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Initial Study-Mitigated Negative Declaration for the proposed North Fork American River Shaded Fuel Break Project Placer County, California State Clearinghouse Number 2025040655

prepared by:

The California Department of Forestry and Fire Protection
The Lead Agency Pursuant to § 21082.1 of the
California Environmental Quality Act

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August 12, 2025

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MITIGATED NEGATIVE DECLARATION

1. *Introduction and Regulatory Context*

1.1 STAGE OF CEQA DOCUMENT DEVELOPMENT

☐ **Administrative Draft.** This California Environmental Quality Act (CEQA) document is in preparation by California Department of Forestry and Fire Protection (CAL FIRE) staff.

☒ **Public Document.** This completed CEQA document has been filed by CAL FIRE at the State Clearinghouse on August 12, 2025 and is being circulated for a 30-day state agency and public review period. The review period ends on September 12, 2025.

☐ **Final CEQA Document.** This final CEQA document contains the changes made by the Department following consideration of comments received during the public and agency review period. The CEQA administrative record supporting this document is on file, and available for review, at CAL FIRE's Sacramento Headquarters, Environmental Protection Program.

1.2 INTRODUCTION

This initial study-mitigated negative declaration (IS-MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by CAL FIRE staff utilizing information gathered from a number of sources including research, field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to § 21082.1 of CEQA, the lead agency, CAL FIRE, has prepared, reviewed, and analyzed the IS-MND and declares that the statements made in this document reflect CAL FIRE's independent judgment as lead agency pursuant to CEQA. CAL FIRE further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in a significant effect on the environment.

1.3 REGULATORY GUIDANCE

This IS-MND has been prepared by CAL FIRE to evaluate potential environmental effects that could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code §21000 *et seq*.) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq*.)

An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063(a)), and thus, to determine the

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appropriate environmental document. In accordance with CEQA Guidelines §15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The initial study shows that there is no substantial evidence…that the project may have a significant impact upon the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions will reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report. This IS-MND conforms to these requirements and to the content requirements of CEQA Guidelines § 15071.

1.4 PURPOSE OF THE INITIAL STUDY

CAL FIRE is proposing to implement vegetative fuel reduction treatments along a swath of land between Interstate 80 and the North Fork of the American River in Placer County. The purpose of the project is to reduce the risk and severity of wildfire and create a more fire resilient forest. The end goal is a healthier forest with better growing conditions for the residual trees and reduced risk of fire for community.

This document represents portions of an Initial Study for a Mitigated Negative Declaration for the North Fork of the American River Fuel Break Treatment Project (Project). This report follows the State CEQA Guidelines which are codified at California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387, to demonstrate compliance with the California Environmental Quality Act (CEQA; Public Resources Code 21000-21189).

CAL FIRE has primary authority for carrying out the proposed project and is the lead agency under CEQA. The purpose of this IS-MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and to describe the adjustments made to the project to avoid significant effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public and reviewing agencies for review and comment. The IS-MND is being circulated for public and state agency review and comment for a review period of 30 days as indicated on the ***Notice of Intent to Adopt a Mitigated Negative Declaration*** (NOI). The 30-day public review period for this project begins on August 12, 2025 and ends on September 12, 2025.

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CAL FIRE to notify the general public by providing the NOI to the county clerk for posting, sending the NOI to those who have requested it, and utilizing at least one of the following three procedures:

- Publication in a newspaper of general circulation in the area affected by the proposed project,
- Posting the NOI on and off site in the area where the project is to be located, or

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- Direct mailing to the owners and occupants of property contiguous to the project.

CAL FIRE has elected to utilize the on and off site in the area where the project is to be located of the three notification options. An electronic version of the NOI and the CEQA document were made available for review for the entire 30-day review period through their posting at:

https://www.fire.ca.gov/what-we-do/natural-resource-management/environmental-protection-program

If submitted prior to the close of public comment, views and comments are welcomed from reviewing agencies or any member of the public on how the proposed project may affect the environment. Written comments must be postmarked or submitted on or prior to the date the public review period will close (as indicated on the NOI) for CAL FIRE's consideration. Written comments may also be submitted via email (using the email address that appears below), but comments sent via email must also be received on or prior to the close of the 30-day public comment period. Comments should be addressed to:

Len Nielson, Staff Chief, Environmental Protection
California Department of Forestry and Fire Protection
Resource Management Program – Environmental Protection
P.O. Box 944246
Sacramento, CA 94244-2460
Email: sacramentopubliccomment@fire.ca.gov

After comments are received from the public and reviewing agencies, CAL FIRE will consider those comments and may (1) adopt the mitigated negative declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project.

2. Project Description and Environmental Setting

2.1 Project Location

The proposed project area is located in Placer County between the communities of Auburn and Colfax. The total project work area includes 6,051 acres parallel to and in between the North Fork of the American River and Interstate 80. The project area consists of 5,946 acres of land held in private ownership and 105 acres of land administered by the Bureau of Land Management. While fuel reduction treatments will likely occur on both private and federal lands, federal lands located within the project area will be permitted under a separate NEPA process and are not included in this project analysis. The legal descriptions for the project are indicated in Table 1.1 below.

Table 1 – Project Location by Township, Range, and Section, All within the Mount Diablo Base and Meridian.

Township	Range	Sections

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15 North	9 East	23,26,25,36,35
14 North	9 East	2,1,11,12,14,13,23,24,27,26,25,33,34,35
13 North	9 East	3,2,4,10,9,17,16,15,19,20,21,29,30,31
13 North	8 East	25,26,35,36

2.2 BACKGROUND AND NEED FOR THE PROJECT

Wildland fire is the primary threat to property and natural resources in the northern Sierra Nevada foothills. Of the 20 largest and most damaging wildfires in California history, 17 (85%) of those fires have occurred in the last 15 years. Fire history is well documented near the project area. Over the past 20 years, there has been 12 wildfires in the North Fork American River Canyon adjacent to the project area, burning over 8,050 acres and threatening thousands of homes within multiple communities. The project is adjacent to the North Fork of the American River Canyon, which is included in the Auburn State Recreation Area, and is a major concentration of public use. Approximately 567 structures are located within 1,000 feet of the project area with several thousand more homes within ½ mile of the project area. These residents are at high wildfire risk due to the unnaturally high fuel loading present in the area, and proximity to the Canyon and highway corridor. Enhanced protection for 8 communities will be provided by this project including Bowman, Clipper Gap, Applegate, Heather Glen, Weimar, Colfax, Cape Horn and Iowa Hill. The project is necessary to reduce the risk of injury and damage associated with wildland fire.

In 2019 this project was identified as one of Governor Gavin Newsom's priority fuel reduction projects within the state of California. Prior work implementation includes construction of 850-acres of shaded fuel break under the Governor Gavin Newsom's Executive Order N-05-19. The project proposes to alter the vegetative fuel structure in the project area to decrease fire intensity, improve the safety of ingress and egress for the public to evacuate and fire personnel to respond. Proper implementation of the project will allow fire suppression activities to be more efficient and effective.

2.3 PROJECT OBJECTIVES

The project is intended to reduce the rate of spread and severity of uncontrolled vegetation fires and to provide locations where fire fighters can safely suppress active wildland fires and protect structures and private property damage. To achieve this objective, treatments are designed to create a zone of reduced fuel loading along the rim of the North Fork of the America River Canyon, allowing for a greater probability of preventing a fire originating in the canyon from spreading into adjacent communities. The project also proposes to treat fuels along roadways to provide safer evacuation corridors, improved emergency ingress/egress, and provide increased defensible space beyond PRC 4291 requirements around structures in the project area.

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2.4 Project Start Date

The implementation of this project will occur in phases depending upon available funding. One CAL FIRE grant is approved to fund a portion of the project east of Weimar. That phase of implementation will begin as soon as the CEQA compliance is achieved, perhaps as soon as the Fall of 2025.

2.5 Project Description

The proposed project would treat and maintain up to 6,051 acres incrementally as implementation funding becomes available from various sources. The project treatments include mastication, hand cutting, chipping of cut material, hand and mechanical piling, pile burning of material, pruning of trees, targeted herbicide application by hand following consultation with a California Licensed Pest Control Advisor (PCA), and prescribed broadcast burning. Project treatments are summarized by the following tables.

Mastication (Mowing):

The mastication (mowing) treatment can be applied to the tree, grass, and brush dominated vegetation types present in the project area, up to a maximum slope of 30% for wheeled equipment, 50% for tracked equipment, and 65% for walking excavator type equipment.

Mastication (Mowing) Treatment Specifications:

Type of Treatment	Treatments to be performed
Tree Removal	-Cut specified quantity of conifers less than 12 inches DBH within the drip line of a tree larger than 12 inches DBH. Cut specified quantity of hardwoods less than 6 inches DBH within the drip line of a tree larger than 12 inches DBH. -Outside the drip line of larger trees thin conifers less than 12 inches DBH and hardwoods less than 6 inches DBH to achieve an average tree spacing of 17 feet (includes trees of all species and sizes). -Tree removal specifications and removal or retention standards to be prescribed by an RPF or supervised designee prior to cutting.

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Type of Treatment	Treatments to be performed
Brush Removal	-For Conifer and Hardwood dominated areas, cut brush within the project area, except that, in areas where such removal would result in no brush being present within a 150-foot circle in any given treated location, under which scenario, 100 to 400 square foot patches of brush would be retained throughout the unit as needed. -For shrub dominated areas shrubs will be thinned to the extent that there is 1 shrub every 30 feet.
Dead woody material	-Masticate dead woody debris larger than 1 inch in diameter and smaller than 14 inches in diameter.
Pruning	-Prune all conifers and hardwoods selected by field staff to a height of 8 feet or to 50% live crown, whichever is less.
Standing dead tree removal	-Standing dead trees up to 12 inches DBH will be felled when identified by an RPF or designee by marking prior to being felled.
Slash treatment	-All material generated by the treatments listed above shall be masticated to a material depth not to exceed 6 inches. Tree and brush stumps may not exceed 6 inches in height -Where mastication alone is not sufficient to treat slash in a manner which achieves project goals, a grapple equipped excavator or tracked front end loader may be used to remove or create slash piles which can later be burned. Slash may also be chipped where feasibility and access for tracked chipper exists within the project area. Slash or chipped material will not be deposited into watercourses.

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Roadside Hand Thinning:

The Roadside Hand thinning treatment can be applied to tree and brush dominated areas 0-100 feet out from existing roads.

