DRAFT INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

Prepared by

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

On behalf of Madera County

December 2022

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GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

Madera County has prepared this Initial Study, which examines the potential environmental impacts of the Madera County – Maintenance District 46 Replacement Well Project (project), in Madera County, California. The document explains the proposed project details and the existing environment that could be affected by the project, potential impacts, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Hard copies of the document are available for review at:

  Madera County Public Works, Engineering Services
  200 W. 4th Street, Suite 3100
  Madera, CA 93637

  An electronic copy of the document is also available for review at: https://www.maderacounty.com/government/public-works/public-notice.

- Please submit your comments in writing no later than January 21, 2023 to:

  Madera County Public Works, Engineering Services
  ATTN: Raymundo Gutierrez
  200 W. 4th Street, Suite 3100
  Madera, CA 93637

  You may also submit your comments via e-mail to Raymundo.Gutierrez@maderacounty.com. For emailed comments, please include the project title in the subject line and include the comment's name and U.S. Postal Service mailing address.

DRAFT PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The County of Madera (County) proposes to construct two (2) test wells, each with a design capacity of 150 gallons per minute (gpm), drilled in hard rock using air rotary well drilling equipment. Each well will be converted from a test well to a production well, including a well pump, motor, discharge head, discharge pipe, meter, valves, electrical service transformer, variable frequency drive and water treatment for removal of constituents that are out of compliance with the SWRCB Division of Drinking Water (DDW).

The wells that are to be replaced have elevated uranium and gross alpha concentrations that exceed their DDW maximum contaminant level (MCL). In addition, there have been water quality results that reflect arsenic levels at or above the MCL in two of the three ACC wells. The type of water treatment required is contingent on the water quality produced from the newly drilled wells. There will be efforts to avoid all three of the previously detected constituents. Treatment types include reverse osmosis, ion exchange, and adsorption and electrodialysis. In addition to the well equipment mentioned previously, the well sites will have several pressure vessels, backwash tank and a hydropneumatic tank, pumps for circulating water to the head of the plant for recycle, and connection to an existing pipeline to the tank site.

The two sites will be cleared of existing surface organics and topsoil and graded to drain naturally with established contours.

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Madera County's intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Madera County's decision on the project is final. This proposed Mitigated Negative Declaration is subject to changes based on comments received from interested agencies and the public.

Madera County has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons.

The project would have no impact on aesthetics, agriculture and forest resources, energy, land use and planning, mineral resources, population and housing, public services, tribal cultural resources, and recreation.

The project would have a less than significant impact on air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, utilities and service systems, transportation/traffic, and wildfire.

The project would have less than significant impact with mitigation on biological resources and cultural resources.

Raymundo Gutierrez — 12/19/2022

Raymundo Gutierrez
Engineer II
Madera County
CEQA Lead Agency

Date

EXECUTIVE SUMMARY

Madera County, as the California Environmental Quality Act (CEQA) lead agency, has determined that the proposed project would have a less than significant impact to the environment with the inclusion of best management practices (BMPs), and the mitigation measures as determined by the CEQA Initial Study Checklist. The following table is a summary of potential impacts to each of the checklist resource categories and any BMPs and/or mitigation measures necessary to reduce potential effects to a less than significant level. The detailed CEQA checklist with discussion and findings of project impacts on each resource is in Section 2 of this Initial Study.

Summary of Potential Impacts, BMPs and Mitigation Measures

Resource	Project Impacts	Summary of BMPs and/or Mitigation Measures
Aesthetics	No Impact	N/A
Agriculture and Forest Resources	No Impact	N/A
Air Quality	Less than Significant Impact	Fugitive dust and exhaust control BMPs
Biological Resources	Less than Significant Impact with Mitigation	ESA fencing, environmental awareness trainings, migratory nesting bird surveys, and focused rare plant surveys.
Cultural Resources	Less than Significant Impact with Mitigation	Cultural resources awareness training, and compliance with regulations relating to unexpected discovery of cultural resources or human remains.
Energy	No Impact	N/A
Geology and Soils	Less than Significant Impact	Construction BMPs consistent with Madera County "Grading and Erosion Control" Code of Ordinances
Greenhouse Gas Emissions	Less than Significant Impact	N/A
Hazards and Hazardous Materials	Less than Significant Impact	Standard BMPs; preparation of a Spill Prevention, Control, and Countermeasure Plan
Hydrology and Water Quality	Less than Significant Impact	Construction BMPs consistent with Madera County "Grading and Erosion Control" Code of Ordinances
Land Use and Planning	No Impact	N/A
Mineral Resources	No Impact	N/A
Noise	Less than Significant Impact	Compliance with Madera County Municipal Code noise BMPs
Population and Housing	No Impact	N/A
Public Services	No Impact	N/A
Recreation	No Impact	N/A
Transportation/ Traffic	Less than Significant Impact	N/A
Tribal Cultural Resources	Less than Significant Impact with Mitigation	N/A
Utilities and Service Systems	Less than Significant Impact	N/A
Wildfire	Less than Significant Impact	N/A
Mandatory Findings of Significance	Less than Significant with Mitigation	N/A

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LIST OF ABBREVIATIONS

APE	Area of Potential Effects
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
District	San Joaquin Valley Air Pollution Control District
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
GHG	Greenhouse Gases
gpm	gallons per minute
MBTA	Migratory Bird Treaty Act
MD	Maintenance District
MND	Mitigated Negative Declaration
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OHP	Office of Historic Preservation
Porter-Cologne Act	Porter-Cologne Water Quality Act (Porter-Cologne Act),
project	Maintenance District 46 Water System Improvements Project
RWQCB	Regional Water Quality Control Board
SIP	State Implementation Plan
SPCCP	Spill Prevention, Control, and Countermeasure Program
SWRCB	State Water Resources Control Board
UCMP	University of California Museum of Paleontology
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
WoS	Waters of the State
WoUS	Waters of the United States

1.0 Introduction

Madera County, as part of the State of California Water Resources Control Board (SWRCB) Clean Water and Drinking Water State Revolving Fund Program (SCFRRP), has prepared this initial study (IS) with proposed mitigated negative declaration (MND) in compliance with the California Environmental Quality Act (CEQA) to evaluate and address any potential consequences of the proposed MD 46 Water System Improvements Project.

The County of Madera (County) Maintenance District No. 46 Ahwahnee (MD 46) is located between the communities of Ahwahnee and Oakhurst in Madera County, California. MD 46 was formed in 1990 to provide water service to a residential development. The Ahwahnee Water System (State Identification Number 2000293) has a total of 89 connections (consisting of 87 residential and two commercial connections), and 21 allocations are on standby. The entirety of the potable water supply system consists of six hard rock wells with a reported combined production of 260 gallons per minute (gpm); three booster pump stations; and two storage tanks with a combined capacity of 185,000 gallons. The potable water supply is reliant solely on groundwater, with two sets of water sources and half of the supply has water quality issues that required three wells to be taken offline.

Due to the removal of three wells from the water system, the peak water demand and fire flow requirements for MD 46 are currently not being met by the three-remaining active Ahwahnee County Club (ACC) wells. Additionally, the water quality requirements for the water system are not being met since the drinking water standards cannot be met by blending alone. As such, the County is seeking to increase source capacity and improve water quality for the Ahwahnee Water System with the MD 46 Water System Improvements Project (project). The County's Environmental Health Division currently regulates MD 46; however, due to MD 46's limited resources, the County has positioned themselves for California State Water Resources Control Board (SWRCB) Proposition 1 funding to assist in rectifying the water system deficiencies.

1.1 Project Description

The County of Madera (County) proposes to construct two (2) test wells, each with a design capacity of 150 gallons per minute (gpm), drilled in hard rock using air rotary well drilling equipment. Each well will be converted from a test well to a production well, including a well pump, motor, discharge head, discharge pipe, meter, valves, electrical service transformer, variable frequency drive and water treatment for removal of constituents that are out of compliance with the SWRCB Division of Drinking Water (DDW).

The wells that are to be replaced have elevated uranium and gross alpha concentrations that exceed their DDW maximum contaminant level (MCL). In addition, there have been water quality results that reflect arsenic levels at or above the MCL in two of the three ACC wells. The type of water treatment required is contingent on the water quality produced from the newly drilled wells. There will be efforts to avoid all three of the previously detected constituents. Treatment types include reverse osmosis, ion exchange, and adsorption and electrodialysis. In addition to the well equipment mentioned previously, the well sites will have several pressure vessels, backwash tank and a hydropneumatic tank, pumps for circulating water to the head of the plant for recycle, and connection to an existing pipeline to the tank site.

The two sites will be cleared of existing surface organics and topsoil and graded to drain naturally with established contours.

1.2 Purpose

The purpose of the project is to re-establish and maintain water supply and water quality within the MD 46 Ahwahnee Water System by increasing source capacity and improving water quality.

1.3 Need

The project is needed to resolve water supply and water quality deficiencies in the MD 46 Ahwahnee Water System.

1.4 No-Build Alternative

The No-Build Alternative would not complete the proposed water system improvements. The No-Build Alternative would not alleviate water supply or water quality deficiencies in the MD 46 Ahwahnee Water System and service conditions would remain insufficient.

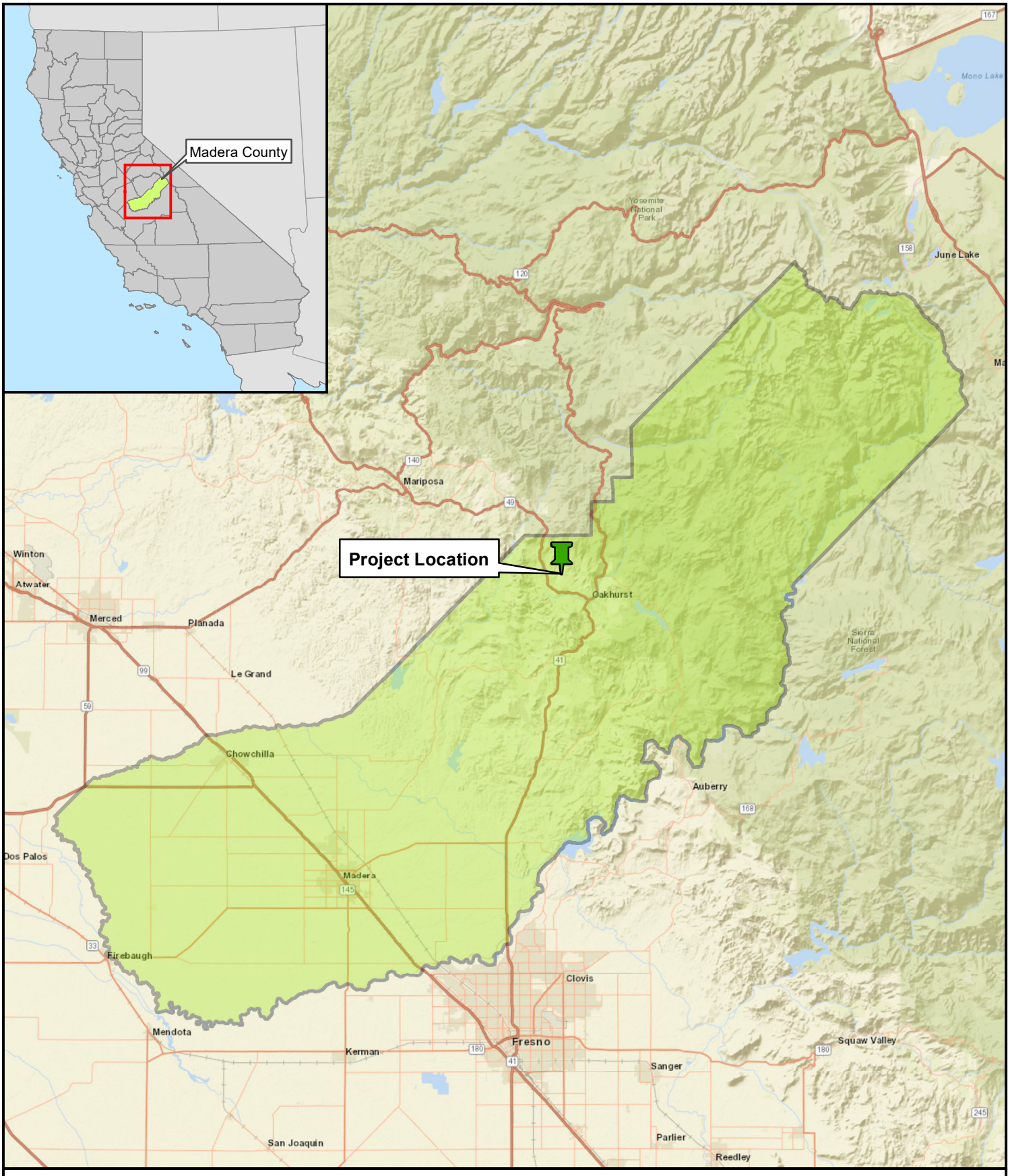

FIGURE 1

PROJECT VICINITY

MAINTENANCE DISTRICT 46

WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CALIFORNIA

AUGUST 2022

WOOD RODGERS

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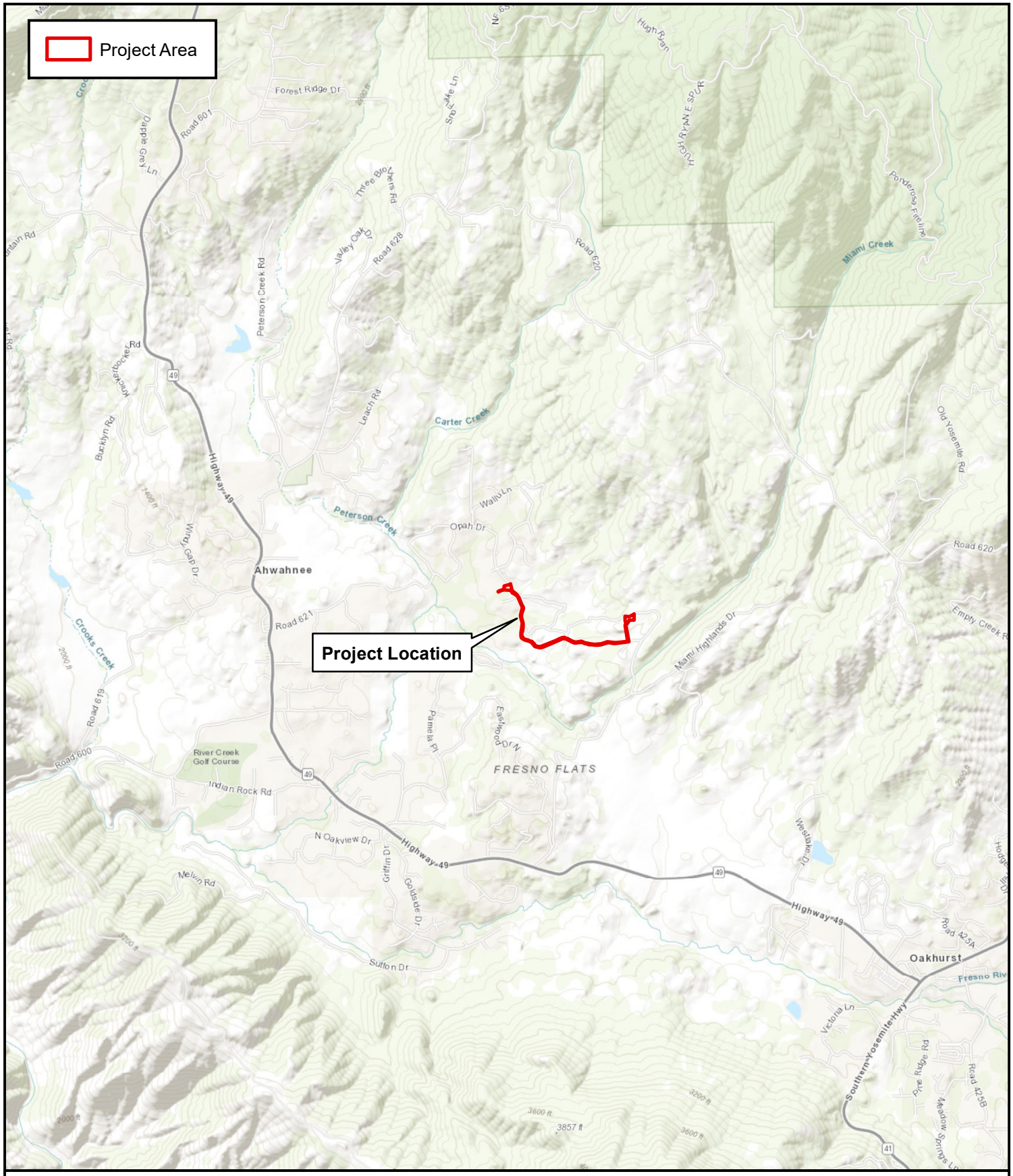

