Initial Study/Mitigated Negative Declaration

El Dorado Irrigation District Vegetation Management Project

Prepared for:

El Dorado Irrigation District

June 2019

Prepared by:

AECOM

Initial Study/Mitigated Negative Declaration

El Dorado Irrigation District Vegetation Management Project

Prepared for:

El Dorado Irrigation District
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June 2019

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Acronyms and Other Abbreviations

°C	degrees Celsius
°F	degrees Fahrenheit
µ	micron(s)
µg	microgram(s)
µg/L	micrograms per liter
AB	Assembly Bill
AQCR	air quality control region
ARB	California Air Resources Board
B.P.	Before Present
ca.	circa
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CENSARE	Central Sierra Research
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CO	carbon monoxide
dB	decibel(s)
dBA	A-weighted decibel(s)
DNL	day-night noise level
DWR	California Department of Water Resources
EDCAPCD	El Dorado County Air Pollution Control District
EIR	environmental impact report
EIS	environmental impact statement
ENF	Eldorado National Forest
EPA	U.S. Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FR	Federal Register
GHG	greenhouse gas
GPS	global positioning system
IPCC	Intergovernmental Panel on Climate Change
IS	initial study
kW	kilowatt(s)
L_{dn}	day-night average noise level
L_{eq}	energy-equivalent noise level
LTAB	Lake Tahoe Air Basin
MND	mitigated negative declaration

msl	mean sea level
$MTCO_2e$	metric tons of carbon dioxide equivalent
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NOAA	National Oceanic and Atmospheric Administration
NO_X	oxides of nitrogen
NWS	National Weather Service
PAC	Protected Activity Center
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter with aerodynamic diameter less than 10 micrometers
$PM_{2.5}$	particulate matter with aerodynamic diameter less than 2.5 micrometers
PRC	California Public Resources Code
Project	EID Vegetation Management Project
ROG	Reactive Organic Gases
RWQCB	regional water quality control board
SEL	sound exposure level
SR	State Route
SR 50	State Route 50
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
TNF	Tahoe National Forest
U.S. 50	U.S. Highway 50
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WDR	waste discharge requirement

El Dorado Irrigation District

NOTICE OF INTENT and NOTICE OF PUBLIC HEARING TO ADOPT A MITIGATED NEGATIVE DECLARATION

(Pursuant to CEQA Section 21092 and CEQA Guidelines Section 15072)

EL DORADO IRRIGATION DISTRICT VEGETATION MANAGEMENT PROJECT

The El Dorado Irrigation District (EID) proposes to adopt a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (Section 15000 et seq., Title 14, California Code of Regulations) for the El Dorado Irrigation District Vegetation Management Project (proposed project). The proposed project involves implementing vegetation management activities on EID lands to return the areas to a more managed, fire resistant condition and to protect local communities, EID's critical infrastructure, and water quality from the effects of catastrophic wildfire.

EID proposes to implement vegetation management projects at four facilities to reduce the risk of wildfire: Weber Reservoir, Sly Park Recreation Area, Camp 5 Maintenance Yard, and Flume 46 on the El Dorado Canal. Vegetation management would be accomplished through a variety of treatments and prescriptions such as mechanical and hand treatments, removal of fuel ladders, and tree removal and pruning to inhibit vertical fire spread and the potential for crown fire. The work is being completed with funding provided by California Department of Forestry and Fire Protection (CAL FIRE) under the California Climate Investments Fire Prevention Grant Program. The project sites are not identified on the lists specified in Government Code section 65962.5. EID is the lead agency under the California Environmental Quality Act (CEQA) for the proposed project and has directed the preparation of an Initial Study (IS) on the proposed project in accordance with the requirements of CEQA, the State CEQA Guidelines, and EID's guidelines. The IS describes the proposed project and assesses the proposed project's potentially significant adverse impacts on the physical environment. It concludes that the proposed project's potentially significant or significant adverse effects on the environment could be mitigated to less-than-significant levels; therefore, a proposed Mitigated Negative Declaration (MND) has been prepared.

Agencies and members of the public are invited to comment on the proposed IS/MND. The comment period is from June 10, 2019 to July 10, 2019. The proposed IS/MND can be reviewed at EID's Customer Service Building, 2890 Mosquito Road, Placerville, CA 95667 or on the EID web site at www.eid.org/ceqa. Comments must be received by 5:00 p.m. on July 10, 2019. Comments can be sent to Doug Venable, Environmental Review Analyst, El Dorado Irrigation District, at the address above or by email at dvenable@eid.org. EID will hold a public hearing to consider the IS/MND on July 22, 2019 at 9:00 a.m. during a regularly scheduled meeting of the EID Board of Directors. The hearing will be in the EID Customer Service Building.

In accordance with the Americans with Disabilities Act (ADA) and California law, it is the policy of the El Dorado Irrigation District to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including individuals with disabilities. If you are a person with a disability and require information or materials in an appropriate alternative format; or if you require any other accommodation for this meeting, please contact the EID ADA coordinator at 530.642.4045 or email at adacoordinator@eid.org at least 72 hours prior to the meeting. Advance notification within this guideline will enable the District to make reasonable accommodations to ensure accessibility.

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1 INTRODUCTION

1.1 BACKGROUND

The El Dorado Irrigation District (EID) proposes to implement vegetation management projects at four of its facilities to reduce the risk of wildfire:

1. Weber Reservoir
2. Sly Park Recreation Area (SPRA)
3. Camp 5 Maintenance Yard (Camp 5)
4. Flume 46 on the El Dorado Canal (Flume 46)

Objectives of the proposed project include:

- Prevent wildfires and protect disadvantaged communities, infrastructure, and forest resources within the Wildland-Urban Interface (WUI);
- Implement vegetation prescriptions to reduce fire hazard, improve tree growth, and increase forest resiliency;
- Implement vegetation prescriptions to reduce the rate of spread, duration and intensity, and fuel ignition into the crowns of conifer forests;
- Retain and enhance ecosystem processes to create a fire resilient landscape that promotes long-term storage of carbon in forest trees and soils, which is compatible with the fuel hazard reduction prescriptions; and
- Support a collaborative approach to create fire resilient and fire-adapted communities in the region

Vegetation management would be accomplished through a variety of vegetation management prescriptions such as mechanical and hand treatments, removal of fuel ladders, and tree removal and pruning to inhibit vertical fire spread and the potential for crown fire. The work is being completed with funding provided by California Department of Forestry and Fire Protection (CAL FIRE) under the California Climate Investments (CCI) Fire Prevention Grant Program. The proposed project is described in detail in Chapter 2.0 of this IS/MND.

1.2 PURPOSE OF THE INITIAL STUDY

This document is an initial study (IS), prepared in accordance with CEQA (Public Resources Code [PRC], Section 21000 et seq.) and the CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). The purpose of this IS is to (1) determine whether project implementation would result in potentially significant or significant effects on the environment; and (2) incorporate environmental commitments into the project design, and propose feasible mitigation measures, as necessary, to eliminate the project's potentially significant or significant project effects, or reduce them to a less than significant level.

An IS presents environmental analysis and substantial evidence in support of its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS is neither intended nor required to include the level of detail provided in an Environmental Impact Report (EIR).

CEQA requires that State and local government agencies consider the environmental consequences of projects that they propose to carry out or over which they have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance (CEQA Guidelines Section 15367). EID has principal responsibility for carrying out the proposed project, and EID is the CEQA lead agency for this IS.

EID has prepared this IS to evaluate the potential environmental effects of the proposed project, and has incorporated mitigation measures to reduce or eliminate potentially significant project-related impacts. Therefore, an MND has been prepared for this project.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. The analysis determined that the proposed project would result in no impacts related to:

- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Services

Impacts of the proposed project were determined to be less than significant for the following topics:

- Air Quality
- Aesthetics
- Agriculture and Forestry
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards
- Hydrology and Water Quality
- Noise
- Transportation
- Wildfire

The proposed project would result in less than significant impacts *with* mitigation on the following issue areas:

- Biology
- Cultural Resources
- Tribal Cultural Resources

1.4 DOCUMENT ORGANIZATION

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed project. This document is divided into the following chapters:

- **Notice of Intent to Consider Adoption of a Proposed MND and Notice of Public Hearing.** The notice of intent to consider adoption of a proposed MND provides notice to responsible and trustee agencies, interested parties, and organizations of the availability of this IS and notice of the public hearing.

- **Mitigated Negative Declaration.** The MND, which precedes the IS analysis, summarizes the environmental conclusions and identifies mitigation measures that would be implemented in conjunction with the proposed project.

- **Chapter 1, "Introduction."** This chapter briefly summarizes the proposed project and describes the purpose of the IS/MND, summarizes findings, and describes the organization of this IS/MND.

- **Chapter 2.0, "Project Description,"** describes the proposed project in detail.

- **Chapter 3.0, "Environmental Checklist,"** describes the environmental setting for each environmental subject area; evaluates a range of impacts classified as "no impact," "less than significant," "less than significant with mitigation incorporated," or "potentially significant" in response to the environmental checklist; and provides an environmental determination for the proposed project.

- **Chapter 4.0, "References,"** provides a bibliography of sources cited in the IS/MND.

- **Chapter 5.0, "List of Preparers,"** identifies staff members and consultants responsible for preparation of this document.

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2 PROJECT DESCRIPTION

2.1 BACKGROUND

Fire is a natural part of the ecosystem. California's combination of climate, terrain, and vegetation results in a combustible natural fire environment. Over time as population grew in the state, exposure of structures along the urban-wildland interface (WUI)[1] increased and modern fire suppression practices were expanded to address this risk permanently altering the fire regime producing a forest of younger, denser stands of trees with a greater flammability than old growth; increasing the risk of catastrophic wildfire.

Recently, the California Legislature passed Assembly Bill (AB) 109 (the budget act of 2017), which created a climate change research program within the Strategic Growth Council (SGC). The legislation allocated $11 million in greenhouse gas reduction fund revenues from the Cap and Trade program to the SGC to develop a program to support "research on reducing carbon emissions, including clean energy, adaptation, and resiliency, with an emphasis on California." California Climate Investments (CCI) projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, sustainable agriculture, recycling, and fuel reduction. Hazardous fuels reduction projects funded under CCI must fall into one of the following treatment objectives:

- Vegetation clearance in critical locations to reduce wildfire intensity and rate of spread.
- Creation or maintenance of fuel breaks in strategic locations, as identified in CAL FIRE Unit Fire Plans, a Community Wildfire Protection Plan, or similar strategic planning document.
- Removal of ladder fuels to reduce the risk of crown fires.
- Creation of community-level fire prevention programs, such as community chipping days, roadside chipping, and green waste bin programs.
- Selective tree removal (thinning) to improve forest health to withstand wildfire.
- Modification of vegetation adjacent to roads to provide for safer ingress and egress of evacuating residents and responding emergency personnel.
- Reduction of fuel loading around critical firefighting infrastructure, including, but not limited to, fire hydrants, water drafting locations, and staging areas.
- Purchase of fuel modification equipment not to exceed $100,000.
- Removal of dead and dying trees that pose a threat to public health and safety and meet the following characteristics:
    - Dead and dying trees must be greater than 10" in diameter and 20 feet in height;
    - Dead and dying trees reasonably accessible by equipment/machinery;

1 WUI is a term used to describe the interface of the urban and natural fuel environments in which fire can cross readily between structural ("urban") fuels and vegetation ("wildland") fuels.

- Dead and dying trees within 300 feet of permanent structures that pose a structural threat to the residence. (this does not include movable or temporary sheds, outbuildings, or carports).
- Dead and dying trees within 300 feet of serviceable roadways that pose a structural threat to roadways; or public or private infrastructure.
- Removal of dead or dying trees from existing fuel breaks; or from Tier 2 high hazard zones.

Vegetation management proposed by the El Dorado Irrigation District (District or EID) is designed to protect critical facilities located in a very high fire hazard severity zone[2] while serving to reduce fuel loads and create defensible space for neighboring communities located in the WUI.

The District is a public water agency located on the western slope of the Sierra Nevada mountain range in El Dorado County and serves a population of more than 100,000 people through more than 38,000 active water meter connections. The District's water system contains more than 1,250 miles of pipe, 27 miles of ditches, five water treatment plants (WTPs), and 37 storage tanks and/or reservoirs.

2.2 PROJECT LOCATION AND SETTING

Figure 2-1 depicts the location of District facilities that are subject to project related actions. The project area covers 570 acres of District-owned property spanning four District facilities located in El Dorado County, California:

1. Weber Reservoir
2. Sly Park Recreation Area (SPRA)
3. Camp 5 Maintenance Yard (Camp 5)
4. Flume 46 on the El Dorado Canal (Flume 46)

El Dorado County contains a patchwork of public and private forest lands dispersed on the western slope of the Sierra Nevada. More than 50 percent of the county is located within the Eldorado National Forest or the Tahoe National Forest. Population centers nearest the project areas include the unincorporated community of Pollock Pines and the City of Placerville. U.S. Highway 50 provides regional access to these communities and the project areas.

The District lies within two major watersheds: the South Fork American River in the north and the North Fork Consumes River in the south. The District is hydrologically split between these two drainage systems by the Placerville Ridge and Highway 50.

Climate in the District's service area is characterized by sunshine in the summer, moderate to heavy precipitation in the winter, and wide temperature ranges. Strong flows of marine air from the Pacific Ocean result in heavy precipitation in the winter. Precipitation in the summer is generally limited to a few scattered thunderstorms over the summer months. The historical annual average precipitation is approximately 38 inches. Temperatures throughout the service area range from warm in the summer to cold in the winter, with average monthly temperatures of 75 degrees Fahrenheit (°F) in July and 42°F in January (Western Regional Climate Center 2019).

[2] Fire Hazard Severity is based on two criteria: probability of burning and expected fire behavior. The factors considered in determining hazard are: 1) how often an area will burn; and 2) when it does burn, what characteristics might lead to buildings being ignited?

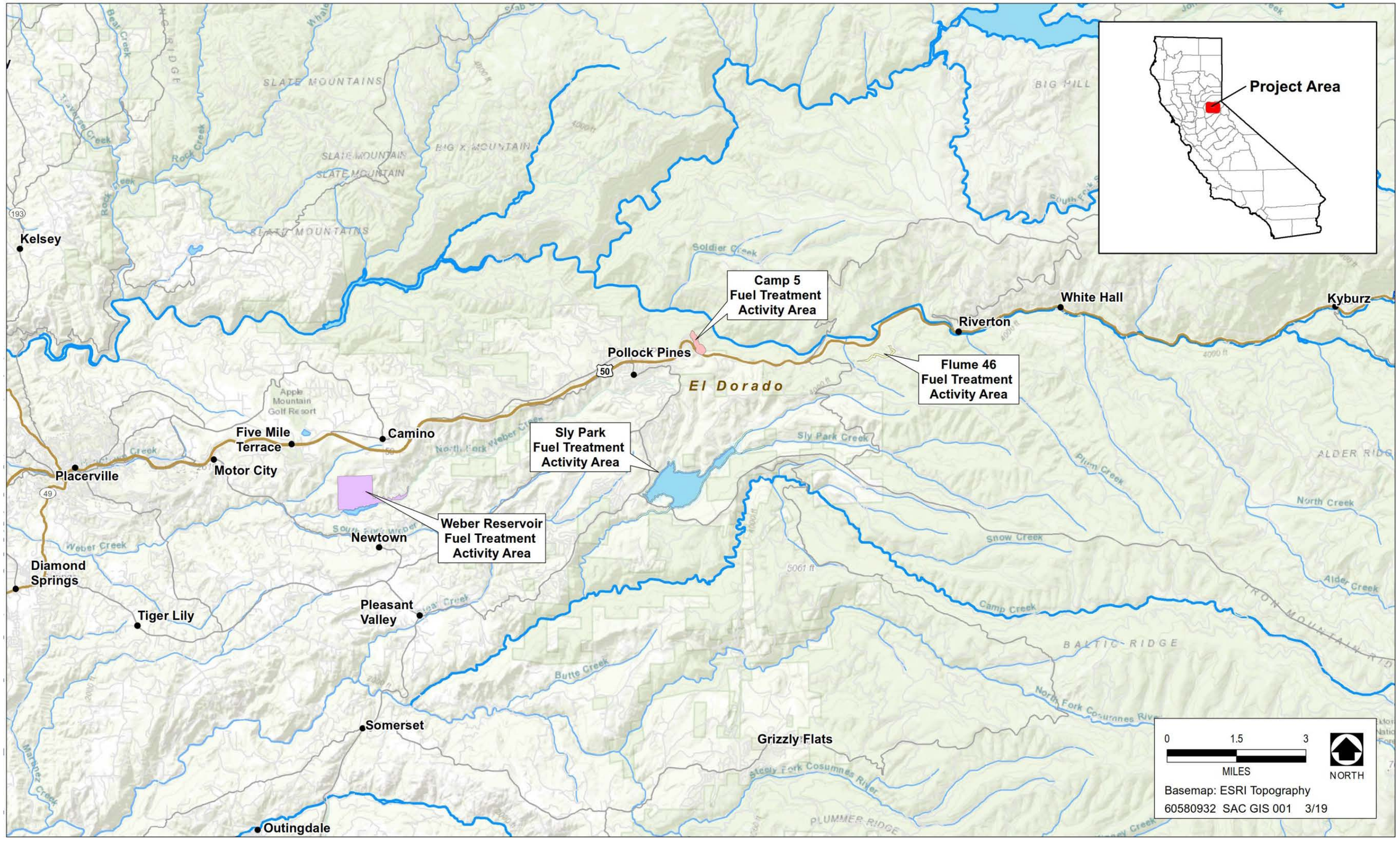

Figure 2-1. Regional Location

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2.3 WEBER RESERVOIR

As shown in Figure 2-1, Weber Dam and Reservoir is sited along Weber Creek in the Camino community region of El Dorado County. It is located within Township 10 North, Range 12 East, Sections 17, 18, Mount Diablo Base & Meridian within the U.S. Geological Survey (USGS) 7.5-minute Camino Quadrangle. The population centers nearest Weber Reservoir are the rural communities of Camino and Pollock Pines.

Vegetation in Weber Canyon is characterized by the transition from oak grass woodland into the lower montane conifer forest types. The river drainage, ridgelines, and canyon terrain are oriented in an east-west alignment that combined with prevailing wind direction creates a likely fire path extending directly into the neighborhoods of Camino and Pollock Pines.

The Weber Reservoir is a critical piece of EID infrastructure. Water released from Weber Reservoir contributes to EID's overall water supply, and provides habitat for fish and wildlife and other natural resources downstream of the dam.

2.4 SLY PARK RECREATION AREA (SPRA)

The Sly Park Recreation Area (SPRA) site is located in the central part of El Dorado County 17 miles east of Placerville and 4 miles south of Pollock Pines. It is located within Township 10 North, Range 13 East, Sections 3, 8, 9, 10, 16-18, Mount Diablo Base & Meridian within the USGS 7.5-minute Sly Park Quadrangle (Figure 2-1).

Sly Park Recreation Area is popular and heavily used for recreation from May through early September by local residents and visitors from outside of the area. Recreational use is more limited at other times of the year, and visitors during these periods consist primarily of local residents. The population center nearest to the park is the unincorporated community of Pollock Pines. Pollock Pines is rural community of approximately 5,000 residents dispersed throughout 5.8 square miles of forestland. Surrounding properties consist of moderately dense residential development along the northwest and west boundaries; Sierra Pacific Industries and U.S. Forest Service manage timberlands on the remainder of the surrounding properties.

SPRA lies within the approximately 13,000 acre Sly Park Creek watershed. Sly Park Creek and Hazel Creek are the two primary watercourses that are tributaries to Jenkinson Lake. Jenkinson Lake serves as the primary reservoir for drinking and irrigation water to thousands of residents in El Dorado County and provides recreational opportunities to visitors. Other assets in the SPRA include twelve campgrounds, trails, office buildings, parking areas, roadways and restrooms.

2.5 CAMP 5 MAINTENANCE YARD/FLUME 46

The Camp 5 Maintenance Yard/Flume 46 sites are located in the central part of El Dorado County 17 miles east of Placerville and 5 miles east of Pollock Pines. Camp 5 is located within Township 11 North, Range 13 East, Section 29 of the Mount Diablo Base & Meridian within the USGS 7.5-minute Pollock Pines Quadrangle (Figure 2-1). Flume 46 is located within Township 11 North, Range 13 East, Section 36 of the Mount Diablo Base & Meridian within the USGS 7.5-minute Riverton Quadrangle (Figure 2-1).

Camp 5 is the site of a Federal Energy Regulatory Commission (FERC) El Dorado Hydroelectric Project No. 184 (Project No. 184) maintenance facility consisting of 22 buildings and structures on the north side of Highway 50

between Pollock Pines and Fresh Pond. The site also contains the headquarters for Project No. 184 which is located on a hillside above the El Dorado Canal. Flume 46 is a ¾ mile long wooden flume representing a key segment of the open water El Dorado Canal system. Camp 5 is surrounded by residential neighborhoods with 3,000 habitable structures dispersed throughout the population center of Pollock Pines and Fresh Pond.

Critical infrastructure includes water conveyance facilities crucial to the operation of Project No. 184 while Flume 46 contains a spillway (Spillway 27), which is used to release water in the event of an emergency or breach in the canal and to dewater the canal for annual maintenance. The Camp 5 site also contains power lines that transect the project area that supply electricity to operate drinking water booster pumps. A multi-agency radio facility (Union Hill) also near to the Camp 5 project site provides emergency communications for Cal Fire, El Dorado County Fire Department, El Dorado Co. Sherriff Dept., CHP, Cal Trans, County DOT, and several cellular carriers.

The Camp 5 complex and Flume 46 are key components of the El Dorado Canal, the primary water conveyance system used to transport water for consumption, storage, and hydroelectric power to El Dorado County.

2.6 PROPOSED VEGETATION MANAGEMENT STRATEGY

2.6.1 OBJECTIVES

The overall goals of this project are to return the project areas to a more managed, fire resistant condition and to protect local communities and EID's critical infrastructure and water quality from the effects of catastrophic wildfire.

Project objectives vary depending on the circumstances at each site but include:

- Prevent wildfires and protect disadvantaged communities, infrastructure, and forest resources within the WUI;
- Implement vegetation prescriptions to reduce fire hazard, improve tree growth, and increase forest resiliency;
- Implement vegetation prescriptions to reduce the rate of spread, duration and intensity, and fuel ignition into the crowns of conifer forests;
- Retain and enhance ecosystem processes to create a fire resilient landscape that promotes long-term storage of carbon in forest trees and soils, which is compatible with the fuel hazard reduction prescriptions; and
- Support a collaborative approach to create fire resilient and fire-adapted communities in the region

2.6.2 PROPOSED ACTIVITIES

The vegetation management strategy to be implemented requires a combination of fuel reduction methods depending on the location, facility access, slope, and reservoir/riparian zone proximity. Based on these considerations, EID in consultation with a Registered Professional Forester visited each site and developed the approach to reducing fuel loads. Strategies to be implemented include: hand-cutting and piling, hand-thinning and chipping, lop and scatter, and mechanical mastication. All project activities will occur in a manner consistent with the California Forest Practice Rules. Each proposed activity is described below:

Source: Stock Photo 2019

Figure 2-2. Example of Hand Thinning

- **Thinning** means reducing the number of stems of small tree species to a predetermined spacing to improve growth and/or to reduce fuel loads. Mechanical release involves removal of non-commercial tree species, shrubs/brush or grasses that are competing with previously planted or existing commercial tree species (Figure 2-2).

- **Pruning/Removal of Ladder Fuel** is the cutting of lower branches of trees to reduce vertical continuity of fuels. Pruning may be conducted in conjunction with thinning or release. Pruning all branches within ten feet of the ground, combined with thinning and the removal of flammable shrubs and ladder fuels, is recommended to reduce the likelihood that a ground fire burning through the stand would move up into the tree crown.

- **Mastication** is a fuel reduction treatment method used in forestry management to reduce fuel loadings by returning the forest to natural conditions. In terms of vegetation management, masticating refers to mechanical grinding or mulching of undergrowth in the forest to smaller chunks (Figure 2-3).

- **Slash disposal**. Slash is the vegetation removed by the fuel reduction process which must be handled either through direct removal or chipped and broadcast to stabilize soils or slopes. Slash disposal can be achieved by mastication, chipping, or piling and burning. All biomass will be chipped and distributed on the individual sites to stabilize soils. No off-site disposal of woody biomass will be conducted.