Roadside Treatment Specifications:

Type of Treatment	Treatment to be Performed
Tree Removal	-Cut specified quantity of conifers less than 12 inches DBH within the drip line of a tree larger than 12 inches DBH. Remove specified quantity of hardwoods less than 6 inches DBH within the drip line of a tree larger than 12 inches DBH. -Outside the drip line of larger trees thin conifers less than 12 inches DBH and hardwoods less than 6 inches DBH to achieve an average tree spacing of 17 feet (includes trees of all sizes). -Tree removal specifications and removal or retention standards to be prescribed by an RPF or supervised designee prior to cutting.
Brush Removal	-Cut brush within the treatment area.
Dead woody material	-Chip or pile burn dead woody debris larger than 1 inch in diameter and smaller than 14 inches in diameter.
Pruning	-Prune all conifers and hardwoods selected by field staff to a height of 8 feet or to 50% live crown, whichever is less.
Standing dead tree removal	-Standing dead trees up to 12 inches DBH will be felled when identified by an RPF or designee by marking prior to being felled.

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Type of Treatment	Treatment to be Performed
Slash treatment	-All material generated by the treatments listed above shall be manually pulled to a roadside location and chipped, piled and burned, or removed (optional).

Hand Thinning Treatments:

The hand thinning treatments within the project can be applied to tree and brush dominated areas at all slope classes.

Hand Thinning Treatment Specifications:

Type of Treatment	Treatment to be Performed
Tree Removal	-Cut specified quantity of conifers less than 12 inches DBH within the drip line of a tree larger than 12 inches DBH. Remove specified quantity of hardwoods less than 6 inches DBH within the drip line of a tree larger than 12 inches DBH. -Outside the drip line of larger trees thin conifers less than 12 inches DBH and hardwoods less than 6 inches DBH to achieve an average tree spacing of 17 feet (includes trees of all species and sizes). -Tree removal specifications and removal or retention standards to be prescribed by an RPF or supervised designee prior to cutting.

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Type of Treatment	Treatment to be Performed
Brush Removal	-For conifer and hardwood dominated areas, cut brush within the project area, except that in areas where such removal would result in no brush being present within a 150-foot circle in any given treated location. In this scenario 100 to 400 square foot patches of brush shall be retained throughout the unit to provide wildlife habitat and cover. -For shrub dominated areas shrubs will be thinned to the extent that there is 1 shrub every 30 feet.
Dead woody material	-Chip or pile burn dead woody debris larger than 1 inch in diameter and smaller than 14 inches in diameter.
Pruning	-Prune all conifers and hardwoods selected by field staff to a height of 8 feet or to 50% live crown, whichever is less.
Standing dead tree removal	-Standing dead trees over 12 inches DBH will be felled when identified by an RPF or designee by marking prior to being felled.
Slash treatment	-All material generated by the treatments listed above shall be treated by lopping, chipping, mastication, hand piled and burned, or removal (optional). -In areas less than 50% slope a grapple equipped excavator or tracked front end loader may be used to create slash piles which can later be burned. -In areas less than 50% slope material may be chipped using a tracked chipper. Chips shall be spread to a depth no greater than 6 inches.

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Pile Burning

Pile burning is proposed as an optional means to dispose of material that is piled by hand or machine in a way that is free from soil. Piles may be burned when permitted, on approved burn days, and shall be contained by control lines, or wet lines, or burned during times when precipitation or weather conditions allow piles to be safely burned and controlled. Pile burning implemented by CAL FIRE shall occur following completion of CAL FIRE policy and procedures for completing prescribed pile burning including but not limited to: a CAL FIRE vegetation management program Go-No-Go checklist, burn maps, developing burning prescription, air quality management, entry into the Prescribed Fire Information Reporting System (PFIRS), and public notification by press release and direct contact with residents. Prescribed fire operations cannot be implemented by other organizations or agencies without the written consent from NEU Forester II and Operations Division Chief.

Broadcast Burning

Broadcast burning is proposed on select sites following initial treatments to reduce hazardous fuel loading, as well as to provide an ecological benefit and promote a more natural fire regime to the treatment area. Broadcast burning will be utilized to reduce surface and ladder fuels present on the site. Burning will occur under conditions where surface fuels such as downed wood, grasses, and small seedling sized trees (less than 4 inches DBH) and shrubs would be consumed. Some incidental pole sized trees (4–10-inch dbh) trees may be killed by the burning in amounts less than 10% of the pretreatment amounts. Burning would be contained by control lines such as hand lines and potentially dozer lines in areas less than 50% slope. Broadcast burning implemented by CAL FIRE shall occur following completion of CAL FIRE policy and procedures for completing a prescribed broadcast burn including, but not limit to: including approval of the Initial Study/Mitigated Negative Declaration (IS/MND), burn maps, developing burning prescription, smoke management plan and air quality management, entry into the Prescribed Fire Information Reporting System (PFIRS), and public notification by press release and direct contact with residents. Development of a burn plan includes a fire behavior model such as First Order Fire Effects Model (FOFEM), BEHAVE, or other fire behavior modeling simulation which predicts fire behavior, calculates consumption of fuels, tree mortality, and predicted emissions. The burn plan will also include measures to reduce the potential for runoff and soil erosion and protect natural resource values within the treatment unit. Additionally, burn unit treatment maps will be developed that demonstrate locations of sensitive resources to protected during operations, or resources will be flagged by the appropriate natural resource personnel prior to burning activities. CAL FIRE will notify and obtain permitting from the local air management district as well as inform local residents of the burn by press release and direct contact with individuals Prescribed fire operations cannot be implemented by other organizations or agencies without the written consent from NEU Forester II and Operations Division Chief.

Herbicide Application

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As a means for project maintenance within areas previously treated according to treatment descriptions listed above, herbicides may be used to control re-sprouting or germinating plants to maintain vegetation densities specified by the treatments. Herbicides may also be used to control invasive plant species to improve regeneration of native species. Targeted herbicide application will be limited to locations where private landowners have agreed to such herbicide use and will occur by hand following consultation with a California Licensed Pest Control Advisor (PCA). All California Department of Pesticide Regulation (DPR) herbicide application laws and regulations will be followed, and applications will be performed only by DPR Qualified Applicators. Project herbicide applications will follow all environmental application laws and will not occur in areas where state or federally listed native plants have been identified or in any designated watercourse buffer.

Road Use and Maintenance

Project work will only utilize existing roads and watercourse crossings, and no new roads or watercourse crossings are proposed under this Project. Project implementation may require the maintenance or repair of existing roadways used during project work. Maintenance activities may include blading/re-grading of dirt roads, re-graveling and/or hardscaping (disperse gravel or woodchips) unpaved roads to prevent road damage or prevent soil erosion or runoff, and filling of holes on dirt or gravel roads. Existing watercourse crossings may need to be maintained or repaired to facilitate project activities. Substantial repair or maintenance of existing watercourse crossings may require Notification to the California Department of Fish and Wildlife (CDFW) per Fish and Game Code Section 1602 and, if necessary, a Lake and Streambed Alteration Agreement will be obtained from CDFW. In general, road maintenance treatments are expected to be minimal and performed on an as-needed basis during project activities, as all areas of proposed project work have existing access. All road and watercourse crossing maintenance activities will be conducted in conformance with all current California laws and requirements.

2.6 Environmental Setting of the Project Region

The following information was produced by the USFS as part of the federal ecoregion mapping program to serve as a scientific basis to plan and implement ecosystem management. This ecosystem classification system maps ecological subregions based on associations of biotic and environmental factors that directly or indirectly affect energy, moisture, and nutrient gradients which regulate the structure and function of ecosystems. These factors include climate, physiography, water, soils, air, hydrology, and potential natural communities. Ecological subregions that occur within the project area are the Sierra Nevada subregion and Sierra Nevada Foothills subregion and their distinguishing characteristics are described below. Additional information regarding USFS ecological subregions can be found at:
https://www.fs.usda.gov/land/pubs/ecoregions/intro.html

Sierra Nevada Subregion (Section M261E)

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Geomorphology. This block mountain range tilts west and has accordant crests. Elevation ranges from 1,000 to 14,495 ft (300 to 4,407 m). Local relief ranges from 500 to 2,000 ft (150 to 600 m). It is in the Sierra Nevada Range geomorphic province.

Lithology and Stratigraphy. There are Mesozoic granitic and ultramafic rocks, Paleozoic and Mesozoic strongly metamorphosed sedimentary and volcanic rocks, and Cenozoic volcanic rocks.

Soil Taxa. Soils include Alfisols, Andisols, Entisols, Inceptisols, Mollisols, and Ultisols, in combination with mesic, frigid, and cryic soil temperature regimes, and xeric, udic, and aquic soil moisture regimes.

Potential Natural Vegetation. Mapped vegetation includes Sierran montane forest, upper montane-subalpine forest, alpine communities and barren, and northern Jeffrey pine forest. Predominant potential natural communities are Ponderosa Pine, Ponderosa Pine-Mixed Conifer, Douglas Fir-Mixed Conifer, White Fir-Mixed Conifer, Red Fir, Lodgepole Pine, Jeffrey Pine, Big Sagebrush, Canyon Live Oak, White Alder, Mountain Alder, Huckleberry Oak, Carex and Aspen series.

Fauna. Mammals include black-tail and mule deer, black bear, mountain lion, coyote, bobcat, red and gray fox, ringtail, weasels, skunks, badger, mountain sheep, yellow-bellied marmot, marten, fisher, wolverine, and porcupine. Grizzly bear, native to the western slope, became extirpated in 1924. Birds include eagles, hawks, owls, woodpeckers, falcons, osprey, stellar jay, herons, quail, kingfisher, goshawk, and blue grouse. Species of concern include the California spotted owl. Introduced species include turkey and beaver.

Climate. Precipitation ranges from 20 to 80 in (500 to 2,030 mm) during fall, winter, and spring. It occurs mostly as snow above 6,000 ft. Rain on snow is common. Summers are dry with low humidity. Temperature averages 42 to 60 degrees F (5.5 to 15.5 degrees C). The growing season lasts 20 to 230 days.

Surface Water Characteristics. There are many rapidly flowing rivers and streams. Rivers flow west from the crest in deeply incised canyons with bedrock-controlled channels to the Great Valley Section and Pacific Ocean. Rivers flow east from the crest in mostly bedrock-controlled channels terminating in basins in the Mojave Desert, Mono or northwestern Basin and Range Sections. Numerous lakes and wet meadows are associated with glaciated areas above 5,000 feet.

Disturbance Regimes. At lower and mid-elevations, historic occurrence of fire has changed from frequent, low intensity ground fires to infrequent, high intensity stand-replacing fires. At higher elevations, historic occurrence has changed from infrequent, low and moderate intensity ground fires to infrequent, low, moderate, and high intensity surface or stand-replacing fires. Seismically active areas occur along the eastern boundary with strong shaking and ground rupture. Wide fluctuations in precipitation and

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temperature for periods of years result in significant or catastrophic changes in biological communities. Snow avalanches are common at higher elevations.

Land Use. Composition and successional sequence of some communities have changed because of plant and animal species introduced between the mid 1800's and early 1900's. These introductions related to mining, grazing, forestry, and recreational activities. Expanding urban uses occur, scattered throughout the foothills and some high elevation areas. Water diversions for hydroelectric power, agriculture, and municipal and domestic use are common within and between river systems.

