | Native |
| *Opuntia ficus-indica* | Mission cactus | None | Introduced |
| *Phoradendron leucarpum* | American mistletoe | None | Native |
| *Punica granatum* | Pomegranate | None | Introduced |
| *Rosa x hybrida* | Hybrid tea rose | None | Introduced |
| *Sambucus mexicana* | Blue elderberry | None | Native |
| *Syringa vulgaris* | Common lilac | None | Introduced |
| **Herbs** | | | |
| *Abutilon theophrasti* | Velvet leaf | None | Introduced |
| *Acmispon americanus* | Spanish lotus | None | Native |
| *Aloe striata* | Coral aloe | None | Introduced |
| *Amaranthus albus* | Pigweed amaranth | None | Introduced |
| *Amsinckia intermedia* | Common fiddleneck | None | Native |
| *Amsinckia menziesii* | Small flowered fiddleneck | None | Native |
| *Asclepias fascicularis* | Narrow leaf milkweed | None | Native |
| *Asclepias vestita* | Woolly milkweed | None | Native |
| *Brassica nigra* | Black mustard | None | Introduced; Cal-IPC Moderate |
| *Brodiaea appendiculata* | Hoover's brodiaea | None | Native |
| *Brodiaea coronaria* | Harvest brodiaea | None | Native |
| *Calendula arvensis* | Field marigold | None | Introduced |
| *Capsella bursa-pastoris* | Shepherd's purse | None | Introduced |
| *Carduus pycnocephalus* | Italian thistle | None | Introduced; Cal-IPC Moderate |
| *Castilleja attenuata* | Valley tassels | None | Native |
| *Centaurea solstitialis* | Yellow star thistle | None | Introduced; Cal-IPC High |
| *Cerastium glomeratum* | Large mouse ears | None | Introduced |
| *Chenopodium album* | Lamb's quarters | None | Introduced |
| *Clarkia* sp. | Clarkia species | None | Native |
| *Clarkia unguiculata* | Elegant clarkia | None | Native |
| *Claytonia perfoliata* ssp. *perfoliata* | Miner's lettuce | None | Native |
| *Convolvulus arvensis* | Field morning glory | None | Introduced |
| *Crassula connata* | Sand pygmy weed | None | Native |

## Table C.1: Plant Species Observed within the Biological Study Area

| Scientific Name | Common Name | Status | Native or Introduced |
|---|---|---|---|
| *Croton setiger* | Turkey mullein | None | Native |
| *Cyperus eragrostis* | Tall flatsedge | None | Native |
| *Dipterostemon capitatus* | Blue dicks | None | Native |
| *Dittricharia graveolens* | Stinkwort | None | Introduced; Cal-IPC Moderate |
| *Eleocharis macrostachya* | Spike rush | None | Native |
| *Epilobium brachycarpum* | Tall annual willowherb | None | Native |
| *Epilobium ciliatum* | Fringed willowherb | None | Native |
| *Epilobium densiflorum* | Dense flowered boisduvalia | None | Native |
| *Erigeron canadensis* | Canada horseweed | None | Native |
| *Erodium botrys* | Broad leaf filaree | None | Introduced |
| *Erodium cicutarium* | Red stemmed filaree | None | Introduced; Cal-IPC Limited |
| *Erodium moschatum* | White stemmed filaree | None | Introduced |
| *Eryngium castrense* | Great valley button celery | None | Native |
| *Eschscholzia californica* | California poppy | None | Native |
| *Euphorbia maculata* | Spotted spurge | None | Introduced |
| *Euphorbia serpillifolia* | Thyme-leaved spurge | None | Native |
| *Galium aparine* | Common bedstraw | None | Native |
| *Galium parisiense* | Wall bedstraw | None | Introduced |
| *Geranium dissectum* | Cutleaf geranium | None | Introduced; Cal-IPC Limited |
| *Geranium molle* | Dove's foot geranium | None | Introduced |
| *Heterotheca grandiflora* | Telegraph weed | None | Native |
| *Hibiscus syriacus* | Rose of Sharon | None | Introduced |
| *Hypochaeris glabra* | Smooth cat's ear | None | Introduced; Cal-IPC Limited |
| *Hypochaeris radicata* | Hairy cats ear | None | Introduced; Cal-IPC Moderate |
| *Iris germanica* | Bearded iris | None | Introduced |
| *Juncus bufonius* | Common toad rush | None | Native |
| *Juncus xiphioides* | Iris leaved rush | None | Native |
| *Kickxia elatine* | Sharp point fluellin | None | Introduced |
| *Lactuca serriola* | Prickly lettuce | None | Introduced |
| *Lamium amplexicaule* | Henbit deadnettle | None | Introduced |
| *Lemna minor* | Smaller duckweed | None | Native |
| *Lepidium strictum* | Prostrate pepper grass | None | Native |
| *Logfia gallica* | Narrowleaf cottonrose | None | Introduced |
| *Lupinus bicolor* | Miniature lupine | None | Native |
| *Lysimachia arvensis* | Scarlet pimpernel | None | Introduced |
| *Lythrum hyssopifolia* | Hyssop loosestrife | None | Introduced; Cal-IPC Limited |
| *Malva parviflora* | Cheeseweed mallow | None | Introduced |
| *Marah fabacea* | California man-root | None | Native |
| *Marrubium vulgare* | White horehound | None | Introduced; Cal-IPC Limited |
| *Matricaria discoidea* | Pineapple weed | None | Native |
| *Medicago polymorpha* | Bur clover | None | Introduced; Cal-IPC Limited |
| *Micropus californicus* | Q-tips | None | Native |
| *Nicotiana acuminata* | Manyflower tobacco | None | Introduced |
| *Oxalis corniculata* | Creeping wood sorrel | None | Introduced |
| *Oxalis pes-capre* | Bermuda buttercup | None | Introduced; Cal-IPC Moderate |
| *Petorhagia dubia* | Wild carnation | None | Introduced |
| *Plagiobothrys nothofulvus* | Rusty haired popcornflower | None | Native |
| *Plagiobothrys stipitatus* var. *micranthus* | Stalked popcornflower | None | Native |
| *Plantago coronopus* | Cut leaf plantain | None | Introduced |