Implementation of EID's vegetation management program will reduce future fire intensity and severity by reducing surface fuels, increasing the height to tree canopy, decreasing crown density, and retaining large fire-resistant trees. Specific actions proposed for each project area are described below:

Source: Stock Photo 2019

Figure 2-3. Examples of Pre and Post Mastication Treatment

2.6.3 WEBER RESERVOIR VEGETATION MANAGEMENT PROJECT

The vegetation management project for Weber Reservoir identifies treatment on 370 acres along the north side of the reservoir to be conducted starting in the fall of 2019 and continuing through the fall of 2021 (Figure 2-4). The vegetation management project proposes to rely on a combination of the following actions:

- **Hand-cutting and piling** along the north side of Weber Creek and reservoir will be accomplished by a hand crew with chainsaws. The contractor will be required to cut all live and dead vegetation less than 10- inches diameter at breast height (dbh) a minimum 90% of the shrubs will be treated. All dead or dying trees greater than 10-inches diameter and greater than 60' tall will be felled and either hand piled, masticated, or left in place for slope stabilization. Chipping will be implemented where feasible, otherwise materials will be dispersed by lopping and scattering or small hand piles will be disposed of through burning.

- **Mechanical mastication** will be designated in areas less than 45% slope where accessibility from existing roads is possible. Brush and trees less than 10-inches dbh will be mechanically masticated. Steep inclusions over 45% will not be treated by mastication. A combination of hand cutting, piling, or lopping and scattering small trees less than 10-inches dbh will be required work crews can adequately and safely navigate the terrain.

EQUIPMENT

Equipment used at this site will include excavator fitted with a mechanical masticator, chipper, transport van, two service trucks, chainsaws, pole saws, and various hand tools.

ACCESS AND STAGING

The work crew of approximately 12 persons would arrive by van with equipment and supplies delivered by heavy truck. The crew would camp at a designated location using tents to bunk at night with sanitization facilities provided by portable toilets, and mobile wash stations/showers that would be trucked to each location. Alternatively, crews would lodge at a local motel in Pollock Pines or Placerville and commute to the project site daily. Work activities would take place Monday through Friday during the hours of 7:00 am to 7:00 pm, or between 8 a.m. and 5 p.m. on weekends. Activities will occur as weather and site conditions permit over the grant timeline ending in the fall of 2021.

The crews would access the work area at two points. The south access point: is taken from an existing unpaved road that runs parallel to Weber Reservoir. Work crews will also take access from private property to the north where the landowner has granted access and staging of equipment on an existing unpaved road way and turnout area.

2.6.4 SLY PARK RECREATION AREA VEGETATION MANAGEMENT PROJECT

Recreational uses in the Sly Park Recreation Area are operated and managed under a Master Plan that incorporates a maintenance program to manage vegetation throughout the park. The Management Plan contains the strategy for ongoing fuel and controlled burns in the areas of the SPRA that do not contain physical structures. Managing vegetation in areas with improved facilities involves use of hand held equipment to eliminate vegetation reduce ladder fuels, remove dead vegetation and debris, providing adequate clearance around fire rings, and similar activities intended to reduce the risk of wildfire.

The park contains approximately 914 acres of timberland and is subject to commercial harvesting operations consistent with the objectives of the master plan along with a firewood harvest program to salvage timber that otherwise is not suitable for commercial sale. All activities are conducted under the implementation program of the SPRA Master Plan that outlines the policies for long term operation and maintenance of the property including vegetation management programs discussed later in this section.

Consistent with ongoing efforts, EID's vegetation management project for Sly Park Recreation Area identifies treatment of approximately 118.5 acres that will take place starting in the fall of 2019 and continuing through the fall of 2021 (Figure 2-5). The vegetation management project proposes to rely on hand tools to minimize the potential for soil compaction, erosion, and dust that could reduce water quality of the lake. Activities proposed at SPRA include:

- **Hand-thinning** or chipping will be accomplished by a hand crew with chainsaws. The contractor will be required to cut material up to 12-inches diameter at breast height (dbh) with 20'x20' spacing between the boles of the remaining trees. A minimum 90% of the shrubs will be treated. Chipping will be implemented where feasible, otherwise materials will be dispersed by lopping and scattering or small hand piles will be disposed of through burning.

- **Pruning:** The hand crew will cut ingrowth around trees and prune residual trees up to 12’ while retaining 33% minimum crown as well as pruning to 10’ off the high side. Limbed material will be treated by chipping wherever possible.

Hand- crews will conduct thinning and pruning around the entire shoreline of Jenkinson Lake and along three tributaries to create a 100 -foot buffer from the high water mark around the lake and 75-foot buffer along the banks of the three tributaries to Jenkinson Lake. Work must be done by hand crews due to the slope and inaccessibility of the terrain.

EQUIPMENT

Equipment used at this site will include personnel van, two service trucks, chainsaws, pole saws, hand tools and clippers for hand cutting and piling around Jenkins Lake and its tributaries.

ACCESS AND STAGING

The work crew of approximately 12 persons would arrive by bus with equipment and supplies delivered by heavy truck. The crew would camp at a designated location for approximately one week using tents to bunk at night with sanitization facilities provided by existing park toilets and mobile wash stations/showers that would be trucked to each location. Alternatively, crews would lodge at a local motel in Pollock Pines or Placerville and commute to the project site daily. Work activities would take place Monday through Friday during the hours of 7:00 am to 7:00 pm, or between 8 a.m. and 5 p.m. on weekends. Activities will occur as weather and site conditions permit over the grant timeline ending in the fall of 2021.

Access to the work site is provided by paved and unpaved roads that occur throughout the park. Crews will camp at the existing parking lot within the park boundary.

2.6.5 CAMP 5 MAINTENANCE YARD/ FLUME 46 – VEGETATION MANAGEMENT PROJECT

Land inside and adjacent to Camp 5 was burned in the King Fire (2014). The vegetation management project for Camp 5 Maintenance Yard/Flume 46 identifies a treatment area that covers 75 acres; 50 acres adjacent to Camp 5 and 25 acres surrounding Flume 46 (Figure 2-6). The vegetation management project proposes to rely on a combination of the following actions:

- **Hand thinning –** Cut all live and dead less than 10 inches in diameter and 60 feet in height. In addition, all dead or dying trees greater than 10 inches diameter and greater than 60 feet tall will be felled and either hand piled, masticated, chipped, or left in place for slope stabilization. Chipping will be implemented where feasible, otherwise materials will be dispersed by lopping and scattering or small hand piles will be disposed of through burning.

- **Mechanical Mastication –** Mechanical treatments will be limited to slopes less the 45 percent and areas identified as riparian zones for aquatics. All down existing woody fuel would be masticated concurrently with treatment of standing fuel ladder vegetation.

EQUIPMENT

Equipment used at this site will include an excavator fitted with a mechanical masticator, personnel van, two service trucks, chainsaws, pole saws, and hand tools.

ACCESS AND STAGING

Access to the work site is provided by paved and unpaved roads. Crews will camp at the existing staging area within the site boundary. Alternatively, crews would lodge at a local motel in Pollock Pines or Placerville and commute to the project site daily. Work activities would take place Monday through Friday during the hours of 7:00 am to 7:00 pm, or between 8 a.m. and 5 p.m. on weekends. Activities will occur as weather and site conditions permit over the grant timeline ending in the fall of 2021.

2.7 PROJECT SCHEDULE

Implementation of the actions outlined in the vegetation management projects will occur starting in the fall of 2019 and continuing through the fall of 2021. Approximately 12 workers will be on a specific site on any one time working for an average of 8 hours daily. The phasing of actions will be based on weather conditions and contractor commitments to be determined as part of the contracting process. For purposes of evaluation it is assumed that vegetation clearing will occur sequentially on a single site over a period of four months each year of 2019–2021.

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Figure 2-4. Weber Reservoir

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Figure 2-5. Sly Park Recreation Area

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Figure 2-6. Camp 5 Maintenance Yard/Flume 46

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3 INITIAL STUDY CHECKLIST

PROJECT INFORMATION

1. Project Title: El Dorado Irrigation District Vegetation Management Project
2. Lead Agency Name and Address: El Dorado Irrigation District
   2890 Mosquito Road
   Placerville, CA 95667
3. Contact Person and Phone Number: Doug Venable (530) 642-4187
4. Project Location: El Dorado County
5. Project Sponsor's Name and Address: El Dorado Irrigation District
   2890 Mosquito Road
   Placerville, CA 95667
6. General Plan Designation: Natural Resources/Rural Residential/Low Density Residential
7. Zoning: Residential Estate/Recreational Facility
8. Description of Project: The El Dorado Irrigation District proposes to conduct vegetation clearance activities covering 570 acres of District-owned property spanning four District facilities located in El Dorado County. The project area encompasses Weber Reservoir, Sly Park Recreation Area, Camp 5 Maintenance Yard (Camp 5), and Flume 46 on the El Dorado Canal (Flume 46). Project activities vary based on the specific site and factors such as grade of slope, but generally include hand thinning, pruning/removal of ladder fuel, mechanical mastication, and slash disposal.
9. Surrounding Land Uses and Setting: The project area is located within El Dorado County. The project area is adjacent to residential uses, agricultural uses, forest uses, and recreational uses.
10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement).
    None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

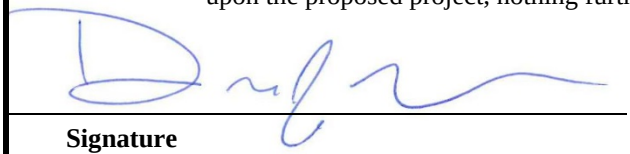
☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

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

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

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

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



June 07, 2019

Signature	**Date**
Doug Venable	Environmental Review Analyst
Printed Name	**Title**
El Dorado Irrigation District	
Agency	

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Section 3 is the analysis portion of this Initial Study. The section evaluates the potential environmental impacts of the project. Section 3 includes 21 environmental subsections, identified below.

1. Aesthetics
2. Agriculture and Forestry Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
10. Hydrology and Water Quality
11. Land Use and Planning
12. Mineral Resources
13. Noise
14. Population and Housing
15. Public Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Service Systems
20. Wildfire
21. Mandatory Findings of Significance

Each environmental issue subsection is organized in the following manner:

The **Environmental Setting** summarizes the existing conditions at the regional, subregional, and local levels, as appropriate; and identifies applicable plans and technical information for the particular issue area.

The **Discussion** section provides a detailed discussion of each environmental issue checklist question. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this Initial Study:

- ***Potentially Significant Impact.*** This response is appropriate when there is substantial evidence that an effect is significant even with implementation of recommended mitigation measures.
- ***Less than Significant with Mitigation Incorporated.*** This response applies when the incorporation of mitigation measures would reduce an effect from "Potentially Significant Impact" to a "Less-than-Significant Impact." The Lead Agency must describe the mitigation measures when significant impacts are identified by the analysis, and briefly explain how they reduce the effect to a less-than-significant level.
- ***Less-than-Significant Impact.*** A less-than-significant impact is used when the project would have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- ***No Impact.*** This impact significance applies when the project would have no impact on the environment for the particular issue, or they are not relevant to the project.

3.1 AESTHETICS

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

3.1.1 ENVIRONMENTAL SETTING

This project area is located entirely within El Dorado County on the western slope of the north central region of the Sierra Nevada range in California. The District facilities are located within the mid-elevational range of the Sierra Nevada ecoregion, from 2,280 feet above mean sea level (AMSL) at the Weber Reservoir facility to 4,040 feet AMSL at the Flume 46 facility. Surrounding land uses include timber harvest and recreation in Eldorado National Forest, residential home sites, and agricultural production (i.e., vineyards and cattle grazing).

Weber Dam and Reservoir is sited along the North Fork Weber Creek and consists of vegetation characterized by the transition from foothill annual grassland and mixed chaparral to mixed conifer forest. Several creeks and drainages traverse the site from north to south. The Sly Park Recreation Area (SPRA) encompasses most of Jenkinson Lake and the approximately 1,010 acres of steep, heavily forested land surrounding it. A west-east trending ridgeline dominates the north side of the site. Jenkinson Lake can be viewed from trails on the upper reaches of the slopes and from the residential area to the northwest. Dense trees on the west side of the park provide screening of the development to the west of Sly Park Road, however, views from the west to the east provide spectacular views of the snow covered peaks of the Sierra Nevada. Views of the lake from the ridge to the south of the lake, along which the Mormon Emigrant Trail runs, are blocked by dense forest. Views of the lake from the equestrian trail in this area are also very limited. (El Dorado Irrigation District, 2007).

The Camp 5 project site is composed primarily of developed areas, including the El Dorado Canal (Canal), a Federal Energy Regulatory Commission (FERC) Hydroelectric Project (Project No.184) maintenance facility, the EID headquarters for Project No. 184, and several access roads/parking areas. Outside of developed areas, the vegetation community consists entirely of mixed conifer forest. Flume 46 is a 0.75-mile long wooden flume that represents a key segment of the Canal. It is built into the side of a steep, north-facing slope vegetated by mixed conifer and montane hardwood forest plant communities.

A list of the county's significant scenic views and resources is located in Table 5.3-1 of the El Dorado County General Plan EIR (El Dorado County, 2003). Many of these viewpoints are areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, or forests. Other viewpoints are the locations of historic structures or districts that are reminiscent of El Dorado County's heritage (El Dorado County, 2003). Highway 50 is designated a state scenic highway and is located adjacent to and within a portion of the project area (Caltrans, 2019).

3.1.2 DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Some areas adjacent to Highway 50 are considered a scenic resource. However, the treatment areas subject to proposed vegetation management would not be visible from Highway 50. While vegetation clearance may be visible to the public, the project would retain the forested characteristics of the site. Project implementation would reduce the potential for a wildfire to burn with such intensity and severity that the landscape is denuded. The project would reduce surface fuels, reduce ladder fuels, decrease crown density, and retain large, fire-resistant trees which results in maintaining the scenic resources of the property. Therefore, the project would have a **less than significant** impact.

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

Vegetation treatment areas would not be visible from Highway 50 which is considered a scenic highway. There are no historic buildings within the treatment areas and the project would not damage rock outcroppings. Project implementation would primarily involve hand thinning and mechanical mastication of vegetation in select areas of the forest. Large trees would be preserved in the treatment areas. Work exclusion areas will be identified around riparian zones in accordance with the Forest Practice Rules which would also help preserve the visual character of the treatment areas. Project activities would improve the long-term viability of the scenic landscape by creating conditions to promote a more fire resilient forest. Vegetation treatment activities would reduce the risk of catastrophic wildfire, which could denude the landscape and destroy the scenic resources in the area. Therefore, the project would have a **less than a significant** impact.

c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The vegetation treatment areas are generally in non-urbanized locations and are largely characterized by conifer forests. The project proposes the use of thinning and pruning, along with mechanical mastication where feasible, to restore the forest to a more fire resilient landscape. Project implementation could result in short-term effects to the existing visual character or quality of the public views in the project area where burning or mechanical mastication is anticipated to occur. Sly Park is the most publicly visible site because treatments would occur in publically accessible recreation areas. However, treatments in the Sly Park Recreation Area would be limited to treatments with chainsaws and hand tools. Chipping would be the preferred treatment for slash and vegetation removed at Sly Park. If burning is required, it would generally occur outside of the peak recreation season, which

would further minimize impacts to public views. The other project sites (i.e., Weber, Camp 5, and Flume 46) do not have established public access or recreation facilities and are generally only visible from a distance.

The project related vegetation treatments are not anticipated to substantially degrade the visual character or quality of public views of the project areas. Therefore, the project would have a **less than significant** impact.

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

Project implementation would not introduce new sources of substantial light or light that would adversely affect day or nighttime views in the area. Prescribed burning could result in temporary sources of light during burning operations. However, these actions would be short-term and are not anticipated to create substantial light or glare that would affect day or nighttime views. This impact would be **less than significant**.

3.2 AGRICULTURE AND FORESTRY RESOURCES

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

3.2.1 ENVIRONMENTAL SETTING

According to the California Department of Conservation's Farmland Mapping and Monitoring Program map for El Dorado County, the project area is not designated prime farmland, farmland of statewide importance, unique farmland, or farmland of local importance (Department of Conservation (DOC) 2016a). No properties used for

agricultural purposes are in to the project area, and the project site is neither on nor adjacent to any land designated as a Williamson Act parcel (DOC 2016b). The northern boundary of Weber Reservoir project area is adjacent to areas designated as agricultural land use.

3.2.2 DISCUSSION

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?

The project area is not on any Prime Farmland, Unique Farmland, or Farmland of Statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping Monitoring Program of the California Resources Agency. **No impact** would occur.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

The project area is not on lands zoned for agricultural use or under a Williamson Act contract. **No impact** would occur**.**

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))?

Vegetation treatment activities would not alter the land use, conflict with existing zoning or cause rezoning of forest land or timberland. **No impact** would occur**.**

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The project proposes the use of thinning and pruning, along with mechanical mastication where feasible, to restore the forest to a more fire resilient landscape. Treatment areas would remain forested following project implementation and no loss or conversion of forest land would occur. Additionally, vegetation clearing under the project would be conducted in a manner consistent with the prescribed management actions outlined in Section 1051.3 of the California Forest Practice Rules. The purpose of the Forest Practice Rules is to implement the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 in a manner consistent with other laws, including but not limited to, the Timberland Productivity Act of 1982, CEQA, the Porter Cologne Water Quality Act, and the California Endangered Species Act. The Forest Practice Act requires activities such as logging and vegetation clearing for fuel reduction to avoid or substantially lessen significant adverse effects on the environment (CAL FIRE 2017). Since the project would not result in the loss of forest land or conversion of forest land to non-forest use and would follow the provisions set forth by the California Forest Practice Rules, the project would have a **less than significant** impact.

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

As described above, the project would not occur on lands zoned for agriculture uses or conflict with existing zoning for agricultural use or a Williamson Act contract. The project would not result in residential uses adjacent to farmland, nor would it result in or encourage the extension of roadways or public service/utility infrastructure into an undeveloped area. This project would not conflict with existing zoning for forestland, timberland or Timberland Production Zone, nor would it result in the conversion of forestland to non-forest use. The project would have a **less than significant** impact.

3.3 AIR QUALITY

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

3.3.1 ENVIRONMENTAL SETTING

The project area is in the Mountain Counties Air Basin (MCAB). The MCAB lies along the northern Sierra Nevada, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. El Dorado County consists of hilly and mountainous terrain that affects airflow patterns throughout the county. These mountain and hill formations direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Because of their proximity to the Sacramento Valley, the MCAB and El Dorado County are prone to receiving pollutant transport from the more populated and traffic-heavy areas.

Various air pollutants may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Criteria air pollutants have been identified by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

In addition to criteria air pollutants, EPA and ARB regulate toxic air contaminants (TACs), also known as hazardous air pollutants. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health.

Federal, state, and local plans, policies, laws, and regulations provide a framework for addressing aspects of air quality that would be affected by the project. Health-based air quality standards have been established for the criteria air pollutants by EPA at the national level, and by ARB at the state level; these are referred to as the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively.

The MCAB is designated as a nonattainment area for ozone, and as an attainment or unclassified area for all other pollutants. With respect to the CAAQS, the MCAB is currently designated as a nonattainment area for ozone and PM_{10}, and as an attainment or unclassified area for all other pollutants.

EPA requires each state with regions that have not attained the NAAQS to prepare a state implementation plan (SIP) detailing how each local area will meet these standards. ARB is the lead agency for developing California's SIP, and oversees the activities of local air quality management agencies. Emission reduction programs and measures are described in air quality attainment plans (AQAPs) or air quality management plans (AQMPs) that the air districts submit to ARB for review and approval. ARB incorporates the AQAPs and AQMPs from local air districts into the SIP for EPA approval.

The El Dorado County Air Quality Management District (EDCAQMD) attains and maintains air quality conditions in El Dorado County. EDCAQMD was formerly known as the El Dorado County Air Pollution Control District (EDCAPCD). After the El Dorado County Air Pollution Control District Guide to Air Quality Assessment (Guide) was published, the name of the air district was changed to EDCAQMD. Therefore, all references to the air district in this analysis, with the exception of the Guide, are EDCAQMD.

EDCAQMD requires all projects to implement Rule 202 (Visible Emissions), Rule 205 (Nuisance), Rule 223 (Fugitive Dust—General Requirements), Rule 223-1 (Fugitive Dust—Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention), Rule 223-2 (Fugitive Dust—Asbestos Hazard Mitigation), and Rule 300 (Open Burning).

Serpentine is a mineral commonly found in seismically active regions of California, usually in association with ultramafic rocks and along associated faults. Certain types of serpentine occur naturally in a fibrous form known generically as asbestos. According to the Asbestos Review Area map for El Dorado County, naturally occurring asbestos-bearing serpentine is not typically found in the geological formations present in the project area (EDCAQMD 2018).

The California Forest Practice Rules prescribe rules and actions for burning slash after vegetation clearing operations associated with fuel management. The following rules specific to prescribed burns would be implemented:

- 937.3 Prescribed Broadcast Burning of Slash [Northern]. Broadcast burning may be prescribed for slash treatment subject to the following conditions: (a) Such burning shall be done only after the first heavy fall rains and shall be completed before April 1; (b) It may occur within cleared firebreaks of not less than 10 ft. (3.05 m) in width; (c) Use of the broadcast burning prescription in the Watercourse and Lake Protection Zone for Class I, and Class II, is prohibited. Where necessary to protect downstream beneficial uses, the Director may prohibit burning prescriptions in Class III watercourses; (d) Exceptions to requirements (a), (b) and (c) above may be granted provided a project-type burning permit is obtained prior to burning and the terms of the permit are adhered to while burning

- 917.5, 937.5, 957.5 Burning of Piles and Concentrations of Slash [All Districts with minor variances]. When the option of burning piles or concentrations of slash is chosen to meet the slash treatment requirements as specified in these rules, such burning shall be done as follows: (a) Piles and concentrations shall be sufficiently free of soil and other noncombustible material for effective burning. (b) The piles and concentrations shall be burned at a safe time during the first wet fall or winter weather or other safe period following piling and according to laws and regulations. Piles and concentrations that fail to burn sufficiently to remove the fire hazard shall be further treated to eliminate that hazard. All necessary precautions shall be taken to confine such burning to the piled slash.

- 917.6, 937.6, 957.6 Notification of Burning [All Districts] The local representative of the Director shall be notified in advance of the time and place of any burning of logging slash. Any burning shall be done in the manner provided by Law.

- 917.7, 937.7, 957.7 Protection of Residual Trees [All Districts] Slash burning operations and fire hazard abatement operations shall be conducted in a manner which will not damage residual trees and reproduction to the extent that they will not qualify to meet the silvicultural and stocking requirements of the rules

3.3.2 DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Project consistency is based on whether the project would conflict with or obstruct implementation of the air quality plan and/or applicable portions of the SIP, which would lead to increases in the frequency or severity of existing air quality violations. The region's AQAP was developed pursuant to California Clean Air Act requirements, and identifies feasible emissions control measures to provide expeditious progress in attaining the ozone standard. Assumptions about land use development used in the AQAP are taken from local and regional planning documents, including general plan land use designations and zoning.

Consistency with the AQAP is determined by analyzing a project with the assumptions in the AQAP. The project would involve the use of excavators, trucks, mechanical equipment, and worker commute trips. Emissions from these activities would be short-term and intermittent, and vary in duration at each project site. The project would not substantially increase mobile-source emissions that were previously included in the AQAP. Therefore, the emissions associated with implementation of the project have been accounted for in the emissions modeling for the current AQAP, and will be accounted for in future AQAPs. Accordingly, implementation of the project would not exceed the assumptions used to develop the current plan, and would not obstruct or conflict with the AQAP.

EID contract specifications include requirements that contractors maintain construction equipment in good operating condition to minimize air pollution. Because the project would not result in a significant increase in emissions, the project would not conflict with or obstruct implementation of the AQAP and SIP. This would be **less than significant**.

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?

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development in the MCAB, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The EDCAQMD approach for determining whether a proposed project has a significant cumulative impact is by determining whether the project is consistent with an approved plan or mitigation program of regional application in place for the pollutants emitted by the proposed project. This applies to both the construction and operation phases of a project. With regard to reactive organic gases (ROG) and nitrogen oxide (NO_X) emissions, the project would be considered consistent with the AQAP and not have a significant cumulative impact if the project:

- Does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NO_X from the project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation.
- Does not exceed the "project alone" significance criteria.
- Includes any applicable emission reduction measures contained in and/or derived from the AQAP.
- Complies with all applicable air district rules and regulations.

With regard to PM_{10} emissions, the project would not be considered significant for cumulative impacts of PM_{10} if the project:

- Is not significant for "project alone" emissions of these pollutants (i.e., does not exceed CAAQS or NAAQS).
- Complies with all applicable rules and regulations of the EDCAQMD.
- Is not cumulatively significant for ROG, NOx, and CO based on the criteria set forth above.