Cultural Ecology. Humans have been utilizing the Sierra for about 10,000 years and have been an integral part of its ecology for 3,000 to 5,000 years. This is particularly apparent through documented use of fire to facilitate gathering and to generate species preferred for foodstuffs, basketry materials, and other needs. Extensive procurement and processing of lithic, acorn, pine nut, basketry fiber, and other resources resulted in innumerable areas of lithic quarry, bedrock mortar, pinyon, Jeffrey pine, sugar pine, oak grove, and other resource alteration. Contemporary attitudes and beliefs are dichotomized between emphasis on values: amenity for the newcomer and commodity for the long-time resident. Human environment is characterized by a rural lifestyle of open space and outdoor leisure activity. Recreation is the primary economic emphasis, trailed by government employment, lumbering, mining, and grazing. The Sierra is experiencing rapid retiree and commuter resident growth, and large transient recreation populations that provide constant resource pressures.

Sierra Nevada Foothills Subregion (Section M261F)
Geomorphology. This block mountain range tilts west and has accordant crests. Elevation ranges from 500 to 3,500 ft (152 to 1,064 m). It is in the Sierra Nevada Range geomorphic province.

Lithology and Stratigraphy. These are Mesozoic sedimentary, granitic, volcanic and ultramafic rocks.

Soil Taxa. Soils include Alfisols, Entisols, Inceptisols, and Mollisols, in combination with thermic soil temperature regime and xeric soil moisture regime.

Potential Natural Vegetation. Kuchler mapped vegetation as blue oak-foothill pine forest, and chaparral. Predominant potential natural communities are Blue Oak, Interior Live Oak, Valley Needlegrass and Mixed Chaparral series.

Fauna. Former inhabitants include grizzly bear and pronghorn antelope. Mammals include black-tailed and mule deer, coyote, ground squirrel, cottontail, jack rabbit, and kangaroo rat. Common birds include turkey vulture, falcons, eagles, hawks, owl, quail, mourning dove, mockingbird, scrub jay, herons, ravens, western meadowlark, fin, and sparrows. Introduced species include turkeys and chukars.

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Climate. Precipitation ranges from 20 to 40 in (510 to 1,020 mm). Temperature averages 55 to 64° F (13 to 18°C). The growing season lasts 200 to 320 days.

Surface Water Characteristics. There are many rapidly flowing rivers and streams. Rivers flow westerly in deeply incised canyons with bedrock-controlled channels to the Great Valley Section and Pacific Ocean. Reservoirs for municipal water supply, irrigation, and flood control are common.

Disturbance Regimes. Fires are low, moderate, and high intensity surface or stand-replacing fires.

Land Use. Composition and successional sequence of some communities have changed because of plant and animal species introduced between the mid 1800's and early 1900's. These introductions related to mining, grazing, and agriculture. Rapidly expanding foothill urban areas are scattered throughout the Section. Large and small water impoundments are common.

Cultural Ecology. Humans have been utilizing the Section for about 10,000 years and have been an integral part of its ecology for 3,000 to 5,000 years. Sierran foothills contain some of the densest year-round prehistoric habitation locations in California, particularly along riparian areas, where intensive occupation, resource procurement and processing practices, and vegetation manipulation often altered the environment. Contemporary attitudes tend to be dichotomized between values: amenity for the newcomer and commodity for the long-time resident. Human environment is characterized by a rural lifestyle of open space and outdoor leisure activity. Recreation is the primary economic emphasis, trailed by government employment. The foothills, in particular, are experiencing rapid retiree and commuter resident growth.

2.7 Description of the Local Environment

The project area encompasses 6,051 acres in Placer County between the 1600-foot and 2600-foot elevation. The Mediterranean climate is typified by cool moist winters and warm dry summers. The soils are generally productive and coupled with annual rainfall, provide ample conditions to allow vegetation to reliably grow large quantities of biomass. This part of the Sierra Nevada Foothills evolved with the influence of natural and anthropogenic fire resulting in fire adapted, and in some cases fire-dependent, grasses, chapparal, hardwood, and hardwood conifer forests ecosystems with high plant diversity. Due to fire exclusion, a decrease in active forest management, and infrequent grazing, portions of the project area are overgrown with a thick understory of brush and small trees. The following sections will discuss the existing vegetation composition, topography and soils, hydrology, land uses, and disturbance regimes of the project area.

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Vegetation Structure and Composition

The vegetation types present in the project area were classified using the California Wildlife Habitat Relationship (CWHR) system based on field analysis of NAIP imagery and field reconnaissance. The CWHR terrestrial vegetation mapping indicated the presence of eight habitat types within the Project area (Table 1). The proposed Project occurs primarily in montane hardwood (MHW) and montane hardwood-conifer (MHC) forest. The most common tree size classes are 3 (pole) and 4 (small tree), and canopy cover varies from open to dense. A significant portion of the Project area is also covered by mixed chaparral (MCH) which is a shrub-dominated community type. Shrubs are reported to be mature or decadent in the Project area (CWHR data). Minor portions of the Project area included Ponderosa pine (PPN), Sierra mixed conifer (SMC), blue oak woodland (BOW), and blue oak- foothill pine (BOP) communities. Pockets of annual grasslands (AGS) are distributed throughout the Project area. The dominant vegetation is described in Table 1 and vegetation classifications are mapped in Figure 1-5.

Table 2 – California Wildlife Habitat Types and Ratings within Project Area

Dominant Vegetation	Project Area Species Composition	CWHR Types[1]
Conifers	Primarily ponderosa pine (*Pinus ponderosa*), with some Douglas-fir (*Pseudostuga menziesii*) on north-facing slopes. Incense cedar (*Calocedrus decurrens*) is evident above 2,000 feet, and sugar pine (*Pinus lambertiana*) above 2,500 feet. Understory shrub species include manzanita, bear clover, deer brush, tanoak, and toyon.	Ponderosa Pine (PPN) tree size 5 canopy closure D Sierra Mixed Conifer (SMC); tree size 5 with canopy closure D

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Hardwoods	Hardwoods consist primarily of canyon live oak (*Quercus chrysolepis*), blue oak (*Quercus douglasii*), and California black oak (*Quercus kelloggii*), with blue oak being present at the lower elevations of the Project area and black oak being present at the higher elevations. The transition of blue oak to black oak occurs at approximately 1,500-2,000 feet. There are small amounts of madrone above 2,000 feet. Species composition of hardwood/conifer mixed areas (BOP) consist of at least 25% conifers (Ponderosa pine, Douglas-fir, incense cedar, sugar pine), and at least 50% hardwoods (canyon live oak, blue oak, black oak). Understory shrub species include manzanita, bear clover, buckbrush, tanoak, and toyon.	Montane Hardwood-Conifer (MHC); tree size 3-4, canopy closures P through D Montane Hardwood (MHW); tree size 3-4, canopy closures P through D Blue Oak Woodland (BOW); tree size 4 with canopy closure P and M. Blue Oak-Foothill Pine (BOP); tree size 4, canopy closure P and M
Shrubs	Primarily manzanita (*Arctostaphylos sp.*), with some areas of buckbrush (*Ceanothus cuneatus*) and chamise (*Adenostoma fasciculatum*).	Mixed Chaparral (MCH); stage 3 canopy closure P and M, stage 4 canopy closure P through D
Herbaceous	Grass species	Annual Grassland (AGS)

[1] All CWHR size classes and canopy closures are included unless otherwise specified; **DBH** = diameter at breast height; **Canopy Closure Classifications:** S=Sparse Cover (10-24% canopy closure); P= Open Cover (25-39% canopy closure); M= Moderate Cover (40-59% canopy closure); D= Dense Cover (60-100% canopy closure); **Tree size classes:** 1 (Seedling)(<1" DBH); 2 (Sapling)(1"-5.9" DBH); 3 (Pole)(6"-10.9" DBH); 4 (Small tree)(11"-23.9" DBH); 5 (Medium/Large tree)(≥24" DBH); 6 (Multi-layered Tree) [In PPN and SMC]. Shrub stages: 1 (Seedling shrub; seedlings or sprouts <3 yrs old); 2 (young shrub; < 1% crown decadence); 3 (Mature shrub; 1.0 – 24.9% crown decadence); 4 (decadent shrub; ≥ 25.0% crown decadence) (Mayer and Laudenslayer 1988).

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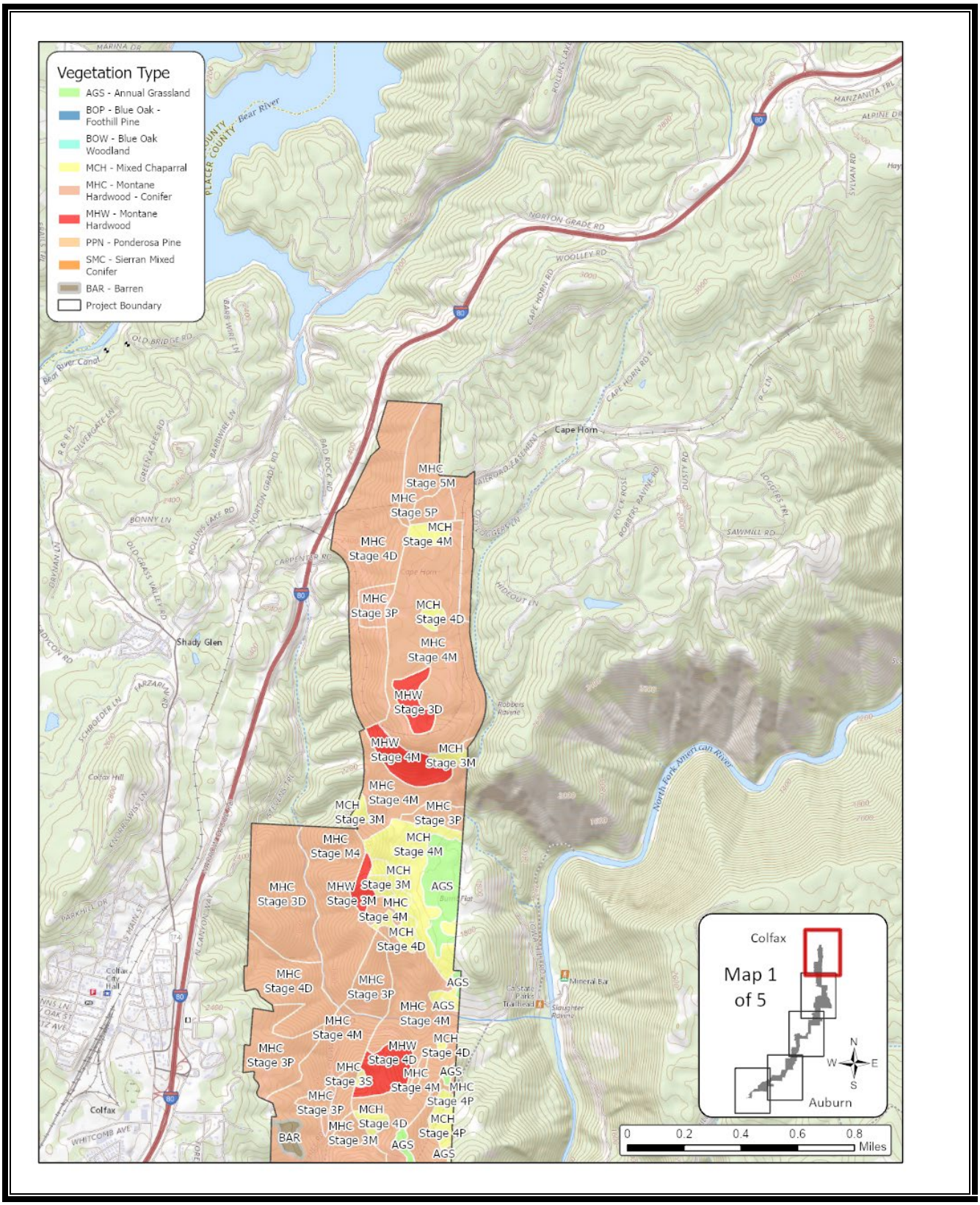

Figure 1. Vegetation Map #1 of 5.