## Table C.1: Plant Species Observed within the Biological Study Area

| Scientific Name | Common Name | Status | Native or Introduced |
|---|---|---|---|
| *Plantago lanceolata* | English plantain | None | Introduced; Cal-IPC Limited |
| *Polygonum aviculare* | Prostrate knotweed | None | Introduced |
| *Psilocarphus tenellus* | Slender woolly marbles | None | Native |
| *Ranunculus aquatilis* var. *aquatilis* | White water buttercup | None | Native |
| *Ranunculus bonariensis* | Carter's buttercup | None | Native |
| *Ranunculus muricatus* | Pricklefruit buttercup | None | Introduced |
| *Raphanus sativus* | Wild radish | None | Introduced; Cal-IPC Limited |
| *Rumex crispus* | Curly dock | None | Introduced; Cal-IPC Limited |
| *Setaria pumila* | Yellow bristlegrass | None | Introduced |
| *Silene gallica* | Common catchfly | None | Introduced |
| *Silybum marianum* | Milk thistle | None | Introduced; Cal-IPC Limited |
| *Soliva sessilis* | Common soliva | None | Introduced |
| *Sonchus oleraceus* | Common sowthistle | None | Introduced |
| *Spergularia rubra* | Purple sand spurry | None | Introduced |
| *Stellaria media* | Chickweed | None | Introduced |
| *Stephanomeria virgata* | Twiggy wreath plant | None | Native |
| *Torilis arvensis* | Field hedge parsley | None | Introduced; Cal-IPC Moderate |
| *Tribulus terrestris* | Puncture vine | None | Introduced; Cal-IPC Limited |
| *Trifolium depauperatum* var. *truncatum* | Dwarf sack clover | None | Native |
| *Trifolium dubium* | Little hop clover | None | Introduced |
| *Trifolium glomeratum* | Clustered clover | None | Introduced |
| *Trifolium hirtum* | Rose clover | None | Introduced; Cal-IPC Limited |
| *Trifolium microcephalum* | Small headed clover | None | Native |
| *Triglochin scilloides* | Flowering quillwort | None | Native |
| *Triteleia laxa* | Ithuriel's spear | None | Native |
| *Typha latifolia* | Broadleaf cattail | None | Native |
| *Verbascum thapsus* | Woolly mullein | None | Introduced; Cal-IPC Limited |
| *Vicia sativa* | Spring vetch | None | Introduced |
| *Vicia villosa* | Hairy vetch | None | Introduced |
| *Xanthium strumarium* | Rough cockleburr | None | Native |
| *Zeltnera muehlenbergii* | Muehlenberg's centaury | None | Native |
| **Grasses** | | | |
| *Aira caryophyllea* | Silver hairgrass | None | Introduced |
| *Avena barbata* | Slender oat | None | Introduced; Cal-IPC Moderate |
| *Avena fatua* | Wild oat | None | Introduced; Cal-IPC Moderate |
| *Briza minor* | Little rattlesnake grass | None | Introduced |
| *Bromus diandrus* | Ripgut brome | None | Introduced; Cal-IPC Moderate |
| *Bromus hordeaceus* | Soft chess | None | Introduced; Cal-IPC Limited |
| *Cortaderia selloana* | Pampas grass | None | Introduced; Cal-IPC High |
| *Crypsis vaginiflora* | African pricklegrass | None | Introduced |
| *Cynodon dactylon* | Bermuda grass | None | Introduced; Cal-IPC Moderate |
| *Digitaria sanguinalis* | Hairy crabgrass | None | Introduced |
| *Festuca microstachys* | Small fescue | None | Native |
| *Festuca myuros* | Rattail sixweeks grass | None | Introduced; Cal-IPC Moderate |
| *Festuca perennis* | Italian rye grass | None | Introduced; Cal-IPC Moderate |
| *Hordeum marinum* | Seaside barley | None | Introduced |
| *Hordeum murinum* | Foxtail barley | None | Introduced; Cal-IPC Moderate |
| *Pleuropogon californicus* var. *californicus* | Annual semaphore grass | None | Native |
| *Poa annua* | Annual blue grass | None | Introduced |