The project would result in short-term and intermittent emissions from vegetation clearance activities and commuter work trips. Prescribed burns would also occur intermittently as needed at the project sites. By reducing heavily overgrown vegetation, the project would reduce the incidence of catastrophic wildfires, thereby reducing emissions of GHGs and increasing the carbon sequestration of forest areas. Prescribed burns would be managed by the El Dorado County Air Pollution Control District (EDCAPCD) smoke management program and would follow rules set forth in the California Forest Practice Rules (EDCAPCD 2002). In addition, the project would not require a change to the existing land use designation. The project would not result in long-term, cumulatively considerable net increases of any criteria pollutant.

As described above, the project would meet all ECAQMD air quality requirements and follow the rules set forth in the California Forest Practice Rules, therefore the project would not 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. The impact would be **less than significant**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population—children, older adults, and persons with pre-existing respiratory or cardiovascular illness—are especially sensitive to air pollutant emissions. Such people are given additional consideration when the impacts of projects on air quality are evaluated. Therefore, at-risk land uses sensitive to poor air quality would include residences, schools, daycare centers, playgrounds, medical facilities, and nursing homes. Recreational land uses, such as parks, also are considered moderately sensitive to air pollution. Moderately-dense residential uses are adjacent to and at varying distances from the project area. Recreational land uses within the project include visitors at the SPRA project site. These are considered the closest sensitive receptors that would be affected by the project.

As described above, the project would not conflict with an applicable air plan and would not result in the cumulative increase in criteria pollutants. Emissions generated from the project would be short-term and intermittent from 2019 to 2021, and would vary depending on the project site. Project activities at Sly Park involve the use of chainsaws and hand tools for thinning and pruning. Chipping would be the preferred treatment for slash and vegetation removed at Sly Park. If burning is required, it would generally occur outside of the peak recreation season.

The project would not result in long-term exposure of substantial pollutant concentrations to sensitive receptors. In addition, the project would follow the rules set forth for prescribed burning in the California Forest Rules and in accordance with the EDCAPCD smoke management plan. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. The impact is **less than significant**.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of odor impacts depend on numerous factors: the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they still can be very unpleasant, and can generate citizen complaints to local governments and regulatory agencies.

Exhaust from diesel equipment and prescribed burns may emit odors during project implementation. However, because of the temporary nature of these emissions and the diffusive from diesel exhaust and prescribed burns, nearby receptors would not likely be adversely affected by project-related diesel exhaust odors. Odors from these sources would be localized, and generally confined to the immediate area surrounding the project site; and the odors would be typical of most construction sites, and temporary in nature. The District includes requirements in the contractor plans and specifications requiring compliance with the EDCAQMD Rule 205 for reducing potential for nuisance resulting from objectionable odors. The project would not result in long-term emissions of odors affecting a substantial number of people. As a result, the project would not create objectionable odors affecting a substantial number of people. This impact would be **less than significant**.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 ENVIRONMENTAL SETTING

The project area covers 570 acres of District-owned property spanning four District facilities located in El Dorado County, California (refer to Figure 2-1, Regional Location):

1. Weber Reservoir
2. Sly Park Recreation Area (SPRA)
3. Camp 5 Maintenance Yard (Camp 5)
4. Flume 46 on the El Dorado Canal (Flume 46)

The District facilities are situated on the western slope of the Sierra Nevada Mountains, within the Sierra Nevada ecoregion. Habitats in the Sierra Nevada region vary from foothill oak savanna and chaparral, to mixed coniferous forest and riparian canyons at mid-elevations, to alpine and wet meadow habitats at the highest elevations. The

eastern slope of the Sierra Nevada is drier and characterized by juniper woodlands, sagebrush, and desert scrub. The majority of the region is publicly owned, including eleven national forests and four national parks as well as lands owned by Bureau of Land Management, Bureau of Reclamation, California State Parks, and California Department of Forestry and Fire Protection.

The District facilities are located within the mid-elevational range of the Sierra Nevada ecoregion, from 2,280 feet above mean sea level (AMSL) at the Weber Reservoir facility to 4,040 feet AMSL at the Flume 46 facility. Surrounding land uses include timber harvest and recreation in Eldorado National Forest, residential home sites, and agricultural production (i.e., vineyards and cattle grazing).

The biological study area encompasses the locations of the District facilities subject to project-related actions (project sites), as well as adjacent lands (i.e., up to a 500-foot buffer from project boundaries, where accessible) that were surveyed by biologists as part of this evaluation. Biological surveys were conducted within and adjacent to each project site for vegetation type, wetlands and other waters, riparian habitat, wildlife habitats, and general observations of wildlife usage. The combined project sites total approximately 570 acres of temporary disturbance associated with project staging, access, vegetation treatment, and monitoring.

3.4.2 SITE DESCRIPTIONS

The specific locations and topography of each project site, representing the biological study areas, are depicted in the Project Description (refer to Figures 2-2, 2-3 and 2-4). Each project site location is also briefly described below.

WEBER RESERVOIR

As shown in Figure 2-2, Weber Dam and Reservoir is sited along the North Fork Weber Creek. The project site encompasses approximately 370 acres on the north side of Weber Reservoir, sloping generally from north to south at elevations ranging from 2,200 to 2,760 feet AMSL. Soils are rocky and cobbly loam derived from volcanic and slate/sandstone parent material (NRCS 2017). Vegetation in the Weber Reservoir project site is characterized by the transition from foothill annual grassland and mixed chaparral to mixed conifer forest. Several creeks/streams and small, seasonal drainages traverse the site from north to south.

SLY PARK RECREATION AREA

The Sly Park Recreation Area (SPRA) project site encompasses approximately 118 acres that surround Jenkinson Lake, an EID-managed reservoir, and overlap with portions of Hazel Creek and Sly Park Creek (Figure 2-3). The project site gains elevation from west to east from approximately 3,200 to 3,560 feet AMSL. Soils consist of rocky and cobbly loam, sandy loam, and alluvium derived from volcanic and slate/sandstone parent material (USGS 2013). Surrounding properties consist of moderately dense residential development to the west and Sierra Pacific Industries and U.S. Forest Service-managed timberlands to the north, east, and south. The SPRA project site is used heavily for recreation, and is crisscrossed by numerous access roads, trails, and campgrounds. Vegetation communities consist primarily of forest types (i.e., montane hardwood, ponderosa pine, Douglas fir, and mixed conifer), with patches of riparian, grassland, and chaparral.

CAMP 5 MAINTENANCE YARD/FLUME 46

The Camp 5 Maintenance Yard/Flume 46 sites are located along the Highway 50 corridor (Figure 2-4). Camp 5 encompasses approximately 50 acres situated immediately north of Highway 50 on a flattened terrace between steep, north-facing slopes, on both sides of the El Dorado Canal (Canal) and maintenance facilities. The elevation of Camp 5 ranges from 3,720 to 4,000 feet AMSL. The 25-acre Flume 46 project site is located approximately 3.5 miles to the east of Camp 5 on a steep north-facing slope at about 4,040 feet AMSL.

The Camp 5 project site is highly disturbed and composed primarily of developed areas, including the Canal, a Federal Energy Regulatory Commission (FERC) Hydroelectric Project No.184 (Project No.184), and several access roads/parking areas. Outside of developed areas, the vegetation community consists entirely of mixed conifer forest. Several small drainages traverse forested areas generally from south to north, following the slope gradient, and intersect the Canal at several locations. Soils are rocky loam and rocky coarse sandy loam of slate/sandstone and granitic parent material (USGS 2013).

Flume 46 is a 0.75-mile long wooden flume that represents a key segment of the Canal. It is built into the side of a steep, north-facing slope vegetated by mixed conifer and montane hardwood forest plant communities. Rock outcrops of granitic origin are common (i.e., Metamorphic rock land soil series); and soils consist of rocky loam and rocky coarse sandy loam of slate/sandstone and granitic parent material (USGS 2013). A rocky, high-gradient stream (Ogilby Creek) flows under Flume 46 and follows the steep slope gradient from southeast to northwest toward the South Fork American River.

VEGETATION COMMUNITIES AND HABITATS

Vegetation communities are described below and depicted in Figures 3.4-1 through 3.4-4. Vegetation community types are based on dominant plant species' presence as defined by the *Manual of California Vegetation* (Sawyer, et al. 2009) cross-referenced to CDFW Wildlife Habitat Relationships system habitat types (CDFW 2019a). During reconnaissance surveys, dominant plant species were identified to the greatest extent feasible in all project sites; however, given the timing of surveys in early spring, many herbaceous and some shrub species were not yet identifiable due to lack of flowers and fruits.

A total of six habitat types were mapped in the biological study areas. These include annual grassland, mixed chaparral, montane riparian, montane hardwood forest, mixed conifer forest, Douglas fir forest, and ponderosa pine forest. Data sources include results of the reconnaissance-level survey and the Sly Park Management Plan vegetation map (Foothill Associates 2007).

ANNUAL GRASSLAND

Annual grassland is common throughout the study area as small patches along developed and disturbed areas, including trails, parking areas, picnic sites, buildings, power line corridors, canals, ditches, and roadsides. In addition, approximately 10 acres of continuous annual grassland habitat exists in the northeast portion of the Weber Reservoir project site. Introduced annual grasses are the dominant plant species in this habitat (CDFW 2019a). The annual grassland vegetation in the study area is composed primarily of nonnative annual grasses and forbs, including soft chess brome (*Bromus hordeaceous*), Italian ryegrass (*Festuca perennis*), and filaree (*Erodium* sp.). In the Weber Reservoir project site, the 10-acre patch of grassland in the northeast corner also contains several native annual forbs, such as field cluster lily (*Dichelostemma* sp.) and lupine (*Lupinus* sp.).

Many wildlife species use annual grassland for foraging and breeding. Characteristic reptiles include the western fence lizard, common garter snake, and western rattlesnake. Mammals typically found in this habitat include the black-tailed jackrabbit, California ground squirrel, Botta's pocket gopher, western harvest mouse, California vole, and coyote. Common birds known to breed in annual grassland include the short-eared owl and western meadowlark. This habitat also provides important foraging habitat for the turkey vulture, northern harrier, American kestrel, white-tailed kite, and prairie falcon.

MIXED CHAPARRAL

Approximately 160 acres of mixed chaparral habitat are mapped in the study area, located in the Weber Reservoir (145 acres) and SPRA (14 acres) project sites. Mixed chaparral habitat is dominated by evergreen shrubs that, at maturity, form a dense, nearly impenetrable thicket of brush (CDFW 2019a). Stands that have not burned for several decades often contain considerable accumulated leaf litter and standing dead material. Dominant species in cismontane mixed chaparral include several species of ceanothus (*Ceanothus* sp.) and manzanita (*Arctostaphylos* sp.). In the study area, mixed chaparral habitat is characterized by dense shrub thickets co-dominated by manzanita and buckbrush ceanothus (*Ceanothus cuneatus*), intermixed with toyon (*Heteromeles arbutifolia*) and hoary coffeeberry (*Frangula californica* ssp. *tomentella*). In open areas, typically along trails and road cuts, understory herbaceous species include nonnative annual grasses, common soaproot (*Chologalum pomeridianum* var. *pomeridianum*) and yerba santa (*Eriodictyon californicum*). Associated trees, occurring as scattered individuals, include black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), gray pine (*Pinus sabiniana*), and ponderosa pine (*Pinus ponderosa*).

Chaparral provides foraging, roosting, resting and nesting sites, as well protection from predators and shelter from climate extremes, for rodents, deer, rabbits, and numerous species of birds.

MONTANE RIPARIAN

Approximately 14 acres of riparian habitat is present in the study area, concentrated along creeks and perennial drainages that traverse the Sly Park Recreation Area (13 acres) and Flume 46 (0.8 acre) project sites. Small patches (i.e., less than 0.1 acre) of riparian vegetation are also be present along small, seasonal drainages mapped in the Weber Reservoir project site where there are openings in the mixed conifer forest canopy. In the central and northern Sierra Nevada, characteristic riparian species include white alder (*Alnus rhombifolia*), aspen (*Populus tremuloides*), black cottonwood (*Populus trichocarpa*), dogwood (*Cornus* sp.), western azalea (*Rhododendron occidentale*), and willow (*Salix* sp.). The transition from riparian to non-riparian vegetation is often abrupt, especially in areas of steep topography.

In the study area, riparian habitat intergrades with montane hardwood and mixed conifer forest habitats. In the Weber Reservoir project site, dominant riparian species in drainages include white alder, Himalayan blackberry (*Rubus armeniacus*), and California wild rose (*Rosa californica*). Riparian habitats along creeks (i.e., Hazel Creek and Sly Park Creek) and streams in the project site are dominated by bigleaf maple (*Acer macrophyllum*), mountain dogwood (*Cornus nuttallii*), and black willow (*Salix gooddingii*) with a mixed conifer overstory. Herbaceous species along creek banks include seep monkeyflower (*Erythranthe guttata*), wild strawberry (*Fragaria vesca*), and Himalayan blackberry.

Riparian areas provide water, thermal cover, migration corridors, and diverse nesting and feeding opportunities for a wide range of wildlife, including amphibians, reptiles, birds and mammals.

AQUATIC FEATURES

Prior to site reconnaissance surveys, AECOM biologists reviewed USGS quadrangle maps and USFWS National Wetland Inventory data and current and historic Google Earth satellite images of the project site for the presence of potential aquatic features. Natural aquatic features include creeks/streams and seasonal drainages. Drainages mapped throughout the study area during reconnaissance surveys (see Figures 3.4-1 – 3.4-4) represent the approximate locations of small, linear aquatic features observed at the time of the biological reconnaissance surveys; these features do not appear in NWI data and are not visible on Google Earth satellite images. Drainages are small and seasonal in nature and are differentiated from the larger creeks/streams in the area by the absence or patchy distribution of riparian vegetation, and lack of a permanent source of hydrology. In addition to the natural aquatic features described above, several manmade aquatic features, such as canals, flumes, and reservoirs are present throughout the study area.

MONTANE HARDWOOD FOREST

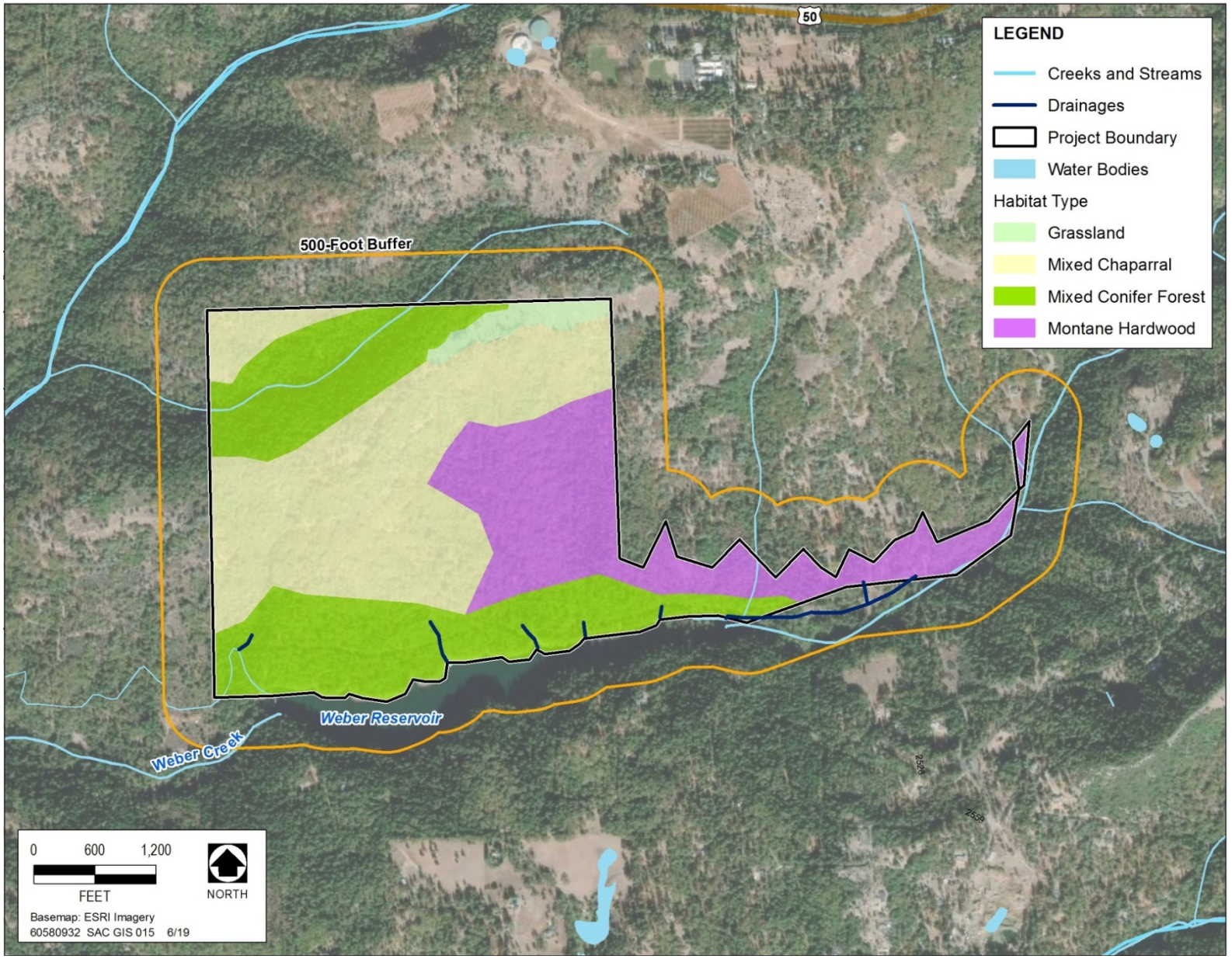
Approximately 107 acres of montane hardwood forest occurs in the study area, located at Weber Reservoir (93.5 acres), Sly Park Recreaton Area (5.6 acres), and Flume 46 (8.6 acres) project sites, usually on moderate to steep slopes. Montane hardwood forest is composed of a pronounced hardwood tree layer (CDFW 2019a). In the study area, this habitat often interfaces with mixed chaparral and mixed conifer forest habitats. The vegetation community is dominated by canyon live oak (*Quercus chrysolepis*) intermixed with ponderosa pine, black oak, and gray pine. Associated understory vegetation includes manzanita, poison oak (*Toxicodendron diversilobum*), and annual grassland species.

Characteristic bird and animal species include those that utilize acorns as a major food source, such as scrub and Steller's jays, acorn woodpecker, western gray squirrel, wild turkey, mountain quail, band-tailed pigeon, California ground squirrel, dusky-footed woodrat, black bear, and mule deer. Many amphibians and reptiles are also found on the forest floor.

MONTANE HARDWOOD/CONIFER (MIXED CONIFER) FOREST

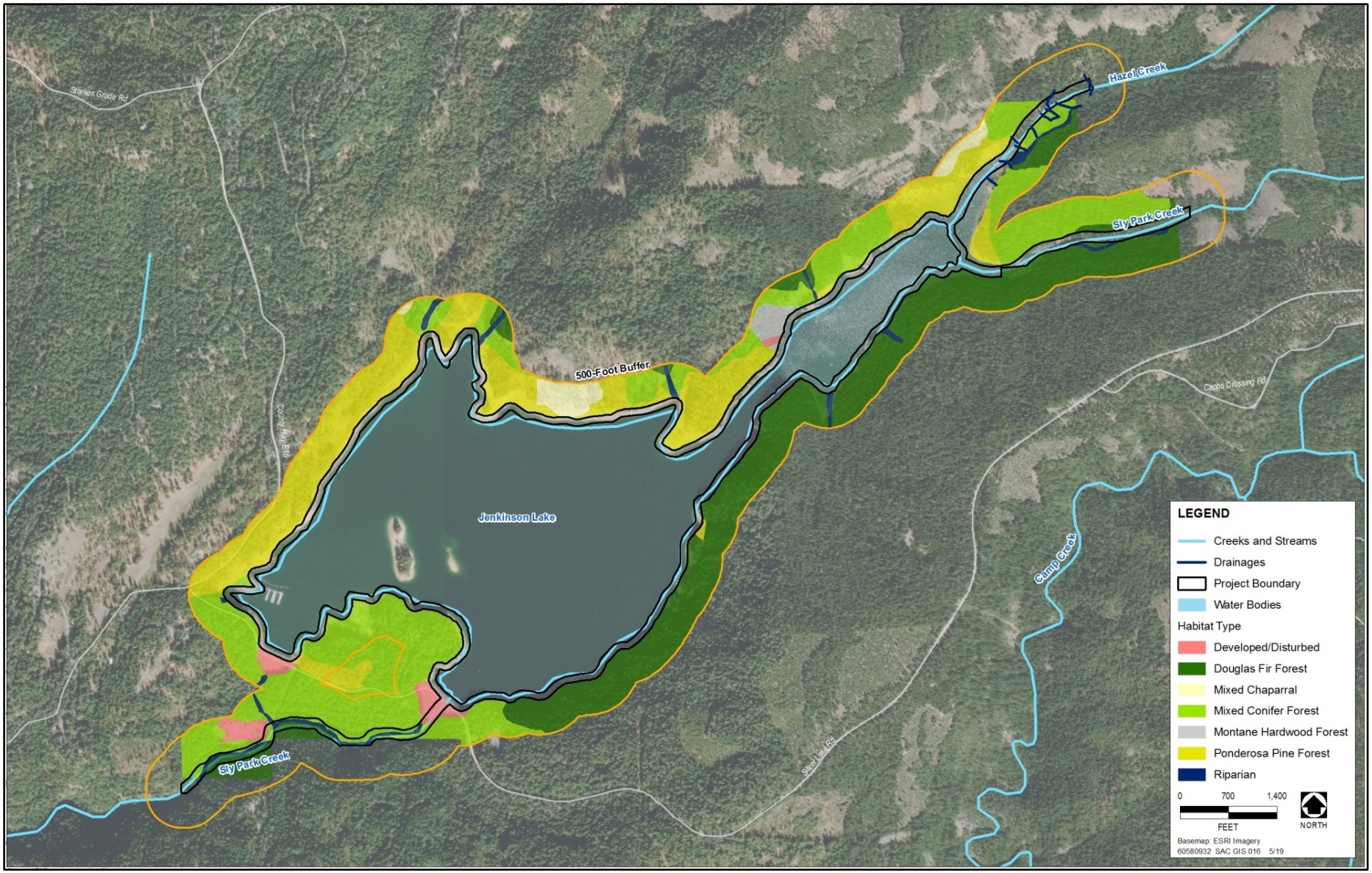
Montane hardwood/conifer (mixed conifer) forest is present in all project sites and is the most prevalent habitat type mapped in the study area, encompassing 398 acres (80 acres in Weber Reservoir; 211 acres in SPRA; 40.5 acres in Camp 5; and 16.6 acres in Flume 46). This habitat is a transitional vegetation community between dense coniferous forest and montane hardwood or mixed chaparral and includes both hardwood and conifer trees in approximately equal proportions (CDFW 2019a). In the study area, the mixed conifer forest is co-dominated by ponderosa pine (*Pinus ponderosa*), Douglas fir (*Pseudotsuga menziesii*), incense cedar (*Calocedrus decurrens*), black oak (*Quercus kelloggii*), and canyon live oak. Associate species include bigleaf maple (*Acer macrophyllum*), dogwood (*Cornus* sp.), Pacific madrone (*Arbutus menziesii*), and toyon (*Heteromeles arbutifolia*). Understory vegetation is typically sparse, consisting primarily of California pipevine (*Aristolochia californica*).

The mixed conifer forest stands to the south of the El Dorado Canal in the Camp 5 project site were extensively burned in 2014 during the King Fire (Cal Fire 2014) and are currently in a successional stage of vegetation recovery. Most of the large trees are burned and exist as standing dead snags, although a few oaks are sprouting from trunk bases, while the understory vegetation is thick with small hoary coffeeberry (*Frangula californica* ssp. *tomentella*) shrubs and young incense cedar seedlings. The hoary coffeeberry shrubs in this area appear to be heavily browsed by deer.