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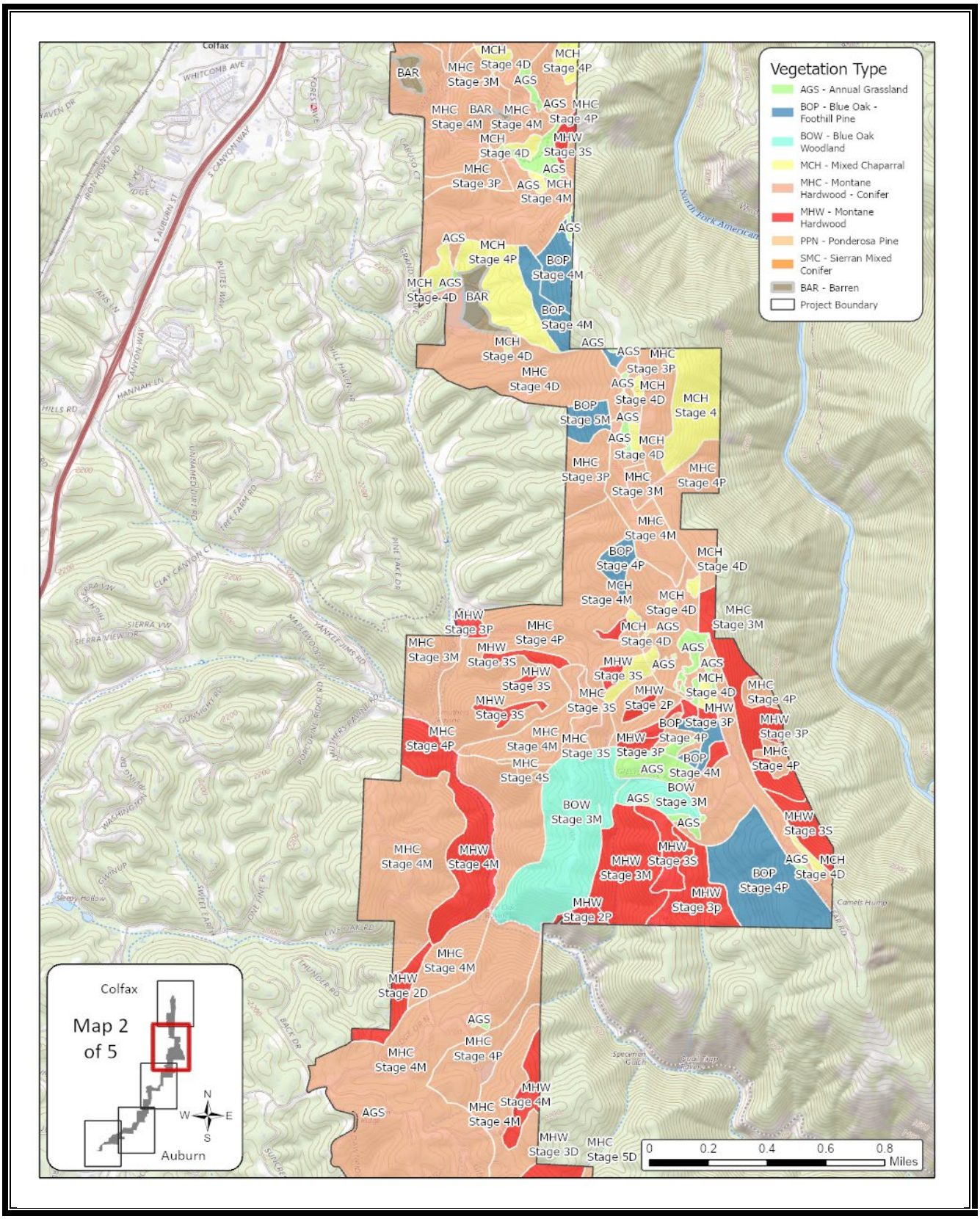

Figure 2. Vegetation Map #2 of 5.

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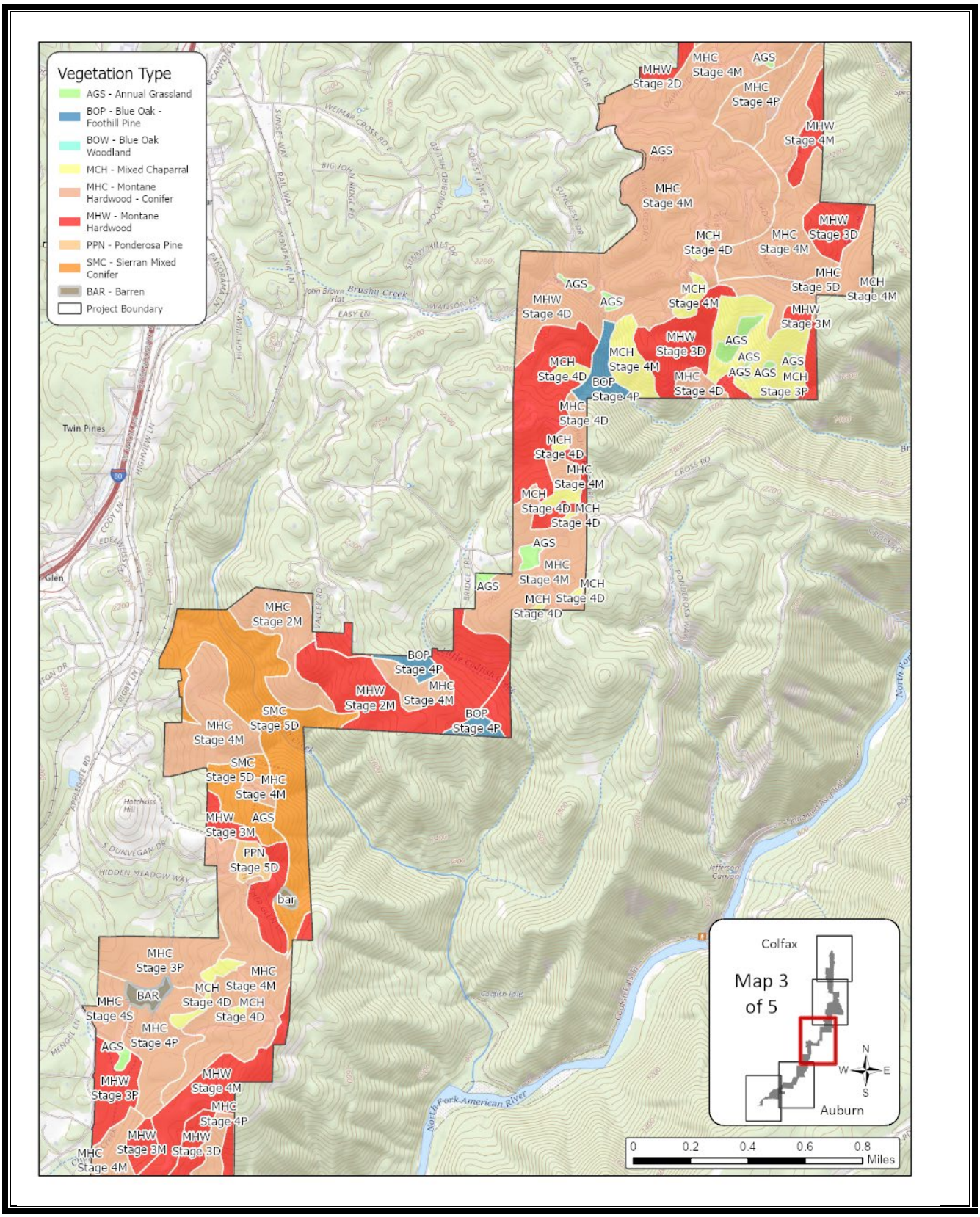

Figure 3. Vegetation Map #3 of 5.