FIGURE 2

PROJECT LOCATION

MAINTENANCE DISTRICT 46

WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CALIFORNIA

AUGUST 2022

WOOD RODGERS

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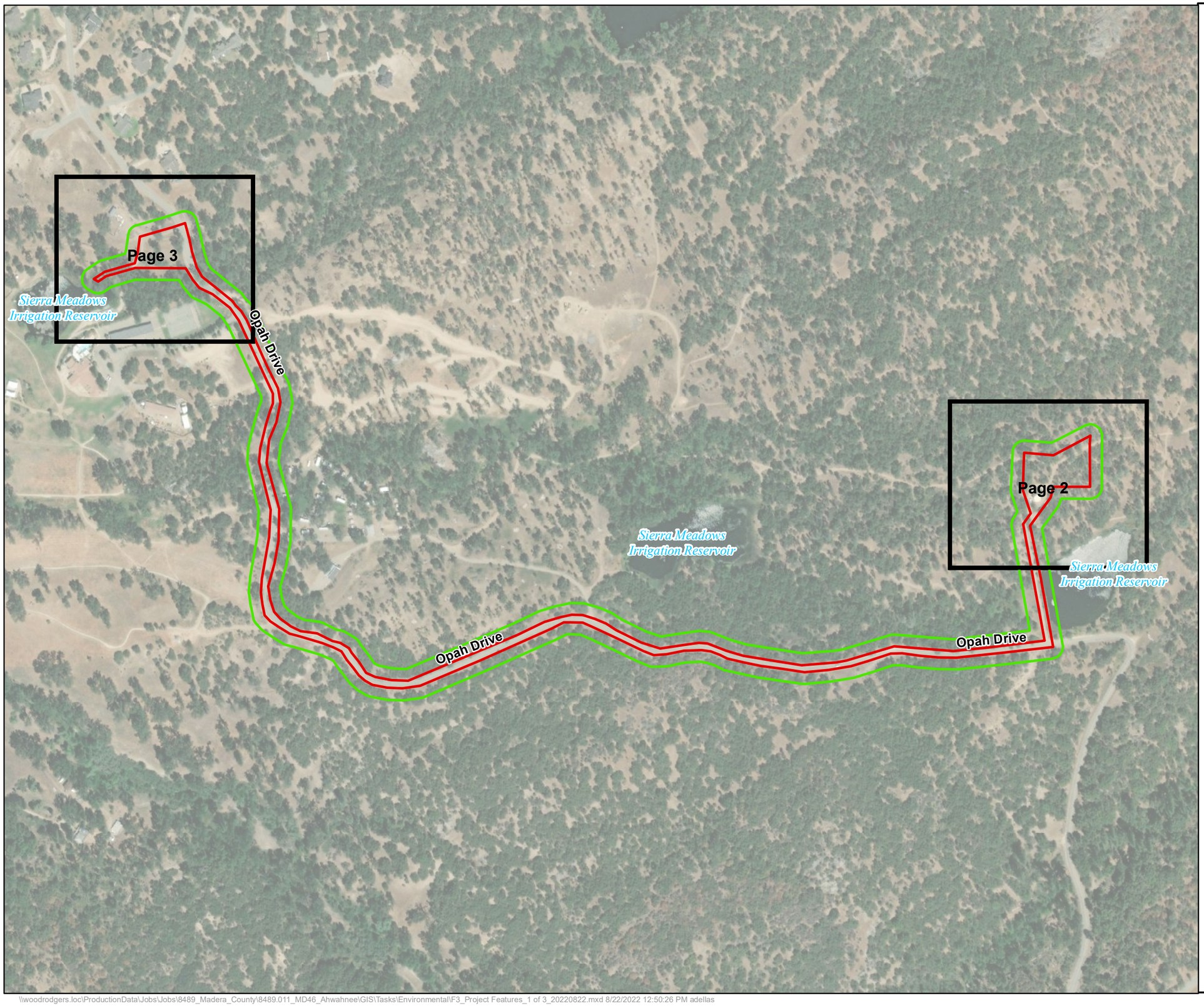
FIGURE 3

PROJECT FEATURES
PAGE 1 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
AUGUST 2022



Project Area
Biological Study Area

0 125 250 500
Feet

NORTH

WOOD RODGERS

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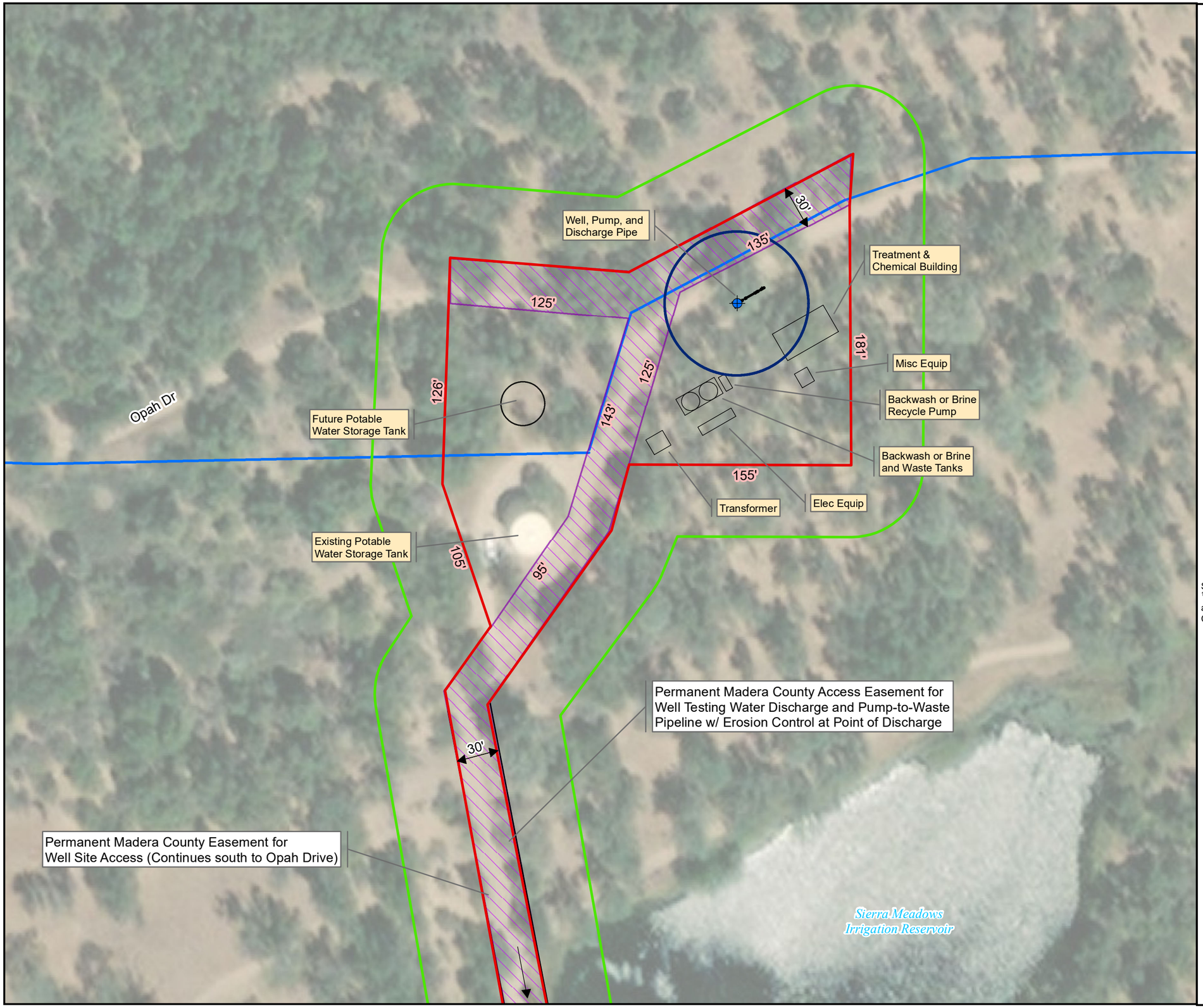
FIGURE 1

FIGURE 3

PROJECT FEATURES
PAGE 2 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
DECEMBER 2022



- Project Area
- Biological Study Area
- Existing Municipal Water Main (8-inch)[1]
- Proposed Test Well #1
- Well Site Control Zone (50 foot radius)
- Proposed Equipment & Treatment Infrastructure
- Permanent Madera County Easement
- Temporary Discharge; Permanent Pump to Waste

Proposed Well: 37.362134, -119.686375 (Approx.)

SOURCES:
[1]Any parcel boundaries, easements, and water mains shown are approximate and not survey-grade. These features should be verifed by a California licensed Land Surveyor or USA, as needed.

0 25 50 100
Feet

NORTH

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FIGURE 1

FIGURE 3

PROJECT FEATURES
PAGE 3 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
OCTOBER 2022

Easement Access for Land Owner
Elec Equip
Transformer
145'
30'
42'
Backwash or Brine and Waste Tanks
89'
20'
Backwash or Brine Recycle Pump
68'
103'
220'
20'
Well Pump
Misc Equip
Treatment & Chemical Building
Unnamed Stream (Intermittent)
Sierra Meadows Irrigation Reservoir (Private)
Permanent Madera County Easement for Temp. Discharge Hose & Pump-to-Waste Pipeline
Opah Drive

- Project Area
- Biological Study Area
- Existing Municipal Water Main (8-inch)[1]
- Existing Access Gate
- Proposed Test Well #2
- Well Site Control Zone (50 foot radius)
- Proposed Equipment & Treatment Infrastructure
- Easement Access for Land Owner (Approx. 6,539 SF)
- Permanent Easement (Discharge Hose-Pump-to-Waste)
- Temporary Discharge, Permanent Pump-to-Waste

Proposed Well: 37.364826, -119.698986 (Approx.)

SOURCES:
[1]Ahwahnee Country Club Estates As-Built Water Plan, Sheet 14 of 14, prepared by Lyle Brewer Engineering.
Records were provided by the County and features were georeferenced. Parcel boundaries, temporary work areas, and water main locations shown are approximated and are NOT survey-grade.

0 25 50 100
Feet

NORTH

WOOD RODGERS

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FIGURE 2

2.0 CEQA Initial Study Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Potentially Significant Impact, Less Than Significant with Mitigation, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

2.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a) Would the project have a substantial adverse effect on a scenic vista?

No impact. No designated scenic vistas are located within or near to the project site.

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

No impact. The project is not within a state scenic highway and would not substantially damage scenic resources within a state scenic highway. Therefore, no impact would occur.

c) Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?

No Impact. The project would not degrade the existing visual character due to the nature and location of the project.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The project would not create any new sources of light or glare.

FINDINGS

The project would not adversely affect any designated scenic resource or vista, nor substantially change the current visual environment. The project would have **No Impact** relating to aesthetics.

2.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
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?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

The land use within the project area is designated by the Madera County General Plan (1995, as amended) as Open Space (OS) and zoning for the project area is consistent with the land use designations as OS. According to the California Department of Conservation (CDC), Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP), Madera County Important Farmland Map 2018, the project area falls within areas designated as "Urban and Built-Up Land" and "Grazing Land". Urban and Built-Up Land areas are defined as land occupied by structures with a building density of at least one unit to 1.5 acres or approximately six structures to 10 acres, and these areas would include residential, industrial commercial, and other areas with the qualifying structural density (CDC 2018). Grazing Land is defined as land which the existing vegetation is suited to the grazing of livestock (CDC 2018). Neither of these land designations are considered protected farmland resources. Additionally, there are no designated timberland harvest or non-industrial timber management zones within the project area.

DISCUSSION

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?

No Impact. According to the CDC California Important Farmland Finder (CDC 2022), and the Madera County FMMP Map (CDC 2018), the project does not occur within lands that are designated as Prime, Unique, or Farmland of Statewide Importance. As a result, no conversion of farmland use is anticipated as a result of the proposed project. The project area would continue to be zoned as OS, and no impact would occur.

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

No Impact. Based on a review of the existing zoning within the project area and Madera County FMMP Map (CDC 2018), the project area has no lands zoned for agricultural use or Williamson Act contract lands. Therefore, the proposed project would not conflict with existing zoning for agricultural use or Williamson Act contract, and no impact would occur.

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 area is zoned as open space. There is no 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)) within the project area. Therefore, the project would have no conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and no impact would occur.

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

No Impact. There are no forest lands or forest resources located within the project area; therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There are no farmlands within or adjacent to the project area. The project would not involve changes in the existing environment that, due to their location or nature, could result in the conversation of farmland or forest land to non-agricultural use or non-forest use. Therefore, the project would have no effects to farmland or forest land resources, and no impact would occur.

FINDINGS

The project does not occur within lands that are designated as Prime, Unique, or Farmland of Statewide Importance, forest land, or timberland. As a result, the project would not directly or indirectly cause the conversion of farmland, forestland, or timberland. The project would have **No Impact** relating to agricultural and forest resources.

2.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

State Regulations

Responsibility for achieving California's air quality standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air districts and is to be achieved through district-level air quality management plans that will be incorporated into the State Implementation Plan (SIP). In California, the United States Environmental Protection Agency (USEPA) has delegated authority to prepare SIPs to the CARB, which, in turn, has delegated that authority to individual air districts.

The CARB has traditionally established state air quality standards, while maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving state implementation plans.

The responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents required by CEQA.

AFFECTED ENVIRONMENT

The project, located within Madera County, is within the San Joaquin Valley Air Basin and is subject to the San Joaquin Valley Air Pollution Control District (District) requirements and regulations. The project is located within the rural community of Sierra Meadows and would be in close proximately (approximately 250 feet) to residences along Opah Drive.

DISCUSSION

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The project is consistent with the site land use and zoning; construction of the project would not conflict with or obstruct implementation of any air quality plan.

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. The USEPA designates NAAQS, while CARB designates California Ambient Air Quality Standards (CAAQS) for criteria air pollutants. These standards designate areas of the state as attainment, non-attainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once within a calendar year. The area air quality attainment status of Madera County is shown below on **Table 1**.

Table 1: NAAQS and CAAQS Attainment Status for Madera County

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – 8-Hour	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
Carbon Monoxide	Unclassified/Attainment	Unclassified
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified
Sources: CARB 2018		

Operational Emissions

The completed project would have no operational emissions. Therefore, no impact relating to air quality would occur due to operation of the completed project.

Construction Emissions

Construction activities associated with the project would result in temporary incremental increases in air pollutants, such as ozone precursors and particulate matter due to operation of gas-powered equipment and earth moving activities. The CEQA encourages public agencies to adopt thresholds of significance for determining whether projects have significant adverse impacts. The District provides thresholds of significance for criteria pollutants and toxic air contaminants (TACs), as described in **Table 2** below.

According to the District, the best form of analysis for project construction emissions is to use the California Emissions Estimator Model (CalEEMod). A CalEEMod was completed for the project. Results of the inputs determined that the project would not exceed the District's thresholds of significance (Appendix A. CalEEMod Summary Report).

Table 2. Air Quality Threshold of Significance – Criteria Pollutants

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tons per year [tpy])	*Emissions (tpy)*	*Emissions (tpy)*
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Even projects not exceeding District thresholds must implement best management practices (BMPs) to reduce dust emissions and avoid localized health impacts. These BMPs are collectively known as Regulation VIII, which contains a series of requirements to reduce the amount of fugitive dust from anthropogenic sources. In addition to fugitive dust, BMPs to reduce emissions from construction-related equipment exhaust would be implemented by the project. Feasible reduction of construction exhaust emission includes use of construction-related equipment powered by engines meeting, at a minimum, Tier II emission standards, as set forth in §2423 of Title 13 of the California Code of Regulations (CCR), and Part 89 of Title 40 Code of Federal Regulations (CFR), and limitations of hours of activities (SJVAPCD 2015). Compliance with Regulation VIII, Title 13 of CCR and Title 40 of CFR does not constitute mitigation because it is already required by law. The project contractor would be required to implement these laws and regulations as BMPs.

The project would not exceed thresholds of significance within the local air quality management district and would not cause cumulatively considerable net increases of criteria pollutants. The project would have no operational phase emissions other than exempt emergency backup generators; however, the project would have temporary construction phase emissions which would further be reduced by implementation of construction and dust control BMPs. Therefore, project effects to air quality would be considered less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The project is located within the rural community of Sierra Meadows along Opah Drive. CEQA sensitive receptors are generally defined as a location where human populations, especially children, seniors, or sick persons are found. Examples of sensitive receptors are residences, hospitals, and schools. The project would occur within and would be in close proximately (approximately 250 feet) to one residence. Additionally, the Sierra Meadows Clubhouse would be within approximately 650 feet of the project area. No schools, hospitals, or senior living centers are located in the project vicinity.