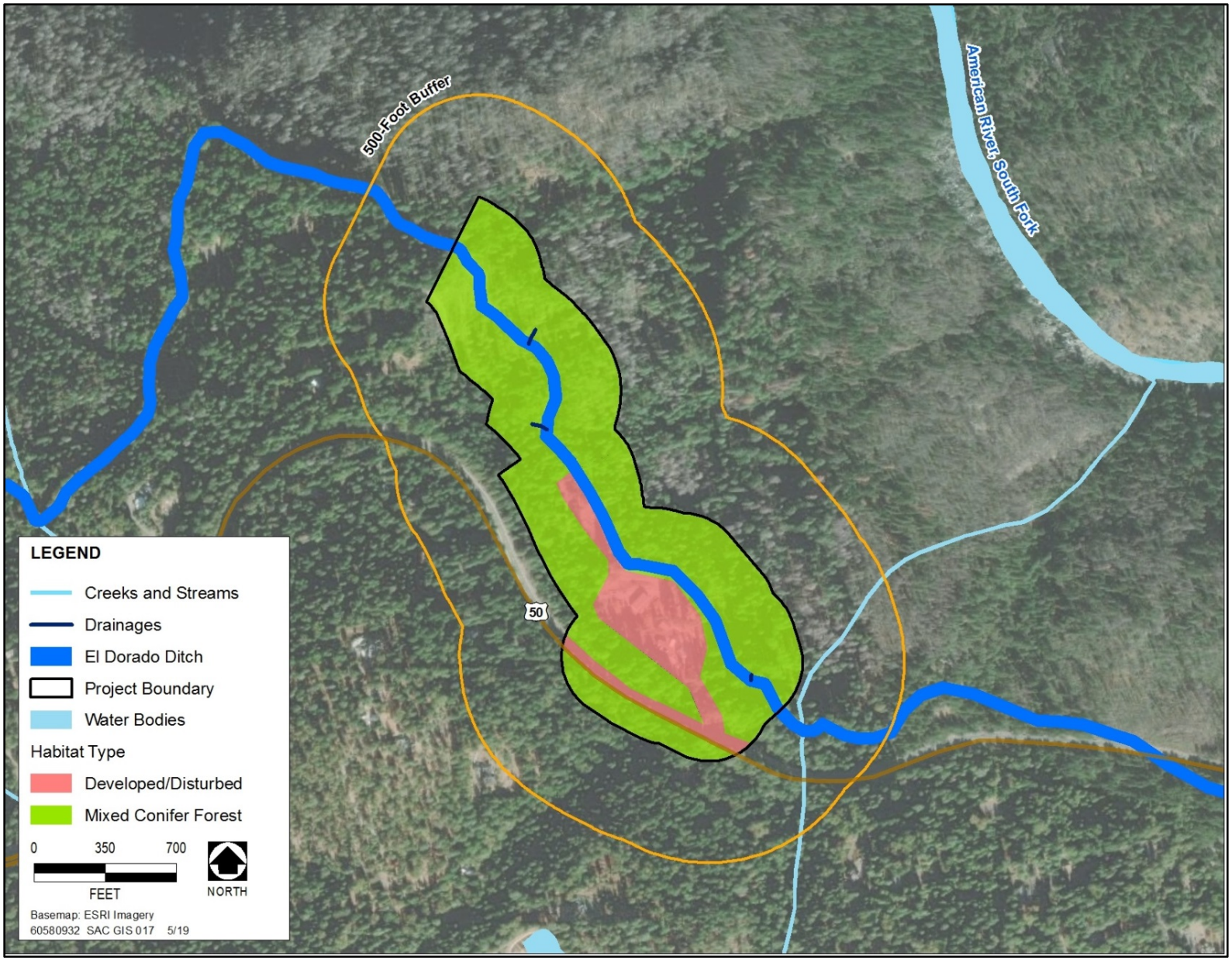
Source: AECOM 2019

Figure 3.4-1. Weber Reservoir Habitat Map



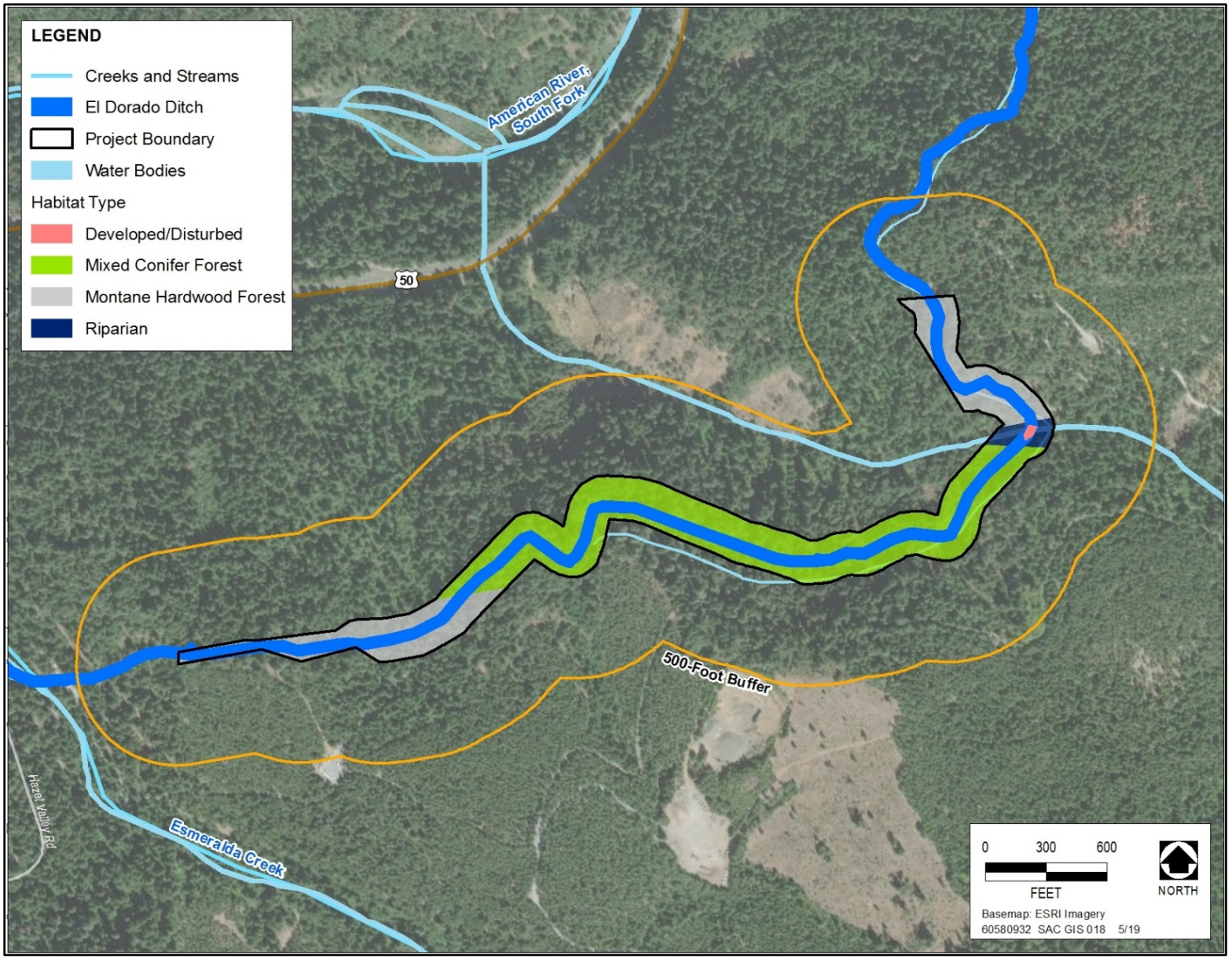
Source: Source: AECOM 2019

Figure 3.4-2. Sly Park Habitat Map



Source: AECOM 2019

Figure 3.4-3. Camp 5 Habitat Map



Source: AECOM 2019

Figure 3.4-4. Flume 46 Habitat Map

High variability in canopy height, cover, and density makes the mixed conifer forest habitat suitable for numerous species of birds and mammals. Notably, mature forests often host valuable habitat for cavity-nesting birds. In addition, many amphibians may be found in the detrital layer.

DOUGLAS FIR FOREST

Approximately 174 acres of Douglas fir forest are located within and adjacent to the Sly Park Recreation Area project site. This habitat is dominated by Douglas fir trees, with common associate species incense cedar, ponderosa pine, and scattered black oak. The understory layer is sparse, composed primarily of mountain misery (*Chamaebatia foliosa*) and sapling trees. Downed woody debris of various sizes and states of decay is common throughout this habitat type. Wildlife species in this habitat are very similar to those found in mixed conifer forest.

PONDEROSA PINE FOREST

The ponderosa pine forest habitat in the study area encompasses 139 acres on the north side of Jenkinson Lake in the Sly Park Recreation Area. The ponderosa pine habitat consists of pure stands of similarly-aged ponderosa pine trees. This area is highly managed with well-spaced trees and no shrub layer. The understory vegetation is composed entirely of a dense carpet of mountain misery. Disturbed areas are common throughout this habitat type, including picnic and campground areas, access roads, trails, turnouts, parking, and staging sites. Wildlife species in ponderosa pine forest are similar to those found in mixed conifer forest habitat; however, due to a lack of understory shrubs, downed woody debris, and older, decayed trees where this habitat occurs in the study area, suitable substrates for nesting, roosting, and protective cover are limited and wildlife use is expected to be lower than in other areas. Ponderosa pine forest can provide transitional or migratory habitat for deer.

3.4.3 METHODS

Before the site visit, AECOM biologists searched the following sources for records of special-status plants and wildlife occurring within the Camino (Weber Reservoir), Sly Park (SPRA), Pollock Pines (Camp 5), Riverton (Flume 46), and fourteen surrounding USGS 7.5 minute quadrangles: California Native Plant Society (CNPS 2019), California Natural Diversity Database (CDFW 2019b), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation project planning tool (USFWS 2019), and the eBird database, managed by Cornell Lab of Ornithology (eBird 2019). In addition to the database searches and federal species lists, information was obtained by reviewing previously prepared environmental documents that address biological resources in the area, including timber harvest plans, and rare plant reports and biological resources analysis prepared for EID flume replacement projects (EID 2009, EID 2011, AECOM 2015, and AECOM 2016).

AECOM biologists Jasmine Greer (botanist) and Vanessa Tucker (wildlife biologist) conducted three field visits on March 14, 2019, March 21, 2019, and April 2, 2019. On March 14, 2019, the biologists surveyed the northern and southern sections of Weber Reservoir. On March 21, 2019, the northern and northeastern sections of the SPRA were surveyed. On April 2, 2019, the biologists conducted their final surveys on Camp 5 and Flume 46. Weather conditions ranged from sunny and overcast to rainy with temperatures ranging from the mid-50s- to high 70º Fahrenheit and winds of 3–5 miles per hour (NOAA 2019).

3.4.4 RESULTS

For the purpose of this analysis, special-status species are plants and animals that fall within any of the following categories:

- Species that are listed under the federal ESA and/or CESA are rare, threatened, or endangered;
- Species considered as candidates and proposed for federal or state listing as threatened or endangered;
- Wildlife designated by CDFW as fully protected and/or species of special concern;
- Birds protected under the MBTA;
- Bats designated by the Western Bat Working Group (WBWG) as high (red) or medium (yellow) priority; or
- Plants ranked by CNPS to be rare, threatened, or endangered in California. CDFW recommends, and local governments may require, that CEQA reviews of proposed projects address plants on Lists 1A, 1B, and 2 of the CNPS California Rare Plant Ranks (CRPRs), defined as follows:
  - List 1A—Plants presumed to be extinct in California
  - List 1B—Plant species considered rare, threatened, or endangered in California and elsewhere
  - List 2—Plant species considered rare, threatened, or endangered in California but more common elsewhere
- Each CRPR category may include an extension indicating the level of endangerment in California:
  - 1—Seriously endangered in California (more than 80 percent of occurrences are threatened and/or high degree and immediacy of threat)
  - 2—Fairly endangered in California (20–80 percent of occurrences are threatened)
  - 3—Not very endangered in California

Tables 3.4-1 and 3.4-2 provide a list of special-status plant and wildlife species, respectively, with potential to occur on the project site based on the pre-field investigation (database and literature review). The following criteria were applied to assess the potential for species occurrence at the project site:

- **Known to Occur**: The project site is within the species' range, suitable habitat for the species is present, and the species has been recorded from within the project site.
- **Could Occur**: The project site is within the species' range, and no occurrences of the species have been recorded within the project site; however, suitable habitat for the species is present and recorded occurrences of the species are generally present in the vicinity.
- **Low Potential to Occur**: The species was identified during literature review as potentially occurring near the project site and habitat for the species is marginal or potentially suitable habitat may occur, but there are no records of species occurrence within the project site or its vicinity.
- **Not Likely to Occur**: No occurrences of the species have been recorded within or immediately adjacent to the project site, and either habitat for the species is marginal or potentially suitable habitat may occur, but the species' current known range is restricted to areas far from the project site.
- **No Potential to Occur**: The project site is outside the species' range or suitable habitat for the species is absent from the project site and adjacent areas.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Allium jepsonii	Jepson's onion	-	-	1B.2	On volcanic soil on Table Mountain, and on serpentine soils in Sierra foothills. On slopes and flats; usually in an open area in chapparal, cismontane woodland, lower montane coniferous forest. Endemic to California; known from Butte, El Dorado, Placer, and Tuolumne counties.	1,160 to 4,331	Apr – Aug	**No potential**; no suitable habitat (serpentine soils) present.
Allium tribracteatum	three-bracted onion	-	-	1B.2	Volcanic slopes and ridges in chaparral, lower and upper montane coniferous forest. Endemic to California; known from Alpine, Amador, Calaveras, El Dorado, and Tuolumne counties.	3,608 to 9,843	Apr – Aug	**Could occur;** suitable habitat (volcanic soils) occur at Weber Reservoir and SPRA sites.
Arctostaphylos nissenana	Nissenan manzanita	-	-	1B.2	Open, rocky shale ridges in closed-cone coniferous forest and chaparral. Endemic to California; known from El Dorado and Tuolumne counties.	1,476 to 3,608	Feb – Mar (Jun)	**No potential;** no suitable habitat (shale ridges) present.
Botrychium ascendens	Upswept moonwort	-	-	2B.3	Lower montane coniferous forest, meadows and seeps; grassy fields, coniferous woods near springs and creeks. Known from high elevation sites throughout Cascade and Sierra Nevada mountain ranges, and also occurs outside of California.	7,000 to 11,000	July – Aug	**No potential;** elevation range is outside of the project site.
Botrychium crenulatum	Scalloped Moonwort	-	-	2B.2	Moist meadows, freshwater marsh, and near creeks in lower montane coniferous forest to upper montane coniferous forest. Distribution is scattered in California and also occurs outside of California.	4,950 to 10,800	June – Sept	**No potential;** elevation range is outside of the project site.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Botrychium lunaria	common moonwort	-	-	2B.3	Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest. In California, known from Mono, Modoc, Nevada, Tulare, and Tuolumne Counties.	6,495 to 11,155	Aug	**No potential;** elevation range is outside of the project site.
Botrychium minganense	Mingan moonwort	-	-	2B.2	Creek banks in mixed conifer forest. Distribution in California is in the high Cascade and Sierra Nevada and Warner Mountains; also found outside of California.	4,700 to 7,000	July – Sept	**No potential;** elevation range is outside of the project site.
Botrychium montanum	Western goblin	-	-	2B.1	Creek banks in old growth forest in lower and upper montane coniferous forest. Distribution in California is in the high Cascade and Sierra Nevada and Warner Mountains; also found outside of California.	4,806 to 7,152	July – Sept	**No potential;** elevation range is outside of the project site.
Botrychium paradoxum	Paradox moonwort	-	-	2B.1	Alpine boulder and rock field (limestone and marble), moist sites in upper montane coniferous forest. Known from El Dorado, Madera, and Tuolumne counties. Also occurs outside of California.	5,700 to 13,779	Aug	**No potential;** elevation range is outside of the project site.
Botrychium pedunculosum	stalked moonwort	-	-	2B.1	Granitic, volcanic, and andesitic sites in meadows and seeps, upper montane coniferous forest throughout the northwestern U.S., including Alaska. In California, only known from Tuolumne County.	Unknown	Aug	**Could occur;** suitable habitat (volcanic soils) are present in the Weber Reservoir and SPRA project sites.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Calochortus clavatus var. *avius*	Pleasant Valley mariposa lily	-	-	1B.2	Open oak and pine forest habitats on Josephine silt loam and volcanic soils; often in rocky areas. Endemic to California, where it is only known from Amador, El Dorado and possibly Mariposa counties.	915 to 5,400	May – July	**Likely to occur;** suitable habitat (volcanic soils in oak & pine forest) present in Weber Reservoir and SPRA project sites. Several records within 5 miles of the study area, in open areas amongst mixed conifer and montane hardwood forest habitats (CDFW 2019).
Calystegia stebbinsii	Stebbin's morning-glory	FE	CE	1B.1	Open areas in chaparral, cismontane woodland. Usually on ultramafic/red clay soils of the Pine Hill formation; gabbro or serpentine. Endemic to California, where it is only known from El Dorado and Nevada Counties.	984 to 2,313	Apr – Jul	**No potential**; no suitable habitat (serpentine or gabbro soils) present.
Calystegia vanzuukiae	Van Zuuk's morning-glory	-	-	1B.3	Ultramafic sites in chaparral, cismontane woodland. Gabbro, serpentine soils. Endemic to California, where it is only known from El Dorado and Placer Counties.	2,296 to 3,806	May – Aug	**No potential**; no suitable habitat (serpentine or gabbro soils) present.
Carex cyrtostachya	Sierra arching sedge	-	-	1B.2	Mesic sites in lower montane coniferous forest, riparian forest, marshes and swamps, meadows and seeps. Endemic to California, where it is only known from Butte, El Dorado, and Yuba Counties.	1,984 to 4,561	May – Aug	**Could occur**; suitable habitat (mesic sites, riparian forest) present along creeks, drainages, and lake edges in Weber Reservoir and SPRA project sites; suitable habitat also present in north-facing upper slopes that border the canal and flume in the Camp 5 and Flume 46 project sites, respectively.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Carex davyi	Davy's sedge	-	-	1B.3	Dry, rocky sites or sparse meadows within subalpine or upper montane coniferous forest. Occurs in high northern and central Sierra Nevada mountains, and also occurs outside of California.	4,920 to 10,500	May – Aug	**No potential;** the project area is below the lower elevation limit of this species.
Carex limosa	mud sedge	-	-	2B.2	Floating bogs, soggy meadows, lake edges, marshes and swamps, in lower and upper montane coniferous forest. In California, known from Klamath Range, high Cascade Range, high Sierra Nevada, and Warner Mountains.	3,935 to 8,860	June – Aug	**No potential;** suitable habitats in project area (lake edges in lower montane coniferous forest) are below elevational range of species.
Carex xerophila	chaparral sedge	-	-	1B.2	Serpentine, gabbroic soils in chaparral, cismontane woodland, lower montane coniferous forest. Endemic to California, where it is found in Butte, El Dorado, Nevada, and Yuba Counties.	902 to 2,527	Mar – Jun	**No potential**; no suitable habitat (serpentine or gabbro soils) present.
Ceanothus roderickii	Pine Hill ceanothus	FE	CR	1B.1	Ultramafic soils in chaparral, cismontane woodland. Gabbroic or serpentine soils, often in historically disturbed areas. Endemic to California, where it is only found in El Dorado County.	853 to 2,067	Apr – Jun	**No potential**; project area is at upper elevation limit for this species, and no suitable habitat (serpentine or gabbro soils) present.
Chlorogalum grandiflorum	Red Hills soaproot	-	-	1B.2	Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates in cismontane woodland, chaparral, lower montane coniferous forest; often on "historically disturbed" sites. Endemic to California, where it is found in Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne Counties.	869 to 5,562	May – Jun	**Likely to occur;** suitable habitat, including previously disturbed sites, present in all project sites. There is one record of this species 2.5 miles northwest of the Camp 5 project site, in mixed chaparral and conifer forest burned by the King Fire (CDFW 2019). Over 16,000 plants were found at this location in 2016.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Fremontodendron decumbens	Pine Hill flannelbush	FE	CR	1B.2	Rocky ridges in chaparral, cismontane woodland; gabbro or serpentine soils, often among rocks and boulders. Endemic to California, where it is found in El Dorado, Nevada, and Yuba Counties.	1,394 to 2,527	Apr – Jul	**No potential**; no suitable habitat (serpentine or gabbro soils) present.
Galium californicum ssp. *sierrae*	El Dorado bedstraw	FE	CR	1B.2	Pine-oak woodland or chaparral. Restricted to gabbroic or serpentine soils. Endemic to California, where it is only found in El Dorado County.	426 to 1,920	May – Jun	**No potential**; no suitable habitat (serpentine or gabbro soils) present.
Helodium blandowii	Blandow's bog moss	-	-	2B.3	Damp soil in meadows and seeps, subalpine coniferous forest. In California, found in the Sierra Nevada mountain range. Also occurs outside of California.	6,108 to 8,860	N/A	**No potential;** project area is outside the elevation range of this species.
Horkelia parryi	Parry's horkelia	-	-	1B.2	Openings on clay soils of the Ione Formation and other clay soils in chaparral or foothill woodland communities. Known from Amador, Calaveras, El Dorado, and Mariposa counties. Especially known from the Ione formation in Amador County.	262 to 3,510	Apr – Sep	**No potential**; no suitable habitat (clay soils) present.
Juncus digitatus	Finger rush	-	-	1B.1	Vernal pools, swales, and volcanic seeps (wetlands) in cismontane woodland and lower montane coniferous forest. Endemic to California, with records from Nevada and Shasta Counties.	2,130 to 2,625	(Apr) May – June	**Could occur;** there are currently no records of this species in El Dorado County; however, species was recently tentatively identified as occurring on lands adjacent to the SPRA project site (EID, pers. comm. June 2019). Suitable wetland habitat (volcanic seeps) may be present in project sites but will be avoided by project activities.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Lewisia longipetala	long-petaled lewisia	-	-	1B.3	Granitic sites in alpine boulder and rock fields, and mesic, rocky sites in subalpine coniferous forest. Endemic to California, where it is found in El Dorado, Nevada, and Placer Counties.	8,202 to 9,597	Jul – Aug (Sep)	**No potential;** project area is outside the elevation range of this species.
Lewisia serrata	Saw-toothed lewisia	-	-	1B.1	North-facing, mostly shaded, moss-covered and metamorphic rock cliffs and ledges in steep gorges along relatively permanent streams in broadleafed upland forest, lower montane coniferous forest, riparian forest. Known from El Dorado and Placer counties.	2,526 to 4,708	May – June	**No potential;** no suitable habitat (steep gorges) present.
Meesia uliginosa	broad-nerved hump-moss	-	-	2B.2	Damp soil in bogs and fens, meadows and seeps, in subalpine coniferous forest and upper montane coniferous forest. Scattered in California, primarily in Sierra Nevada and southern Cascade Range.	3,969 to 9,200	Jul, Oct	**No potential;** no suitable habitat (bogs/fens, meadows, seeps) present.
Monardella linoides ssp. *oblonga*	Tehachapi monardella	-	-	1B.3	Lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Endemic to California where it is found in the southern Sierra Nevada and Tehachapi Mountains.	2,952 to 8,104	(May) Jun – Aug	**Not likely to occur;** no records in northern Sierra Nevada region, but suitable habitat is present (lower montane coniferous forest).
Ophioglossum pusillum	Northern adder's-tongue	-	-	2B.2	Marshes and swamps; marsh edges, low pastures, and grassy roadside ditches. Known from only four occurrences in Siskyou, Mendocino, Lake, and El Dorado counties in California.	3,280 to 6,561	July	**Could occur;** suitable habitat (grassy roadside ditches) present in the Weber Reservoir and SPRA project sites.
Packera layneae	Layne's ragwort	FT	CR	1B.2	Ultramafic soil (serpentine or gabbro), occasionally along streams, in chaparral and cismontane woodland. Endemic to California, where it occurs in foothills of central Sierra Nevada.	672 to 3,478	Apr – Aug	**No potential**; no suitable habitat (serpentine or gabbro soils) present.

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Phacelia stebbinsii	Stebbins' phacelia	-	-	1B.2	Shady, moss-covered metamorphic rock outcrops or meadows with rocky or gravelly soil in lower montane coniferous forest, cismontane woodland, meadows and seeps. Known from El Dorado, Placer, and Nevada counties.	1,800 to 6,000	May – July	**Likely to occur;** suitable habitat (moss-covered granite outcrops) present along north-facing slopes in Camp 5 and Flume 46 project sites. There is one record of this species within 5 miles to the north, located on metamorphic rock outcrops in montane hardwood forest habitat (CDFW 2019).
Poa sierrae	Sierra blue grass	-	-	1B.3	Shady north-facing, often moist, rocky slopes in lower montane coniferous forest; often in canyons. Endemic to California where it is found in the northern and central high Sierra Nevada and Sierra Nevada foothills.	1,197 to 6,283	May – Aug	**Could occur**; suitable habitat (shady north-facing slopes) present in all project sites.
Rhynchospora capitellata	brownish-beaked rush	-	-	2B.2	Marshes and swamps, meadows and seeps, in lower and upper montane coniferous forest; mesic sites. Widely distributed; in California, occurs in the northern Sierra Nevada and southern Cascade Ranges.	147 to 5,611	May – Jun	**Could occur;** suitable habitat (mesic sites) present in areas associated with perennial drainages, creeks, and lake edges in the Weber Reservoir, SPRA, and Flume 46 project sites.
Viburnum ellipticum	oval-leaved viburnum	-	-	2B.3	Generally north-facing slopes in chaparral, cismontane woodland, and lower montane coniferous forest. In California, widely distributed in northern and central Sierra Nevada foothills, San Francisco Bay area, North Coast region, and Klamath Ranges.	705 to 4,594	May – Jun	**Likely to occur;** suitable habitat (north-facing slopes in chaparral, woodland, and coniferous forest) present at all project sites. There is one record of this species 5 miles to the west of Weber Reservoir (CDFW 2019).