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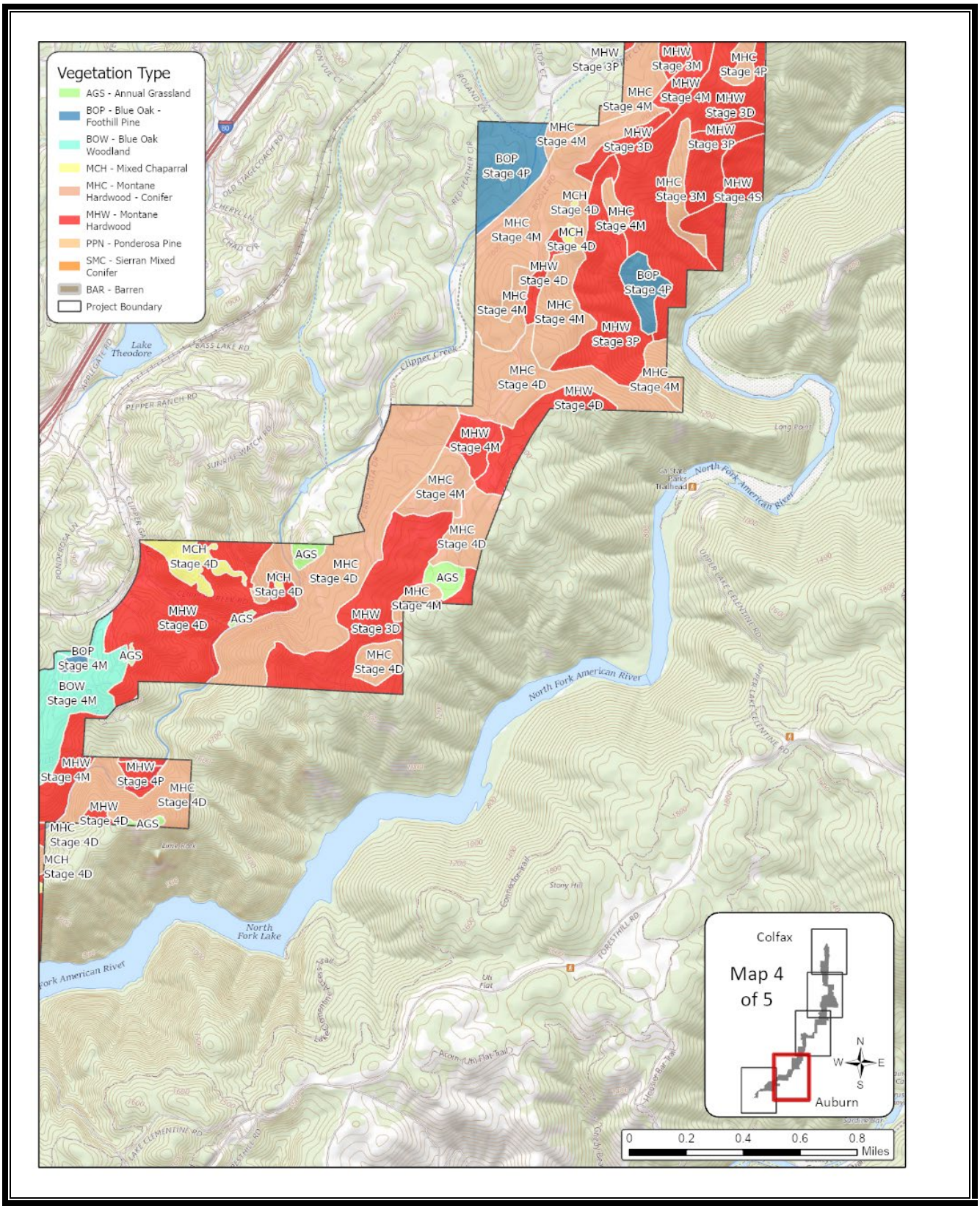

Figure 4. Project Vegetation Map #4 of 5.

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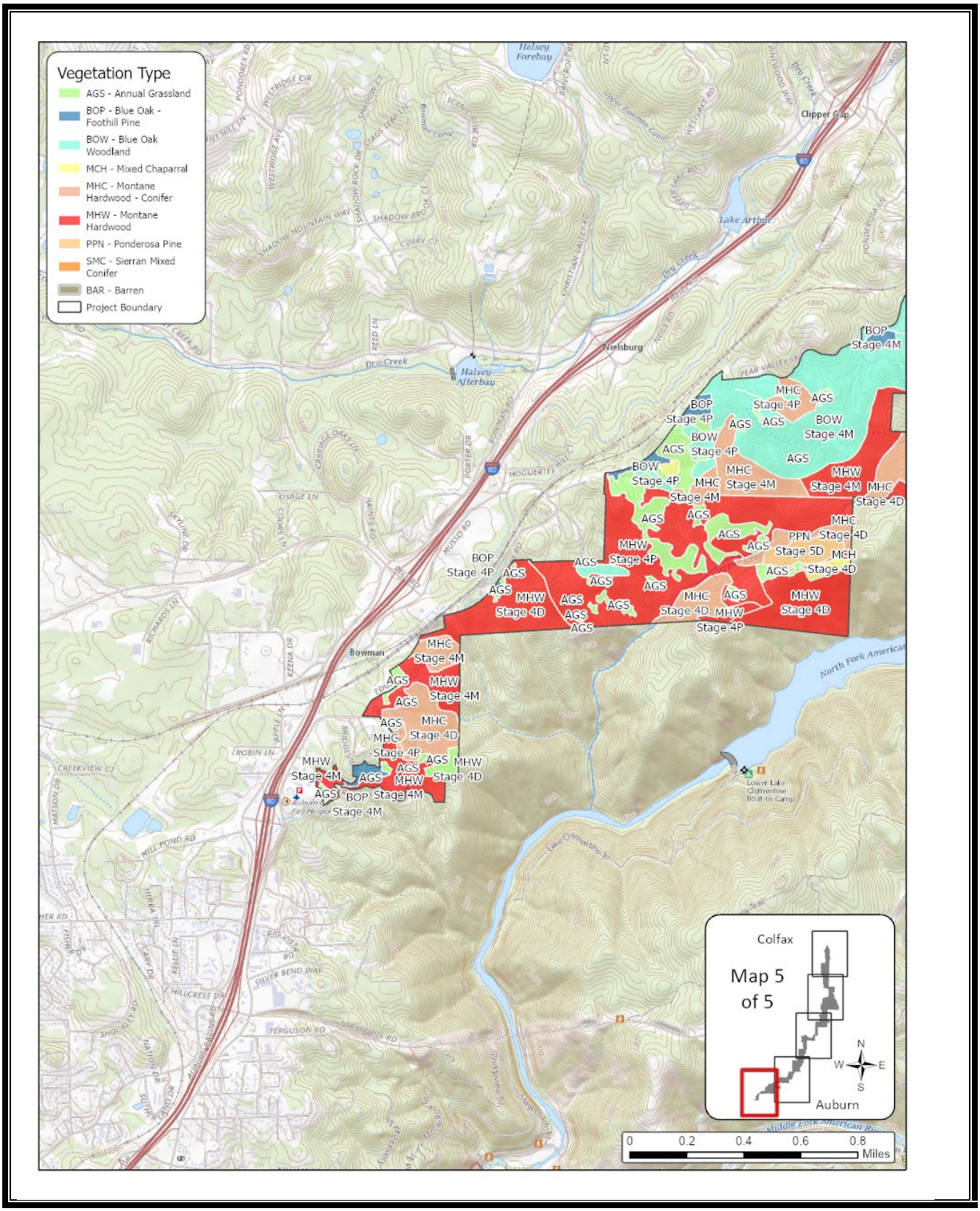

Figure 5. Vegetation Map #5 of 5.

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Topography and Soils

The Project area is primarily situated along the main ridgeline above and west of the North Fork American River; paralleling the river and Interstate 80. The ridge top location hosts a range of slopes from 0% to 70% with isolated areas up to 100% slope. Due to constraints of the equipment that will be used to carry out project treatments, it is likely that most treatments will occur on areas that are less than 50% slopes, with some hand or specialized mechanical treatment (walking excavator) occurring on areas with slopes up to 65%. Soils in the Project area are listed below in Table 3, which provides the soil types, parent material, permeability of the soil, and a generalized typical surface texture. Soil data within the project area has been used to assess project feasibility relating to vegetation treatment regarding the usage of heavy equipment and soil stability, erosion potential after post-vegetation treatment, and other potential soil impacts and limitations to treatments within the project area.

Table 3: Mapped Soil Types and Characteristics within the Project Area, NRCS Web Soil Survey. Data available at https://websoilsurvey.nrcs.usda.gov/app/

Soil Types	**Parent Material**	**Permeability**	**Typical Surface Texture**
115 – Auburn Argonaut complex 2-15% slopes	Schist, slate, metabasic rock	Slow	Loam
117 – Auburn Rock outcrop complex, 2-30% slopes	metabasic	Moderate	Loam
119, 120, 121 – Auburn-Sobrante-Rock outcrop complex, 2-30%, 30-50%, 50-70% slopes	metabasic	Moderate	Loam
122, 123 – Boomer loam, 2-15%, 15-30% slopes	metabasic	Moderately slow	Loam
124, 125- Bommer – Rock outcrop complex, 5-30%, 30-50% slopes	Amphibolite schist, meta andesite	Moderately slow	Loam

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Soil Types	**Parent Material**	**Permeability**	**Typical Surface Texture**
143 Dubakella very stony loam, 9-50% slopes	Ultra basaltic rock	Slow	Stony loam
159, 160 - Josephine loam, 15-30%, 30-50% slopes	Weathered metamorphic rock	Moderately slow	Loam
161- Josephine – Rock outcrop complex, 15-50% slopes	Weathered metamorphic rock outcrop	Moderately slow	Loam
163 – Mariposa gravelly loam, 5-30% slopes	Schist and slate	Moderate	Gravelly loam
164, 165 – Mariposa-josephine complex, 5-30%, 30-50% slopes	Schist and slate metamorphic rock	Moderately slow	Loam
167, 168 – Mariposa-rock outcrop complex, 5-50%, 50-70% slopes	Schist and slate	moderate	Gravelly loam
169, 170 – Maymen-rock outcrop complex	Metamorphic rock	Excessively drained	Gravelly loam
179 – Rock outcrop	Metamorphic rock	Slow	Rock
187, 188, 189 – Sites loam, 9-15%, 15-30%, 30-50% slopes	Metamorphic rock	Moderately slow	Loam

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Soil Types	**Parent Material**	**Permeability**	**Typical Surface Texture**
190- Sites-Rock outcrop complex, 15-50% slopes	Metamorphic rock	Moderately slow	Loam
191- Sobrante silt loam, 2-15% slopes	Metabasic	Moderate	Silt loam
196- Xerorthents and similar soils, 90% minor components 10%, 2-50% slope	Mine spoils or earthy fill	Well drained	Earthy fill
194 – Haypress – Toiyabe complex, 30-50% slopes	Granitic Rock	excessively drained	Loamy coarse sand