According to the CalEEMod prepared for the project, the project would not generate construction emissions greater than local air quality management district thresholds of significance. However, the project would cause temporary and intermittent construction and dust emissions which could cause nuisance effects to sensitive receptors. The proposed project would not generate any substantial pollutant concentrations, and with the implementation of BMPs, temporary incremental increases of air pollutants would be avoided and minimized in accordance air quality regulations. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and the project would have a less than significant effect.

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. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or

formulaic methodologies to determine the presence of a significant odor impact. While offensive odors rarely cause any physical harm, they can be very unpleasant, and lead to considerable distress among the public that often generates citizen complaints.

Nuisance odors related to machinery exhaust and/or dust could occur within close proximity to construction activities. However, due to the distance to sensitive receptors, the project is not anticipated to result in any adverse effects related to odors. Additionally, with the implementation of construction and fugitive dust BMPs, temporary incremental increases of air pollutants that may cause nuisance odors would be avoided and minimized to the greatest extent possible. Therefore, the project would not adversely affect a substantial number of people due to air quality emissions, and the project would have a less than significant effect.

BEST MANAGEMENT PRACTICES

To control fugitive dust and construction-related emissions the project would implement the following best management practices as part of the project:

- In order to control fugitive dust, the project contractor shall be required to implement all applicable measures of the San Joaquin Valley Air Pollution Control District Regulation VIII.

- In order to control construction exhaust emissions, the project contractor shall be required to use construction-related equipment powered by engines meeting, at a minimum, Tier II emission standards, as set forth in §2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 Code of Federal Regulations.

FINDINGS

The project would not cause operational long-term air quality impacts; however, the project would cause temporary incremental emissions from construction. With the implementation of construction and dust control BMPs, the project would comply with all federal, state, and local standards, and would result in a **Less than Significant Impact** relating to air quality.

2.4 BIOLOGICAL RESOURCES

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

REGULATORY SETTING

This section describes the federal, state, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA).

Federal Regulations

Federal Endangered Species Act
The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the United States Fish and Wildlife Services (USFWS) or the National Marine Fisheries Service.

Clean Water Act
The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States (WoUS). The CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into WoUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce), or it may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., WoUS including any wetlands). The RWQCB also asserts authority over "waters of the State" (WoS) under waste discharge requirements (WDR) pursuant to the Porter-Cologne Water Quality Control Act.

State Regulations

California Environmental Quality Act
California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts.

California Endangered Species Act
The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the California Department of Fish and Wildlife (CDFW) to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits "take" of candidate species (those species under consideration for listing).

The CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts that the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies that have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. The CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Natural Communities Conservation Act
The Natural Communities Conservation Act (NCCP) of 1991 was intended to provide an alternative and/or a collaborative approach to FESA and CESA. It was designed to represent a new approach to conservation. Instead of focusing on individual species (e.g., FESA/CESA), the NCCA focuses on protecting intact ecosystems across an entire region or landscape. NCCPs have become increasingly common in the development of regional plans that combine the HCP and NCCP processes.

California Fish and Game (CFG) Code Section 1602: Streambed Alteration Agreement
Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

CFG Code Section 3503 and 3503.5: Bird and Raptors
CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

CFG Code Section 3513: Migratory Birds
CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Local Regulations

Madera County General Plan
The Madera County General Plan (1995, as amended) contains numerous policies that support natural communities and open space for the preservation of natural resources. The General Plan policies are found throughout the general plan elements and work together as a framework for landscape protections.

Specifically, the Agricultural and Natural Resources Element focuses on balanced management of Madera County's multiple natural resources. The policies speak to a connected and accessible open space system, with the goal of a conserved and protected system of natural resources including, forest resources, water resources, wetland and riparian areas, fish and wildlife habitat, vegetation, and open space for the preservation of natural resources (Madera County 1995).

Ahwahnee/Nipinnawasee Area Plan
The Ahwahnee/Nipinnawasee Area Plan is intended to refine the goals and policies of the 1995 Madera County General Plan and provide more detailed guidance for future growth and development in eastern Madera County. The Area Plan identifies goals, objectives and policies that protect natural resources. Objective No. 1 of the Area Plan regards promoting of Ahwahnee's environmental quality, retaining the agricultural and open space character of the planning area, providing rural residential opportunities, and encouraging controlled growth in selected areas. To achieve Objective No. 1, the Area Plan also identifies open space policies for agriculture and natural resources.

AFFECTED ENVIRONMENT

This section describes the natural resources present within and immediately surrounding the project area, designated as the project BSA. The project BSA was defined as the area necessary for all project activities, plus an additional 50-foot buffer. The project BSA encompasses approximately 21.88 acres.

The Biological Resources section discusses the special-status species and sensitive habitats that have been identified or are potentially occurring in the project BSA, an analysis of the impacts that could occur to biological resources due to implementation of the proposed project, and appropriate mitigation measures to reduce or avoid significant impacts. The analysis of biological resources presented in this section is based on a review of the current project description, literature research, biological field survey, and aquatic resources delineation conducted by Wood Rodgers qualified biologist.

The project is located in the town of Ahwahnee, Madera County in the Sierra Steppe – Mixed Forest – Coniferous Forest - Alpine Meadow Province (M261) ecological subregion, Sierra Nevada Foothills Section, and ecological subsection M261Fc (Lower Granitic Foothills) of California (USDA 2007). Annual average high temperature in the area is 94 degrees Fahrenheit, and annual low temperature is 29. The region receives an average of 29 inches of precipitation annually in the form of rain, and an annual average of 2 inches of snow.

Physical Conditions

Topography
The BSA is within the *Ahwahnee* U.S. Geological Survey (USGS) 7 ½ Minute Quadrangle and occurs within a single distinct topographic region of Sierra Nevada foothills, and the natural elevation within the project area is ranges from approximately 2,195 feet to 2,445 feet above mean sea level. The landscape of the Sierra Nevada foothills region is a block mountain range with low-elevation crests of similar heights. Geologic formations are a mixture of sedimentary, granitic, volcanic, and ultramafic rocks.

Soils
The Natural Resource Conservation Service (NRCS) Custom Soil Resource Report for the project (NRCS 2022) identifies soils within the BSA consist exclusively of Ahwahnee and Auberry coarse sandy loams, 15 to 30 percent slope.

Hydrological Resources
The BSA includes three surface water features: two (2) Sierra Meadows irrigation reservoirs, and an unnamed stream channel. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) the entire proposed project site within Zone X, an area of minimal flood hazard (Appendix C. FEMA FIRMette Maps). The unnamed stream run adjacent to and partially within the tennis courts portion of the project area and ends at the mouth of the irrigation reservoir.

Vegetation Communities
The BSA is dominated by foothill woodland mixed within barren/urban, disturbed/ruderal habitats. Land cover and vegetation communities within the BSA area designated as: barren/urban, disturbed/ruderal, foothill woodland, open water, and stream channel (Figure 4. Vegetation Communities within the Biological Study Area).

Developed Habitats

Barren
Barren habitat are man-made infrastructures and are defined by the absence of any vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or non-wildland species and <10% cover by tree or shrub species would be considered barren habitat (CDFW 1988). Barren habitat within the BSA consists of the paved and gravel roadways and roadway shoulders.

Disturbed/Ruderal
The disturbed/ruderal land cover type is defined as areas that have been subject to previous or ongoing disturbances such as along roadsides, mowed or manicured landscaping areas, and other anthropogenic disturbances. Disturbed/ruderal habitat within the BSA includes roadsides, manicured lawns, and Sierra Meadows storage and glamping areas.

Natural Vegetation Communities

Foothill Woodland
Foothill woodlands cover several million acres in and around the Central Valley of California. This habitat is highly variable with canopy coverage ranging from semi-chaparral to dense, forest-like, and is comprised of several species associated with a variety of oaks dominating the vegetation. Species associations of foothill woodland are typically subdivided into valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), and interior live oak (*Quercus wislizenii*).

FIGURE 4

WATERS AND VEGETATION COMMUNITIES PAGE 1 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
OCTOBER 2022

- Biological Study Area

Vegetation Communities

- Barren
- Disturbed/Ruderal
- Foothill Woodland
- Open Water
- Stream Channel

0 125 250 500
Feet

NORTH

WOOD RODGERS

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FIGURE 4

WATERS AND VEGETATION COMMUNITIES PAGE 2 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT
MADERA COUNTY, CA
OCTOBER 2022

Biological Study Area

Vegetation Communities

- Barren
- Disturbed/Ruderal
- Foothill Woodland
- Open Water
- Stream Channel

0 25 50 100
Feet

NORTH

WOOD RODGERS

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FIGURE 4

WATERS AND VEGETATION COMMUNITIES PAGE 3 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
OCTOBER 2022

- Biological Study Area

Vegetation Communities

- Barren
- Disturbed/Ruderal
- Foothill Woodland
- Open Water
- Stream Channel

0 25 50 100
Feet

NORTH

WOOD RODGERS

Open Water

Open water habitats include permanently flooded lakes and reservoirs, intermittent lakes, and ponds, and occur in association with all other habitat types throughout California. Vegetation typically occurring in the deeper water of this habitat includes suspended photoplankton such as diatoms, desmids, and filamentous green algae. Depending upon the fluctuation of water levels throughout the year, submergent vegetation such as algae and pondweed may occur near the shoreline of open water habitats. Vegetation occurring in the open water habitat on the Project site is poorly developed due to the summertime drops of the water level; however, emergent vegetation comprised of rushes (*Juncus* sp.), sedges (*Carex* sp.), and cattails (*Typha* sp.) were observed along portions of the shorelines.

Stream Channel

Stream channel habitats can be classified as ephemeral (only flowing during rain events), intermittent (flowing seasonally), or perennial (constant flow throughout the year). Stream channel habitat within the BSA consists of an unnamed ephemeral stream channel that transports rainfall flow from the above hillside down to Sierra Meadows irrigation reservoir at the western terminus of the project area.

DISCUSSION

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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

Less Than Significant Impact with Mitigation. Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator, the CDFW California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (Appendix B. Special Status Species Database Query Results). Literature and database searches were completed to identify habitats and special-status species having the potential to occur in the project vicinity.

Field surveys, habitat assessments and analysis of special status species occurrences were conducted to determine the potential for species to occur within the BSA. Field surveys were conducted on September 27, 2022. Field surveys included walking meandering transects through the BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife.

A Biological Resources Report (BRR) was prepared for the project (Wood Rodgers 2022). The BRR provides a list of regional species of special concern returned by database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements for each species, comparing them to available habitat within the BSA, and analyzing the local and regional occurrences of the species. Based on these analyses, it was determined that the one (1) wildlife species would have the low potential to occur within the BSA: bald eagle (*Haliaeetus leucocephalus*). Additionally, five (5) special status plant species would have a low potential to occur in the BSA: Big-scale balsamroot (*Balsamorhiza macrolepis*), Madera leptosiphon (*Leptosiphon serrulatus*), Orange lupine (*Lupinus citrinus var. citrinus*), slender-stalked monkeyflower (*Erythranthe gracilipes*), and Small's southern clarkia (*Clarkia australis*).

The following is a discussion of these special status species, potential project effects, and any avoidance, minimization and/or mitigation measures required to reduce project impacts to a less than significant level.

Special Status Wildlife Species

Bald Eagle
The bald eagle is an ESA delisted species. However, it is CESA-listed as endangered, and is a considered a "Fully Protected" species by CDFW. The species occurs near ocean shores, lakes, rivers, rangelands, and coastal wetlands for nesting and wintering. Nesting occurs within one mile of a water source with abundant fish near mountain forests and woodlands. The species nests in large, old growth, or dominant live trees with open branches (prefers ponderosa pines) and often chooses the largest tree in a stand. Usually, the species will not nest near evident human disturbance. Prefers lower elevations and not found in the high Sierra Nevada. The breeding season is from February through July.

Bald Eagle Survey Results
No bald eagle individuals or historic/recently large nests were observed within the BSA. However, the project area contains suitable nesting trees, and small lakes are nearby that may provide a prey source for the species. There are 6 recent occurrences of the species within 3 miles of the project area in similar habitat conditions. However, the areas adjacent to the project area do have high levels of human disturbance which may deter the species from nesting within the project area or adjacent suitable nesting sites. The species is considered to have a low potential to occur within the project area, due to the presence of potentially suitable nesting and foraging habitat, and the number of local occurrences within 3 miles.

Project Effects to Bald Eagle
Project construction would require large equipment and the presence of the human form, which may have the potential to disturb any nesting bald eagles within the vicinity of the project. The project is anticipated to have approximately 0.66 acres of permanent impacts and approximately 0.17 acres of temporary impacts to foothill woodland habitat (Figure 5. Project Impacts). However, the 2022 biological surveys confirmed that there are no existing or historic bald eagle nesting sites within the BSA. Therefore, the project does not anticipate direct effects to bald eagle nesting sites or known bald eagle nesting trees.

To ensure that no bald eagle nesting sites are directly impacted by the project during the year of construction, the project shall incorporate measures **BIO-2**, which will provide environmental awareness worker training and **BIO-7**, which will provide pre-construction nesting surveys for migratory birds and raptors. With the implementation of **BIO-2** and **BIO-7** the project would not result in take of bald eagle and would be in full compliance with CESA and CDFW regulations.

Migratory Birds and Raptors
Migratory birds and raptors have the potential to nest within the project impact area, or within proximity to the project. Individuals and their nests are protected under the MBTA and CFG Code Sections 3503, 3503.5 and 3515. No migratory bird nest locations were identified during biological surveys; however, the project does have suitable nesting habitat for migratory birds and raptor species, and avian species were observed moving within and adjacent to the BSA. To ensure no incidental take of migratory bird species, the project would incorporate **BIO-7** as part of the project

Special Status Plant Species

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special status plants occurring on site. After special status plant focused surveys, habitat assessment, and literature review, all special status plant species are presumed absent from the BSA.

FIGURE 5

PROJECT IMPACTS
PAGE 1 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
DECEMBER 2022

Page 3

Sierra Meadows Irrigation Reservoir

Opah Drive

Page 2

Sierra Meadows Irrigation Reservoir

Opah Drive

Opah Drive

Sierra Meadows Irrigation Reservoir

Project Area

Biological Study Area

Impacts to Foothill Woodland

Permanent

Temporary

0 125 250 500

Feet

NORTH

WOOD RODGERS

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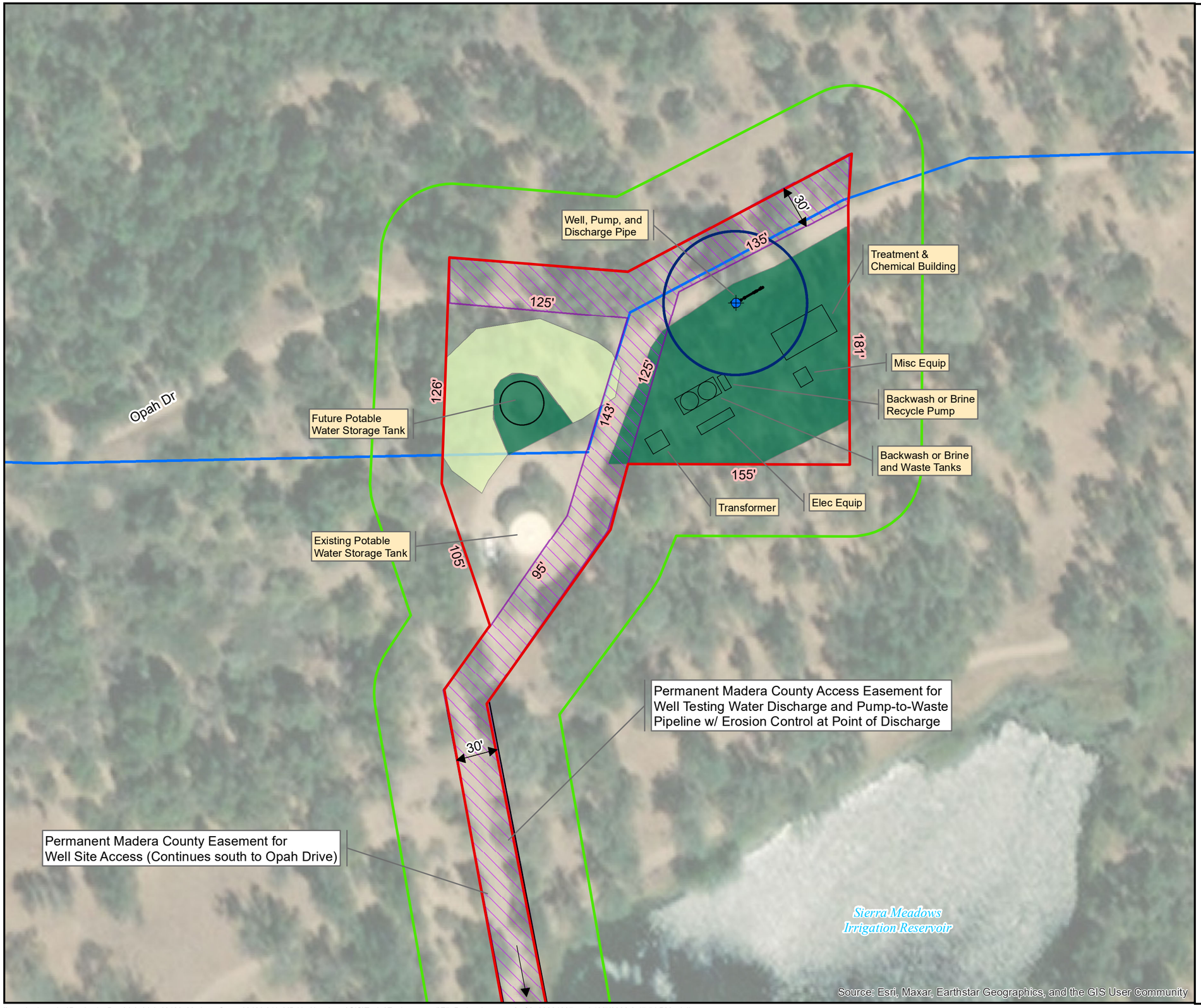
FIGURE 3