Table 3.4-1. Special-status Plant Species Identified as Occurring in the Project Region and Discussion of their Potential to Occur in the Biological Study Area - El Dorado Irrigation District CalFire Vegetation Treatment at Camp 5, Flume 46, Sly Park Recreation Area (SPRA), and Weber Reservoir - El Dorado County, California

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements and Distribution	Elevation Range (feet above MSL)[2]	Blooming Period	Potential for Occurrence[3]
		Federal	State	CRPR				
Wyethia reticulata	El Dorado County mule's ears	-	-	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest; stony red clay and gabbroic soils; often in openings in gabbro chaparral. Endemic to California, where it is only found in El Dorado County.	393 to 2,067	Apr – Aug	**No potential**; no suitable habitat (gabbro or stony red clay soils) present.

[1] **Regulatory Status:**

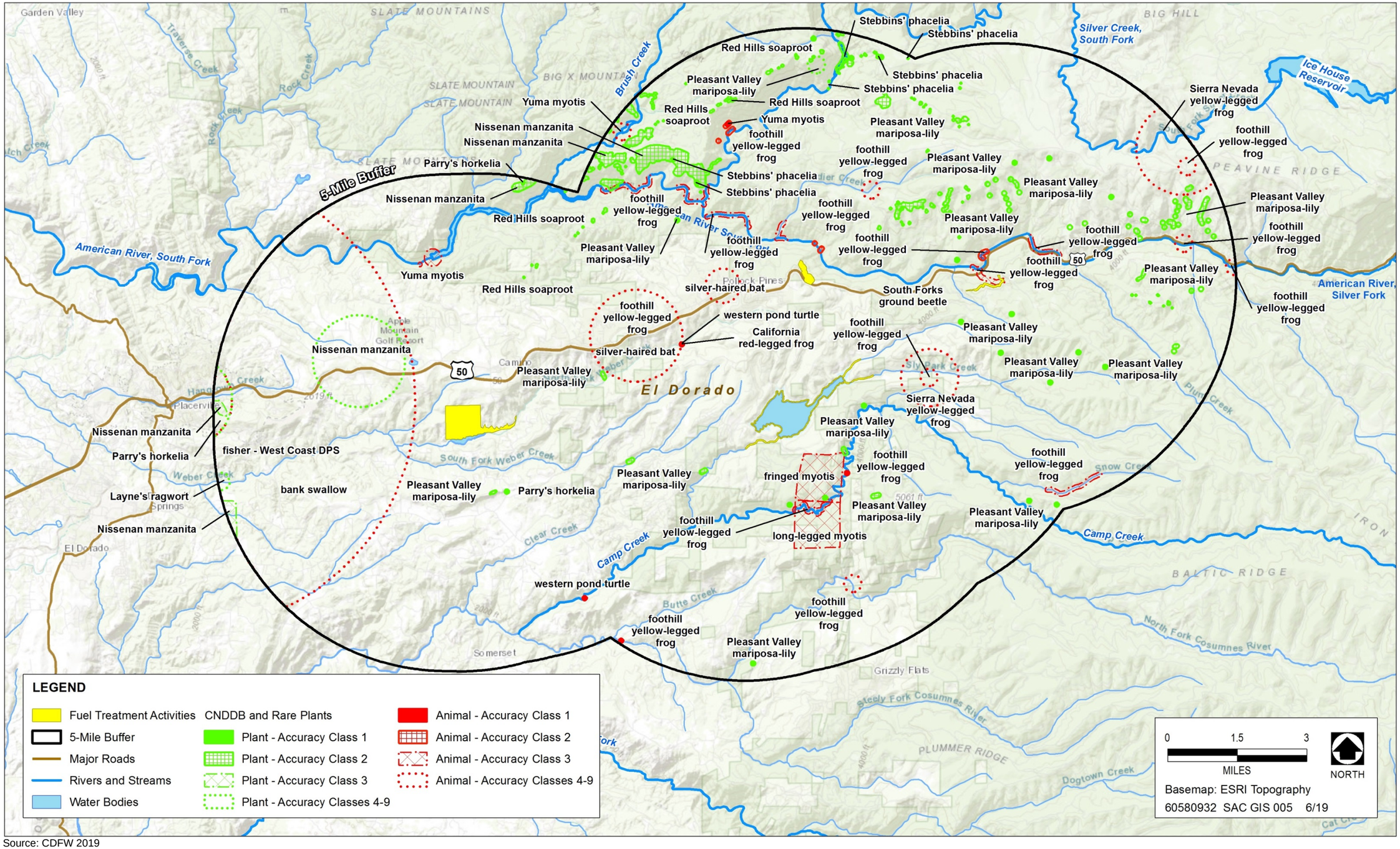
Federal Status Categories:
FE = Listed as endangered under Federal Endangered Species Act
FT = Listed as threatened under Federal Endangered Species Act
California State Status Categories:
CE = Listed as endangered under California Endangered Species Act
CR = Listed as rare under California Endangered Species Act
California Rare Plant Rank (CRPR) Categories:
[1B] Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
[2B] Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
CRPR Threat Rank Extensions:
[.1] Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)
[.2] Fairly endangered in California (20 to 80% of occurrences are threatened)
[.3] Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

[2] **MSL** = mean sea level

[3] **Potential for Occurrence:**

Known to Occur: The project site is within the species' range, suitable habitat for the species is present, and the species has been recorded from within the project site.
Could Occur: The project site is within the species' range, and no occurrences of the species have been recorded within the project site; however, suitable habitat for the species is present and recorded occurrences of the species are generally present in the vicinity.
Not Likely to Occur: No occurrences of the species have been recorded within or immediately adjacent to the project site, and either habitat for the species is marginal or potentially suitable habitat may occur, but the species' current known range is restricted to areas far from the project site.
No Potential to Occur: The project site is outside the species' elevational range or suitable habitat for the species is absent from the project site and adjacent areas.

Sources: CDFW 2019, CNPS 2019, USFS 2013, Baldwin et al. 2012



Source: CDFW 2019

Figure 3.4-5. Special Status Plant and Wildlife Species Records within 5 Miles of Project Sites

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SPECIAL-STATUS PLANT SPECIES

No special-status plant species were found on the project site during the reconnaissance surveys. The database searches identified above resulted in 35 special-status plant species being evaluated for their potential to occur in the proposed project sites or vicinity (Table 3.4-1). Of these, 23 species have no potential to occur because of a lack of suitable habitat or the project sites are outside the known elevation range of the species. The remaining 12 species have some potential to occur at the project sites. Of these, Tehachapi monardella (*Monardella linoides ssp. oblonga*) is considered not likely to occur; no occurrences of Tehachapi monardella have been recorded near the project site, and even though potentially suitable habitat may occur, the species' current known range is restricted to areas far from the project site.

There are occurrence records of 6 special-status plant species within 5 miles of the project sites (CDFW 2019) (Exhibit 3.4-5). Of these, 4 species are considered likely occur: Pleasant Valley mariposa lily (*Calochortus clavatus* var. *avius*), oval-leaved viburnum (*Viburnum ellipticum*), Red Hills soaproot (*Chlorogalum grandiflorum*), and Stebbins phacelia (*Phacelia stebbinsii*) (Exhibit 3.4-5). The other special-status plants depicted on Exhibit 3.4-5 have no potential to occur due to lack of habitat (e.g., clay soils, shale ridges, serpentine soils, decomposed granite soils).

SPECIAL-STATUS WILDLIFE SPECIES

Wildlife surveys were conducted to evaluate the potential for occurrence of special-status wildlife species at or near the study area, with additional survey areas for particular species within appropriate buffer distances. An evaluation of habitat for tree-roosting bat species (e.g., snags, large trees, trees with cavities or flaking bark, leafy trees) was conducted where trees would need to be removed, approximately 10 feet uphill and 40 feet downhill of the flumes and staging, and access areas. The biologist also surveyed the forest canopy and trees at and within 200 feet of the project site boundaries to search for suitable raptor and passerine nesting sites and for evidence of recent nesting activity. Habitat for special-status amphibians and reptiles was surveyed by visually scanning the water features that cross the study area for appropriate water depth and flow rate, substrate along the bottom of the water features, bank structure, and vegetation in the water features and along the banks. Habitat for meso-carnivores was focused on an assessment of potential burrow or denning habitat at and within 200 feet of the project site.

Twelve special-status wildlife species have a *low potential to occur* within or near the project site; Southern long-toed salamander (*Ambystoma macrodactylum sigillatum*), California red-legged frog (*Rana draytonii),* foothill yellow-legged frog (*Rana boylii*), Western pond turtle (*Emys marmorata*), Northern goshawk (*Accipiter gentilis*), California spotted owl (*Strix occidentalis, occidentalis*), sharp-shinned hawk (*Accipiter striatus*), Sierra Nevada mountain beaver (*Aplodontia rufa californica*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), fringed myotis (*Myotis thysanodes*), and long-legged myotis (*Myotis Volans*). One special-status species is *known to occur* at the Sly Park Recreation Area project site; bald eagle (*Haliaeetus leucocephalus*).

SPECIAL-STATUS MAMMALS

No special-status mammals were observed during the field visits. The Sierra mountain beaver is patchily distributed throughout the Sierra Nevada mountain range; no observations of the species have been recorded within the project sites. However, suitable habitat such as a moist dense riparian understory with deep friable soils for extensive burrowing is found throughout the project site (Camp 1918).

SPECIAL-STATUS RAPTORS

No special-status raptors were observed during the field visits. Only four raptor species, Northern goshawk, sharp-shinned hawk, California spotted owl, and bald eagle have the potential to occur within the project sites. Of the special-status species that may nest in the project area and could be affected by the project, the bald eagle is the one that is known to occur and nest within the project boundaries. This species is most often found nesting in tall conifers or cliff faces near water bodies, where they will hunt for prey, but will readily fly through and forage within more open or shrub/scrub-dominated areas between patches of woodland. A pair of bald eagles has been documented to be nesting in the Sly Park Recreation Area, Jenkinson Lake portion of the project (eBIRD 2019).

Northern goshawk, sharp-shinned hawk, and California spotted owl also have the potential to occur within the project boundaries. Although these species were not observed during the three field visits; recent observations of these species within project boundaries make it likely that these raptors actively use the project sites as foraging, roosting, and nesting habitat (eBIRD 2019). Owl species were not expected to be observed during the field visits due to their nocturnal nature. All four project site; SPRA, Weber Reservoir, Flume 46, and Camp 5 provide adequate canopy cover, abundant rodent prey, and habitat diversity for California spotted owls to be potentially within the project boundaries.

SPECIAL-STATUS AMPHIBIANS AND REPTILES

No special status reptiles or amphibians were observed during the three site visits. The western pond turtle, California red-legged frog, Southern long-toed salamander, foothill yellow-legged frog have low potential to occur in Jenkinson Lake or Weber Reservoir, and in Ogilby Creek that flows under Flume 46, although the presence of bullfrogs and/or predatory fish typically excludes the presence of special-status frogs in Jenkinson Lake or Weber Reservoir (CDFW 2019).

SPECIAL-STATUS BATS

The project site overlaps with the ranges of four bat species of conservation concern: silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasionycteris cinereus*), long-legged myotis (*Myotis volans*), and fringed myotis (*Myotis thysanodes*). The hoary bat, fringed myotis, and long-legged myotis have been ranked as highest priority (H) for funding, planning, and conservation actions by the Western Bat Working Group. The silver-haired bat has been designated as medium priority (M); lack of information is a major obstacle in adequately assessing the status of the species by the Western Bat Working Group. A fifth bat species, Mexican free-tailed bat (*Tadarida brasiliensis*), is a common and abundant species that also roosts and moves through the region in large numbers.

All of these species roost in trees, structures, caves, and rock features. No roosting bats were observed during the site visits; however suitable roosting and foraging habitat exists surrounding Weber Reservoir, SPRA, Flume 46. And Camp 5. Potential exists for any of these bat species to move through the project site and use the large pines, rock formations, etc. as roosting habitat. The larger lakes and reservoirs; Jenkinson Lake and Weber Reservoir also provide adequate space for foraging.

Table 3.4-2. Special-Status Animal Species Known or with Potential to Occur in the Project Region and their Potential for Occurrence on the Project Site

Species	Regulatory Status[1]		Habitat	Potential for Occurrence
	Federal	State		
Fish				
Delta smelt *Hypomesus transpacificus*	FT	–	Inhabits open waters of bays, tidal rivers, channels, and sloughs; rarely occurs in water with salinity of more than 10–12 ppt; when not spawning, found where salt water and freshwater mix; typically spawns upstream, but some spawning events have been documented in estuaries.	**No potential to occur.** This species range is outside of the project area and has not been documented within the project.
Amphibians and Reptiles				
Southern long-toed salamander *Ambystoma macrodactylum sigillatum*	–	SSC	Occurs from 0 to 9,200 feet amsl, from Tuolumne County in the Sierra Nevada north to Modoc and Lassen counties in the Cascade Range. Breeds in temporary ponds (approximately 12 inches deep or less) formed from rain and snowmelt associated with ponderosa pine, montane-conifer, mixed conifer, montane riparian, red fir, and wet meadows. Populations at higher elevations may require year-round water and develop more slowly. Adult life is mostly subterranean in burrows, rock cracks, and other structures. Seasonal movements associated with breeding are usually up to 3,300 feet.	**Low potential to occur.** Potential breeding and upland habitat for the species was observed at SPRA, Camp 5, and Flume 46. This species was not observed within the project sites.
Western pond turtle *Emys marmorata*	–	SSC	Forages in ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; nests in nearby uplands with low, sparse vegetation.	**Low potential to occur.** CNDDB 1993 occurrence in Camp Creek which is a tributary to Sly Park Creek (within project). CNDDB 2007 sighting in Spivey Pond, North fork of Weber Creek which drains into Weber Reservoir (within project
California red-legged frog *Rana draytonii*	FT	SSC	Occurs throughout California and northern Baja California. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development and must have access to aestivation habitat. Endemic to California and Baja California, at elevations ranging from sea level to 1,524 meters (5,000 feet). Has a distinct aquatic and upland habitat requirement which includes; pools of slow moving streams, perennial or ephemeral ponds and upland sheltering habitats.	**Low potential to occur.** Potential habitat for CRLF was observed in Weber Reservoir. CNDDB 2008 occurrence in the North Fork of Weber Creek, upstream of Weber Reservoir, adults and two juveniles were recorded. There is potential for this species to occur at the lower elevation site, Weber Reservoir.

Table 3.4-2. Special-Status Animal Species Known or with Potential to Occur in the Project Region and their Potential for Occurrence on the Project Site

Species	Regulatory Status[1]		Habitat	Potential for Occurrence
	Federal	State		
Foothill yellow-legged frog *Rana boylii*	–	ST, SSC	Found in most major Pacific-slope Sierra watersheds between upper Sacramento River and the Tehachapi mountains. Streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands from sea level to 6,700 feet. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools	**Low potential to occur.** Suitable habitat for the species is found throughout the project area. CNDDB occurrences ranging from 1916 to 2017 show 23 entries of foothill yellow-legged frog occurring at the Project site and surrounding areas. Drainages and aquatic habitat occurs at Jenkinson Lake, Weber Reservoir, and Flume 46 but do not provide appropriate cobble substrate or stream gradient. The presence of predatory fish and amphibians such as the American bullfrog (Lithobates catesbeianus) in Weber Reservoir and Jenkinson Lake also likely excludes this species. EID monitoring report from 2016 only detected 1 adult (mortality), 1 juvenile, and 1 egg mass during their surveys (EID 2017a).
Sierra Nevada yellow-legged frog *Rana sierra*	FE	ST	Prefers sunny riverbanks, meadow streams, isolated pools, and lake borders in high Sierra Nevada. Prefers sloping banks with rocks or vegetation to water's edge. Seldom found more than few feet from water. Also occurs in ponds and low gradient streams with deep pools and undercut banks, generally above 4,500 to 12,000 feet in elevation.	**No potential to occur.** The project sites do not fall within the species' elevation range. A 2004 CNDDB occurrence was recorded in Sly Park Creek Dam downstream of Jenkinson Lake. Suitable habitat does occur in the project area; however the nearest recorded occurrence of this species is approximately 20 miles to the east of Flume 46 in Lake Aloha, Camp Harvey tributaries, and the Upper Echo Lake (EID 2017b).
Birds				
Northern goshawk *Accipiter gentilis*	–	SSC	Permanent resident in the Klamath and Cascade ranges, in the North Coast Ranges from Del Norte County to Mendocino County, and in the Sierra Nevada south to Kern County; winters in Lassen, Modoc, Mono, and northern Inyo counties; rare in Southern California. Nests and roosts in older stands of red fir, Jeffrey pine, and lodgepole pine forests; hunts in forests and in forest clearings and meadows.	**Low potential to occur.** Two CNDDB occurrences recorded in 1980 and 1984; One active nest was recorded approximately 7 miles north of the Weber Reservoir and the second occurrence was of an active nest was in 1984, 9 miles southeast of the Jenkinson Lake. Suitable habitat does occur in all project areas. eBIRD has citizen observations recorded as recent as 2016, East of the town of Riverton.

Table 3.4-2. Special-Status Animal Species Known or with Potential to Occur in the Project Region and their Potential for Occurrence on the Project Site

Species	Regulatory Status[1]		Habitat	Potential for Occurrence
	Federal	State		
Sharp-shinned hawk *Accipiter striatus*	–	WL	Found throughout most of United States, breeds from southern Alaska to central California, Arizona, New Mexico and northern Texas. Individuals' nests in forest and woodland habitats, and hunts along forest edges.	**Low potential to occur**. eBIRD 2016 near Weber reservoir, direct sightings in SPRA/Jenkinson Lake.
Tricolored blackbird *Agelaius tricolor* (nesting colony)	–	ST, SSC	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Requires open water and protected nesting substrate, such as flooded, spiny, or thorny vegetation.	**No potential to occur.** Suitable habitat for this species was observed within the project area. Last positive observation in the area was in 1976.
Bald eagle *Haliaeetus leucocephalus* (nesting and wintering)	D	SE, FP	In western North America, nests and roosts in coniferous forests within 1 mile of a lake, reservoir, river, or the ocean.	**Known to occur.** Known to occur and in SPRA and there are suitable conifers adjacent to project site for an eagle to nest in. This species is known to occur from October until April in the project vicinity.
Bank swallow *Riparia riparia*	–	ST	The state's largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County, along the Feather and lower American rivers, and in the Owens Valley. Nesting areas also include the plains east of the Cascade Range south through Lassen County, northern Siskiyou County, and small populations near the coast from San Francisco County to Monterey County. Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam to allow digging.	**No potential to occur**. CNDDB occurrence in 1873. Colony nested in Rough face of a high gravelly hill. No suitable habitat is present within the project sites.
Great gray owl *Strix nebulosi*	USFS-S	SE	Found throughout Canada, Washington, Oregon, and upper elevation sierras in California. Typically found in pine and fir forests adjacent to montane meadows between 2,500 and 7,500 feet asml. Will often move downslope into oak woodlands and lower elevation mixed forests in California and Oregon.	**No potential to occur.** Suitable habitat is present within the project sites however; the occurrence of this species is rare within the project sites.
California spotted owl *Strix occidentalis occidentalis*	-	SCC	Occurs in the southern Cascade Range in northern California, through the Sierra Nevada, across the Transverse and Peninsular Ranges in southern California, and up the Coast Range through Monterey County.	**Low potential to occur.** Suitable foraging and roosting habitat is present within SPRA, Weber Reservoir, Flume 46, and Camp 5; however no recent observations near the project sites have been recorded.

Table 3.4-2. Special-Status Animal Species Known or with Potential to Occur in the Project Region and their Potential for Occurrence on the Project Site

Species	Regulatory Status[1]		Habitat	Potential for Occurrence
	Federal	State		
Mammals				
Sierra Nevada mountain beaver *Aplodontia rufa californica*	–	SSC	Occurs in the Sierra Nevada in scattered populations. Locally uncommon. Typically occurs in montane riparian habitat. Requires friable soil for burrowing and a cool and moist microclimate near water. Prefers areas with a dense understory of vegetation for cover.	**Low potential to occur.** Suitable riparian habitat with permanent water is present at SPRA, Weber Reservoir, Flume 46, and Camp 5. Recent CNDDB observations in 2011 within 5 miles of the project.
Townsend's big-eared bat *Corynorhinus townsendii*	USFS-S	SSC, WBWG-H	Uncommon colonial bat associated with coniferous forests, mixed meso-phytic forests, deserts, agricultural areas, native prairies, riparian communities, and coastal habitat types; individuals typically roost in caves and mines, but also in basal hollows of trees, including redwoods, and human structures (e.g., bridges, buildings).	**No potential to occur.** Basal hollows of trees are found throughout the project site however no suitable winter roosting or maternity roosting sites were observed.
Hoary bat *Lasiurus cinereus*	–	WBWG-M	Uncommon, solitary foliage-roosting bat. Most widespread North American bat. Individuals prefer to bear young in woodlands and forests with medium to large-size trees with dense foliage.	**Low potential to occur**. CNDDB latest occurrence in 1979, near Grizzly flats. Suitable habitat for the species is present within SPRA, Weber Reservoir, Flume 46, and Camp 5; however not much information is known on the species.
Silver-haired bat *Lasionycteris noctivagans*	–	WBWG-M	Occurs from southern Alaska to throughout much of the United States. Common colonial bat distributed in coastal and montane forests. Individuals roost in hollow trees, snags, buildings, rock crevices, caves, and under bark. Females congregate in small maternity colonies inside trees.	**Low potential to occur.** Suitable habitat for the species is found throughout SPRA, Weber Reservoir, Flume 46, and Camp 5; however the nearest occurrence as near Pollock Pines and was recorded in 1990 (CNDDB 2019).
Fringed myotis *Myotis thysanodes*	USFS-S	WBWG-H	Uncommon colonial forest/woodland bat that roosts in crevices in buildings, underground mines, rocks, cliff faces, bridges, and large decadent trees and snags. Prefer Oak and pinyon woodlands.	**Low potential to occur.** CNDDB 2001 occurrences within a mile Southeast of Jenkinson Lake. Suitable habitat also occurs within SPRA, Weber Reservoir, Flume 46, and Camp 5.
Long-legged myotis *Myotis volans*	–	WBWG-H	Colonial bat found in coniferous forests at 4,000–9,000 feet in elevation.	**Low potential to occur.** CNDDB occurrence from 2001 within a mile of Jenkinson Lake. Suitable habitat for this species occurs within all project sites.
Fisher-West Coast DPS *Pekania pennant*	USFS-S	ST	The west coast Distinct Population Segment is limited to Washington, Oregon, and California. Require mature strands of coniferous or mixed forest that contain key elements and structural components that provide abundant den sites, rest sites, and preferred prey. Key structural components include; large diameter trees, high canopy closure, large hardwood or conifer trees with cavities, and large down wood.	**No potential to occur.** CNDDB occurrence from 1916 where five fishers were killed for their pelts. Species prefers more north coast coniferous forest.

Table 3.4-2. Special-Status Animal Species Known or with Potential to Occur in the Project Region and their Potential for Occurrence on the Project Site

Species	Regulatory Status[1]		Habitat	Potential for Occurrence
	Federal	State		
Sierra Nevada red fox *Vulpes vulpes necator*	FC	ST	Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	**No potential to occur.** Rare, only two populations remain; one near Lassen Peak and the second one near Sonora Pass in the Humboldt and Stanislaus national forests.

Notes: CNDDB = California Natural Diversity Database; amsl = above mean sea level; BSA = Biological Study Area; CNDDB = California Natural Diversity Database; DPS = Distinct Population Segment; FR = *Federal Register*

[1] **Legal Status Definitions**

– = no listing.
Delisted = removed from federal or California Endangered Species Act list.

Federal

FC = federal candidate for listing under the federal Endangered Species Act.
FE = listed as endangered under the federal Endangered Species Act.
FPT = proposed for listing as threatened under the federal Endangered Species Act.
FT = listed as threatened under the federal Endangered Species Act.

State

SCT = state candidate for listing as threatened under the California Endangered Species Act.
SE = listed as endangered under the California Endangered Species Act.
SSC = state species of special concern
ST = listed as threatened under the California Endangered Species Act.

Other

USFS-S = Sensitive species identified by the regional forester for which population viability is a concern on National Forest Service (NFS) lands within the region.