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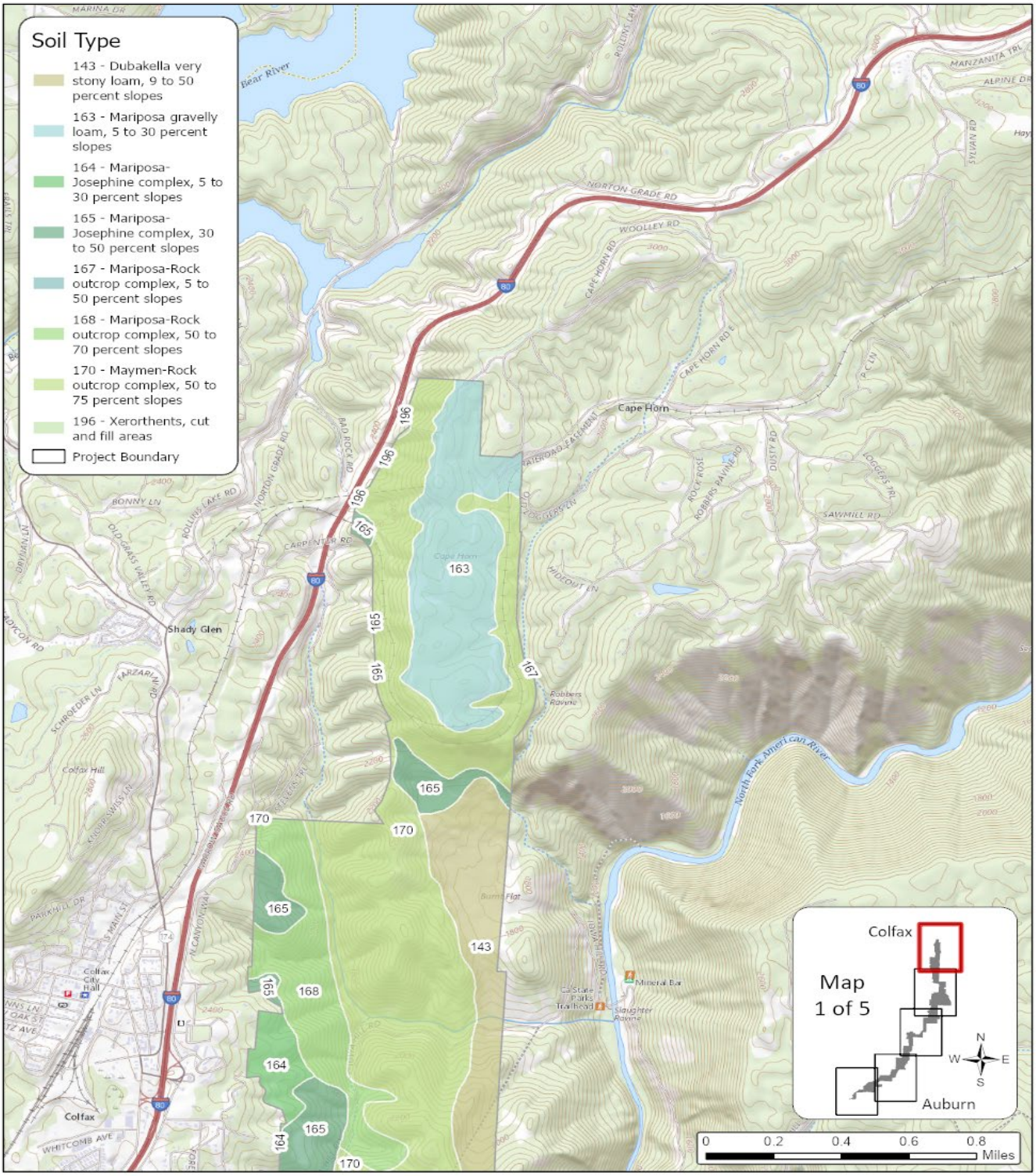

Figure 6. Soil Map #1 of 5.

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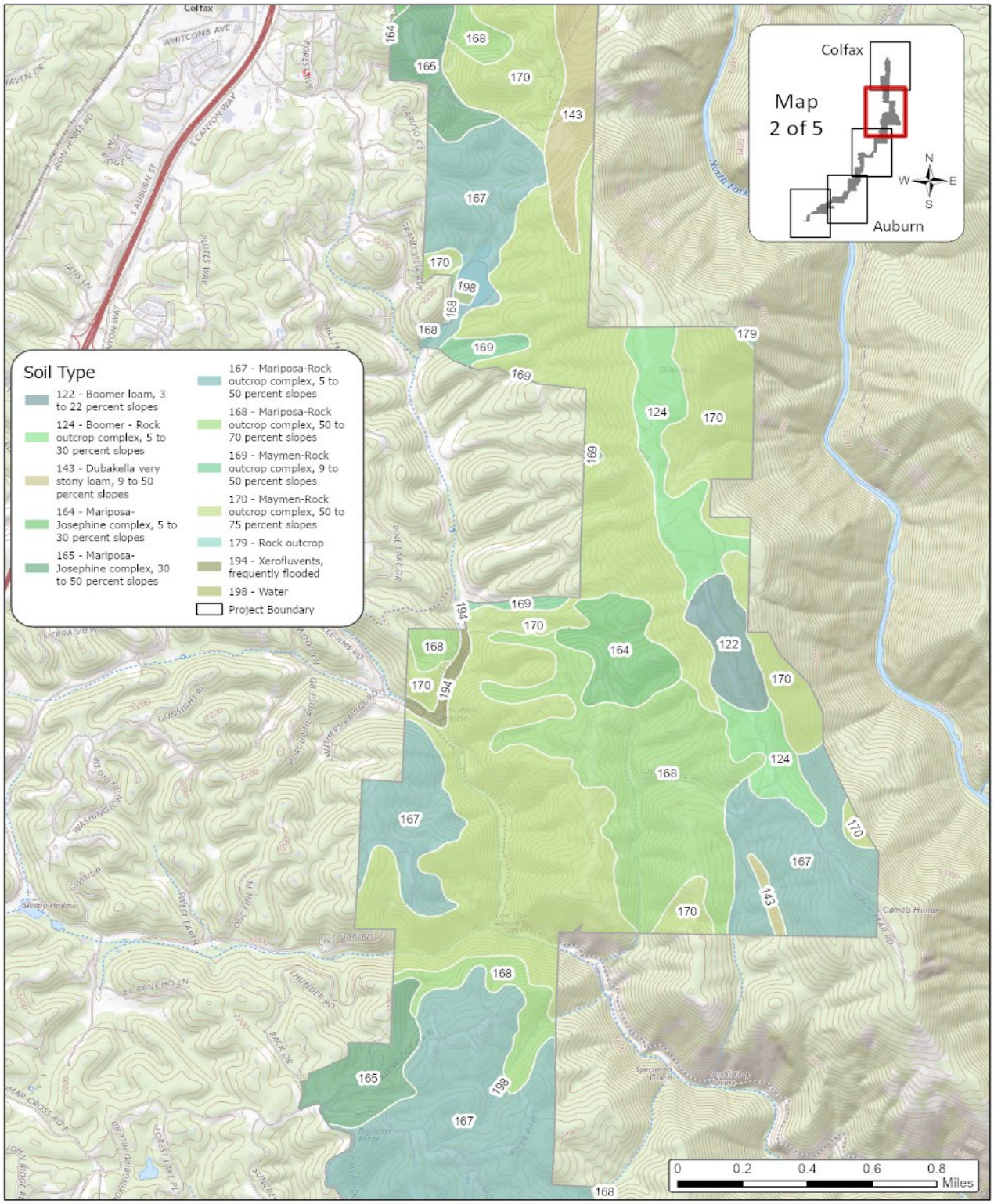

Figure 7. Soil Map #2 of 5.

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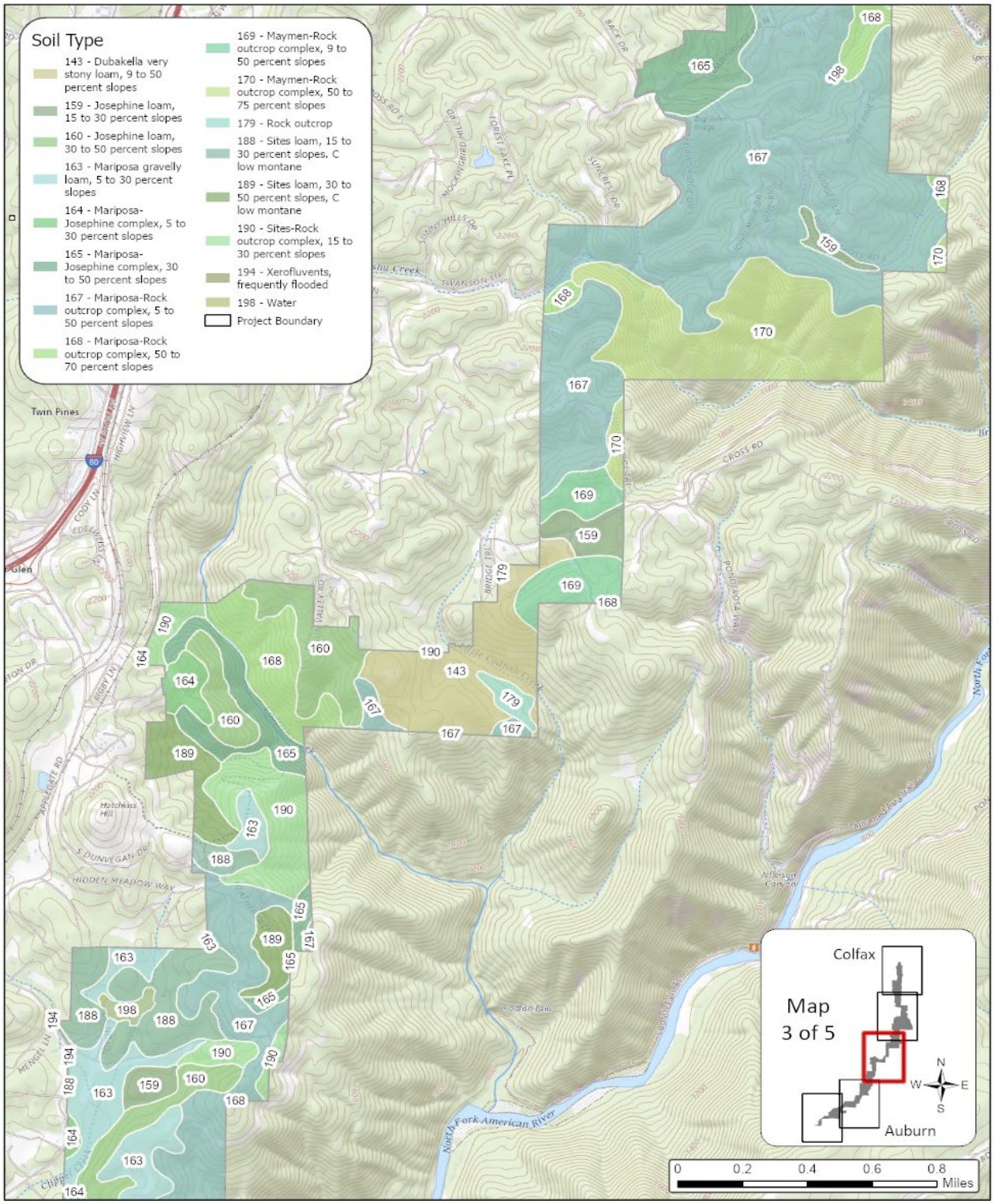

Figure 8. Soils Map #3 of 5.