## Table C.1: Plant Species Observed within the Biological Study Area

| Scientific Name | Common Name | Status | Native or Introduced |
|---|---|---|---|
| *Poa bulbosa* | Bulbous blue grass | None | Introduced |
| *Polypogon monspeliensis* | Rabbitsfoot grass | None | Introduced; Cal-IPC Limited |
| *Triticum aestivum* | Wheat | None | Introduced |
| **Vines** | | | |
| *Rubus armeniacus* | Himalayan blackberry | None | Introduced; Cal-IPC High |
| *Vitis californica* | California wild grape | None | Native |

Notes: LSA Site Visit, April 25 and July 3, 2024.
Rating system: **High** = several ecological impacts; **Moderate** = substantial but not severe ecological impacts; **Limited** = minor ecological impacts or not enough information to justify higher score; **Alert** = species ranked as High or Moderate with limited distribution, but potential to spread; **Watch** = could pose a high risk of becoming invasive in the future.
Cal-IPC = California Invasive Plant Council.

## Table C.2: Animal Species Observed within the Biological Study Area

| Scientific Name | Common Name | Status | Native or Introduced |
|---|---|---|---|
| **Birds** | | | |
| *Melanerpes formicivorus* | Acorn woodpecker | None | Native |
| *Zenaida macroura* | Mourning dove | None | Native |
| *Mimus polyglottos* | Northern mockingbird | None | Native |
| *Sturnus vulgaris* | European starling | None | Introduced |
| *Cathartes aura* | Turkey vulture | None | Native |
| *Aphelocoma californica* | Western scrub jay | None | Native |
| *Agelaius phoeniceus* | Red-winged blackbird | None | Native |
| *Petrochelidon pyrrhonota* | Cliff swallow | None | Native |
| *Pavo* sp. | Pea fowl | None | Introduced |
| **Mammals** | | | |
| *Felis catus* | Domestic cat | None | Introduced |
| *Canus lupus familiaris* | Domestic dog | None | Introduced |

Source: LSA Site Visit, April 25 and July 3, 2024.