Western Bat Working Group Priority

WBWG (H): Species designated as the highest priority (H) for funding, planning, and conservation actions, by the Western Bat Working Group.
WBWG (M): Species designated as medium priority (M); lack of information is a major obstacle in adequately assessing the status of the species.
Sources: CDFW 2019; USFWS 2019; eBird 2019; iNaturalist 2019; WBWG 2019; EID 2016a, and EID 2016b.

SENSITIVE HABITATS

Sensitive habitats are those that are of special concern to resource agencies or are afforded specific consideration through the State CEQA Guidelines, Section 1602 of the California Fish and Game Code, Section 404 of the Clean Water Act, and the state's Porter-Cologne Act. Sensitive habitats may be of special concern to these agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species.

Waters of the United States and Other Waters

Natural aquatic features present within the project site include creeks and drainages traversing the study area. Additional manmade aquatic features, such as canals, flumes, and reservoirs are also present. Because the exact location and timing of all project activities is not known at this time, a formal delineation of wetlands and other aquatic features within the study area is not practical and has not been completed. However, to assess the potential regulatory status of the above-mentioned aquatic features USGS quadrangle maps and USFWS National Wetland Inventory data and current and historic Google Earth satellite images of the project site were reviewed in support of the site reconnaissance surveys. Based on this data review and site reconnaissance, several features, including natural and manmade features described above, are potential federal or state jurisdictional waters (including wetlands).

From a regulatory perspective, surface water and its drainage or groundwater, including saline waters, within the boundaries of the state are considered "waters of the state" and are regulated under the Porter Cologne Act and Section 401 of the CWA. Therefore, creeks and seasonal drainages within the study area that have a defined bed and bank are waters of the state. In addition, any manmade aquatic features that retain surface water at any time would also be considered waters of the state (e.g., canals and reservoirs). On the federal side, aquatic areas that also meet the regulatory definition of "waters of the United States" are further regulated under Section 404 of the CWA. While no wetland delineation has been conducted to date within the project site, creeks and reservoirs, at minimum, are assumed to be subject to USACE jurisdiction because of their apparent hydrologic connection to navigable waters downstream. No project activities are proposed within a water body/water course. To avoid potential indirect impacts on aquatic habitat, the project will be conducted in accordance with California Forest Practice Rules (Title 14, California Code of Regulations, Chapters 4, 4.5, and 10) and Watercourse and Lake Protection Zones will be enforced around all watercourses, lakes, channels, flood-prone areas, and riparian zones prior to and continuously during project activity (CAL FIRE 2017) (see Mitigation Measure BIO-5).

Riparian Habitat

During site reconnaissance surveys, riparian habitats were mapped in the study area. Riparian habitats are defined as tree or shrub vegetation that overlap waterways and may be subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. A total of 14 acres of riparian habitat were mapped in the study area along creeks and drainages in the SPRA and Flume 46 project sites. Small patches (i.e., less than 0.1 acre) of riparian habitat were also observed along seasonal drainages in the Weber Reservoir project site.

Sensitive Natural Communities

California natural communities are organized by CDFW and partner organizations, such as CNPS, based on vegetation type classification, and are ranked using the same system to assign global and state rarity ranks for plant and animal species in the CNDDB (CDFW 2018b). CDFW considers natural communities ranked S1–S3 to

be sensitive natural communities, to be addressed in the environmental review processes (CDFW 2019c). Sensitive natural communities are defined as being of limited distribution statewide or within a county or region and often vulnerable to the environmental effects of projects (CDFW 2019c).

A total of seven vegetation communities were mapped on the project site. None of these vegetation communities are considered sensitive natural communities (CDFW 2018b). Therefore, sensitive natural communities are considered absent from the project site.

3.4.5 DISCUSSION

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

No special-status plant or wildlife species were observed on the project site during reconnaissance-level surveys. However, suitable habitat is present on or adjacent to the project site for several special-status plant and wildlife species that occur within the Sierra Nevada foothills.

There are 12 species of special-status plants with potential to occur in the project site. Of these, *Tehachapi monardella* is considered not likely to occur due to range restriction, and 4 species are associated with wetland and riparian habitats that will be avoided by project activities: Sierra arching sedge (*Carex cyrtostachya*), finger rush (*Juncus digitatus*), brownish beaked rush (*Rhynchospora capitellata*), and northern adder's tongue (*Ophioglossum pusillum*). Suitable micro-habitats for the remaining 7 species of special-status plants potentially occurring within the project site include volcanic soils, historically disturbed and previously-burned areas, north-facing slopes, and metamorphic rock outcrops. The volcanic soils of the Weber Reservoir and Sly Park Recreation Area project sites provide suitable substrate for the Pleasant Valley mariposa lily (*Calochortus clavatus* var. *avius*), three-bracted onion (*Allium tribracteatum*), and stalked moonwort (*Botrychium pendunculosum*). A large population of Red Hills soaproot (*Chlorogalum grandiflorum*) was discovered in 2016 approximately 3 miles to the north of the Camp 5 project site, in an area burned by the King Fire, and similar habitat exists within the northern portion of the Camp 5 project site. Red Hills soaproot could also be found in woodland, chaparral, and mixed conifer forest habitats in other project sites, particularly in areas that were historically disturbed. Granitic rock outcrops in the Camp 5 and Flume 46 project sites could provide habitat for Stebbin's phacelia (*Phacelia stebbinsii*). North-facing slopes in chaparral, woodland, and mixed conifer forest, which are common features at all project sites, provide suitable habitat for oval-leaved viburnum (*Viburnum ellipticum*) and Sierra blue grass (*Poa sierrae*). Project activities could result in impacts on populations of special status plants; this impact would be **potentially significant.**

Mitigation Measure BIO-1: Conduct Pre-Construction Surveys for Special-status Plants

Before project implementation, EID will conduct appropriately-timed botanical surveys for all areas of project-related ground disturbance. Floristic surveys will be conducted by a qualified botanist during the species' blooming period in accordance with methods described in CDFW's 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018).

If no special-status plants are found during surveys, the findings will be documented in a letter report, and no further mitigation would be required.

If special-status plants are found during surveys, locations of special-status plant populations would be completely avoided by clearly identifying avoidance areas in the field by staking or flagging before vegetation removal activities. No project activity would occur in the marked areas.

Implementation of Mitigation Measure BIO-1 would avoid impacts on special-status plant populations and reduce the potentially significant impact to **less than significant** with mitigation.

There are 12 special-status wildlife species with low potential to occur within the project sites. 4 of the 13 species with low potential to occur are associated with riparian habitats or waterbodies and will be avoided: western pond turtle, California red-legged frog, foothill yellow-legged frog, and Sierra Nevada mountain beaver. In accordance with California Forest Practice Rules (Title 14, California Code of Regulations, Chapters 4, 4.5, and 10) (CAL FIRE 2017); buffers for watercourse and lake protection zones will be implemented to avoid potential impacts to these species. For project activities occurring in Sly Park Recreation Area; activities within the California Forest Practice Rules buffers will be limited to hand tools and will not involve the use of heavy equipment. Due to the nature of these project activities the potential impact to these mobile amphibian and reptile species would be **less than significant**.

For the remaining 8 low potential to occur species (five bat species and three bird species) and the one known to occur species, the bald eagle, suitable potential habitat is found in throughout the project sites. This habitat is useful for foraging, dispersal and; nesting habitat for raptors and other migratory birds. Suitable roosting habitat is also present for bat species in the mixed conifer, and hardwood forests found throughout the project sites. Disruption or destruction of migratory bird nests is a violation of the Migratory Bird Treaty Act. Disruption or destruction of active raptor nests is a violation of Section 3503.5 of the California Fish and Game Code. These impacts would be **potentially significant**.

Mitigation Measure BIO-2: Conduct Pre-Construction Surveys for Raptors and Migratory Birds

Trees and vegetation are planned to be removed outside the nesting season, August 16 through February 14. If construction occurs between February 15 and August 15, EID will conduct preconstruction surveys for active nests of special-status and MBTA protected birds before the start of any project activities. Surveys for nesting raptors will be conducted in accordance with established CDFW raptor survey protocols. If active nests are found, EID will establish avoidance buffers around nests that are sufficient so that breeding is not likely to be disrupted or adversely affected by project activities. An avoidance buffer will constitute an area where project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur. Typical avoidance buffers during the nesting season will be 100 feet for nesting passerine birds and 500 feet for nesting raptors unless a qualified biologist determines that smaller buffers will be sufficient to avoid impacts on nesting raptors and/or other birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. A qualified biologist will monitor any active nests during construction, to ensure that the species is not being harmed or harassed by the noise or activity resulting from project-related activities. Buffers will be maintained until a qualified biologist has determined that young have fledged and are no longer reliant on the nest or parental care for survival.

Implementation of Mitigation Measure BIO-2 would minimize disturbance or disruption of any active nesting sites of migratory birds and/or raptors and reduce the potentially significant impact to **less than significant** with mitigation.

Mitigation Measure BIO-3: Avoid Disturbance to Roosting Bat Species

Bats species known to occur in the proposed Project region may roost in trees within the proposed Project area. If Project activities are planned to occur during the bat maternity season (May through mid-August), the District shall conduct a habitat assessment of the Project site to identify potential habitat for bat maternity roosts (e.g., large-diameter trees, snags). Potential roost habitat identified during the assessment shall be marked and avoided, if possible. If the potential roost habitat cannot be avoided and removal of potential roost habitat must be conducted during the maternity season, preconstruction inspections for potential roost habitat shall be conducted using appropriate methods (e.g., camera inspection, exit survey with night optics, acoustic survey) within the 14-day period prior to vegetation removal. If bats are found during inspections, removal of that roost feature shall be delayed until the end of the maternity season or until a qualified bat biologist has determined that the young are capable of flight. If Project activities occur outside of the maternity season, no mitigation shall be required.Mitigation Measure BIO-4: Develop and Implement Worker Environmental Awareness Training

Before the start of vegetation removal activity, EID will develop a worker environmental awareness program. Before the start of project activities, the environmental training will be provided to all personnel working on the project site during vegetation removal. EID, consultant, and construction personnel entering the project site will be trained before being allowed on-site.

Implementation of Mitigation Measures BIO-3 and BIO-4 would avoid or minimize potential impacts on special-status bats, and reduce the potentially significant impact to **less than significant** with mitigation.

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

No sensitive natural vegetation communities are present in the study area. Approximately 14 acres of riparian habitat exist along creeks in the Sly Park Recreation Area and Flume 46 project sites. The edges of Weber Reservoir and Jenkinson Lake may also provide riparian habitat functions. Several linear drainages, most of which appear to be seasonal in nature, were mapped in the study area and may also contain riparian habitat. Riparian habitat is under the jurisdiction of CDFW under Section 1600 of the California Fish and Game Code, and includes vegetation growing in association with waterways (e.g., creeks and drainages).

Project-related activities would result in no direct or indirect temporary or permanent loss of riparian habitat or removal of riparian vegetation no project activities are proposed within a water body/water course, and a Registered Professional Forester will establish Watercourse and Lake Protection Zones around all watercourses, lakes, channels, flood-prone areas, and riparian zones prior to project activity, in accordance with California Forest Practice Rules (Title 14, California Code of Regulations, Chapters 4, 4.5, and 10) (CAL FIRE 2017). Vegetation clearing to reduce hazardous fuel loads would take place using hand treatments inside the area from the ordinary high water mark out to 100 feet around Jenkinson Lake. Additionally, hand clearing will occur inside the area from the ordinary high water mark out to 75 feet along the three tributaries that connect to Jenkinson Lake. Therefore, this impact would be **less than significant**.

However, project activities could indirectly affect riparian habitat by altering existing topography and hydrology, causing fugitive dust to accumulate on vegetation, and potentially contributing to the introduction and spread of nonnative invasive plant species. This impact would be **potentially significant**

Mitigation Measure BIO-4: Develop and Implement Worker Environmental Awareness Training

Before the start of vegetation removal activity, EID will develop a worker environmental awareness program. Before the start of project activities, the environmental training will be provided to all personnel working on the project site during vegetation removal. EID, consultant, and construction personnel entering the project site will be trained before being allowed on-site.

Mitigation Measure BIO-5: Protect Riparian Habitat

EID shall avoid and minimize indirect impacts on riparian habitat by implementing watercourse and lake protection zones, and measures to minimize erosion and runoff in all drainage plans, in accordance with California Forest Practice Rules (Title 14, California Code of Regulations, Chapters 4, 4.5, and 10) (CAL FIRE 2017). Prior to project activity, EID will assign a qualified Registered Professional Forester to identify the locations of riparian habitat and water bodies, and corresponding setbacks (Watercourse and Lake Protection Zones) for avoidance. Identification of riparian habitat/water bodies for avoidance will be in addition to and distinguished from any required construction boundary fencing or flagging. Watercourse and Lake Protection Zones will be identified as appropriate on project maps. Appropriate runoff controls, such as berms, straw wattles, silt fencing, filtration systems, and sediment traps, will be implemented to control siltation and the potential discharge of pollutants. Watercourse and Lake Protection Zones and appropriate runoff controls, such as berms, straw wattles, silt fencing, filtration systems, and sediment traps, will be implemented to protect riparian habitat and control siltation and the potential discharge of pollutants.

Implementation of Mitigation Measures BIO-4 and BIO-5 would avoid or minimize potential effects on riparian habitat, thereby reducing the impact to a **less than significant** level.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No project activities are proposed within a water body/water course; therefore, project-related activities would result in no direct fill or indirect temporary or permanent loss of state or federally protected wetlands. Equipment mobilization and staging areas for the proposed vegetation removal activities would be located in existing access roads and uplands (i.e., annual grassland and ruderal areas) such that these activities would not directly affect any state or federally protected wetlands. However, project activities (i.e., vegetation clearing and mastication) encroaching on aquatic features could result in indirect impacts on vegetation, degradation of water quality, and/or changes in hydrology. Project- elated spills, worker errors, and soil erosion in or near aquatic features are other potential sources of indirect impacts on state or federally protected wetlands. Introduction of dust and settling of contaminants associated with vehicular emissions during project activities may also indirectly affect aquatic resources.

Implementation of Mitigation Measure BIO-5 would avoid effects of project activities on state or federally protected wetlands through pre-project establishment of Watercourse and Lake Protection Zones and appropriate

runoff controls to control erosion, siltation, and potential discharge of pollutants; therefore this impact would be **less than significant** and no further mitigation is required.

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?

Wildlife movement corridors typically are associated with ridgelines and valleys, rivers, and creeks supporting riparian vegetation. The proposed project site does provide good cover for movement and foraging for many species; however, more typical movement corridors are available adjacent to the site. Proposed project development would temporarily impede wildlife use of the site; however, these project effects would be localized and would not substantially affect wildlife movements. No wildlife nursery sites are in the proposed project site. The impact would be **less than significant**. No mitigation is required.

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

Proposed project site development would not conflict with any known local policies or ordinances and would be consistent with provisions of the El Dorado County General Plan Conservation and Open Space Element. The proposed project is not within an important biological corridor or priority conservation area as identified in the general plan. **No impact** would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No draft or adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans exist. **No impact** would occur.

3.5 CULTURAL RESOURCES

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

3.5.1 ENVIRONMENTAL SETTING

The following information is based on a preliminary investigation of the project location which included a records search at the North Central Information Center of the California Historical Resources Information System (CHRIS), FERC Project No. 184 Historic Properties Management Plan, Sly Park Historic Properties Management Plan, and research in AECOM's cultural library, and a field survey of the project site.

PREHISTORIC SETTING

In an attempt to unify the various hypothesized cultural periods in California, Fredrickson (1973) proposed an all-encompassing scheme for cultural development. The following discussion of the temporal periods for the Sierra Nevada region, including the project area, is based on the synthesis provided by Jackson and Ballard (1999).

There is an absence of well-defined components or single component sites that date prior to 7,000 years before present (BP). Few sites date to the Archaic Pattern and Period (c 7000–3200 BP). Sites assigned to the Archaic Period appear as low-density distributions of artifacts that are intermixed with archaeological assemblages from later occupations, such as that indicated from the CA-ELD-263 investigation by Boyd (1998).

The Early and Middle Sierran Patterns (c 3200–600 BP) are interpreted with reservation to indicate an increase in regional land use and the regular use of certain locales. An increase in the exploitation of resources during the latter portion (c post-1400 BP) of this period is marked by the adoption of mortar technology.

The Early Sierran Period (c 3200–1400 BP) is marked by the abundant presence of milling slabs and handstones, a substantial increase in the use of obsidian tool production, and a shift to cool/wet climatic regimes.

The Middle Sierran Period (c 1400–600 BP) exhibits major technological improvements, associated with the introduction of bow and arrow technology. Social disruption is inferred from changes in artifact assemblages, land use patterns, and high incidence of violent death. This pattern is followed by relatively intensive land use, active trade, and the establishment of permanent settlements in some regions, inferred as reflecting increased populations. (Jackson and Ballard 1999:250)

The Late Sierran Period (c 600–150 BP) is characterized by continued intensive use of the western slope of the Sierra Nevada, including significant use of acorns, but with less of a focus on seeds; exploitation of fauna, including deer and rabbits; year-round occupation of sites below 3,000–3,500 feet; and short-term seasonal occupation of mid- to high-elevation Sierran sites.

ETHNOGRAPHIC SETTING

Ethnographically, the project area is situated near the boundaries of Nisenan (sometimes referred to as the Southern Maidu) and Washoe territory (d'Azevedo 1986; Waechter et al. 2003; Wilson and Towne 1978). As boundaries in the past were fluid, a brief overview of the ethnographic literature for both groups is described below.

NISENAN

In the Nisenan territory, several political divisions (or tribelets) each had their own respective headmen who lived in the larger villages. As with most valley and foothill groups, the Nisenan used a wide variety of floral and faunal food sources. The acquisition of faunal species was accomplished through any number of techniques and implements, including the bow and arrow, game drives, and decoys. Nets, traps, rodent hooks, and fire were all put to use in hunting small game. Fish could be caught with nets, gorges, hooks, and harpoons. (Wilson and Towne 1978)

WASHOE

Culturally, the Washoe people are linked to both California and the Great Basin. Their language is the only non-Numic language group in the Great Basin. Washoe core territory extended from Honey Lake on the north to the West Walker River on the south, and from the Pine Nut Range on the east, west to the Sierra Nevada crest. Washoe subsistence exhibited a pattern of seasonal resource exploitation, relying on extensive knowledge of the environment. (d'Azevedo 1986)

HISTORIC SETTING

The project area is located in El Dorado County, one of the original 27 counties created when California became a state in 1850. Originally, the county's boundaries included parts of present-day Amador, Alpine, and Placer counties. By 1919, California adopted the current boundary lines that are marked to the east by the state of Nevada and to the west by Sacramento and Placer counties. The American and Cosumnes rivers form the County's northern and southern boundaries. The original county seat was the town of Coloma, but in 1857 it was moved to Placerville (Baxter and Allen 2006; Waechter et al. 2003).

The Lincoln Highway, which was one of America's first transcontinental automobile routes, was established in 1913, and several sections are currently overlain by US Highway 50. The Lincoln Highway was designated U.S. Highway 50 for most of its route, and it continues to be a popular route for tourists traveling to the Lake Tahoe area and Eldorado National Forest (ENF) (NPS 2004:5).

Gold mining was the predominant industry in western El Dorado County for many years. Other mineral products in the region include large deposits of slate, granite, lime, and asbestos, as well as building stones. By the turn of the 20th century, lumbering, raising livestock, and farming had joined mining as the principal industries at the lower elevations of the county. Crops included pears, plums, apples, peaches, cherries, oranges, olives, walnuts, wheat, rye, corn, and acres of vineyards. (Waechter et al. 2003; Baxter and Allen 2006)

Water was needed for mining activities. After the ditch systems had been established, temporary dams were constructed by miners, while more permanent dams for hydroelectric power were built starting in the 1870s. This dam construction progressed, with larger dams and more modern construction methods to keep up with population growth. Hydroelectric development has intensified considerably since then, resulting in a broad network of facilities.

A segment of the El Dorado Canal (Flume 46), which was completed by the El Dorado Water & Deep Gravel Mining Company (EDW & DGMCo.) in 1876 is located within the current project area (Starns 2004). Civil engineer Francis A. Bishop designed the canal, which proved to be a great deal more challenging than anticipated because of the rugged terrain characterized by granite domes and steep mountain slopes. To meet the challenges posed by the landscape, Bishop planned to lay flume segments on foundations of dry-laid granite and rubble bench walls wherever possible instead of building costly, high-maintenance timber trestles. The rock walls would maintain the hydraulic gradient necessary to convey water along the steep mountain slopes of the canyon. The canal conveyed water to the mines in Placerville and Coon Hollow. In 1919, El Dorado Water Company, the predecessor of EID, purchased the lower sections of the system, and EID made arrangements to purchase the remainder of the system in 1997 (Starns 2004:190).

Lumbering operations in the Sierra Nevada foothills began in 1849 at Sutter's Mill in Coloma, which ironically led to the Gold Rush and the intensification of lumbering operations to support mining and associated developments, and resulted in substantial changes to the forest. A sawmill, which began operation in 1911 by the J. and J. Blair Land and Lumber Company, was located at Fresh Pond, directly east of the current project. In 1937, the Placerville Lumber Company leased a portion of the property. Reportedly, the Sly Park School, which was built between 1910 and 1925, was located on a bench overlooking Fresh Pond (Supernowicz 1994).

PREVIOUS CULTURAL STUDIES

The cultural resources records search conducted at the North Central Information Center, indicated that three previously conducted cultural resources inventories (NCIC report numbers 464, 8752, and 9003) occurred within portions of the project site, and seven studies (NCIC report numbers 8668, 8774, 8775, 8786, 9338, 9947, and 10076) have occurred within 0.25 mile of the study area (NCIC File No 18-66). No cultural resources have been previously recorded within the project site (i.e. treatment area); however, seven historic-era resources have been documented within 0.25 mile of the project site.

FIELD INVESTIGATION

Reconnaissance-level cultural resources survey was conducted in March, April, and May of 2019 during which two previously unrecorded resources were documented. The first is an historic rock wall of stacked unmodified stone running roughly east to west located in a meadow at the northern portion of the project site bordering Weber Reservoir. The rock wall is constructed of native volcanic rock which is abundant in the meadow and is approximately 75 meters long. The second previously unrecorded resource is an abandoned 1940s Plymouth automobile near the shore of the reservoir. The auto is nearly complete though rusted, dented, and vandalized with both graffiti and bullet holes.

3.5.2 DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The following discussion addresses items a) and b) for Cultural Resources.

Three previously conducted cultural resources inventories (NCIC report numbers 464, 8752, and 9003) occurred within portions of the project site, and seven studies (NCIC report numbers 8668, 8774, 8775, 8786, 9338, 9947, and 10076) have occurred within 0.25 mile of the study area. Table 3.5-1 through 3.5-4 lists each report and the findings. The records search conducted for the project found that no cultural resources have been previously recorded within the project site (treatment area); however, seven historic-era resources have been documented within 0.25 mile of the project site.