PROJECT IMPACTS
PAGE 2 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
DECEMBER 2022



- Project Area
- Biological Study Area
- Existing Municipal Water Main (8-inch)[1]
- Proposed Test Well #1
- Well Site Control Zone (50 foot radius)
- Proposed Equipment & Treatment Infrastructure
- Permanent Madera County Easement
- Temporary Discharge; Permanent Pump to Waste

Impacts to Foothill Woodland

- Permanent
- Temporary

0 25 50 100
Feet

NORTH

WOOD RODGERS

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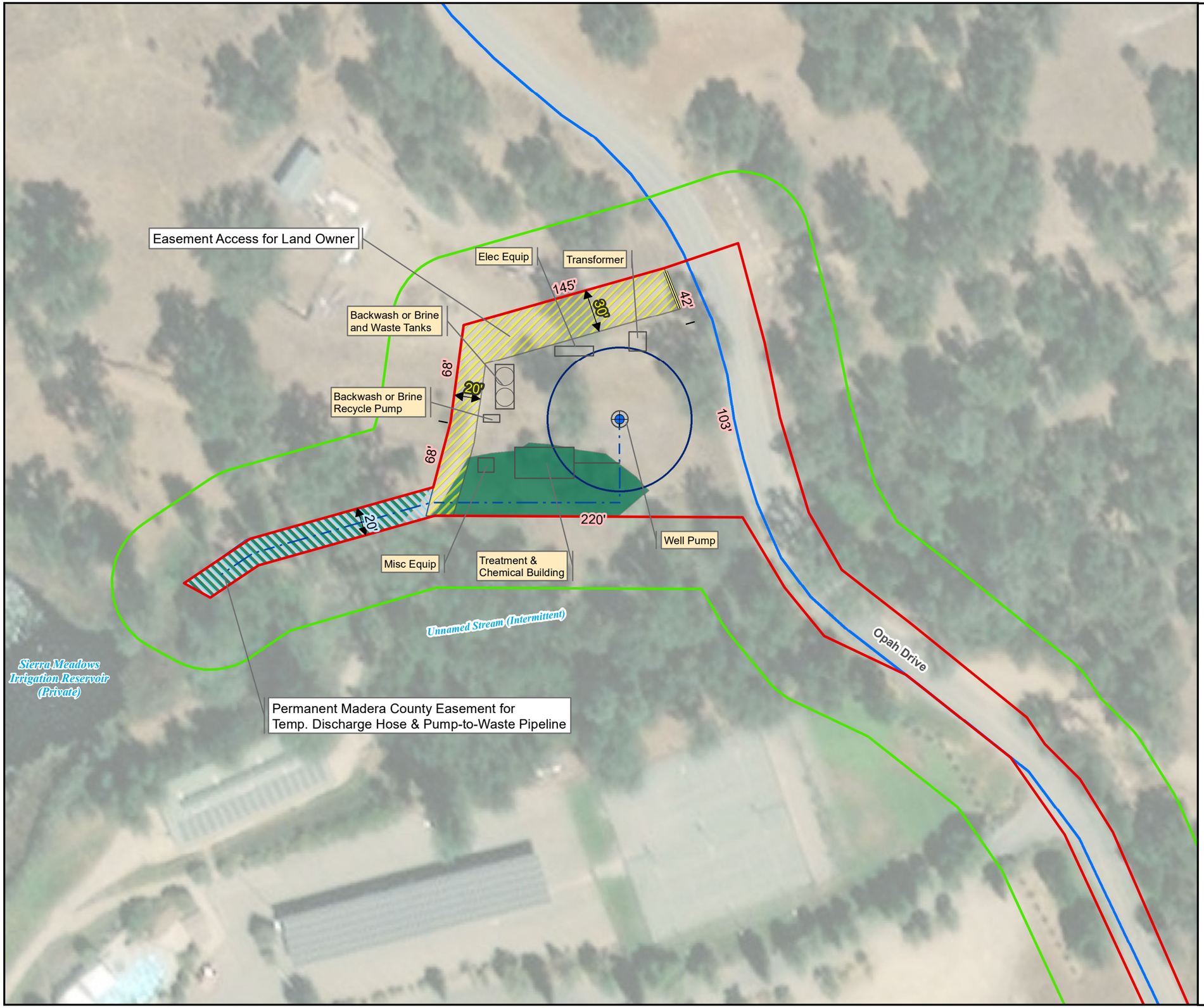
FIGURE 1

FIGURE 5

PROJECT IMPACTS
PAGE 3 OF 3

MAINTENANCE DISTRICT 46
WATER SYSTEM IMPROVEMENTS PROJECT

MADERA COUNTY, CA
OCTOBER 2022



- Project Area
- Biological Study Area
- Existing Municipal Water Main (8-inch)[1]
- Existing Access Gate
- Proposed Test Well #2
- Well Site Control Zone (50 foot radius)
- Proposed Equipment & Treatment Infrastructure
- Easement Access for Land Owner (Approx. 6,539 SF)
- Permanent Easement (Discharge Hose-Pump-to-Waste)
- Temporary Discharge, Permanent Pump-to-Waste

Impacts to Foothill Woodland

- Permanent

0 25 50 100
Feet

NORTH

WOOD RODGERS

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FIGURE 2

Discussion of Special Status Plant Species with Potential to Occur

Big-scale Balsamroot
Big-scale balsamroot (*Balsamorhiza macrolepis*) is not a state or federal listed species but is a CNPS rare plant rank 1B.2. The species is a perennial herb inhabiting open grassy or rocky slopes and valleys within chaparral, cismontane woodland, valley and foothill grassland communities; and sometimes occurs in serpentinite soils. The species known elevation range is 300-5,100 feet and the blooming period for the is March-June.

Madera Leptosiphon
Madera leptosiphon (*Leptosiphon serrulatus*) is not a state or federal listed species but is a CNPS rare plant rank 1B.2. The species is an annual herb inhabiting openings in woodland and chaparral of cismontane woodland and lower montane coniferous forest communities. The species known elevation range is 1,747-4,270 feet and the blooming period for the is April to May.

Orange Lupine
Orange lupine (*Lupinus citrinus var. citrinus*) is not a state or federal listed species but is a CNPS rare plant rank 1B.2. The species is an annual herb endemic to the Sierra Nevada foothills, extending from Mariposa to Fresno Counties, inhabiting yellow pine forest, foothill woodlands, and chaparral communities. The species known elevation range is 2,160-5,313 feet and the blooming period for the is April to July.

Slender-stalked Monkeyflower
Slender-stalked monkeyflower (*Erythranthe gracilipes*) is not a state or federal listed species but is a CNPS rare plant rank 1B.2. The species is an annual herb endemic to California, inhabiting disturbed or burned areas on decomposed granite in chaparral, cismontane woodland, and lower montane coniferous forest communities. The species known elevation range is 1,600-4,300 feet and the blooming period for the is April to June.

Special Status Plant Species Survey Results

Big-scale balsamroot Survey Results
The project area contains potentially suitable cismontane foothill woodland habitat. However, there are no known occurrences of the species within 20 miles of the project area. No big-scale balsamroot was observed during the September 27, 2022, biological reconnaissance survey and focused botanical surveys within potentially suitable habitat. However, due to surveys occurring outside of the species known blooming period, the species cannot be presumed absent from the BSA due to the presence of suitable habitat. The species is considered to have a low potential of occurring within the BSA.

Madera Leptosiphon Survey Results
The BSA does include openings within lower cismontane woodland. However, there are no recent occurrences of the species are within 30 miles of the project area. No Madera leptosiphon was observed during the September 27, 2022, biological reconnaissance survey and focused botanical surveys within potentially suitable habitat. However, due to surveys occurring outside of the species known blooming period, the species cannot be presumed absent from the BSA due to the presence of suitable habitat. The species is considered to have a low potential of occurring within the BSA.

Orange Lupine Survey Results
The BSA does contain potentially suitable foothill woodland. However, there are no recent occurrences of the species within 6.5 miles of the project area. No orange lupine was observed during the September 27, 2022, biological reconnaissance survey and focused botanical surveys within potentially suitable habitat. However, due to surveys occurring outside of the species known blooming period, the species cannot be

presumed absent from the BSA due to the presence of suitable habitat. The species is considered to have a low potential of occurring within the BSA.

Slender-stalked Monkeyflower Survey Results

The BSA does contain potentially suitable cismontane foothill woodland. There are no recent CNDDB occurrences of the species within 25 miles; however, there is one "research grade" 2020 iNaturalist occurrence of the species approximately 5 miles from the project area. No slender-stalked monkeyflower was observed during the September 27, 2022, biological reconnaissance survey and focused botanical surveys within potentially suitable habitat. However, due to surveys occurring outside of the species known blooming period, the species cannot be presumed absent from the BSA due to the presence of suitable habitat. The species is considered to have a low potential of occurring within the BSA.

Project Effects to Special Status Plant Species

Each of the special status plant species with a low potential to occur within the BSA can be found within foothill woodland habitats. The project is anticipated to have approximately 0.66 of permanent impacts and approximately 0.17 acres of temporary impacts to foothill woodland habitat (Figure 5. Project Impacts). With the low potential for the species to occur with foothill woodland habitat, pre-construction focused rare plant surveys, measure **BIO-6**, would be conducted during the blooming period prior to construction to ensure no project effects to the individual specimen or populations of special status plant species would occur. With the incorporation of measures **BIO-2** and **BIO-6**, the project would avoid any potential impacts to special status plant species, and impacts would be considered less than significant with mitigation incorporated.

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 Wildlife or U.S. Fish and Wildlife Service?

Less than Significant. The BSA does not contain riparian habitat, or any other sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS. However, the project area does contain foothill open water and stream channel habitat. Below is a discussion of the results of the project's preliminary jurisdictional delineation. See Figure 4 for habitat classification mapping.

Open Water

Two (2) open water features exist within the BSA. Open water features consist of portions of two (2) of the Sierra Meadows community irrigation reservoirs, one at the western terminus of the project, and one at the eastern terminus of the project (See Figure 4). Each feature was examined for primary indicators of the OHWM and mapped in the field. Within the BSA, approximately 0.23 acres of open water was delineated. The Sierra Meadows irrigation reservoirs are man-made impoundments and have no direct connectivity to traditional navigable waters and therefore, are not considered WoUS. However, these surface waters features would be considered WoS, based on the SWRCB definition of waters of the state. Additionally, the open water habitat would fall under jurisdiction of the CDFW under CFG Code Section 1600.

Stream Channel

An unnamed ephemeral stream channel crosses a portion the BSA and terminates flow within the Sierra Meadows irrigation reservoir at the eastern terminus of the BSA. Within the BSA, approximately 0.03 acres of open water was delineated. Similar to the open water habitat discussion above, this surface water feature terminates in the reservoir and therefore has no connectivity to WoUS. However, the feature would be considered a WoS and CDFW jurisdictional habitat (See Figure 4 above and **Table 3** below).

Table 3. Jurisdictional Resources Survey Results

Waters of the U.S., State and CDFW Waters (acres)			
Aquatic Resource	Waters of the U.S.	Waters of the State	CDFW Waters
Open Water	--	0.23	0.23
Stream Channel	--	0.03	0.03
Total	**--**	**0.26**	**0.26**

Project Effects to Jurisdictional Resources and Sensitive Habitats.
The project is not anticipated to have any effects to surface waters. Project construction will be limited to upland habitats and no temporary or permanent effects to WoS or CDFW jurisdictional habitats are anticipated. The project has been designed to minimize temporary and permanent impacts to jurisdictional waters to the maximum extent practicable. In addition to general construction Best Management Practices (BMPs), avoidance and minimization measures **BIO-1** through **BIO-5** will be incorporated into the project design to ensure construction does not encroach into jurisdictional resources or effect sensitive natural communities. With the incorporation of these avoidance and minimization measures, the project would be considered to have a less than significant impact with mitigation relating to sensitive natural communities.

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?

No Impact. No state or federally protected wetlands occur within the BSA; therefore, the project would not have a substantial adverse effect on state or federally protected wetlands. No impact would occur.

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. According to the CDFW, Terrestrial Connectivity, Areas of Conservation Emphasis (ACE), the project is within an ACE Class 3 and ACE Class 2 areas. The completed project is not anticipated to have any effects on the habitat connectivity for birds, fish, or small and medium terrestrial wildlife, and project construction would be nominal in size and duration. No loss of or impediments to habitat connectivity are anticipated, and no impact would occur.

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

No Impact. Pursuant the Madera County General Plan Policy 5.F.4, "The County shall ensure that landmark trees are preserved and protected." Landmark trees are considered those greater than 36 inches in diameter at breast height (dbh). No landmark trees would be impacted by the project within foothill woodland habitat. Therefore, the project would not conflict with any local policies or ordinances that protect biological resources. No impact would occur.

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

Less than Significant. The project area is not within an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any approved plan and no impact would occur.

MITIGATION MEASURES

BIO-1: Prior to the start of construction activities, the project limits in proximity to jurisdictional waters shall be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters. The project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-2: Before on-site project activities begin, all construction personnel will participate in a worker environmental awareness program. A qualified biologist will inform all construction personnel about sensitive natural communities of concern in proximity to the project, and the life history and ecology of special-status plant and wildlife species with potential to occur in the vicinity of the project.

BIO-3: All temporarily disturbed areas shall be restored onsite to pre-project conditions or better prior to project completion. Where possible, vegetation shall be trimmed rather than fully removed with the guidance of the project biologist.

BIO-4: Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds must be cleaned to reduce the spreading of noxious weeds.

BIO-5: All hydro seed and plant mixes must consist of a biologist approved native seed mix.

BIO-6: A focused rare plant survey shall be conducted pursuant to the *Protocols for Surveying and Evaluating Impacts to Species Status Native Plant Populations and Natural Communities* (CDFW 2018) during the appropriate blooming season for special status rare plant species prior to the start of construction. If the species with potential to occur or any other special status plant species are discovered during the focused rare plant surveys, additional ESA fencing or relocation shall be implemented to avoid and minimize impact to the species. Consultation with CDFW may be required to determine appropriate buffer distances and/or relocation of species populations.

BIO-7: If vegetation removal is required during the nesting season (February 1st – August 31st), a pre-construction nesting bird survey must be conducted within 7 days prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the biologist will be removed by the contractor.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in consultation with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

BIO-8: The contractor must not use herbicides to control invasive, exotic plants or apply rodenticides during construction.

BIO-9: To allow subterranean wildlife enough time to escape initial clearing and grubbing activities, equipment used during initial clearing and grubbing must be operated at speeds no greater than 3 miles per hour.

BIO-10: The contractor must dispose of all food-related trash in closed containers and must remove it from the project area each day during construction. Construction personnel must not feed or attract wildlife to the project area.

FINDINGS

Considering the information obtained for literature search, biological surveys, and analysis of potential impacts from project design, the following significance determinations have been made: With the implementation of measures BIO-1 through BIO-10, potential impacts to the special status wildlife, special status plant species, or sensitive habitats would be **Less than Significant with Mitigation.**

2.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §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 dedicated cemeteries?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires federal undertakings to consider the effects of the action on historic properties. Historic properties are defined by the Advisory Council on Historic Preservation (ACHP) regulations (36 Code of Federal Regulations [CFR] Part 800) and consist of any prehistoric or historical archaeological site, building, structure, historic district, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria (36 CFR Part 800.16[l]).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP.

For projects involving a lead federal agency, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR Part 60.4.

The quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association. They must also meet one or more of the four criteria for inclusion on the NRHP:

- Criterion A, Association with events that have made a significant contribution to the broad patterns of history;
- Criterion B, Association with the lives of persons significant in the past;
- Criterion C, Embodiment of distinctive characteristics of a type, period, or method of construction, the work of a master, high artistic values, or a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D, History of yielding, or the potential to yield, information important in prehistory or history.

If a cultural resources professional meeting the Secretary of Interior's Qualification Standards determines a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP. Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met. Resources listed on, or eligible to, the NRHP are automatically considered historical resources for the purposes of CEQA.

Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 25 U.S.C. 3001)
Under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001) and implementing regulations 43 CFR Part 10, federal agencies are responsible for the protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are discovered on lands under the agency's jurisdiction. All human remains and potential human remains must be treated with respect and dignity at all times.

State Regulations

California Register of Historical Resources: Public Resources Code Section 5024
The term historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]).

Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]);
2. A local survey conducted pursuant to PRC Section 5024.1(g); or
3. The property is listed in or eligible for listing in the NRHP (PRC Section 5024.1[d][1]).

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the CRHR, which states that a historical resource must be significant at the local, state, or national level under one or more of the following four criteria.

It is associated with events that have made a significant contribution to the broad patterns of:

1. California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

Unique Archeological Resources

The PRC also requires the Lead Agency to determine whether or not a project would have a significant effect on unique archaeological resources (PRC Section 21083.2[a]).

The PRC defines a unique archaeological resource as follows.

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
    - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
    - Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
    - Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2).

In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of a historical resource. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR.

California Health and Safety Code Section 7050.5

Regarding the discovery of human remains on non-federal lands, Section 7050.5 of the California Health and Safety Code (CHSC) states the following:

a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].

b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) (CHSC Section 7050.5).

Of particular note to cultural resources is subsection (c). After notification, NAHC would follow the procedures outlined in PRC Section 5097.98, which include notification of most likely descendants (MLD),

if possible, and recommendations for treatment of the remains. The MLD would have 48 hours after being granted access to the site to complete their inspection and make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

California Graves Protection and Repatriation Act of 2001
Section 8010 and 8011 of the CHSC also address the protection of Native American human remains and cultural items and state:

8010. This chapter shall be known, and may be cited as the California Native American Graves Protection and Repatriation Act (CALNAGPRA) of 2001.

8011. It is the intent of the Legislature to do all of the following:

(a) Provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect.

(b) Apply the state's repatriation policy consistently with the provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.), which was enacted in 1990.

(c) Facilitate the implementation of the provisions of NAGPRA with respect to publicly funded agencies and museums in California.

(d) Encourage voluntary disclosure and return of remains and cultural items by an agency or museum.

(e) Provide a mechanism whereby lineal descendants and culturally affiliated California Indian tribes that file repatriation claims for human remains and cultural items under the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.) or under this chapter with California state agencies and museums may request assistance from the commission in ensuring that state agencies and museums are responding to those claims in a timely manner and in facilitating the resolution of disputes regarding those claims.

(f) Provide a mechanism whereby California tribes that are not federally recognized may file claims with agencies and museums for repatriation of human remains and cultural items.

Madera County General Plan
Goal 4.D of the Madera County General Plan is to "identify, protect, and enhance Madera County's important historical, archaeological, paleontological, and cultural sites and their contributing environment." Policy 4.D.7. under Goal 4.D is applicable to this project:

Policy 4.D.7. The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

AFFECTED ENVIRONMENT

This section presents an overview of information on the local prehistory and history of the proposed project area and vicinity. Understanding local cultural history is critical in defining important local, state, and/or regional events, trends, or patterns in prehistory and history by which the significance of prehistoric and historical cultural resources may be evaluated and their significance may be established.

The project site is within the southern area of the ancestral territory of the Eastern Miwok people, more specifically the Southern Sierra Miwok people. The Eastern Miwok are one of two major divisions of the Miwokan subgroup of the Utian language family, and the Southern Sierra Miwok are a separate linguistic

and cultural group, with distinct language and culture, from the four other Eastern Miwok groups. The foremost political unit of the Miwok was the tribelet, each of which was an independent and sovereign nation that embraced a defined territory and exercised control over the natural resources of that territory. Lineage was also of political significance for the Miwok (Levy 1978:398).

What is known of Sierra Miwok geographical territory is gleaned from ethnographies prepared in the early 1900s (more than 100 years after contact with Europeans cultures), and knowledge of Sierra Miwok prehistory is fragmentary. The arrival of Europeans and Americans in California during the 1840s resulted in the arrival of diseases from fur trappers, gold miners, and settlers. As a result, the relationship between Sierra Miwok and miners grew to be hostile. Some Southern Sierra Miwok provided labor for J.D. Savage's gold-mining operations in the Big Oak Flat district, but as the number of miners increased and large mining operations shut down, the participation of the Miwok lessened. When California was annexed by the United States, some Sierra Miwok were moved to the Fresno area, but many remained in rancherias that were located throughout the Sierra Nevada foothills. In the late 1800s and early 1900s, Miwok people living on rancherias maintained some hunting and gathering for subsistence (combined with seasonal wage labor on farms and ranches). As reliance on cash increased, dependence on hunting and gathering for subsistence decreased (Levy 1978:400-401).

Sierra Miwok traveled during the various seasons to obtain food not found in the vicinity of their permanent settlements. Resources subject to hunting and gathering were dependent on season and locality, but meat consumption was higher in the winter because consumption of plant food was limited to stored resources (Levy 1978:402). Deer was the most important animal that was hunted, and traps and snares were the most common methods for obtaining small game (Levy 1978:404). According to ethnographies, the principal tool used for hunting was the bow and arrow, with Sierra Miwok bows typically made from incense cedar (Levy 1978:405). The Southern Sierra Miwok manufactured both twined and coiled basketry that was stylistically similar to that of the Yokuts and Numic people. Eastern Miwok constructed various buildings, including conical residential houses, two types of assembly houses (large semisubterranean and circular brush assembly), and sweathouses. Other structures built by the Eastern Miwok included small conical huts (constructed for newly menstruating girls and aged people) and conical grindings houses (constructed over bedrock mortars to allow for grinding of resources in inclement weather) (Levy 1978:408-409).

The project site is also located near Ahwahnee (which means "deep, grassy valley"), a community that was established in the 1870s and grew out of the intersections of Yosemite Valley, Madera, Mariposa and Oakhurst/Grub Gulch mining district. The vicinity of Ahwahnee has a rich history of ranching, farming, and hotels dating back to the late 1800s. In the late 1980s, the 18-hole course at the Ahwahnee County Club golf course opened. The property was sold in 2001, and the facility soon reopened as Sierra Meadows Ranch Country Club. As of 2016, Sierra Meadows became a lodging and event center (Sierra Meadows n.d.).

Methodology

A record search and field survey were conducted for the project. Staff of the Southern San Joaquin Valley Information Center (SSJVIC) conducted a record search of the project site and a 0.5-mile radius (SSJVIC Records Search File Number 22-364) on September 26, 2022. The SSJVIC, an affiliate of the California Historical Resources Information System, is the official State repository of cultural resource records and reports for Madera County. The SSJVIC record search results did not identify any previously recorded archaeological resources within the project site and identified ten previously recorded archaeological resources within 0.5-mile of the project site. These ten resources consist of five sites with only bedrock milling features and five sites with bedrock milling features and associated midden and/or artifact scatters.

The project site has been previously studied as part of three cultural resources studies, all of which were pedestrian surveys. The entire project site and more than 95 percent of the record search radius have been previously surveyed for cultural resources.

A pedestrian survey of the project site was conducted on October 26, 2022, to check for surficial archaeological materials within the project site. The field survey was negative for archaeological resources; no historic-period or pre-contact period (Native American) resources were identified in the project site.

DISCUSSION

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. As described above, the record search and field survey were negative for the presence of archaeological resources in the project site; therefore, no historical resources exist within the project site. As such, the proposed project would not cause an adverse change in the significance of a historical built environment or archaeological resource.

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

Less than Significant with Mitigation. As described above, the record search and field survey were negative for the presence of archaeological resources in the project site and, as such, the proposed project would not cause an adverse change in the significance of a known archaeological resource. Given that all ten previously recorded archaeological resources within 0.5-mile of the project site contain bedrock milling features as site components and there were no bedrock outcrops observed in the project site, it is unlikely that previously unrecorded archaeological resources would be encountered during project implementation. However, there is always a potential that previously unidentified archaeological resources could be identified during project implementation.

To avoid or minimize impacts to previously unidentified archaeological resources that may be determined significant per CEQA, all construction personnel would receive mandatory cultural resources awareness training conducted by a qualified archaeologist, as specified in Mitigation Measure **CR-1**. Additionally, in the event that cultural materials are encountered during project implementation, all work would cease within 50 feet of the find and a qualified archaeologist would determine appropriate next steps, as specified in Mitigation Measure **CR-2**. With implementation of Mitigation Measures **CR-1** and **CR-2**, potential impacts to significant archaeological resources would be less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant. No cemeteries or human remains have been recorded within the project site. If human remains are encountered at any time during project implementation, State Health and Safety Code Section 7050.5 and State CEQA Guidelines Section 15064.5(e)(1) state that no further disturbance shall take place in the area of the find until the County Coroner has made a determination of origin and disposition of the human bone pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately and shall make a determination within two working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the NAHC by phone within 24 hours, and the NAHC shall then immediately 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 of the remains 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.

Compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 regarding the treatment of human remains would ensure that potential impacts to human remains would be less than significant.

MITIGATION MEASURES

CR-1: Before any ground-disturbing work (including vegetation clearing, grading, and equipment staging) commences, a qualified archaeologist (one who meets the Secretary of the Interior's Professional Qualifications Standards for Archeology, or an archaeologist supervised by such an archaeologist) shall conduct a mandatory cultural resources awareness training for all construction personnel. The training shall cover the cultural history of the area, characteristics of archaeological resources that could be encountered during project implementation, applicable laws, and the avoidance and minimization measures to be implemented. Proof of personnel attendance shall be provided to overseeing agencies as appropriate. If new construction personnel are added to the proposed project, the contractor shall ensure that the new personnel receive the mandatory training before starting work.

CR-2: If unrecorded cultural resources are encountered during project-related ground-disturbing activities, even in the absence of an onsite archaeological monitor, a qualified cultural resources specialist shall be contacted to assess the potential significance of the find. If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances within 50 feet of the find will be halted, and a qualified professional archaeologist (one who meets Secretary of the Interior's Professional Qualifications Standards for Archeology) shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation, such as avoidance or data recovery. The archaeologist shall also determine whether future archaeological monitoring is appropriate.

If the find is determined to be a significant cultural resource, the County shall make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work shall be permitted to continue on other parts of the project while archaeological mitigation takes place.

Any archaeological reports prepared as part of the project (such as a monitoring report or resource evaluation report) shall be submitted to the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System.

FINDINGS

The project would have **Less Than Significant Impacts with Mitigation** relating to cultural resources.

2.6 ENERGY

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

DISCUSSION

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

No Impact. The project would comply with standard construction BMPs and the Madera County General Plan relating to the efficient use of energy resources. Therefore, the project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, and no impact would occur.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The project would not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. Therefore, no impact would occur.

FINDINGS

The project would have **No Impact** relating to energy or energy resources.

2.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to 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 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?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

The project is located in the foothills of the Sierra Nevada Geomorphic Province, which is characterized by a gently sloping granitic western slope that disappears under sediments of the Great Valley Province. Natural soils within the project area consist exclusively of Ahwahnee and Auberry coarse sandy loams, 15 to 30 percent slope.

DISCUSSION

a) Would the project expose people or structures to 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?

No Impact. According to the CDC Fault Activity Map of California (CDC 2015), there are no known active faults within the project area or directly adjacent to the project area. The nearest fault is the Bowie Flat fault (Late Quaternary), located approximately 44 miles northwest of the project area. The project would consist of minor ground disturbance and would not substantially change the existing conditions that it would result in new risks to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. Therefore, no impact would occur.

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

Less than Significant Impact. The project would have an area of soil disturbance less than one acre; therefore, compliance with NPDES and WDR general permits would not be required. However, the project would be required to be in compliance with Madera County "Grading and Erosion Control" Code of Ordinances Title 14, Chapter 14.50, which includes construction BMPs for erosion and sediment control. By maintaining compliance with Madera County standards, impacts associated with erosion and loss of topsoil would be considered 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?

No Impact. The project area is not located on a geologic unit or soil that is known for unstable conditions. During construction, soils may become unstable during grading activities; however, the area of ground disturbance and construction activities necessary for the construction of the project would not occur on unstable soils and would not result or potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, no impact would occur.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. Natural soils within the project area consist exclusively of Ahwahnee and Auberry coarse sandy loams, 15 to 30 percent slope. This soil type is not known as an expansive soil, as defined in Table 18-1-B of the Uniform Building Code, and construction within these soil types would not create substantial risks to life or property. Therefore, no impact would occur.

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?

No Impact. The project would not utilize septic tanks or an alternative waste water disposal system on the site. Therefore, the project would have no impact due to soils incapable of adequately supporting septic systems.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. According to the University of California Museum of Paleontology (UCMP), there are no known recorded findings of fossils within the Ahwahnee area (UCMP 2022). Additionally, no findings of unique paleontological resources or sites or unique geological features were identified during the record search and pedestrian survey within the project area. Therefore, no impact would occur.

BEST MANAGEMENT PRACTICES

The following best management practices will be incorporated into the project:

- The project contractor would be required to be in compliance with Madera County "Grading and Erosion Control" Code of Ordinances Title 14, Chapter 14.50, which includes construction BMPs for erosion and sediment control.

FINDINGS

The project would have a **Less than Significant Impact** relating to geology and soils.

2.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

REGULATORY SETTING

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO_2, CH_4, NO_X, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

On June 1, 2005, California Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this Executive Order, the carbon intensity of California's transportation fuels was reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the U.S. EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions. [1]

According to the Association of Environmental Professionals white paper, "Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents" (June 29, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change creates a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current,

[1] http://www.epa.gov/climatechange/endangerment.html

and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

Local Regulations

To assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific greenhouse gas emissions (GHG) on global climate change, the San Joaquin Valley Air Pollution Control District (District) has adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

As the project would have no effects on traffic capacity, any additional GHG emissions would only occur during, and result from necessary temporary construction activities.

DISCUSSION

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. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, no single project alone is expected to measurably contribute to a noticeable incremental change in the global average temperature, or to a global, local, or microclimate. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions, on a global basis.

In December 2009, the SJVAPCD adopted the Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (SJVAPCD 2009). Under this guidance, projects complying with an approved GHG plan or mitigation program or implementing Best Performance Standards and reducing project-specific GHG emissions by at least 29% compared to business-as-usual condition would have a less than significant individual and cumulative impact on global climate change. However, the SJVAPCD methodology was developed primarily to address long-term operational activities of land use development projects (e.g. residential and commercial buildings). Thus, the SJVAPCD has not developed an applicable Best Performance Standards or threshold of significance for small-scale construction projects.

In order to establish additional context in which to consider the project's GHG emissions, this analysis reviewed guidelines used by other public agencies. For example, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has identified an annual threshold of 1,100 MT CO2e for the construction and operational phases of all project types. SMAQMD recognizes that, although there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere, a threshold must be set to trigger a review and assessment of the need to mitigate project GHG emissions (SMAQMD 2020). The threshold set by the SMAQMD was developed to allow

lead agencies to assess the consistency of proposed projects with the Assembly Bill (AB) 32 and Senate Bill (SB) 32 reduction goals (SMAQMD 2020). The SMAQMD also recommends amortizing the level of short-term construction emissions over the expected (long-term) operational life of a project (SMAQMD 2020). The operational life of a project varies by project type; however, the SMAQMD recommends agencies to use 40 years for new residential and 25 years for conventional commercial. Similarly, other air districts (e.g., South Coast Air Quality Management District) typically assume a project lifetime to be 30 years. The Placer County Air Pollution Control District (PCAPCD), in its 2017 CEQA guidelines, recommends a threshold of 10,000 MT CO2e per year for the project-level construction phase (PCAPCD 2017). Therefore, this analysis utilizes the 1,100 MT CO2e threshold developed by SMAQMD for the construction and operational phase of all project types for conservative purposes. Each of the significance thresholds developed by these other agencies is designed to establish the level of emissions for individual projects that would represent cumulatively considerable contribution to the significant cumulative impact of GHG emissions, based on the statewide framework established by AB 32, SB 32, and relevant executive orders addressing climate change effects. It is not the intent of this CEQA document to cause the adoption of these thresholds as mass emissions limits for this or other projects, but rather to provide this additional information to put the project-generated GHG emissions in the appropriate statewide context.

Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the project would result in exhaust related GHG emissions. According to the District, the best form of analysis for project construction emissions is to use the CalEEMod. A CalEEMod was completed for the project. Results of the inputs determined that the project would not exceed the District's thresholds of significance (Appendix A. CalEEMod Summary Report).

Using the CalEEMod results for the proposed project, the project construction effort is so short and the level of export of materials is so low, that the model calculated the CO_2e for a 1-year construction period as 81.8. This is well below the SMAQMD's threshold of significance of 1,100 MT CO_2e per year. Therefore, the project is not expected to generate GHG emissions in quantities that would individually or cumulatively contribute to a significant impact on the environmental, and the project is considered to have a less than significant impact relating to the generation of GHG emissions. No mitigation is required.

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

No Impact. The proposed project would generate short-term GHG emissions during construction. As indicated under section (a) above, the short-term construction GHG emissions would not exceed SMAQMD's significance thresholds, which are based on Senate Bill 32 GHG reduction targets. Further, the Districts Climate Change Action Plan guidance documents do not include GHG emissions reduction measures that are applicable to the proposed project. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emission. No impact would occur, and no mitigation would be required.

FINDINGS

The project would have a **Less and Significant Impact** relating to GHG emissions.

2.9 HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety, and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

AFFECTED ENVIRONMENT

A review of the California Department of Toxic Substances (DTSC) EnviroStor database (DTSC 2022), and the State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2021) found no known cleanup sites within the project area, or within 1 mile of the project area.

DISCUSSION

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. The project would involve the use of heavy equipment for the grading, filling, and hauling of materials. Such equipment may require the use of common materials that have hazardous properties, e.g., petroleum-based fuels. These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a significant hazard to the public or environment. All refueling of construction vehicles and equipment would occur within designated areas and the use of hazardous materials within the project area would be temporary. Therefore, the project would have a less than significant impact.

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. A review of the DTSC EnviroStor database (DTSC 2022), and the State SWRCB GeoTracker database (SWRCB 2021) found no known cleanup sites within the project area, or within 1 mile of the project area. Therefore, the project would not be anticipated to cause a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials. However, unknown potentially hazardous materials could be uncovered during ground disturbance or drilling of the replacement wells due to disturbance. As a construction BMP, the project contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities, which would provide measures for unknown discovery of hazardous materials. Therefore, the project would have a less than significant impact.

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?

No Impact. There are no schools within one-quarter mile of the proposed project. Therefore, no impact would occur.

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. A review of the DTSC EnviroStor database (DTSC 2022), and the State SWRCB GeoTracker database (SWRCB 2021) found no known cleanup sites within the project area, or within 1 mile of the project area. Therefore, the project would not be located on a site which is included on a list of hazardous materials sites, and no impact would occur.

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

No Impact. The project is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area, and 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. Regarding emergency preparedness, the County has developed an Emergency Operations Plan (2010), Local Hazard Mitigation Plan (2017), and the Community Wildfire Protection Plan (2008). In the case of an emergency evacuation (most likely due to wildfire), project construction and/or operation would not occur on major roadways, nor would construction equipment block any roadways during construction. Therefore, the project would not impair implementation of or physically interfere with any emergency plan or evacuation plan, and no impact would occur.

g) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The project would not occur within a designated wildland area, or where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no impact would occur.

BEST MANAGEMENT PRACTICES

The following best management practices will be incorporated into the project:

- The project contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

FINDINGS

The project would have a **Less than Significant Impact** relating to hazards and hazardous materials.

2.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such 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?	☐	☐	☐	☒

REGULATORY SETTING

Federal Regulations

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to WoUS. CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool.

The USACE regulates discharges of dredged or fill material into WoUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

The RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity that may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those

of USACE (i.e., WoUS including any wetlands). The RWQCB also asserts authority over WoS under WDR pursuant to the Porter-Cologne Water Quality Control Act.

On April 21, 2020, the U.S. EPA and the USACE published the "Navigable Waters Protection Rule" (NWPR) to redefine the extent of waters of the United States, and CWA jurisdiction. Under the final rule, four categories of water are federally regulated under: the territorial seas and traditional navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds, and impoundments; and wetlands adjacent to jurisdictional waters. The final rule also detailed 12 categories of exclusions or features that are not considered "waters of the United States" which includes features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. Currently, the U.S. EPA and USACE are in receipt of the U.S. District Court for the District of Arizona's August 30, 2021, order vacating and remanding the Navigable Waters Protection Rule in the case of Pascua Yaqui Tribe v. U.S. Environmental Protection Agency. In light of this order, the agencies have halted implementation of the NWPR nationwide and are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice.

Porter-Cologne Water Quality Act

Also known as the California Water Code, the Porter-Cologne Water Quality Act (Porter-Cologne Act), was created in 1969 to govern water quality regulation in California and protect water quality as well as beneficial uses of water. The Porter-Cologne Act applies to all WoS, including surface water, groundwater, and wetlands at both point and non-point sources of pollution. The act established the overarching California State Water Resources Control Board and nine semiautonomous Regional Water Boards. The Porter-Cologne Act requires the adoption of water quality control plans that give direction to managing water pollution in California. Usually, basin plans get adopted by the Regional Water Boards and are updated when needed. The plans incorporate the beneficial uses of the WoS and then provide objectives that should be met in order to maintain and protect these uses.

State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State

In response to the EPA and USACE "Navigable Waters Protection Rule" and reduction in water quality protections under CWA jurisdiction, the SWRCB adopted the "*State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*" (Procedures). On April 6, 2021, the SWRCB adopted the Procedures for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and WDR for dredge or fill activities.

According to the SWRCB, Procedures were adopted to address several important issues:

- strengthening protection of waters of the state that are no longer protected under the CWA since those waters of the state have historically relied on CWA protections in dredged or fill discharge permitting practices;
- inconsistency across the Regional Water Boards in requirements for discharges of dredged or fill material into waters of the state, including wetlands;
- no single accepted definition of wetlands at the state level;
- the Regional Water Boards may have different requirements and levels of analysis with regard to the issuance of water quality certification; and,

- current regulations have not been adequate to prevent losses in the quantity and quality of wetlands in California, where there have been especially profound historical losses of wetlands.

Madera County Storm Water Resource Plan
The Madera County Storm Water Resource Plan (SWRP) is a first of its kind watershed-based storm water plan that establishes an integrated and coordinated storm water runoff management strategy for the County (Madera County 2017).

The County of Madera, City of Chowchilla, and City of Madera are required to comply with three separate storm water NPDES permits, as applicable to their jurisdictions and activities, for projects over one (1) acre of soil disturbance:

- Phase II Small Municipal Separate Storm Sewer System (MS4) General Permit (Phase II MS4 Permit) (Order 2013-0001-DWQ);
- General Permit for Discharges of Storm Water Associated with Construction Activity(Construction General Permit) (Order 2009-0009-DWQ); and
- General Permit for Discharges of Storm Water Associated with Industrial Activity (Industrial General Permit) (Order 2014-0057-DWQ).

As applicable for new or redevelopment projects the SWRP identifies design criteria and BMPs to prevent storm water and dry weather runoff pollution and increase effective storm water and dry weather runoff management for new and upgraded infrastructure and residential, commercial, industrial, and public development.

AFFECTED ENVIRONMENT

Hydrology
The project area is within the Miami Creek subwatershed within the larger Upper Fresno River watershed. Water from the western slope of the Sierra Nevada foothills drains through Peterson Creek to the north and Miami Creek to the south of the project area, and unnamed ephemeral stream channels flow into a series of ponds throughout the Sierra Meadows neighborhood.

Groundwater
The proposed project is not within a groundwater basin; however, waters from Miami Creek subwatershed could provide groundwater resources to the nearest groundwater basin, the San Joaquin Valley – Madera Groundwater Basin.

Flooding
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) the project area would not be within any designated Special Flood Hazard Area subject to inundation (FEMA 2022; see Appendix C. FEMA FIRMette Maps). The project site is situated at an elevation of approximately 30-40 feet above mean sea level.

DISCUSSION

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

Less than Significant Impact. The project would have an area of soil disturbance less than one acre; therefore, compliance with NPDES and WDR general permits would not be required. However, the project

would be required to be in compliance with Madera County "Grading and Erosion Control" Code of Ordinances Title 14, Chapter 14.50, which includes construction BMPs for erosion and sediment control. By maintaining compliance with Madera County standards, construction of the project would not violate any water quality standards, or waste discharge requirements, or substantially degrade surface or ground water quality, and the project would have a less than significant impact.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The proposed project is not within a groundwater basin; however, waters from Miami Creek subwatershed could provide groundwater resources to the nearest groundwater basin, the San Joaquin Valley – Madera Groundwater Basin. The project would provide safe drinking water to the local community, as determined necessary and within Madera County guidelines. Due to the removal of three of the six working wells from the Ahwahnee water system, the project would increase source capacity within the system by drilling two new replacement wells. The replacement well may incrementally decrease groundwater supply in the area; however, they would be replacements for the wells removed from the system.

Implementation of the project would pull from groundwater resources, but would be a replacement for lost system functionality and is not anticipated to substantially decrease groundwater supplies or substantially interfere with groundwater recharge to a degree that the project could impeded sustainable groundwater management. Therefore, the impact would be considered 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;
(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?

Less than Significant Impact. The project would construct two replacement wells and treatment facilities for safe drinking water. Project construction would not alter the existing drainage pattern of the site or area, or impede or redirect flood flows in any way. However, any source of ground disturbance from construction activities may have the potential for erosion or siltation; however, the project would be required to comply with Madera County "Grading and Erosion Control" Code of Ordinances Title 14, Chapter 14.50, which includes construction BMPs. Further, negligible additions in impervious surfaces for placement of treatment facility equipment would not substantially increase the rate or amount of runoff which would result in flooding on- or offsite. Therefore, impacts would be considered less than significant.

d) Would the project , in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The project is not located within a FEMA Special Flood Hazard Area; however, construction of the project would occur outside of the flood season. Therefore, the project would not in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. No impact would occur.

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

No Impact. The project would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. No impact would occur.

BEST MANAGEMENT PRACTICES

The project would be required to comply with Madera County "Grading and Erosion Control" Code of Ordinances Title 14, Chapter 14.50, which includes construction BMPs for erosion and sediment control.

FINDINGS

With the inclusion of BMPs and compliance with all required Madera County codes, the project will have a **Less than Significant Impact** relating to hydrology and water quality.

2.11 LAND USE AND PLANNING

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

DISCUSSION

a) Would the project physically divide an established community?

No Impact. The project would include construction of two replacement wells, water transmission pipeline, and water treatment equipment. The project would not physically divide an established community. Therefore, 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. The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, no impact would occur.

FINDINGS

The project would not physically divide an established community or conflict with any land plan, policy, or regulation. Therefore, the project would have **No Impact** relating to land use and planning.

2.12 MINERAL RESOURCES

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

DISCUSSION

a) 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. The project area does not occur within a known mineral resource deposit that would be of value to the region and the residents of the state. Therefore, the project would not result in the loss of availability of a known mineral resource, and no impact would occur.

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. The project area does not occur within an identified locally-important mineral resource recovery site delineated with the Madera County General Plan (1995, as amended), specific plan or other land use plan. Therefore, the project would not result in the loss of availability of a known mineral resource recovery site, and no impact would occur.

FINDINGS

The project would have **No Impact** relating to mineral resources.

2.13 NOISE

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

REGULATORY SETTING

Madera County General Plan

As mandated by Section 65302(f) of the California Government Code, Madera County has adopted a noise element as a component of the Madera County General Plan (1995, as amended). The scope of the element includes the unincorporated areas of County. The Noise Element establishes noise criteria to ensure high noise levels do not adversely affect that county resident's quality of life. As the County Municipal Code and General Plan do not have specific goals and criteria, the analysis is formulated on the policies outlined in the General Plan for non-transportation noise sources applicable to the proposed project:

Policy 7.A.6 The County shall enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the California Building Code concerning interior noise exposure for multi-family housing, hotels and motels.

Policy 7.A.9 Vibration perception threshold: The minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direction means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be a motion velocity of one-tenth (0.1) inches per second over the range of one to one hundred Hz.

Policy 1.G.2. The County shall require public facilities, such as wells, pumps, tanks, and yards, to be located and designed so that noise, light, odors, and appearance do not adversely affect nearby land uses.

Madera County Municipal Code

The Madera County Municipal Code provides general noise regulations and designates construction activity work hours. Title 9, Chapter 9.58. "Noise Regulations" section G states, "Construction activities are limited to the hours of seven a.m. and seven p.m. Monday through Friday and nine a.m. and five p.m. on Saturdays. Construction activities will be prohibited on Sundays." (Madera County 2022).

AFFECTED ENVIRONMENT

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. The Madera County 2030 General Plan (1995, as amended) notes noise-sensitive land uses as: residential uses, schools, hospitals and convalescent homes, hotels and lodging, and outdoor activity areas. The project area occurs within land

use designated as Open Space. However, the project would occur adjacent to Very Low Density Residential parcels, with the closest residential home and outdoor activity area approximately 250 feet from the western terminus of the project area.

DISCUSSION

a) Would the project generate 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. The project would not produce operational noise. However, short-term noise impacts would be associated with project construction. Construction related short-term noise levels, those that will occur during grading and infrastructure construction, are anticipated to be higher than the existing ambient noise levels in the area immediately adjacent to the project site.

Two types of short-term noise impacts could occur during the construction of the proposed project. First, the transport of workers and construction equipment/materials to the project site would incrementally increase noise levels on access roads leading to the site (SR-49 and Opah Drive). Although there would be a relatively high single event noise exposure potential associated with the passing trucks (up to 87 dBA at 50 feet from the passing truck), the effect on long-term ambient noise levels would be small and less than significant (average over a longer time period). Therefore, short-term construction noise levels associated with worker and equipment/material transport to the proposed project site would result in less than significant impacts.

The second type of short-term noise impact is related to excavation, grading and construction of the project site. Construction of the proposed project would result in a temporary, periodic increase in ambient noise levels. However, this increase would be temporary, intermittent, and limited to daytime hours. Construction is performed in steps, each of which has its own mix of equipment and consequently, its own characteristics. These various sequential phases would change the character of the noise generated on the project site and, therefore, the noise levels surrounding the site 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 equipment noise ranges to be categorized by work phase. **Table 4**, *Typical Construction Noise Levels*, lists typically construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor. At the project site, the loudest piece of equipment that might be used would be a hydraulic backhoe (86 dBA (L_{max})). Using a noise attenuation calculation, the nearest residential home and outdoor activity area, at approximately 250-feet, would receive noise of the hydraulic backhoe at approximately 72 dBA L_{max}.

Madera County requires that all construction vehicles or equipment, fixed or mobile, be equipped with properly operating and maintained mufflers. All operations shall comply with the noise ordinance standards and stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and limited to the hours established by the Madera County Municipal Code Section 9.58. Construction noise during the allowed construction time periods shall be exempted from specific noise level thresholds.

With implementation of the Madera County Municipal Code BMPs (i.e., muffling of construction equipment, stockpiling/staging of construction vehicles and hour limitations) and compliance with Code requirements as outlined above, the project would have a less than significant impact for impacts related to temporary noise exposure to sensitive receptors. Therefore, the project would have a less than significant impact with mitigation incorporated.

Table 4. Typical Construction Noise Levels

Type of Equipment	Range of Sound Levels (dBA at 50 feet)	Suggested Sound Level (dBA at 50 feet)
Dozer	85-90	88
Front End Loader	86-90	88
Hydraulic Backhoe	81-90	86
Hydraulic Excavator	81-90	86
Grader	79-89	86
Air Compressor	76-86	86
Truck	81-87	86
Pneumatic Tool	78-88	85
Jack Hammer	75-85	82
Tractor	77-82	80
Pump	60-80	77
Source: *Noise Control for Buildings and Manufacturing Plants*, (Bolt, et al., 1987).		

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

Less than Significant. The Madera County General Plan Policy 7.A.9 establishes a "vibration perception threshold" where the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direction means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be a motion velocity of one-tenth (0.1) inches per second over the range of one to one hundred Hz. The project would not require pile driving or significant groundborne vibration during construction activities, and due to the distance (approximately 250-feet) to the nearest sensitive receptor, project effects would be considered less than significant related to the generation of groundborne vibration.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is not located within the vicinity of a private airstrip or an airport land use plan and is not within two miles of a public airport or public use airport. Therefore, the project would not expose people residing or working in these areas to excessive noise levels, and no impact would occur.

BEST MANAGEMENT PRACTICES

The following best management practices from the Madera County Municipal Code shall be implemented during project construction:

- Construction activities shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturdays. Construction activities are prohibited on Sundays and Federal Holidays.

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, to the satisfaction of the County Engineer.

- Stationary construction shall be placed such that emitted noise is directed away from sensitive noise receptors to the satisfaction of the County Engineer.