# APPENDIX D

# SPECIAL-STATUS SPECIES EVALUATION

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| **Plants** | | | | |
| *Arctostaphylos myrtifolia*<br><br>Ione manzanita | US: T<br>CA: -<br>CRPR: 1B.2 | Perennial evergreen shrub; blooms November–March; chaparral, cismontane woodland, Ione soil; elevation from 195 to 1,905 feet; Amador and Calaveras counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Balsamorhiza macrolepis*<br><br>big-scale balsamroot | US: -<br>CA: -<br>CRPR: 1B.2 | Perennial herb; blooms March–June; chaparral, cismontane woodland, and valley and foothill grassland; elevation from 150 to 5,100 feet; Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Calycadenia hooveri*<br><br>Hoover's calycadenia | US: -<br>CA: -<br>CRPR: 1B.3 | Annual herb; blooms July–September; rocky cismontane woodland, and valley and foothill grassland; elevation 215–985 feet; documented in Calaveras, Madera, Mariposa, Merced, San Joaquin, and Stanislaus counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Calycadenia spicata*<br><br>spicate calycadenia | US: -<br>CA: -<br>CRPR: 1B.3 | Annual herb; blooms May–September; cismontane woodland, and valley and foothill grassland; elevation from 130 to 4,595 feet; Amador, Butte, Calaveras, El Dorado, Fresno, Kern, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Tulare, Tuolumne, and Yuba counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Downingia pusilla*<br><br>dwarf downingia | US: -<br>CA: -<br>CRPR: 2B.2 | Annual herb; blooms March–May; valley and foothill grassland (mesic), and vernal pools; elevation 5–1,460 feet; documented in Fresno, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Eriogonum apricum* var. *apricum*<br><br>Ione buckwheat | US: E<br>CA: E<br>CRPR: 1B.1 | Perennial herb; blooms July–October; chaparral (openings, Ione soil); elevation from 195 to 475 feet; Amador County. | No | Was not detected during seasonally timed botanical surveys. |
| *Eriogonum apricum* var. *prostratum*<br><br>Irish Hill buckwheat | US: E<br>CA: E<br>CRPR: 1B.1 | Perennial herb; blooms June–July; chaparral (openings, Ione soil); elevation from 295 to 395 feet; Amador County. | No | Was not detected during seasonally timed botanical surveys. |
| *Eryngium pinnatisectum*<br><br>Tuolumne button-celery | US: -<br>CA: -<br>CRPR: 1B.2 | Annual/perennial herb; blooms May–August; cismontane woodland, lower montane coniferous forest, vernal pools; elevation 230–3,000 feet; documented in Amador, Calaveras, Sacramento, San Joaquin, and Tuolumne counties. | No | Was not detected during seasonally timed botanical surveys. |

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| *Erythranthe marmorata*<br><br>Stanislaus monkeyflower | US: -<br>CA: -<br>CRPR: 1B.1 | Annual herb; blooms March–May; cismontane woodland and lower montane coniferous forest; elevation 330–2,955 feet; documented in Amador, Calaveras, Fresno, Stanislaus, and Tuolumne counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Gratiola heterosepala*<br><br>Boggs Lake hedge-hyssop | US: -<br>CA: E<br>CRPR: 1B.2 | Annual herb; blooms April–August; marshes and swamps (lake margins), and vernal pools; elevation from 35 to 7,790 feet; Fresno, Lake, Lassen, Madera, Mendota, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, SJQ, Solano, Sonoma, and Tehama counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Horkelia parryi*<br><br>Parry's horkelia | US: -<br>CA: -<br>CRPR: 1B.2 | Perennial herb; blooms April–September; chaparral, cismontane woodland, Ione formation, and other soils; elevation from 260 to 3,510 feet; Amador, Calaveras, El Dorado, Mariposa, and Tuolumne counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Legenere limosa*<br><br>legenere | US: -<br>CA: -<br>CRPR: 1B.1 | Annual herb; blooms April–June; vernal pools; elevation from 5 to 2,885 feet; Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, Shasta, SJQ, San Mateo, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Navarretia myersii* ssp. *myersii*<br><br>pincushion navarretia | US: -<br>CA: -<br>CRPR: 1B.1 | Annual herb; blooms April and May; vernal pools; often acidic soils; elevation 65 to 1,085 feet; known from Central Valley from Placer County south to Fresno County. | No | Was not detected during seasonally timed botanical surveys. |
| *Navarretia paradoxiclara*<br><br>Patterson's navarretia | US: -<br>CA: -<br>CRPR: 1B.3 | Annual herb; blooms May–June (July); meadows and seeps, openings, serpentine, vernally mesic; elevation 490–1,410 feet; documented in Calaveras and Tuolumne counties. | No | Was not detected during seasonally timed botanical surveys. |
| *Orcuttia viscida*<br><br>Sacramento Orcutt grass | US: E<br>CA: E<br>CRPR: 1B.1 | Annual herb; blooms April–July (September); vernal pools; elevation from 100 to 330 feet; Sacramento County. | No | Was not detected during seasonally timed botanical surveys. |