Table 3.5-1. Previous Cultural Resources Inventories (Flume 46)

NCIC Report Number	Year	Author(s)	Report Title
Previous Studies Conducted within Portions of the Project Site			
000464	1969	Olsen, William H. (uncertain)	Survey of the El Dorado Canal, Powerhouse, Forebay, and Intake Dam, El Dorado County, California.
008865	2006	R. Scott Baxter, Rebecca Allen, and Trish Fernandez	Resource Evaluation of CA-ELD-2230H (Ditch Camp 3) and CA-ALP-532/H (Caples Lake Tender's Site), FERC Project 184 APE
009003	2003	Sharon Waechter, Stephen Wee, Meredith Rucks, Mary Maniery, Darren Andolina, and Eric Wohlgemuth	Proposed Relicensing of the El Dorado Hydroelectric Project (FERC Project 184)
009223	2006	Kim Thibeault	An Archaeological Survey Report for the Groovy Timber Harvesting Plan, El Dorado County, California
009339	1971	James M. Snoke	Pacific Timber Sale Archaeological Reconnaissance Report
Previous Studies Conducted within 0.25 Mile of the Project Site			
008667	1991	Stephen Wee	Historic Research Report on Rock Retaining Wall Locate above Flume 45 EL Dorado Canal
008668	1991	Leslie Glover, Stephen Wee, and Rebecca Bunse	Archaeological Survey and Historic Research Report on Access Roads Associated with the El Dorado Canal
008669	1991	Leslie Glover, Stephen Wee, and Rand Herbert	Archaeological Survey and Historical Research Report on the El Dorado Canal
008814	1996	Lisa A. Shapiro and Robert J. Jackson	Evaluation of Heritage Resources for the Pacific House-Echo Summit Power Line Safety Project, Eldorado National Forest

Note: NCIC = North Central Information Center

Source: North Central Information Center 2019 compiled by AECOM in 2019

Table 3.5-2. Previously Recorded Cultural Resources (Ditch Camp 5)

Primary Number	Trinomial Number	Type	Age	Description	NRHP Eligibility/CRHR Significance
Resources within Project Site					
P-09-000599	CA-ELD-000511H	Structure, Site	Historic	Water conveyance system; Ancillary building; Engineering structure	Not Eligible/ Significant
P-09-003451	CA-ELD-002226H	Building	Historic	Ditch Camp 5	Contributing element of FERC 184 district
Resources within 0.25 Mile of Project Site					
P-09-000809	CA-ELD-000721H	Structure, Site	Historic	Roads/trails/railroad grades; Engineering Structure; Bridge; Highway/trail	
Resources within Project Site					
P-09-000599	CA-ELD-000511H	Structure, Site	Historic – El Dorado Canal	Water conveyance system; Ancillary building; Engineering structure	Determined not eligible/significant
P-09-003456	CA-ELD-002230H	Western States Gas and Electric Company's Ditch Camp 3	Historic	Foundations/structure pads; Privies/ dumps/trash scatters; Water conveyance system; Roads/ trails/railroad grades; Walls/fences	Determined not eligible
Resources within 0.25 Mile of Project Site					
P-09-003309	CA-ELD-002177H	Site	Historic, Ogilby Grade	Roads/trails/railroad grades	
P-09-004264		Site	Historic	Roads/trails/railroad grades	
P-09-004339		Site	Historic, Esmeralda Sawmill	AH02 (Foundations/structure pads); AH04 (Privies/dumps/trash scatters)	

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historic Resources

Source: North Central Information Center 2019, Data compiled by AECOM in 2019

Table 3.5-3. Previously Recorded Cultural Resources (Sly Park Recreation Area)

Primary Number	Trinomial Number	Type	Age	Description	NRHP Eligibility
Resources within Project Site					
P-09-000351	CA-ELD-000263		Prehistoric	AP04 (Bedrock milling feature); AP05 (Petroglyphs); AP15 (Habitation debris)	Eligible/Significant
P-09-000816	CA-ELD-000728		Prehistoric	AP04 (Bedrock milling feature); AP15 (Habitation debris)	Eligible/Significant
P-09-001810	CA-ELD-002097H		Historic	AH07 (Roads/trails/railroad grades); AH09 (Mines/quarries/tailings)	Significant – Criteria A
P-09-001811	CA-ELD-002098H		Historic	AH07 (Roads/trails/railroad grades)	Significant – Criteria A
P-09-001815	CA-ELD-001334H		Historic	AH02 (Foundations/structure pads)	Not eligible/significant
P-09-001896			Historic	HP22 (Lake/river/reservoir)	Significant – Criteria A
P-09-003181	CA-ELD-002091H		Sly Park Historic District	HP02 (Single family property); HP04 (Ancillary building); HP20 (Canal/aqueduct); HP21 (Dam); HP22 (Lake/river/reservoir); HP70 (Tunnel or Underpass)	Significant – Criteria A
Resources within 0.25 Mile of Project Site					
P-09-001792		Site	Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001793	CA-ELD-002092	Site	Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001794		Other	Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001796		Site	Historic, Sly Park Dam	HP21 (Dam)	Significant – Criteria A
P-09-001797		Other	Historic	AH05 (Wells/cisterns)	Not eligible/significant
P-09-001798	CA-ELD-001331		Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001799		Structure	Historic, Camp Creek Diversion Tunnel and North Portal	AH06 (Water conveyance system); HP20 (Canal/aqueduct)	Significant – Criteria A
P-09-001800	CA-ELD-002093H	Site	Historic	AH07 (Roads/trails/railroad grades)	Significant – Criteria A
P-09-001801		Other	Historic	AH16 (Other) - fence posts	Not eligible/significant
P-09-001802	CA-ELD-002094H	Site	Historic	AH04 (Privies/dumps/trash scatters)	Does not appear eligible/significant
P-09-001803		Other	Historic	AH16 (Other)	Not eligible/significant
P-09-001804		Object	Historic	AH16 (Other) – iron plate	Not eligible/significant

Table 3.5-3. Previously Recorded Cultural Resources (Sly Park Recreation Area)

Primary Number	Trinomial Number	Type	Age	Description	NRHP Eligibility
P-09-001805		Object	Historic	AH04 (Privies/dumps/trash scatters)	Not eligible/significant
P-09-001806		Site	Historic	AH09 (Mines/quarries/tailings)	Not eligible/significant
P-09-001809	CA-ELD-002096H	Site	Historic	AH09 (Mines/quarries/tailings)	Does not appear eligible/significant
P-09-001812	CA-ELD-001332	Site	Prehistoric	AP04 (Bedrock milling feature)	Not eligible/significant
P-09-001813	CA-ELD-001333H	Other	Historic, Bishop Goodman House	AH02 (Foundations/structure pads)	Eligible/significant
P-09-001814		Site	Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001816	CA-ELD-001335	Site	Prehistoric	AP04 (Bedrock milling feature)	Does not appear eligible/significant
P-09-001817		Other	Prehistoric	AP04 (Bedrock milling feature); AP16 (Other) - isolate	Not evaluated
P-09-001897		Structure	Historic, Sly Park Storage Shed	HP04 (Ancillary building)	Significant – Criteria A
P-09-001898		Structure	Historic, Sly Park Dam Tender's House	HP02 (Single family property)	Significant – Criteria A
P-09-002019	CA-ELD-001419	Site	Prehistoric	AP02 (Lithic scatter)	Not evaluated
P-09-002034		Site	Historic, Dry Gulch Ditch	AH06 (Water conveyance system)	Not evaluated
P-09-002079	CA-ELD-001449	Site	Prehistoric	AP04 (Bedrock milling feature)	Not evaluated
P-09-002080	CA-ELD-001450	Site	Prehistoric	AP04 (Bedrock milling feature)	Not evaluated
P-09-002081	CA-ELD-001451	Site	Prehistoric	AP04 (Bedrock milling feature)	Not evaluated
P-09-002082		Site	Historic, mining ditch	AH06 (Water conveyance system)	Not evaluated
P-09-004282		Site	Prehistoric	AP04 (Bedrock milling feature)	Not evaluated
P-09-004416	CA-ELD-002764H	Site	Historic, Jenkinson Road	AH07 (Roads/trails/railroad grades)	Not evaluated
P-09-004418	CA-ELD-002766H	Site	Historic, Louis LePettit's Grade/Stonebreaker Grade	AH07 (Roads/trails/railroad grades)	Not evaluated
P-09-004420	CA-ELD-002767H	Site	Historic, Road to Cutler's Mill	AH07 (Roads/trails/railroad grades)	Not evaluated
P-09-005391		Site	Prehistoric	AP04 (Bedrock milling feature)	Not evaluated
P-09-005395		Site	Historic, Diamond Springs to Carson Valley	AH07 (Roads/trails/railroad grades)	Not evaluated
P-09-005861	CA-ELD-003074	Site	Prehistoric	AP02 (Lithic scatter)	Not evaluated
Source: North Central Information Center 2019, Data compiled by AECOM in 2019					

Table 3.5-4. Previously Recorded Cultural Resources Weber Reservoir

Primary Number	Trinomial Number	Type	Age	Description	NRHP Eligibility
Resources within Project Site					
P-09-001159		Site	Historic	AH06 (Water conveyance system)	Not evaluated
P-09-001466	CA-ELD-001081H	Structure	Historic	AH06 (Water conveyance system)	Not evaluated
P-09-001510	CA-ELD-001123H	Structure	Historic	AH08 (Dams)	Not evaluated
Resources within 0.25 Mile of Project Site					
P-09-000512	CA-ELD-000424	Site	Prehistoric	AP02 (Lithic scatter)	Not evaluated
P-09-001458		Object	Prehistoric	AH16 (Other) – basalt flake	Not eligible
P-09-001459		Object	Historic	AH16 (Other) – tin coffee pot	Not eligible
P-09-001464	CA-ELD-001079H	Site	Historic	AH11 (Walls/fences)	Not evaluated
P-09-001465	CA-ELD-001080H	Site	Historic	AH07 (Roads/trails/railroad grades)	Not evaluated
P-09-001467	CA-ELD-001082H	Site	Historic	AH09 (Mines/quarries/tailings)	Not evaluated
Source: North Central Information Center 2019, Data compiled by AECOM in 2019					

However, a review of additional documentation not contained in the results provided by NCIC and summarized in Norby and Wee (2018) indicate that two major 1990 inventory and evaluation studies of the El Dorado Canal were undertaken for PG&E. In his evaluation of the historic significance of the Canal, (*Historical Overview and Significance Evaluation of the El Dorado Canal*, Volume 1) Shoup argued that the El Dorado hydroelectric power system "as a whole" no longer retained sufficient integrity to its potential period of significance (1922–1940) for it to be considered eligible for listing in the National Register of Historic Places (NRHP). Shoup concluded that major modifications to the siphons, recent tunnel construction projects, abandonment of old canal segments, and enlargement of the 1870s hydraulic mining canal and subsequent modifications to the enlarged 1922–24 hydroelectric power canal undertaken over the years of operation by Western States Gas & Electric and its successor-in-interest PG&E had rendered the overall system insignificant as a historic resource in the context of California hydroelectric power systems. The State Historic Preservation Officer (SHPO) concurred with this finding.

However, Shoup argued that the dry-laid granite rock walls that dated to the 1870s and were related to the early hydraulic mining history of the state possessed integrity. He recommended that they be considered as significant at the local and statewide level of significance and that they qualified for listing in the NRHP as a "discontiguous district" associated with the Chinese (Criteria A and C, Ethnic Heritage) and as an important example of late 19th century engineering (Criterion C, Engineering/Technology). The California SHPO disagreed with Shoup that the rock walls were eligible under Criterion A, but allowed that they may be eligible under Criterion C, if it could be proven that there was something distinctively "Chinese" about the construction methods used in building the rock walls, or under engineering/technology if the walls embodied "certain distinguishing attributes that define the property type and meet an appropriate level of integrity as well.

After comparing the existing resources on the canal to the extant rock walls on 13 other major hydraulic mining systems in the Sierra Nevada as documented by Caruso in the *Historical Overview and Significance Evaluation of the El Dorado Canal,* Volume 2, Wee and Herbert concluded that certain segments of the canal's extensive system of flume bench foundation walls and abutments possessed distinguishing attributes and sufficient integrity to warrant listing in the NRHP under Criterion C (Engineering/Technology). These segments are the following: the rock bench walls located at Flume Nos. 8, 24–25, 41, 45, and 48, plus the rock retaining walls running up and

down Alder Creek and Plum Creek canyons that were abandoned with the construction of siphons across the mouths of these canyons in 1924. They found that the rock walls that "follow along the natural slope of the drainage represent distinctive engineering features that enhance our understanding of this type of resource" and that "those segments of dry-laid rock walls that are the highest, tallest, and display the best workmanship in fitting the granite blocks together, or where walls are found in combination with other distinctive engineering features such as openings through the walls, stepped or tiered walls, stone culverts, rocks containing drill holes, or tall abutment walls at the crossing over major drainages, they convey a greater sense of their historic function and method of construction. The SHPO concurred with these recommendations in 1993 (Norby and Wee 2018:8)

The eligibility status of the El Dorado Rock Wall Discontiguous District was reaffirmed in 2008. That year, PAR Environmental Services, Inc. prepared an NRHP evaluation report for EID's Federal Energy Regulatory Commission (FERC) Project No. 184 hydroelectric system, which included the long abandoned Alder Creek and Plum Creek Canyon Flume Bench Walls among the eight segments that contributed to the discontiguous historic district. Their study concluded that little had changed that would alter their status as part of a discontiguous historic district since they were found eligible in 1993. In August 2008, SHPO concurred that the El Dorado Rock Wall Discontiguous District remained eligible for inclusion in the NRHP. None of these rock walls are located within the current project (Norby and Wee 2018).

The project does not involve disturbance to any of the known resources. However, the project site (treatment area) is situated in an area known to contain prehistoric and historic resources. Though unlikely, soil disturbance during project activities could damage previously unrecorded cultural resources. If buried historical or archaeological resources were inadvertently discovered and impacted during project implementation, this would be a potentially significant impact. Mitigation Measure CUL-1 would be implemented to reduce this potentially significant impact to a **less than significant** level.

Mitigation Measure CUL-1: Address Previously Undiscovered Historic Properties and Archaeological Resources.

EID shall implement the following measure to reduce or avoid impacts on undiscovered historic properties and archaeological resources. If interested Native American Tribes provide information demonstrating the significance of the project location and tangible evidence supporting the determination the site is highly sensitive for prehistoric archaeological resources, EID will retain a qualified archaeologist 1) monitor for potential prehistoric archaeological resources during initial ground disturbing activities, 2) prepare a worker awareness brochure, and 3) invite tribal representatives to review the worker awareness brochure.

If buried or previously unidentified historic properties or archaeological resources are discovered during project activities, all work within a 100-foot radius of the find shall cease. EID shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed with interested Native American Tribes providing recommendations and shall be coordinated with the State Historic Preservation Officer and Reclamation, if necessary, and shall be completed before project activities continue in the vicinity of the find.

c) Disturb any human remains, including those interred outside of formal cemeteries?

There has been no indication or evidence that the area has been used for human burials in the recent or distant past; therefore, human remains are unlikely to be encountered. If human remains are encountered, the mitigation measure below would reduce potential impacts to a less than significant level.

Mitigation Measure CUL-2: Avoid Potential Effects on Undiscovered Burials.

EID shall implement the following measures to reduce or avoid impacts related to undiscovered burials. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all potentially damaging ground-disturbance in the area of the burial and a 100-foot radius shall halt and the El Dorado County Coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, then Federal laws governing the disposition of those remain would come into effect. Specifically, the Native American Graves Protection and Repatriation Act (NAGPRA), Pub L. 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048 requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian Tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also has established procedures for the inadvertent discovery of Native American cultural items on Federal or Tribal lands, which includes consultation with potential lineal descendants or Tribal officials as part of their compliance responsibilities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. EID shall ensure that the procedures for the treatment of Native American human remains contained in California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 are followed.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, 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?	☐	☐	☒	☐

3.6.1 ENVIRONMENTAL SETTING

The project would not include the construction or operation of facilities that would require electricity from a regional or local utility provider. Proposed activities would include fuel usage for vehicles, trucks, hand-held machinery, and heavy-duty equipment. Energy usage activities associated with the project would be limited to vehicle usage and short-term equipment and machinery usage.

3.6.2 DISCUSSION

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

The project would not result in a potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources during vegetation management activities. The project would not increase consumption or inefficient energy use and would not include the construction of new facilities that would require energy. During operations, the project would only require fuel for vehicles and equipment used by working crews. The impact would be **less than significant**.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would not conflict with a state or local plan for renewable energy. Currently, no state or local plans restrict vegetation management activities, and equipment and machinery used would comply with all state and local energy efficiency standards. The impact would be **less than significant**.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative 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 geological feature?	☐	☐	☒	☐

3.7.1 ENVIRONMENTAL SETTING

There are no known active faults in the project area. The closest active faults are the Foothills Fault system (Melones and Bear Mountains Fault Zones) located approximately 15 miles west of the project area (USGS 2019)

Rock outcrops of granitic origin are common (i.e., Metamorphic rock land soil series); and soils in the project area consist of rocky and cobbly loam, sandy loam, and alluvium derived from volcanic, slate/sandstone parent material, and granitic parent material (USGS 2013).

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

The California Geological Survey does not list the County of El Dorado as a county affected by the Alquist-Priolo Earthquake Fault Zone (DOC 2010). The faults that exist in the vicinity of the project area are not listed as surface fault ruptures. No portion of El Dorado County is located in a Seismic Hazard Zone (California Geological Survey identified areas prone to liquefaction and earthquake induced landslides).

The project is limited to vegetation clearance activity and would not include the construction of any structures that would be subject to rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, or landslides. Therefore, there would be **no impact**.

b) Result in substantial soil erosion or the loss of topsoil?

Project implementation would include vegetation activities that could result in soil erosion. Vegetation clearance conducted along steep slopes would take place by crews using hand held equipment rather than powered machinery. Some vegetation cleared would also be left in place for further slope stabilization. This approach will reduce potential for erosion because machinery tends to disturb soil and steep gradients can accumulate sediment and debris that mobilizes suddenly creating debris flows and severe scouring downslope. EID would follow all measures set forth in the California Forest Practice Rules to minimize soil erosion which would avoid potential for soil erosion. Impacts are **less than significant**.

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?

Project implementation is anticipated to result in minimal ground disturbance. In sloped areas where the greatest potential for landslide would occur, vegetation management activities would be limited to crews conducting thinning and pruning with chainsaws and hand tools. In addition, there are no structures proposed, so the project would not expose soils to subsidence, liquefaction, or collapse, and would not pose a hazard to people or structures. Vegetation clearance would not pose a significant risk from landslides, lateral spreading, subsidence, liquefaction, or collapse. There would be **no impact**.

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

The project would not include construction of habitable structures, and therefore is not expected to create substantial risks to life or property. Impacts would be **less than significant**.

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?

The project would not include the use of septic tanks or alternative wastewater disposal systems. **No impact** would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Paleontological resources are typically present in sedimentary rock formations. The likelihood of paleontological resources being present in the project area is considered very low as El Dorado County's geology is primarily igneous (volcanic) where paleontological resources are not known to exist (El Dorado County 2003). The project area does not contain any known fossil locations or known paleontological sites. Impacts would be **less than significant**.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 ENVIRONMENTAL SETTING

Certain gases in Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining Earth's surface temperature. A portion of the solar radiation that enters the atmosphere is absorbed by Earth's surface, and a smaller portion of this radiation is reflected toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the atmosphere; therefore, infrared radiation released from Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Without the naturally occurring greenhouse effect, Earth would not be able to support life as we know it. However, GHG emissions associated with human activities are likely responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of Earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate (IPCC 2014).

GHGs are present in the atmosphere naturally; are released by natural and anthropogenic (human-caused) sources; and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change:

- carbon dioxide (CO_2)
- methane (CH_4)
- nitrous oxide (N_2O)
- hydrofluorocarbons
- perfluorocarbons
- sulfur hexafluoride

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The concept of CO_2 equivalents (CO_2e) is used to account the different GWP potentials of GHGs to absorb infrared radiation. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation, and the length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of 1. The other main GHGs that have been attributed to human activity are CH_4, which has a GWP of 21, and N_2O, which has a GWP of 310 (UNFCC 2013). For example, 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2. GHGs with lower emissions rates than CO_2 still may

contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes ultimately to result in climate change is not known precisely; the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to a global, local, or micro-climate. From the standpoint of CEQA, GHG-related effects to global climate change are inherently cumulative.

MANDATORY GREENHOUSE GAS REPORTING RULE

On October 30, 2009, the EPA published the final version of the Mandatory Greenhouse Gas Reporting Rule in the Federal Register. In general, compliance with this national reporting requirement provides EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons (MT) or more of CO_2 annually. An estimated 85 percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule. Subsequent rulings have expanded the emissions sources required to report emissions data, and now include oil and natural gas industries, industrial wastewater treatment plants, and industrial landfills.

EXECUTIVE ORDER S-3-05

The goal of this Executive Order, enacted on June 1, 2005, is to reduce California's GHG emissions to year 2000 levels by 2010, 1990 levels by 2020, and 80 percent below the 1990 levels by the year 2050. In 2006, this goal was reinforced with the passage of Assembly Bill (AB) 32.

GLOBAL WARMING SOLUTIONS ACT OF 2006 AND EXECUTIVE ORDER S-20-06

The Global Warming Solutions Act of 2006 set the same overall GHG emissions reduction goals as outlined in Executive Order S-3-05. The act further requires that ARB create a plan including market mechanisms and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06, enacted on October 18, 2006, further directed state agencies to begin implementing the act, including the recommendations made by the State of California's Climate Action Team.

The EDCAQMD has no regulations addressing GHG emissions. The EDCAQMD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses. Each project is evaluated on a case-by-case basis, using the most up-to-date calculation and analysis methods. Therefore, to establish additional context in which to consider the order of magnitude of the project's construction-related GHG emissions, this analysis considers the following guidelines on the levels of GHG emissions that would constitute a cumulatively considerable incremental contribution to climate change:

- The San Luis Obispo Air Pollution Control District has adopted 1,150 MT CO_2e as a project-level GHG significance threshold that would apply to annual operational and amortized construction emissions from land use development projects (SLOAPCD 2012).

- The SCAQMD GHG Working Group has proposed a significance screening level of 3,000 MT CO_2 per year for residential and commercial projects (SCAQMD 2008).

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) has a construction phase GHG emissions thresholds of 1,100 MT CO_2e per year (SMAQMD 2015).

Many California air districts, such as the SMAQMD and the SCAQMD, recommend that construction emissions associated with a project be amortized over the life of the project (typically 30 years) and added to the operational emissions. The EDCAQMD's CEQA Guide to Air Quality Assessment includes numerous references to methodologies developed by the SMAQMD and the SCAQMD for criteria pollutant emissions. Therefore, because of lack of a specific GHG threshold or guidance from the EDCAQMD, referencing methodologies and guidance from those agencies is considered to be appropriate when discussing GHG emissions. The information regarding other jurisdictions' thresholds are provided for comparative purposes only. These thresholds are not applicable to the project and are not intended to be used for assessing the environmental impact of associated GHG emissions.

3.8.2 DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The project objective is to promote a healthy forest, promote carbon sequestration, and provide long term benefit. In the short term, activities associated with implementation of the proposed project could produce GHGs when conducting prescribed burns or burning slash piles. Work permitted under the VMP would be ongoing. However, as shown in Table 3.8-1, prescribed burns contribute far less CO_2 or ozone than what wildland fires generate. As such, while individual prescribed burn projects implemented under the project would introduce some emissions of CO_2 or ozone overall the project would reduce the potential release of greenhouse gas emissions in the long term. Therefore, the Plan would not significantly increase greenhouse emissions. Fuel reduction calculations were conducted using Calfire Calculator and Forest Vegetation Services (FVS) model. Output files for the calculations are provided in Appendix A and summarized below in Table 3.8-1

Table 3.8-1. Net GHG Benefit of Proposed Project

CALIFORNIA CLIMATE INVESTMENTS Cap and Trade Dollars at Work	Project Name:	El Dorado Irrigation District Veg Management Project
	Grant ID, if applicable:	5GG17112
GHG Summary Worksheet		
GHG benefit from fuels reduction activities (MT CO_2e)		12,088
Net GHG Benefit (MT CO_2e)		12,088

Source Cal Fire and AECOM 2019

Project implementation would generate short-term GHG emissions related to the use of vehicles, mechanical equipment, and prescribed burning. Smaller equipment such as chainsaws and chippers would be used. These activities would be short-term at each project location and would cease following completion of the project. Emissions at each of the project sites would vary depending on duration and equipment used.

GHG emissions generated by the project would consist primarily of CO_2. Emissions of other GHGs, such as CH_4 and N_2O, are important with respect to global climate change; however, even when considering the higher GWPs

of these other GHGs, their contribution to total GHG emissions is small compared with CO_2 emissions from the project's emission sources (i.e., mechanical equipment and on-road vehicles).

In summary, the project would conduct vegetation clearance as a way to remove fuel load and decrease the potential for large wildland fires that release greenhouse gases. Project implementation would also promote the carbon sequestration capacity of the forest. It is anticipated that short-term equipment and vehicle usage in the project area would not generate emissions that would have a significant impact on the environment. Therefore, there would be a **less than significant** impact.

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

The project would not generate GHG emissions that would have a significant impact on the environment. Neither EID nor any other agency with jurisdiction over the project has adopted climate change or GHG reduction measures with which the project would conflict. The project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Therefore, there would be a **less than significant** impact.

3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 ENVIRONMENTAL SETTING

The SWRCB GeoTracker and the California Department of Toxic Substances Control (DTSC) EnviroStor database were searched to identify toxic releases, hazardous waste, or other violations that could affect the project site (SWRCB 2019; DTSC 2019). There is one leaking underground storage tank (LUST) cleanup site in or near the project area: Pacific Gas and Electric Company **(**PG&E) CAMP #5 located at 7225 HYW 50 in Pollock Pines.

WILDFIRE RISK AND RESPONSE

PRC 4201-4204 and Government Code 51175-51189 require identification of fire hazard severity zones in California. CAL FIRE has established a fire hazard severity classification system. Fire hazard severity zones are

measured qualitatively, based on vegetation, topography, weather, crown fire potential (a fire's tendency to burn upwards into trees and tall brush), ember production, and movement within the area being consumed.