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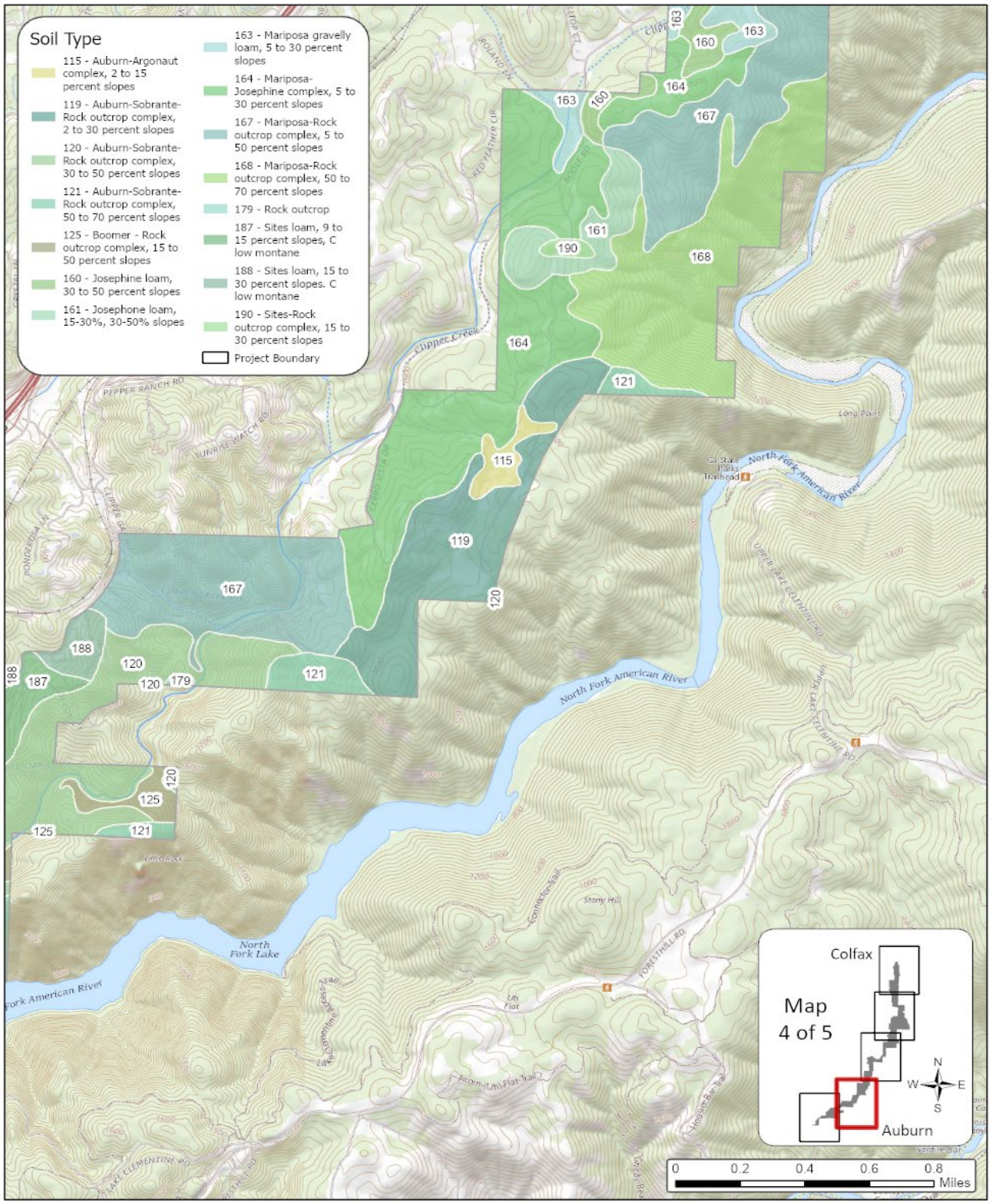

Figure 9. Soils Map #4 of 5.

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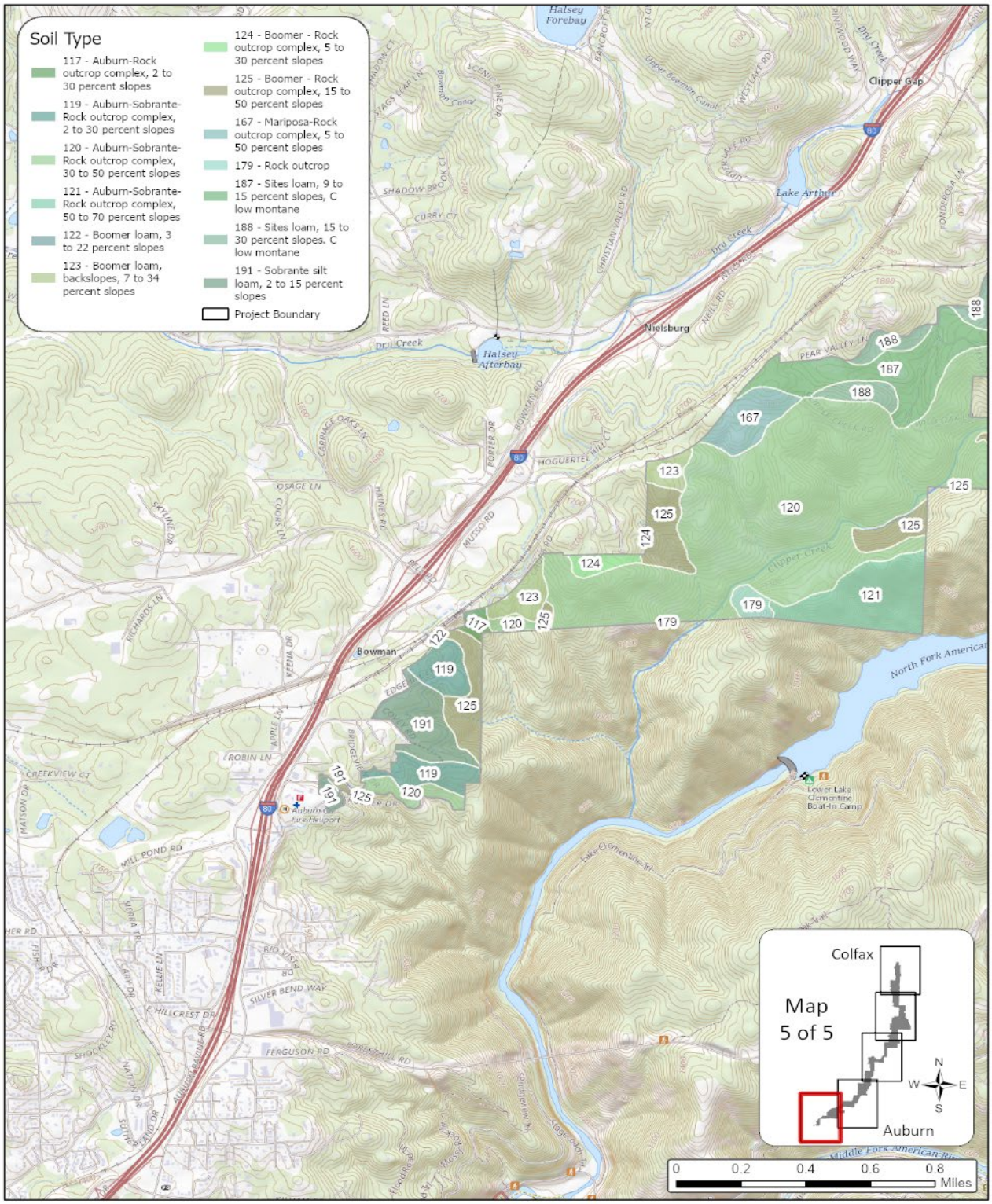

Figure 10. Soils Map #5 of 5.

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Hydrology

Perennial, intermittent, and ephemeral watercourses exist within the project area. In order to establish adequate protection measures for these watercourses, they were evaluated and categorized as Class I, II, III, and IV waters based on the watercourse classification system found in the California Forest Practice Rules (FPR); Title 14, California Code of Regulations Chapters 4,4.5, and 10, Table 4. This classification system requires that each watercourse (or wet area) be mapped, field verified, and delineated prior to operations near the watercourse. The criteria used to classify watercourses is summarized in Table 4 below. Once classified, watercourse protection zones (sometimes known as watercourse buffers) are established to protect the beneficial uses[1] of waters of the state. Watercourse protection zones (or buffer distances) as well as protection measures by treatment activity can be found in Table 5. Prior to the commencement of operations, CAL FIRE will ensure that all watercourses within treatment units have been classified, field verified, delineated and protected as summarized in tables 4 and 5.

Table 4 - Watercourse Classifications

Watercourse Classification	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for non-fish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream established domestic, agricultural, hydroelectric supply, or other beneficial use.

[1] As described in the Porter-Cologne Water Quality Control Act and the federal Clean Water Act.

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Table 5 - Protection Measures by Watercourse Classification

Watercourse Classification	Class I	Class II	Class III	Class IV
Slope Class	Class I (WLPZ)	Class II (WLPZ)	Class III (ELZ)	Class IV
<30%	75’	50’	25’	Determined by consultation with facility owner
30-50%	100’	75’	50'	Determined by consultation with facility owner
>50%	150‘	100’	50’	Determined by consultation with facility owner
Protection measures by treatment type within the buffer	Class I	Class II	Class III	Class IV
Mastication	No operations	No operations	1) At least 50% of the understory vegetation present before operations will be left living and well distributed within the ELZ to maintain soil stability. 2) Equipment operation in the ELZ is prohibited except as follows: In areas where side slopes are less than 30%, masticators will be allowed to enter and exit the ELZ perpendicularly to the watercourse to masticate material which cannot be reached from outside the ELZ. Masticators will not be allowed to come into contact with the watercourse	Determined by consultation with facility owner.

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			except at existing crossings flagged by an RPF which are dry at the time of operations.	
Hand Treatment (Roadside)	1) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the over story and 50% of the understory canopy covering the ground and adjacent waters shall be left in a well distributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of operations. Live trees larger than 12 inches DBH may not be cut. 2) Burning is prohibited within the WLPZ	1) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the over story and 50% of the understory canopy covering the ground and adjacent waters shall be left in a well distributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of operations. Live trees larger than 12 inches DBH may not be cut. 2) Burning is prohibited within the WLPZ	At least 50% of the understory vegetation present before operations will be left living and well distributed within the ELZ to maintain soil stability.	Determined by consultation with facility owner.
Hand Treatment (Non roadside)	1) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the over story and 50% of the understory canopy covering the ground and adjacent waters shall be left in a well distributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of	1) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the over story and 50% of the understory canopy covering the ground and adjacent waters shall be left in a well distributed multi-storied stand configuration composed of a diversity of species similar to that found before the	1) At least 50% of the understory vegetation present before operations will be left living and well distributed within the ELZ to maintain soil stability. 2) Equipment operation in the ELZ is prohibited except as follows: In areas where side slopes are less than 30%, tracked heavy equipment will be allowed to enter and exit the ELZ perpendicularly to	Determined by consultation with facility owner

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	operations. Live trees larger than 12 inches DBH may not be cut. 2) Burning is prohibited within the WLPZ 3) Heavy Equipment Shall be prohibited from entering the WLPZ except at established crossings?	start of operations. Live trees larger than 12 inches DBH may not be cut. 2) Burning is prohibited within the WLPZ 3) Heavy Equipment Shall be prohibited from entering the WLPZ except at established crossings?	the watercourse to chip or pile. Tracked chippers will not be allowed to come into contact with the watercourse except at existing crossings flagged by an RPF which are dry at the time of operations. 3) If more than 800 square feet of mineral soil is exposed by the equipment operation in the ELZ, such areas will be treated by applying chips, mulch or slash lopped to no more than 12 inches in height, covering 80% of the exposed area.	
Follow-up Herbicide Application	No operations	No operations	No operations	Determined by consultation with facility owner
Prescribed Burning	Exclude from treatment by fire line construction. Fire line will be constructed by hand tool work and see no equipment usage in their construction. Low-intensity fire may back into the buffer zone during prescribed burning operations. No ignitions will occur within the WLPZ	Exclude from treatment by fire line construction. Fire line will be constructed by hand tool work and see no equipment usage in their construction. Low-intensity fire may back into the buffer zone during prescribed burning operations. No ignitions will occur within the WLPZ	No ignition within the ELZ buffer. Low-intensity fire may back into the buffer zone during prescribed burning operations. No ignitions will occur within the WLPZ	Determined by consultation with facility owner

2.8 Current Land Use and Previous Impacts

Current Land Uses

The analysis area includes 6,051 acres of primarily private land. Private lands in the project area are primarily used as nonfarm rural residential, with some limited grazing, small scale agriculture, and timber harvest towards the eastern end of the project area.