- Stockpiling and staging areas shall be located as far as practical from noise sensitive receptors during construction activities, to the satisfaction of the County Engineer.

FINDINGS

The project would cause temporary construction-related noise. There is no Madera County threshold of significance for noise and with the implementation of the above mitigation measures, noise effects to the local environment would be considered less than significant. Therefore, the project would have a **Less than Significant Impact with Mitigation** relating to Noise.

2.14 POPULATION AND HOUSING

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

REGULATORY SETTING

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "…discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

DISCUSSION

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)?

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality for existing populations. The project would not induce substantial unplanned population growth in the area, either directly or indirectly. Therefore, the project would have no impact.

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

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality for existing populations. The project would not displace any existing housing or necessitate the construction of replacement housing elsewhere. Therefore, the project would have no impact.

FINDINGS

The project would have **No Impact** relating to population or housing.

2.15 PUBLIC SERVICES

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

DISCUSSION

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

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality for existing populations. Project construction and operation would not result in substantial adverse physical impacts associated with provision of new or altered government facilities. The new water supply and water quality facilities would not cause the need for new or altered government facilities, construction which could cause environmental effects in order to maintain acceptable service ratios, response times, or other performance objectives related to fire protection, police protection, schools, parks, or other public facilities. Therefore, the project would have no impact.

FINDINGS

The project would have **No Impact** relating to public services.

2.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	☐	☐	☐	☒

DISCUSSION

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?

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality. The construction and/or operation of the completed project would not increase the use of existing parks or other recreational facilities due to the location and nature of the project. Therefore, no impact would occur.

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?

No Impact. The project does not include recreational facilities or require the construction or expansion of other recreational facilities. Therefore, no impact would occur.

FINDINGS

The project would have **No Impact** relating to recreation.

2.17 TRANSPORTATION/TRAFFIC

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

DISCUSSION

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

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality. The project would have no transportation elements and would not be a part of the transportation network. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and no impact would occur.

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

No Impact. The project is not a transportation project and would not conflict with CEQA Guidelines section 15064.3. No impact would occur.

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)?

No Impact. The project is not a transportation project and would not increase hazards due to a geometric design feature. No impact would occur.

d) Would the project result in inadequate emergency access?

Less than Significant. The project may require temporary road or lane closures along Opah Drive during water transmission line construction. As part of the project, emergency vehicle ingress and egress would be required to be maintained, and a traffic management plan would be incorporated as a construction BMP by the contractor or project proponent, if it is deemed necessary prior to project initiation. Therefore, the project would not result in any inadequate emergency access, and project impacts would be considered less than significant.

FINDINGS

The project would have a **Less than Significant Impact** relating to transportation/traffic.

2.18 TRIBAL CULTURAL RESOURCES

TRIBAL CULTURAL RESOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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:				
a) 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	☐	☐	☐	☒
b) 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.	☐	☐	☐	☒

REGULATORY SETTING

Federal Regulations

Indian Trust Assets
ITAs are legal interests in property held in trust by the U.S. for Native American tribes or individuals. Examples of potential ITAs are lands, minerals, fishing rights, and water rights. Management of ITAs is based on the following orders, agreements, and regulations:

- Executive Order 13175, Consultation and Coordination with Indian Tribal Governments 65 FR 67249
- Memorandum on Government-to-Government Relations With Native American Tribal Governments (FR Volume 59, Number 85, signed April 29, 1994)
- Secretarial Order No. 3175 – Departmental Responsibilities for Indian Trust Resources
- Secretarial Order No. 3206 – American Indian Tribal Rights, Federal -Tribal Trust Responsibilities, and the federal Endangered Species Act (ESA)
- Secretarial Order No. 3215 – Principles for the Discharge of the Secretary's Trust Responsibility
- Secretarial Order No. 3342 – Identifying Opportunities for Cooperative and Collaborative Partnerships with Federally Recognized Indian Tribes in the Management of Federal Lands and Resources
- Secretarial Order No. 3335 – Reaffirmation of the Federal Trust Responsibility to Federally Recognized Tribes and Individual Indian Beneficiaries

American Indian Religious Freedom Act of 1978
The American Indian Religious Freedom Act of 1978 (AIRFA; 42 U.S.C. § 1996) protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

Historic Sites Act of 1935
The Historic Sites Act of 1935 (54 U.S.C. 320101–320106, formerly 16 U.S.C. 461–467) declares"...that it

is a national policy to preserve for public use historic sites, buildings, and objects of national significance…," asserting historic preservation as a government duty under jurisdiction of the United States Secretary of the Interior.

National Historic Preservation Act
As discussed and defined in Section 2.5, Cultural Resources, Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. For purposes of the discussion regarding tribal cultural resources, it is important to underscore that historic properties include properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria (36 C.F.R. § 800.16[l]).[1]

Traditional Cultural Properties and Traditional Cultural Landscapes
Traditional Cultural Properties (TCPs) are properties associated with cultural practices or beliefs of a living community that are: (1) rooted in that community's history; and (2) important in maintaining the continuing cultural identity of a community. TCPs can refer to properties of importance to any community, including Indigenous communities. The appropriate terminology for sites of importance to Indian tribes is 'historic property of religious and cultural significance to an Indian tribe [and Native Hawaiian organization'" (ACHP 2008:19; ACHP 2011:14). Traditional cultural landscapes (TCL) encompass the same meaning and utility, as well as inclusivity of Indigenous communities. The Secretary of the Interior's Guidelines for the treatment of cultural landscapes define a cultural landscape as "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values" (Birnbaum and Peters 1996:4).Historic vernacular landscapes "evolved through use by the people whose activities or occupancy shaped them" and ethnographic landscapes "contain a variety of natural and cultural resources that associated people define as heritage resource" (Birnbaum and Peter 1996:4; Ball et al. 2015:7).

National Register Bulletin 38 provides examples of TCPs – and TCLs – that fit the definition in the guidelines (Parker and King 1998:1):

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world
- A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents
- An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices
- A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice
- A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity

TCPs and TCLs are eligible for inclusion on the NRHP if they meet the criteria set forth in 36 C.F.R. § 60.4, National Register Criteria for Evaluation. The steps in the identification and evaluation of TCPs are the following (abbreviated from Parker and King 1998:11-14):

1. Potential Traditional Cultural Properties must be identified through consultation with the affected community or Tribe

2. The investigation must consider the beliefs and practices associated with a potential Traditional Cultural Properties from the perspective of the community or Tribe

3. The potential Traditional Cultural Properties must be a property, that is, a tangible place on the landscape, rather than an intangible belief or practice

4. The property must retain integrity of relationship with the beliefs and practices that give it meaning to the community or Tribe

5. The property must retain integrity of condition, such that the elements of the property associated with the beliefs and practices that give it significance are present

6. The property must meet one or more of the four criteria for eligibility on the National Register (see Section 2.5.1.1 [Cultural Resources – Regulatory Setting – Federal).

Cultural resources routinely not considered for eligibility for inclusion in the NRHP are religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties achieving significance within the past 50 years. However, these resources, can be evaluated as eligible if they meet one or more of the NRHP eligibility criteria for evaluation, retain integrity, and meet special criteria requirements called criteria considerations. The most notable of the seven considerations (A through G) is Criteria Consideration G, which specifies that a property that has achieved significance within the last 50 years can qualify for the NRHP only if it is of exceptional importance. As noted by Parker and King (1998:17–18), "a significance ascribed to a property only in the past 50 years cannot be considered traditional." However, they also note: "The fact that a property may have gone unused for a lengthy period of time, with use beginning again only recently, does not make the property ineligible for the [National] Register" (Parker and King 1998:14).

If a property is determined to be a TCP, it becomes the responsibility of the lead agency to assess whether the proposed project would have an effect on the property, and should the effect be adverse, would it alter or destroy the elements that make the property significant and eligible. If a proposed project is determined to have an adverse effect, the lead agency is responsible for seeking measures that would mitigate the adverse effects to TCPs.

State Regulations

Tribal Cultural Resources

As defined at PRC § 21074, a tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place or object that is of cultural value to a California Native American tribe and is either: (1) on or eligible for the CRHR or a local historic register; or (2) the lead agency, at its discretion, chooses to treat the resource as a TCR. TCRs are similar to TCPs in terms of their characteristics, identification, and treatment, and may include a cultural landscape to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Additionally, as defined at PRC § 21074(c), a historical resource, a unique archaeological resource, or a non-unique archaeological resource may also be a TCR if it conforms to the criteria of a TCR in PRC § 21074(a). CEQA mandates that lead agencies determine whether a project will have a significant impact on TCRs that are eligible for listing on the CRHR (i.e., a historical resource), or are determined to be significant by the lead agency in order to appropriately mitigate any such impacts.

Under the CEQA Guidelines, even if a resource is not included on any local, state, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource (i.e., TCR) for the purposes of CEQA, if there is substantial evidence supporting such a determination (CEQA Guidelines § 15064.5[a]). A lead agency must consider a resource to be historically

significant if it finds that the resource meets the criteria for listing in the CRHR. A resource may be eligible for inclusion in the CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage (Criterion 1)
- Is associated with the lives of persons important in our past (Criterion 2)
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values (Criterion 3)
- Has yielded, or may be likely to yield, information important in prehistory or history (Criterion 4)

In accordance with CEQA guidelines, cultural resources investigations are necessary to identify TCRs that may have significant impacts as a result of a project (14 CCR §15064.5). The following steps are routinely implemented in a cultural resources investigation for CEQA compliance:

1. Identify cultural resources in the proposed project area
2. Evaluate against the CRHR criteria of significance (listed below)
3. Evaluate the impacts of the proposed project on all cultural/tribal resources
4. Develop and implement measures to mitigate proposed project impacts on historical resources or resources deemed significant by the lead agency

As TCRs hold cultural value to a California Native American tribe, consultation with local Native American tribes is an integral component of each of the cultural resources investigation steps described above.

Assembly Bill 52 and Consultation

The lead agency for CEQA is responsible for consultation with Native American tribes regarding the potential for a project to impact TCRs, pursuant to Assembly Bill 52 and PRC §§ 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, 21084.3, and 5097.94(m). Assembly Bill 52 recognizes that "…tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated…" and that consultation will occur between a lead agency and Native American tribes for covered projects.

PRC §21080.3.1 (a) and Government Code §65352.4 define consultation as "the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance."

As described in Section 2.5, Cultural Resources, a proposed project may induce a significant impact to a historical resource, unique archaeological resource, or a TCR if it causes a substantial adverse change (i.e., physical demolition, destruction, relocation, or alteration) to the resource or immediate surroundings (14 CCR 15064.5[b]), thereby demolishing or significantly altering the physical characteristics that qualify it for listing on the CRHR or local registers (PRC §§ 5020.01[k] and 5024.1[g]). A project that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment (PRC § 21084.2). A lead agency shall establish measures to avoid impacts that would alter

significant characteristics of a TCR, when feasible (PRC §21084.3). As such, the County is committed to working together with tribes and consultation efforts with California Native American tribes are described below.

Native American Historical, Cultural, and Sacred Sites
Pursuant to PRC 5097.94 the NAHC has authority and duty to "identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands" and has the power and duty to make recommendations for acquisition by the state or other public agencies regarding Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans.

California Native American Graves Protection and Repatriation Act of 2001
The California Native American Graves Protection and Repatriation Act of 2001 (CalNAGPRA) requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes.

Local Regulations

Madera County General Plan
Goal 4.D of the Madera County General Plan is to "identify, protect, and enhance Madera County's important historical, archaeological, paleontological, and cultural sites and their contributing environment." Policy 4.D.1. under Goal 4.D is applicable to this project:

Policy 4.D.1. The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

AFFECTED ENVIRONMENT
The project site is within the southern area of the ancestral territory of the Eastern Miwok people, more specifically the Southern Sierra Miwok people. Please see Section 2.5 (Cultural Resources) for more information on the Eastern Miwok people.

Methodology

A record search and field survey were conducted for the project. Please see Section 2.5 (Cultural Resources) for more information on the results of the record search and field survey.

In November 2022 and pursuant to Assembly Bill 52, Madera County staff sent letters describing the project and maps depicting the project site to six tribal representatives who represent groups with traditional and cultural ties to the project site. To date, no requests for consultation have been received.

DISCUSSION

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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)

No Impact. As described above, Madera County staff provided formal notification to tribal representatives who represent groups with traditional and cultural ties to the project site. To date, no requests for consultation have been received. As such, the proposed project would not cause an adverse change in the

significance of a listed or eligible tribal cultural resource.

b) Would the project cause a substantial adverse change in the significance of 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.

No Impact. As described above, Madera County staff provided formal notification to tribal representatives who represent groups with traditional and cultural ties to the project site. To date, no requests for consultation have been received and no information regarding potential tribal cultural resources in the project site has been received. As such, the proposed project would not cause an adverse change in the significance of a tribal cultural resource.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The project would have **No Impact** relating to tribal cultural resources.

2.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
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 statutes and regulations related to solid waste?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

The Ahwahnee Water System (State Identification Number 2000293) has a total of 89 connections (consisting of 87 residential and two commercial connections), and 21 allocations are on standby. The entirety of the potable water supply system consists of six hard rock wells with a reported combined production of 260 gpm; three booster pump stations; and two storage tanks with a combined capacity of 185,000 gallons. The potable water supply is reliant solely on groundwater, with two sets of water sources and half of the supply has water quality issues that required three wells to be taken offline.

Due to the removal of three wells from the water system, the peak water demand and fire flow requirements for MD 46 are currently not being met by the three-remaining active Ahwahnee County Club (ACC) wells. Additionally, the water quality requirements for the water system are not being met since the drinking water standards cannot be met by blending alone. As such, the County is seeking to increase source capacity and improve water quality for the Ahwahnee Water System with the proposed project.

DISCUSSION

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The project would construct two (2) test wells, each with a design capacity of 150 gpm, drilled in hard rock using air rotary well drilling equipment. Each well will be converted from a test well to a production well, including a well pump, motor, discharge head, discharge pipe, meter, valves, electrical service transformer, variable frequency drive and water treatment for removal of constituents. In addition, a new water transmission line would be constructed along Opah Drive to the water storage tank site. Any impacts from the new transmission line would be within barren roadway. However, the project is anticipated to have approximately 0.66 of permanent impacts and approximately 0.17 acres of temporary impacts to foothill woodland habitat (Figure 5. Project Impacts).

Construction of the project is not anticipated to cause significant environmental effects to biological resources, and with the implementation of mitigation measures **BIO-1** through **BIO-10** described in Section 2.4, the project would have a less than significant effect on the environment.

In addition, with any project that requires ground disturbance and excavation, there is a potential to discover unknown cultural, historic, or tribal cultural resources. As part of the project, mitigation measures **CUL-1** through **CUL-2** would be implemented to ensure the project would comply with all requirements and regulations related to the discovery of unknown resources.

Therefore, the project would not cause significant environmental effects, and impacts associated with the construction of the two replacement wells, water treatment equipment, and water transmission line would be considered 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?

No Impact. The project is needed to resolve water supply and water quality deficiencies in the MD 46 Ahwahnee Water System. Therefore, the purpose of the project to re-establish and maintain water supply and water quality within the MD 46 Ahwahnee Water System by increasing source capacity and improving water quality, would provide a benefit to the citizens within the Ahwahnee Water System and provide sufficient water supplies in the reasonably foreseeable future development during normal, dry, and multiple dry years. No impact would occur.

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 project would not include the construction of any wastewater-generating uses, and no impact to wastewater service or capacity would occur.

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. Construction activities may generate small amounts of solid waste; however, this amount would not be 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. The construction contractor would be required to dispose of all solid waste at an appropriate waste disposal facility or landfill, and in compliance with all federal, state, and local regulations regarding solid waste. Therefore, the project would have a less than significant impact.

e) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The project would comply with all federal, state, and local statutes and regulations related to solid waste, and no impact would occur.

FINDINGS

The project would have a **Less than Significant Impact** to utilities and service systems.

2.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

According to the CAL FIRE, Fire Hazard Severity Zones (CAL FIRE 2007) for Madera County, the project area is located in a "Moderate" fire hazard severity zone in State Responsibility Area (SRA).

Regarding emergency preparedness, the County has developed an Emergency Operations Plan (2010), Local Hazard Mitigation Plan (2017), and the Community Wildfire Protection Plan (2008).

It is virtually impossible to produce a comprehensively written predetermined escape plan in the event evacuation is necessary because of a wildfire. The location, rate of spread and direction of travel of the fire will determine the safest route to direct people away from harm's way. In Madera County disaster preparedness, which includes evacuation protocols and procedures, is the responsibility of the county Office of Emergency Services which is a component of the Sheriff's Office. In the event fire officials declare evacuation a necessity, the actual process will be carried out by members of the Sheriff's Department with the assistance of available fire department personnel and other law enforcement agencies. One of the tools available in the evacuation process is the "reverse 911" phone system. This system has proven successful in recent wildland fire large scale evacuations. The system provides a large number of people in a short period of time information and instructions via a phone call in the event of a natural disaster.