Fire prevention areas considered to be under State jurisdiction are referred to as State Responsibility Areas (SRA). In such areas, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. All project sites are within an SRA and has been identified by CAL FIRE as being in a Very High, High, and Moderate Fire Hazard Severity Zone (CAL FIRE 2007).

Battalion 1 of CAL FIRE's Amador-El Dorado Unit has primarily responsibility for response to wildland fires in the project area (CAL FIRE 2018). Battalion 1 encompasses approximately 590,000 acres in El Dorado and Sacramento counties. El Dorado County communities within the Battalion include Camino, Diamond Springs, El Dorado, El Dorado Hills, Pioneer, Logtown, Latrobe, Nashville, Cameron Park, Placerville, Pleasant Valley, Pollock Pines, Rescue, Shingle Springs, and Grizzly Flats. Within Battalion 1, El Dorado Station 43 would provide first response to the project site. El Dorado Station 43 houses two Type III fire engines and one Type II fire dozer (CAL FIRE 2018). It also houses one dozer tender unit and is the Battalion Chief Headquarters. El Dorado Station 43 is approximately 10 miles west of the project area, at 5660 Mother Load in Placerville.

3.9.2 DISCUSSION

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?

Project implementation is not anticipated to create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Burning of slash would occur intermittently and would follow rules set forth in the California Forest Practice Rules. Vegetation clearance activities could result in minor use, storage, and disposal of hazardous materials such as equipment fuel, however hazardous wastes would be disposed of in accordance with applicable federal, State and local requirements. Project impacts would be **less than significant.**

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project area is not located within 0.25 mile of any school. **No impact** would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

There is one cleanup site located in the Camp 5 project area. There is one leaking underground storage tank (LUST) cleanup site, PG&E CAMP #5 located at 7225 HYW 50 in Pollock Pines (State Water Resources Control Board 2019). This site was closed in 1996 and would therefore not create a significant hazard to the public or environment. In addition, the project would not require soil excavation and no structures would be developed. Project impacts would be **less than significant**.

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?

The project area is not located within an airport land use plan area or within 2 miles of a public or public use airport (El Dorado County Transportation Commission 2018). There would be **no impact**.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would not include road closures or generate substantial traffic volumes that could create a hazard or slow the movement of vehicles. Therefore, project implementation would not interfere with any adopted emergency response plan or emergency evacuation plan, including any EID emergency response plan or the El Dorado County Operational Area Multi-Hazard Functional Emergency Operations Plan, as implemented by the County Office of Emergency Services (OES) of the County Sheriff's Department. **No impact** would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Project implementation is not anticipated to result in significant fire hazard. The Project involves vegetation management with the intent to reduce the risk of wildfire exposure to people or structures and directly or indirectly reduce the risk of loss, injury, or death involving wildfire. The project sites are located in areas considered a WUI. WUI's are transition zones between human development and wildland areas that could be affected by wildland fire. Weber Reservoir is within the WUI in the communities of Camino and Pollock Pines more than 3,000 habitable structures that could be affected by wildland fire. Sly Park Recreation Area is within the WUI in the community of Pollock Pines with more than 5,000 habitable structures that could be affected by wildland fire. Camp 5 is within the WUI in the communities of Pollock Pines and Fresh Pond with more than 3,000 habitable structures that could be affected by wildland fire.

Implementation of EID's vegetation management project would reduce future fire intensity and severity to the project areas by reducing surface fuels, increasing the height to tree canopy, decreasing crown density, and retaining large fire-resistant trees. Project related activity would return the project area to a managed, fire resistant condition that would benefit local communities and EID's critical infrastructure by create a fire resilient landscape which reduces the rate of spread, duration and intensity of future wildfires. Small-scale burning operations associated with vegetation clearance would follow the procedures set forth in the California Forest Practice Rules to minimize fire risk. Impacts would be **less than significant**.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
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 that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.10.1 ENVIRONMENTAL SETTING

Climate in the District service area is characterized by sunshine in the summer, moderate to heavy precipitation in the winter, and wide temperature ranges. Strong flows of marine air from the Pacific Ocean result in heavy precipitation in the winter. Precipitation in the summer is generally limited to a few scattered thunderstorms during the summer months. The historical annual average precipitation is approximately 38 inches. Temperatures throughout the service area range from warm in the summer to cold in the winter, with average monthly temperatures of 75°F in July and 42°F in January (Western Regional Climate Center 2019). The District facilities are located within the mid-elevational range of the Sierra Nevada ecoregion, from 2,280 feet above mean sea level (AMSL) at the Weber Reservoir facility to 4,040 feet AMSL at the Flume 46 facility.

The project area lies within two major watersheds: the South Fork American River in the north and the North Fork Consumes River in the south.

The project area is not located within a 100-year floodplain (FEMA 2019).

3.10.2 DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

There is the potential for erosion to occur with project implementation that could result in the violation of water quality standards or water discharge requirements. Movement of surface soils will likely occur during the process of clearing the treatment area of vegetation and before new plant cover is established. The amount of soil erosion is influenced by clearance method, soil type, intensity of precipitation, slope angle, and the density of plants debris and litter remaining after treatment.

The project would not require grading of soil to create access roads as work crews can utilize existing roads to access treatment areas. Vegetation clearance would occur by use of powered tools, machinery, and hand tools. No herbicides or other chemical treatments will be applied during the vegetation clearance. Vegetation clearance conducted along steep slopes would take place by crews using hand held equipment rather than motorized machinery. This approach will reduce potential for erosion because steep gradients can accumulate sediment and debris that can mobilize suddenly creating debris flows and severe scouring. Work exclusion areas will be identified around riparian zones in accordance with the Forest Practice Rules. This approach will provide a buffer of land that separates soil disturbed by vegetation clearing and minimize the potential for surface runoff to transport sediment to the drainage and create a potential for increased turbidity.

By following these techniques and complying with the best management practices outlined in the California Forest Practice Rules to minimize erosion and other BMPs, the potential impacts would be reduced to a **less than significant** level.

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

Project implementation would not involve extraction of groundwater or involve placement of impervious surfaces in an area designated for groundwater recharge. The project would not deplete groundwater supplies and would not interfere substantially with groundwater recharge. **No impact** would occur.

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?

Vegetation clearance activities would not alter the course of a stream or river. Project implementation would not increase impervious surfaces. The project would follow California Forest Practice Rules found in Title 14, California Code of Regulations, Chapters 4, 4.5, and 10 that require prescribed activities to reduce soil erosion and siltation of waterways. Therefore, project impacts would be **less than significant**.

(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Project implementation would not introduce pavement or other impervious surfaces that would increase the rate of flow from surface runoff beyond existing conditions. Project related activity would follow measures set forth in the California Forest Practice Rules to minimize surface runoff. Therefore, the project would not substantially increase the potential for on-site and off-site flooding by increasing the amount of surface runoff through the addition of impervious surfaces. Therefore, the project would have a **less than significant** impact.

(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?

The project does not drain to an existing stormwater drainage system. There would be **no impact**.

(iv) Impede or redirect flood flows?

The project area is not located within a 100-year floodplain (FEMA 2019). Therefore, runoff flows from the project area would not impede or redirect flood flows. There would be **no impact**.

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

The project area is not located within a 100-year floodplain (FEMA 2019). There are no surface water bodies in the vicinity of the project site that could generate damaging seiches (i.e., sloshing of water in an enclosed or restricted water body). The project would have **no impact**.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Project operation would not result in conflicts with implementation of a water quality control plan or sustainable groundwater management plan. Vegetation clearance activities would not result in conditions that would alter or contribute to conflicts with an applicable water quality control plan or sustainable groundwater management plan. Vegetation management can enhance ecosystem services, such as improve soil and water quality. In addition, vegetation management can lower the effects of a catastrophic wildfire on water quality, including degradation of water quality as shade is removed, increasing the water temperature and creating the potential for subsequent rain to carry sediment from newly exposed soil into waterways. There would be a **less than significant** impact.

3.11 LAND USE AND PLANNING

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

3.11.1 ENVIRONMENTAL SETTING

The project area includes 570 acres of District-owned property spanning four District facilities: Weber Reservoir; Sly Park Recreation Area; Camp 5 Maintenance Yard (Camp 5); and Flume 46 on the El Dorado Canal (Flume 46). Weber Dam and Reservoir is sited along the North Fork Weber Creek. The Sly Park Recreation Area project area is within the Pollock Pines community region. Surrounding properties consist of moderately dense residential development to the west and Sierra Pacific Industries and U.S. Forest Service-managed timberlands to the north, east, and south. Camp 5 is surrounded by residential neighborhoods with numerous private homes immediately adjacent to the facilities. Flume 46 is a 0.75-mile long wooden flume that represents a key segment of the El Dorado Canal. It is built into the side of a steep, north-facing slope vegetated by mixed conifer and montane hardwood forest plant communities.

A Forest Management Plan was developed as part of the SPRA Master Plan. The SPRA Master Plan contains design standards and guidelines, including for fuel load management, shore and creek protection, and vegetation management and restoration. SPRA has an ongoing and effective fuels management program that utilizes under-story burning during the fall. Controlling vegetation and maintaining fuel breaks help control canopy openings, minimize vertical and horizontal fuels, and reduce ongoing maintenance needs over time (El Dorado Irrigation District 2007).

3.11.2 DISCUSSION

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?

The following discussion addresses items a) and b) for Land Use and Planning. There would be no new development as part of the project and there would be no change in land use associated with project implementation. The project supports the El Dorado County General Plan Public Health, Safety and Noise Element, Fire Safety Goal 6.2 Fire Hazards to “Minimize fire hazards and risks in both wildland and developed areas”. In addition, all proposed activities must be consistent with the prescribed forest practices for the management area as described in the US Forest Service Land and Resources Management Plan. Vegetation clearance to promote healthy forests and preserve water quality is consistent with this management objective**.**

All project activities would occur in a manner consistent with the SPRA Master Plan and the California Forest Practice Rules. The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and would not physically divide an established community. There would be **no impact**.

3.12 MINERAL RESOURCES

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

3.12.1 ENVIRONMENTAL SETTING

According to the California Geological Survey's Mineral Land Classification of El Dorado County, California (Department of Conservation 2001), the project area is not located in an area designated as a Mineral Resource Zone. There are no mineral extraction sites on or in the vicinity of the project area. The project area is also not included in any Mineral Resources designation of the El Dorado General Plan.

3.12.2 DISCUSSION

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?

The following discussion addresses items a) and b) for Mineral Resources. The project would not result in the loss of availability of a known mineral resource or locally important mineral resources recovery site. The project would have **no impact**.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive 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?	☐	☐	☐	☒

3.13.1 ENVIRONMENTAL SETTING

The project area consists primarily of vegetation areas adjacent to EID facilities with scattered rural residential development adjacent to the project area. The most significant source of noise generated in the project area is associated with vehicular traffic on Highway 50. Other noise sources in the project vicinity include stationary noise sources such as recreational activity in the project area, and intermittent noises from activities at the surrounding EID facilities.

3.13.2 DISCUSSION

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?

Proposed project activities would include the use of mechanical mastication equipment, chainsaws, chippers, pole saws, and hand tools. Vegetation clearance would cause short-term and temporary increases in noise levels that could exceed County noise compatibly standards on short term basis. However, the work would only occur during daytime when people are less susceptible to noise and would be temporary in nature. Policy 6.5.1.11 in the El Dorado County General Plan, Health, Safety, and Noise Element states applicable noise standards "shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays". In addition, the standards "shall not apply to public projects to alleviate traffic congestion and safety hazards" (El Dorado County 2004). Noise levels are not anticipated to be significant as it would be intermittent throughout the day during the hours of 7:00 am to 7:00 pm, or between 8 a.m. and 5 p.m. on weekends and would only occur for a short period of time.

In addition, noise levels would vary depending on the project area location and equipment being used. Typically, noise may be heard in one area on average for one week until vegetation clearance activities move to different areas. The nearest sensitive receptors would be visitors at the Sly Park Recreational Area and landowners adjacent to an active treatment area. As stated above, activities would be limited to daytime hours when people are less sensitive to noise (7:00 am to 7:00 pm weekday, and 8 a.m. and 5 p.m. on weekends). In addition the activity would generate noise on an intermittently within these time period and would occur at varying locations around the treatment area so no one use is subject to continuous noise generated by project activity. Finally, noise generated by the project would move as specific treatment areas are targeted at each of the sites represent the project area and cease upon completion of the vegetation clearance. The project would not substantially increase noise levels on or near the project site. This impact would be **less than significant**.

b) Generation of excessive vibration or groundborne noise levels?

The project may generate perceptible vibration and groundbourne noise levels in the immediate vicinity. However, proposed activities would be short-term, intermittent, and occur during the hours of 7:00 am to 7:00 pm, or between 8 a.m. and 5 p.m. on weekends. Therefore, the impact would be **less than significant**.

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?

There are no public or private airports within 2 miles of the project area, and the project area is not within an airport land use plan. Therefore, the project would not expose people residing or working in the project area to excessive noise levels. There would be **no impact**.

3.14 POPULATION AND HOUSING

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

3.14.1 ENVIRONMENTAL SETTING

The project area is on District owned property in El Dorado County. Portions of the project area are adjacent to residential areas, however no homes are located in fuel treatment activity areas or within the boundaries of any EID facility.

3.14.2 DISCUSSION

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?

The following discussion addresses items a) and b) for Population and Housing.

Proposed project activities would not include construction of new homes or businesses and would therefore not directly or indirectly induce substantial unplanned population growth, nor would it displace housing or people. There would be **no impact**.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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?	☐	☐	☐	☒

3.15.1 ENVIRONMENTAL SETTING

The El Dorado County Fire District provides fire protection services to El Dorado County. The Fire District has six staffed and seven unstaffed volunteer fire stations, and 72 uniformed personnel and three support personnel (El Dorado County Fire District 2019). The Fire District responds to structural fires, vehicle accidents, medical aid requests, or any other emergencies. The nearest fire station to the Weber Reservoir and Sly Park Recreation Area project area is El Dorado County Fire Station 18 located at 5785 Sly Park Rd in Pollock Pines. The nearest fire station to Camp 5/ Flume 46 is El Dorado County Fire Station 17 located at 6430 Pony Express Trail in Pollock Pines.

Law enforcement in El Dorado County is provided by the El Dorado County Sheriff's Department. The Sheriff's Department operates from its headquarters in Placerville and from substations in South Lake Tahoe, El Dorado Hills, and Georgetown (El Dorado County Sheriff's Department 2017). The Sheriff's Department is responsible for managing the OES in El Dorado County. The OES is responsible for planning, response, recovery and mitigation of large-scale emergencies, and it provides a link between local emergency services and the State (El Dorado County Sheriff's Department 2017). The nearest Sheriff's substation to the project area is located at 6430 Pony Express Trail in Pollock Pines.

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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

The project would not include new housing or businesses that would increase population levels and result in an increase demand for fire protection services and facilities. Implementation of EID's vegetation management project will reduce future fire intensity and severity by reducing surface fuels, increasing the height to tree canopy, decreasing crown density, and retaining large fire-resistant trees. Therefore, the project would not affect the El Dorado County Fire District's response times or other performance objectives, and would not result in construction of new or expansion of existing fire protection facilities. **No impact** would occur.

POLICE PROTECTION

The project would not increase the population in the project area because no housing is proposed. Project related activity would not increase demand for police protection services or require additional Sheriff's Department staffing to maintain its officer-to-population service ratio. Therefore, the project would not generate the need for construction of new or expansion of existing police protection facilities. **No impact** would occur.

SCHOOLS

Project implementation would not create any new housing that would generate new students or increase the demand for school services and facilities. **No impact** would occur.

PARKS

The project would not increase the population in the project area because of new housing or employment opportunities. Therefore, the proposed project would not increase the use of existing neighborhood or community parks or require construction of new parks to meet the County's parkland standard. **No impact** would occur.

OTHER PUBLIC FACILITIES

The project would not increase the population in the project area as a result of new housing or employment opportunities. Therefore, project operation would not increase demand for other public facilities. The project would have **no impact**.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 ENVIRONMENTAL SETTING

Sly Park Recreation Area (SPRA) is popular and heavily used for recreation from May through early September by local residents and visitors from outside of the area. Recreational use is more limited at other times of the year, and visitors during these periods consist primarily of local residents. SPRA includes Jenkinson Lake, which provides recreational opportunities to visitors. Other assets in the SPRA include twelve campgrounds, trails, office buildings, parking areas, roadways, and restrooms.

3.16.2 DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Project implementation would not increase the population in the project area because of new housing or employment opportunities. The project would not create additional recreational demand that would increase the use of existing neighborhood and regional parks or other recreational facilities. **No impact** would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would not include recreational facilities or create additional recreational demand that would require the construction or expansion of recreational facilities. **No impact** would occur.

3.17 TRANSPORTATION

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

3.17.1 ENVIRONMENTAL SETTING

The project area covers 570 acres of District-owned property spanning four District facilities located in El Dorado County. U.S. Highway 50 provides regional access to these communities and the project areas. Access would be provided to Weber Reservoir at two points. The south access point: would be taken from an existing unpaved road that runs parallel to Weber Reservoir. Access would also be provided from private property to the north where the landowner has granted access and staging of equipment on an existing unpaved road way and turnout area. Access to Sly Park Recreation Area would be provided by paved and unpaved roads that occur throughout the park. Access to Camp5/Flume 46 would be provided by existing service roads.

3.17.2 DISCUSSION

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

Project implementation would not introduce any new land uses or activities in the project area that would generate long-term increases in traffic volume. Potential traffic increases would be limited to intermittent travel to and from project sites over a limited period of the years2019–2021.There would be no street or lane closures and no new roads would be constructed as part of the project.

Vehicle trips associated with transportation of crews and equipment to the treatment area would be generated for a short-term and would cease at project completion. The project would not generate a volume of trips that is considered substantial in relation to the existing traffic load and capacity of the street system. Therefore, the project would not interfere with a plan program or policy directed at the circulation system. The project would not conflict with adopted applicable policies or plans related to the performance of the circulation system. The impact would be **less than significant**.

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

CEQA Guidelines Section 15064.3, subdivision (b) Criteria for Analyzing Transportation Impacts includes provisions for evaluation a project's transportation impacts. by using the vehicles miles traveled (VMT) metric. According to the guidelines, a lead agency may elect to be governed by the provisions of Section 15064.3 immediately; or beginning July 1, 2020, when the provisions apply statewide. CEQA Guidelines Section 15064.3, subdivision (b)(3) allows for a qualitative analysis of potential impacts related to VMT. The project would not require a change to the existing land use designation. Operations following project completion would change compared to existing conditions. Project implementation would not result in long-term increases in vehicle miles traveled. Therefore, **no impact** would occur.

c) Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not change the existing design features of roads and highways in the project vicinity. Slow-moving trucks entering and exiting at this location could pose a hazard to other vehicles traveling on the area roadways. However, proposed activities would be temporary and access to the sites is from existing roadways with adequate line of site, so project implementation would not substantially increase hazards due to a design feature or incompatible use. The project would have a **less than significant** impact.

d) Result in inadequate emergency access?

The project would not result in inadequate emergency access. Slow-moving trucks entering and exiting the project area could slightly delay the movement of emergency vehicles. However, the trucks would typically pull to the side of the road when emergency vehicles use their sirens. Additionally, vehicle traffic would be short-term and intermittent and would only contribute a small percentage of the overall traffic. Street closures would not be required during construction. Therefore, the project would not result in inadequate emergency access during project construction. The project would have a **less than significant** impact.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 ENVIRONMENTAL SETTING

Tribal cultural resources are defined in CEQA as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, which may include non-unique archaeological resources previously subject to limited review under CEQA.

ASSEMBLY BILL 52 NATIVE AMERICAN CONSULTATION

AB 52 requires the lead agency to begin consultation with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification and requests the consultation (Public Resources Code Section 21080.3.1[d]).

3.18.2 DISCUSSION

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape,

sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listed in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k)?

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

Tribal consultation was conducted by EID. On October 10, 2019, tribes requesting consultation pursuant to AB 52 were notified of the project. Tribes notified include United Auburn Indian Community of the Auburn Rancheria, Wopumnes Nisenan-Mewuk Nation of El Dorado County, Torres Martinez Desert Cahuilla Indians, and Wilton Rancheria. United Auburn Indian Community of the Auburn Rancheria (UAIC) responded and requested consultation. On March 20, 2019, EID met with the United Auburn Indian Community of the Auburn Rancheria and toured the Sly Park and Weber Reservoir sites. No tribal cultural resources within the project area have been identified as a result of this consultation.

As noted in checklist response 3.5 “Cultural Resources” three previously conducted cultural resources inventories (NCIC report numbers 464, 8752, and 9003) conducted within the Sly Park Recreation Area identified prehistoric artifacts that are NRHP Eligible. While located in Sly Park, these artifacts are outside the proposed treatment area. Though unlikely, soil disturbance during project activities could damage previously unrecorded cultural resources. If buried historical or archaeological resources were inadvertently discovered and impacted during project implementation, this would be a potentially significant impact. Mitigation Measure CUL-1 found in Section 3.5 would be implemented to reduce this potentially significant impact to a **less than significant** level.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 ENVIRONMENTAL SETTING

The project would not be served by any water, wastewater, storm water, electric power, natural gas, or telecommunication facilities.

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?

The project would not include any new development that would require relocation or construction of new or expanded municipal wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities. **No impact** would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project would not include new development that would require water supplies. **No impact** would occur.

c) Result in a determination by the wastewater treatment provider that 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?

The project would not generate new wastewater flows. Therefore, the project would not exceed a wastewater treatment provider's capacity. **No impact** would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No solid waste would be generated by the project. **No impact** would occur.

3.20 WILDFIRE

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

3.20.1 ENVIRONMENTAL SETTING

The long, hot, dry summers in El Dorado County, combined with poor road access, inadequate clearance between structures and vegetation, flammable vegetation, and steep topography result in severe seasonal wildfire conditions every year. The California Public Resources Code requires the designation of State Responsible Areas (SRAs), which are identified based on cover, beneficial water uses, probable erosion damage and fire risks, and hazards. In such areas, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. CAL FIRE designates the Weber Reservoir, Sly Park Recreation Area, and Camp 5/Flume 46 project areas primarily in a Very High, High, or Moderate Fire Hazard Severity Zone in a State Responsibility Area.

The project sites are located in areas considered a WUI. WUI's are transition zones between human development and wildland areas that could be affected by wildland fire. Vegetation management activities can prevent wildfires and protect disadvantaged communities, infrastructure, and forest resources within the WUI. The project sites are considered WUI defense zones where the focus is to protect life and property.

3.20.2 DISCUSSION

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Project implementation would not impair an adopted emergency response plan or emergency evacuation plan. See Section 9, Hazards and Hazardous Materials, item f. There would be **no impact**.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project would support the goals and objectives of numerous strategic plans in the area including: California Strategic Fire Plan; 2012 Strategic Fire Plan for Amador-El Dorado- Sacramento Alpine Unit; 2015 CAL FIRE Amador- El Dorado Ranger Unit Strategic Fire Plan; National Cohesive Wildland Fire Management Strategy; and El Dorado County Community Wildfire Protection Plan (CWPP**).**

The goal of the project is to return the project areas to a more managed, fire resistant condition and to protect local communities, EID's critical infrastructure, and water quality from the effects of catastrophic wildfire. Vegetation management activities help contain potential wildfires and facilitate long-term, collaborative ecosystems stewardships to protect critical and domestic water supplies and nearby homes and commercial structures. Therefore, the project would not exacerbate wildfire risk, or expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. The impact would be **less than significant**.

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?

The project would not require the installation or maintenance of additional associated infrastructure. Therefore, the project would not exacerbate fire risk. The impact would be **less than significant**.

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?

The project would not include development that would expose people or structures to significant risks associated with wildfires, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. Vegetation management decreases the potential for damage from flooding and siltation (CAL FIRE 2019). The impact would be **less than significant**.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Authority: Public Resources Code Sections 21083 and 21083.05.

Reference: Government Code Section 65088.4; Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.21.1 DISCUSSION

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

The project would not substantially, reduce the habitat of fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels. Implementation of the mitigation measures presented in Sections 3.5 and 3.6 would mitigate potential significant impacts that would substantially degrade the quality of the environment, or impact biological or cultural resources. The potential impacts identified in this document would be **less than significant** with mitigation incorporated.

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.)

The project would not have impacts that would be cumulatively considerable. The temporary and intermittent nature of the project's impacts and negligible long-term effects would result in **no impacts, less than significant impacts, or less than significant impact with mitigation.** No known past, present, or future projects in the project area would contribute in a cumulative manner to effects on the environment.

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

The project outcome would promote a healthy forest that is less prone to catastrophic wildfires and would support the objectives of state and local fire plans intended to protect the nearby communities of Pollock Pines and Camino. This impact would be **less than significant**.

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