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| **Invertebrates** | | | | |
| *Branchinecta lynchi*<br><br>vernal pool fairy shrimp | US: T<br>CA: - | Occurs in a variety of vernal pool habitats that range from small, clear pools to large, turbid, and alkaline pools; more common in pools less than 0.05 acre, typically as part of larger vernal pool complexes; adults active from early December to early May; pools must hold water for at least 18 days, the minimum to complete the lifecycle if temperatures are optimal; eggs laid in spring and persist through dry season as cysts; current California distribution includes Central Valley and Coast Ranges; threatened by habitat loss, degradation, and fragmentation, as well as interference with vernal pool hydrology. | No | No vernal pool habitat present. |
| *Danaus plexippus*<br><br>monarch butterfly | US: C<br>CA: - | Migrant; lays eggs on milkweed (primarily *Asclepias* spp.); overwinters along coast in dense stands of eucalyptus, Monterey pine, and Monterey cypress that provide indirect sunlight, moisture for hydration, protection from winds, and above-freezing temperatures. | No | No suitable overwintering or breeding habitat present. |
| *Desmocerus californicus dimorphus*<br><br>valley elderberry longhorn beetle | US: T<br>CA: - | Requires elderberry shrubs for reproduction and survival, with stems greater than 1 inch; occurs only in Central Valley north of San Joaquin River; occurs below 500 feet elevation; eggs laid on elderberry shrubs; larvae burrow into stems for food and metamorphosis; adults emerge from stem and spend remainder of their lives on same shrub or on ground underneath. | Yes | Nearest recorded occurrence is 3 miles to the north (CNDDB EONDX 3777). A single elderberry shrub was observed within 50-foot BSA. |
| *Lepidurus packardi*<br><br>vernal pool tadpole shrimp | US: E<br>CA: - | Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid. | No | No vernal pool habitat present. |
| **Fish** | | | | |
| *Oncorhynchus mykiss irideus pop. 11*<br><br>steelhead—Central Valley DPS | US: T<br>CA: - | Populations in Sacramento and San Joaquin rivers and their tributaries. Central Valley steelhead enter fresh water from August through April. Steelhead adults typically spawn from December through April, with peaks from January through March. | No | No suitable aquatic habitat present. |

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| **Amphibians** | | | | |
| *Ambystoma californiense*<br><br>California tiger salamander—Central California DPS | US: T<br>CA: T, SSC | Small salamander found in vernal and seasonal pools and associated grasslands, oak savanna and woodland, and coastal scrub in Central Valley from Tulare County north to the Sacramento area and along Central Coast from Santa Barbara County north to San Franciso Bay; 0–3,200 feet elevation; spends most of year in small mammal burrows; breeding season is November–February; requires seasonal ponds for breeding and egg laying; can travel more than 3,000 feet between aquatic and upland habitats. | Yes | Nearest recorded occurrence approximately 0.9 mile to the southeast (CNDDB EONDX 96619). Wetlands within the 500-foot BSA are likely unsuitable due to inconsistent flooding from year to year. Aquatic areas to the east and west of the 500-foot BSA may be marginally suitable due to hydrology. |
| *Spea hammondii*<br><br>western spadefoot | US: C<br>CA: SSC | Species relies on vernal pools for breeding where predators cannot become established; open areas with sand or gravelly soils in a variety of habitats: grasslands, coastal scrub, woodlands, chaparral, sandy washes, lowland river floodplains, alkali flats, foothills, and mountains; endemic to California and northern Baja California; distribution is from Redding south throughout Central Valley and foothills, throughout South Coast Ranges into coastal southern California to Transverse and Peninsular mountains; elevation is from sea level to 4,500 feet. | Yes | Nearest recorded occurrence is approx. 2.3 miles to the west (CNDDB EONDX 113410). Wetlands within 500-foot BSA are likely unsuitable due to inconsistent flooding from year to year. Aquatic areas to the east and west of the 500-foot BSA may be marginally suitable due to hydrology. |
| **Reptiles** | | | | |
| *Actinemys [=Emys] marmorata*<br><br>northwestern pond turtle | US: C<br>CA: SSC | Highly aquatic and diurnally active; found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with vegetation and rocky/muddy bottoms; wide variety of habitats; needs basking areas near water (logs, rocks, vegetation mats, and banks); may enter brackish water and even seawater; digs nest on land near water; range is from north of the San Francisco Bay area south, including the Central Valley. | Yes | Aquatic habitat within BSA and greater area could support this species. One unprocessed CNDDB record from 2012 is located approximately 0.71 mile southwest of the Project. |