DISCUSSION

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality within the MD 46 Ahwahnee Water System. The project would have no effect on emergency preparedness and would not substantially impair and adopted emergency response plan or emergency evacuation plan. Therefore, no impact would occur.

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. Project construction would involve some soil disturbance and grading for installation of the treatment facilities. During construction, equipment and on-site diesel fuel could pose a risk for wildfire, by possible ignition sources such as internal combustion engines, gasoline powered tools, and equipment that could produce a spark, fire, or flame. However, contractors would have to comply with Sections 4427, 4428, 4431, and 4442 of the Public Resources Code (PRC)25. During construction, contractors would be responsible for monitoring and safety measures, in compliance with applicable PRC requirements. Therefore, impacts 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?

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality within the MD 46 Ahwahnee Water System. The project would not require infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

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?

No Impact. The project would construct two replacement wells and treatment equipment to re-establish and maintain water supply and water quality within the MD 46 Ahwahnee Water System. Project construction and operation 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. No impact would occur.

FINDINGS

The project would have a **Less than Significant Impact** relating to wildfire.

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION

a) Does the project have the potential to 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 with Mitigation. Based upon the review and analysis of potential adverse effects to the environment provided in this Initial Study, including the project-specific BMPs and mitigation measures, the proposed project would not substantially degrade the overall quality of the environment within the project area.

With respect to Section 2.4 Biological Resources and Section 2.5 Cultural Resources, that must be mitigated to a less than significant level with incorporation of project specific mitigation measures. The project has the potential to impact the special status wildlife and plant species, and has the potential to effect cultural resources, including tribal cultural resources. However, mitigation measures would reduce the level of all project-related impacts to a less than significant level. Therefore, the project impacts would be considered less than significant with mitigation.

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. The project would not have adverse environmental impacts at a significant level. All potential significant impacts would be addressed with avoidance, minimization, and mitigation measures and would not result in cumulatively considerable impacts.

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

Less than Significant. The project would not have adverse environmental impacts at a significant level which would cause or result in substantial adverse effects on human being, either directly or indirectly. Conversely, the project would provide benefits to the Ahwahnee Water System as a whole, in the form of replacement wells to support water demand and ensure safe drinking water standards are met for the systems users. The project would have a less than significant effect related to effects on human beings.

FINDINGS

With the incorporation of BMPs and the mitigation measures noted previously, the project will not have a significant impact relating to degradation of the quality of the environment, nor have impacts that are individually limited, but cumulatively considerable; nor have environmental effects which would cause substantial adverse effects, either directly or indirectly, on human beings. Therefore, there are no potentially significant determinations for mandatory findings of significance.

3.0 Comments and Coordination

This chapter summarizes Madera County efforts to identify, address and resolve project-related issues through early and continuing coordination.

3.1 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

Consultation and/or coordination with the following agencies was, or will be initiated for the project:

- California State Water Resources Control Board
- San Joaquin Valley Air Quality Management District

3.2 PUBLIC PARTICIPATION

The public comment period for the project will occur from December 21, 2022, to January 21, 2023. All written comments received by Madera County will be incorporated into the Final IS/MND and added in an appendix. Any additions or corrections to the IS/MND subsequent to public comments will be addressed within the final document.

4.0 Distribution List

A Notice of Availability was prepared and posted with the Madera County Recorder Office and noticed within the Sierra Star newspaper for the local area, in accordance with CEQA Guidelines Section 21092. The Draft IS was distributed to the following agencies and interested parties (unless IS hardcopies specified).

Madera County Public Works, Engineering Services
200 W. 4th Street, Suite 3100
Madera, CA 93637
(IS hardcopies)

State Government

California State Clearinghouse - CEQA Submit Online Database

Local Agencies

Madera County Clerk-Recorder
200 W. 4th Street
Madera, CA 93637

5.0 List of Preparers

Wood Rodgers Inc.

Tim Chamberlain, Senior Environmental Planner
Andrew Dellas, MS, PWS, Senior Biologist

LSA Associates Inc.

Kerrie Collison, M.A., RPA, Associate/Senior Cultural Resources Manager

Madera County

Raymundo Gutierrez, Engineer II, Madera County Public Works
Craig Wagner, Supervising Civil Engineer, Madera County Public Works

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Appendix A:
CalEEMod Summary Report

MD 46 Water System Improvements Project Summary Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MD 46 Water System Improvements Project
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	34.2
Location	37.362267034546576, -119.68656875708695
County	Madera
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2565
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

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
User Defined Recreational	1.00	User Defined Unit	0.70	500	0.00	—	—	—
User Defined Recreational	1.00	User Defined Unit	0.46	500	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.31	3.64	35.0	35.0	0.05	1.65	13.5	15.2	1.52	6.47	7.99	—	5,318	5,318	0.22	0.05	0.98	5,339
Mit.	4.31	3.64	35.0	35.0	0.05	1.65	13.5	15.2	1.52	6.47	7.99	—	5,318	5,318	0.22	0.05	0.98	5,339
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.61	1.81	10.8	11.4	0.02	0.45	0.01	0.45	0.41	< 0.005	0.41	—	1,945	1,945	0.08	0.02	< 0.005	1,951
Mit.	1.61	1.81	10.8	11.4	0.02	0.45	0.01	0.45	0.41	< 0.005	0.41	—	1,945	1,945	0.08	0.02	< 0.005	1,951
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	0.35	3.02	3.05	< 0.005	0.14	0.74	0.88	0.13	0.35	0.48	—	492	492	0.02	< 0.005	0.02	494
Mit.	0.40	0.35	3.02	3.05	< 0.005	0.14	0.74	0.88	0.13	0.35	0.48	—	492	492	0.02	< 0.005	0.02	494

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.06	0.55	0.56	< 0.005	0.02	0.14	0.16	0.02	0.06	0.09	—	81.5	81.5	< 0.005	< 0.005	< 0.005	81.8
Mit.	0.07	0.06	0.55	0.56	< 0.005	0.02	0.14	0.16	0.02	0.06	0.09	—	81.5	81.5	< 0.005	< 0.005	< 0.005	81.8
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	100	26.0	15.0	15.0	15.0	15.0	15.0	15.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	No	No	No	No	No	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	No	No	No	No	No	No	—	—	—	—	—	—	—

2.4. Operations 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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.02	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.02	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	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.02	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	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.00	< 0.005	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	0.00
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	9.00	100	26.0	15.0	15.0	15.0	15.0	15.0	15.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	No	No	No	No	No	No	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	4	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	3	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	3	0	0	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	4	1	1	4

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	3	1	1	3
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	3	1	1	3
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	28.0
Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

Appendix B:
Special Status Species Database Query Results

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: August 04, 2022
Project Code: 2022-0071632
Project Name: Madera County - MD 46 Replacement Well Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2022-0071632
Project Name: Madera County - MD 46 Replacement Well Project
Project Type: Water Supply Pipeline - Maintenance/Modification - Below Ground
Project Description: Two Replacement well sites, with treatment items.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.3623976,-119.68557357677874,14z

Counties: Madera County, California

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fisher *Pekania pennanti* Population: SSN DPS There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Flowering Plants

NAME	STATUS
Mariposa Pussypaws *Calyptridium pulchellum*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2695

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: County of Madera
Name: Andrew Dellas
Address: 3301 C St. #100B
City: Sacramento
State: CA
Zip: 95816
Email adellas@dokkenengineering.com
Phone: 9165861695

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Ahwahnee (3711936) OR Fish Camp (3711946) OR Stumpfield Mtn. (3711947) OR Horsecamp Mountain (3711937) OR Bass Lake (3711935) OR White Chief Mtn. (3711945))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abrams' onion *Allium abramsii*	PMLIL02360	None	None	G3	S3	1B.2
amphibious caddisfly *Desmona bethula*	IITRI77010	None	None	G2G3	S2S3	
An andrenid bee *Andrena macswaini*	IIHYM35130	None	None	G2	S2	
bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S3	FP
beaked clarkia *Clarkia rostrata*	PDONA050Y0	None	None	G2G3	S2S3	1B.3
Big Tree Forest *Big Tree Forest*	CTT84250CA	None	None	G3	S3.2	
big-scale balsamroot *Balsamorhiza macrolepis*	PDAST11061	None	None	G2	S2	1B.2
Bolander's clover *Trifolium bolanderi*	PDFAB400G0	None	None	G3	S3	1B.2
Central Valley Drainage Hardhead/Squawfish Stream *Central Valley Drainage Hardhead/Squawfish Stream*	CARA2443CA	None	None	GNR	SNR	
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G2	S1S2	
Fisher - southern Sierra Nevada ESU *Pekania pennanti pop. 2*	AMAJF01022	Endangered	Threatened	G5T1	S1	SSC
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Endangered	G3	S3	SSC
Jepson's dodder *Cuscuta jepsonii*	PDCUS011T0	None	None	G3	S3	1B.2
Leech's skyline diving beetle *Hydroporus leechi*	IICOL55040	None	None	G1?	S1?	
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
Mariposa pussypaws *Calyptridium pulchellum*	PDPOR09060	Threatened	None	G1	S1	1B.1
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	
orange lupine *Lupinus citrinus var. citrinus*	PDFAB2B103	None	None	G2T2	S2	1B.2
Rawson's flaming trumpet *Collomia rawsoniana*	PDPLM02080	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2?	1B.2
short-leaved hulsea *Hulsea brevifolia*	PDAST4Z020	None	None	G3	S3	1B.2
Sierra marten *Martes caurina sierrae*	AMAJF01014	None	None	G4G5T3	S3	
Sierra Nevada red fox - Sierra Nevada DPS *Vulpes vulpes necator pop. 2*	AMAJA03017	Endangered	Threatened	G5TNR	S1	
Sierra Nevada yellow-legged frog *Rana sierrae*	AAABH01340	Endangered	Threatened	G1	S1	WL
Sierra pygmy grasshopper *Tetrix sierrana*	IIORT27010	None	None	G1G2	S1S2	
slender-stalked monkeyflower *Erythranthe gracilipes*	PDSCR1B1C0	None	None	G2	S2	1B.2
Small's southern clarkia *Clarkia australis*	PDONA05040	None	None	G2	S2	1B.2
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T2T3	S3	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western waterfan lichen *Peltigera gowardii*	NLVER00460	None	None	G4?	S3	4.2
wolverine *Gulo gulo*	AMAJF03010	None	Threatened	G4	S1	FP
yellow-lip pansy monkeyflower *Diplacus pulchellus*	PDSCR1B280	None	None	G2	S2	1B.2
Yosemite toad *Anaxyrus canorus*	AAABB01040	Threatened	None	G2G3	S2S3	SSC

Record Count: 34

California Native Plant Society

Search Results

15 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B**] , Quad is one of [**3711937:3711936:3711935:3711947:3711946:3711945**]

SCIENTIFIC NAME	▲ COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
Allium abramsii	Abrams' onion	Alliaceae	perennial bulbiferous herb	May-Jul	None	None	G3	S3	1B.2
Clarkia rostrata	beaked clarkia	Onagraceae	annual herb	Apr-May	None	None	G2G3	S2S3	1B.3
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2
Trifolium bolanderi	Bolander's clover	Fabaceae	perennial herb	Jun-Aug	None	None	G3	S3	1B.2
Cuscuta jepsonii	Jepson's dodder	Convolvulaceae	annual vine (parasitic)	Jul-Sep	None	None	G3	S3	1B.2
Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	None	None	G3	S3	1B.2
Calyptridium pulchellum	Mariposa pussypaws	Montiaceae	annual herb	Apr-Aug	FT	None	G1	S1	1B.1
Lupinus citrinus var. *citrinus*	orange lupine	Fabaceae	annual herb	Apr-Jul	None	None	G2T2	S2	1B.2
Collomia rawsoniana	Rawson's flaming trumpet	Polemoniaceae	perennial rhizomatous herb	Jul-Aug	None	None	G2	S2	1B.2
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2
Hulsea brevifolia	short-leaved hulsea	Asteraceae	perennial herb	May-Aug	None	None	G3	S3	1B.2
Erythranthe gracilipes	slender-stalked monkeyflower	Phrymaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2
Clarkia australis	Small's southern clarkia	Onagraceae	annual herb	May-Aug	None	None	G2	S2	1B.2
Diplacus pulchellus	yellow-lip pansy monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2
Platanthera yosemitensis	Yosemite bog orchid	Orchidaceae	perennial herb	Jul-Aug	None	None	G2	S2	1B.2

Showing 1 to 15 of 15 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 7 October 2022].

Appendix C:
FEMA FIRMette Maps

National Flood Hazard Layer FIRMette

FEMA

119°42'14"W 37°22'7"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

119°41'37"W 37°21'38"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

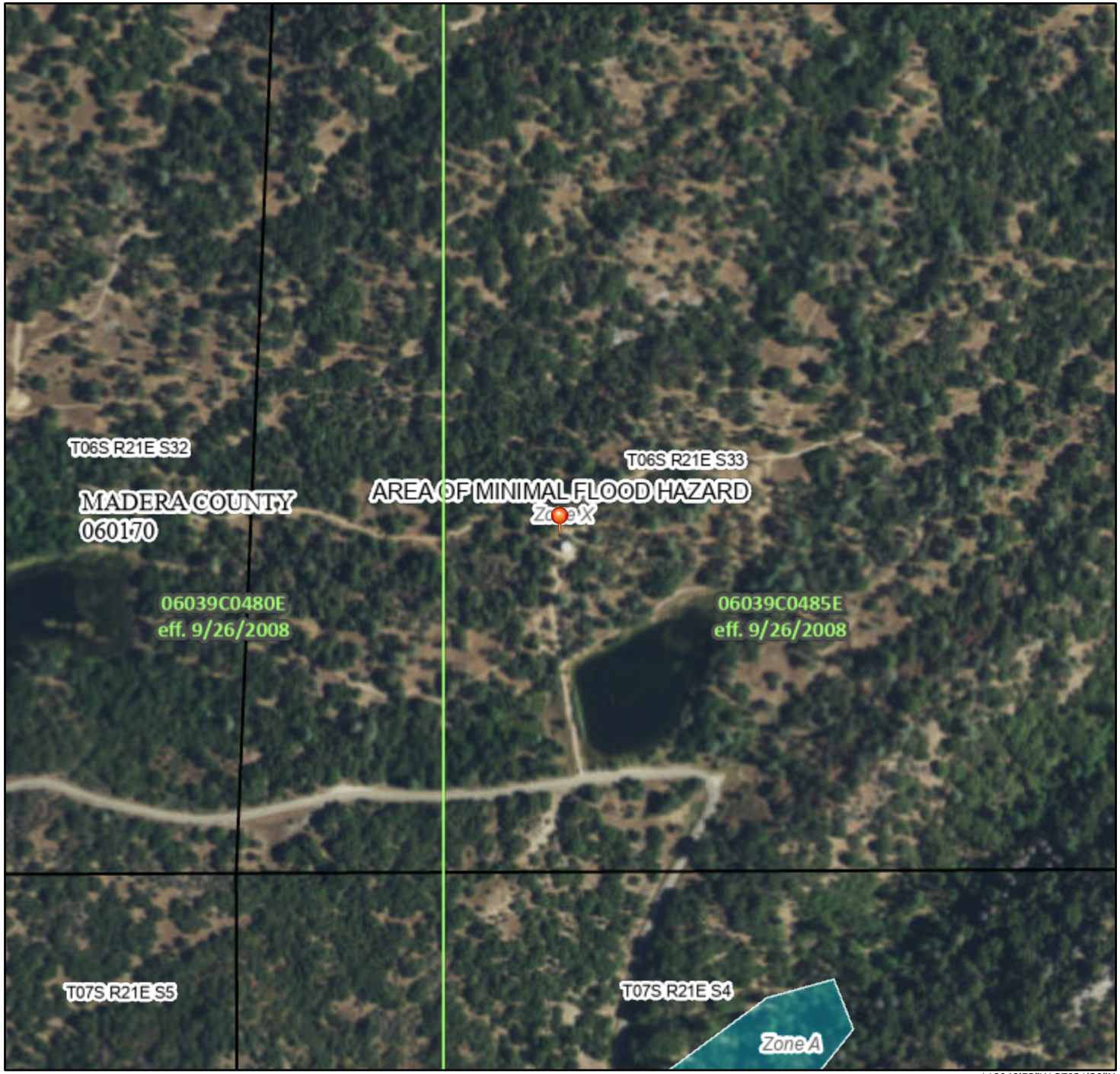
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/10/2022 at 6:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

119°41'30"W 37°21'58"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

119°40'52"W 37°21'29"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
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- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/10/2022 at 7:01 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.