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| **Birds** | | | | |
| *Agelaius tricolor*<br><br>tricolored blackbird | US: -<br>CA: T, SSC | Colonial breeder that prefers freshwater, emergent wetlands with tall, dense cattails or tules, but also thickets of willow, blackberry, wild rose, and tall herbs; breeding colonies are minimum ~50 pairs; forages in pastures, grain fields, and similar habitats near breeding areas. | No | No suitable wetland habitat present. Wetlands on site are not large enough to support a nesting colony. |
| *Aquila chrysaetos*<br><br>golden eagle | US: -<br>CA: FP, WL | Uncommon resident of mountainous and valley-foothill areas. Nesting occurs on cliff ledges and overhangs or in large trees. Foraging typically occurs in open terrain where small rodent prey is seen while soaring high above ground. Species occurs throughout California except the Central Valley. | No | Not expected to nest in trees so close to humans. Project site lacks open terrain required for foraging. |
| *Athene cunicularia*<br><br>burrowing owl | US: -<br>CA: SSC | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation and lack of trees. Subterranean nester dependent upon burrowing mammals, most notably the California ground squirrel. | No | No suitable burrows detected. Project site heavily disturbed by humans and domestic animals and lacks the open, treeless habitat this species prefers. |
| *Buteo swainsoni*<br><br>Swainson's hawk | US: -<br>CA: T | Resident and migrant throughout Central Valley, Klamath Basin, Northeastern Plateau, Mojave Desert, Antelope Valley, and elsewhere; breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannahs; usually nests in scattered trees surrounded by foraging habitat; forages primarily for small mammals in grasslands and open desert scrublands or suitable grain fields or livestock pastures; occasionally eats insects, amphibians, reptiles, and birds; usually found near water. | Yes | Suitable nest tress present. The CNDDB's nearest recorded occurrence is approximately 5 miles to the south at Camanche Reservoir (CNDDB EONDX 90047). |
| *Haliaeetus leucocephalus*<br><br>bald eagle | US: D<br>CA: E | Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live trees with open branches, especially ponderosa pine. Roosts communally in winter. Piscivorous and scavenger. Requires large bodies of water. | No | No suitable aquatic habitat present. |

## Table D.1: Special-Status Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur | Rationale |
|---|---|---|---|---|
| *Icteria virens*<br><br>yellow-breasted chat | US: -<br>CA: SSC | Summer resident of riparian willow thickets and other brushy tangles (e.g., blackberry, wild grape) near water on coast and Sierra Nevada foothills up to 4,800 feet; forages and nests in low, dense riparian habitat within 10 feet of ground. | No | No suitable riparian habitat present. |
| *Riparia riparia*<br><br>Bank swallow | US: -<br>CA: T | Summer migrant; breeds May through July; colonial nester in riparian areas and other lowland habitats except the desert; nests on vertical cliffs and banks over streams, rivers, lakes and the ocean; need fine-textured soils for digging nest holes; | No | No suitable cliffs or banks present. |

Sources: CDFW (2024a, 2024b, 2024c); CNPS (2024); LSA (2024); USFWS (2024b); Zeiner et al. (1990).
Notes:
**US: Federal Classifications**
E Listed as endangered.
T Listed as threatened.
C Candidate for federal Listing
D Federally delisted (recovered).
**CA: State Classifications**
E State-listed as endangered.
T State-listed as threatened.
C Candidate for listing as threatened or endangered.
FP California Fully Protected. Refers to animals protected under Fish and Game Code sections 3511, 4700, 5050, and 5515.
SSC Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
**CRPR: California Rare Plant Rank**
1A Presumed Extinct in California
1B Rare, Threatened, or Endangered in California and elsewhere
2A Plants presumed extirpated in California, but more common elsewhere
2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere
**CRPR Threat Code Extension:**
.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Fairly endangered in California (20-80% occurrences threatened)
.3 Not very endangered in California (<20% of occurrences threatened)
BSA = Biological Study Area

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