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Private property in the project area is primarily zoned Residential Agricultural (RA) 10-acres and Residential Single Family (RS) in Placer County, CA.

Public lands that border the project's eastern boundary are managed for recreation and are included in the Auburn State Recreation Area. These areas are collectively managed under a Resource Management Plan / General Plan (RMP/GP). These public lands consist of a mosaic of Bureau of Land Management (BLM) and Bureau of Reclamation (BOR) federally owned lands, with additional smaller parcels owned by Placer Land Trust, California Department of Parks and Recreation (CDPR), and the U.S. Army Corps of Engineers (ACE). Within the project footprint, there are 105 acres of federally owned land which will be subject to further NEPA compliance prior to any project related activities occurring.

Previous Impacts

The primary past impacts on the environment within or near the project area are residential development and wildland fire suppression activity. Each of these phenomena together are the impetus for development of this MND. Residential development into the wildland-urban interface (WUI) has placed people and their property at risk. Within the project area, and elsewhere within the Sierra Nevada environment, vegetation growth annually increases vegetation density, limited vegetation reduction occurs, and wildland fire potential increases due to compounding vegetation and environmental factors. The result is the perpetually increasing and greater risk of large damaging wildfire that not only places lives and property at risk, but also threatens the environment and natural resources of the State. Fire history indicates about 25% of the project area (roughly 1500 acres) has experienced wildfire in the past 20 years. The USFS Fire Effects Information System (FEIS) indicates that average historical fire interval derived from LANDFIRE succession modeling for northern California montane mixed-conifer communities is 7-24 years, and is 8-16 years for California oak woodlands. (United States Department of Agriculture (USDA) 2018 and 2012)

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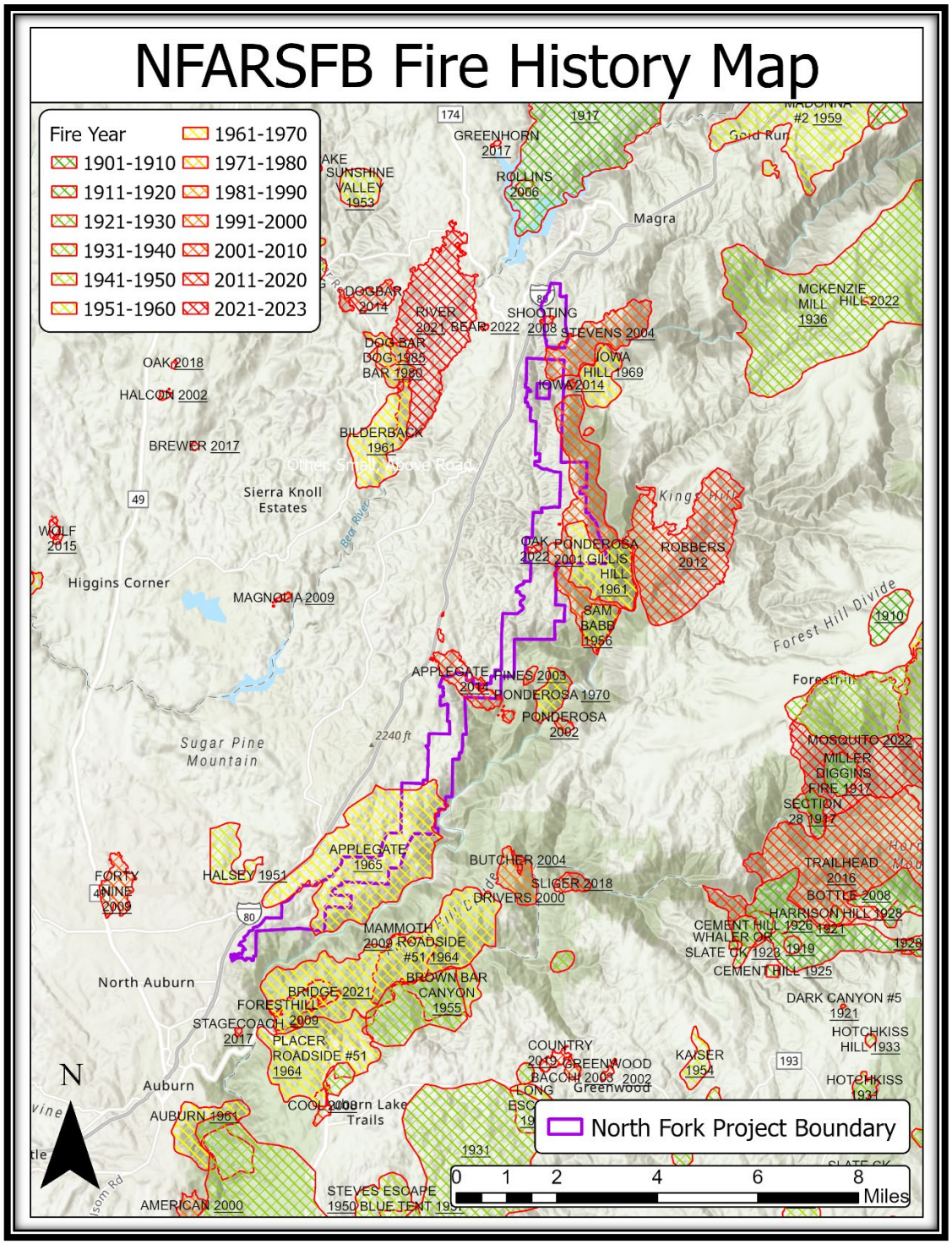

Figure 11: Fire history map around the project area

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2.9 Project Maps and Supporting Photos

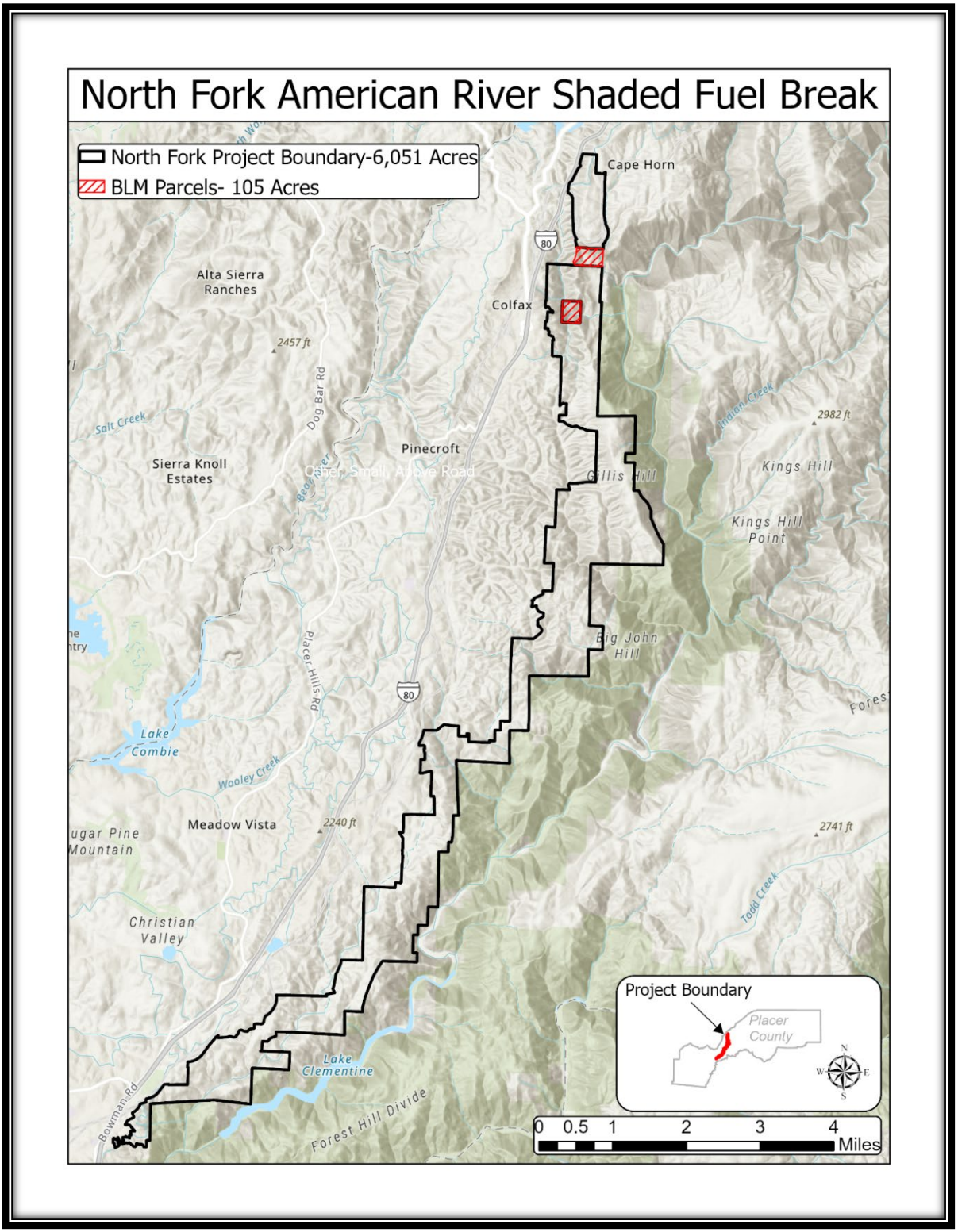

Figure 12. NFARSFB Project Vicinity and Location Map.

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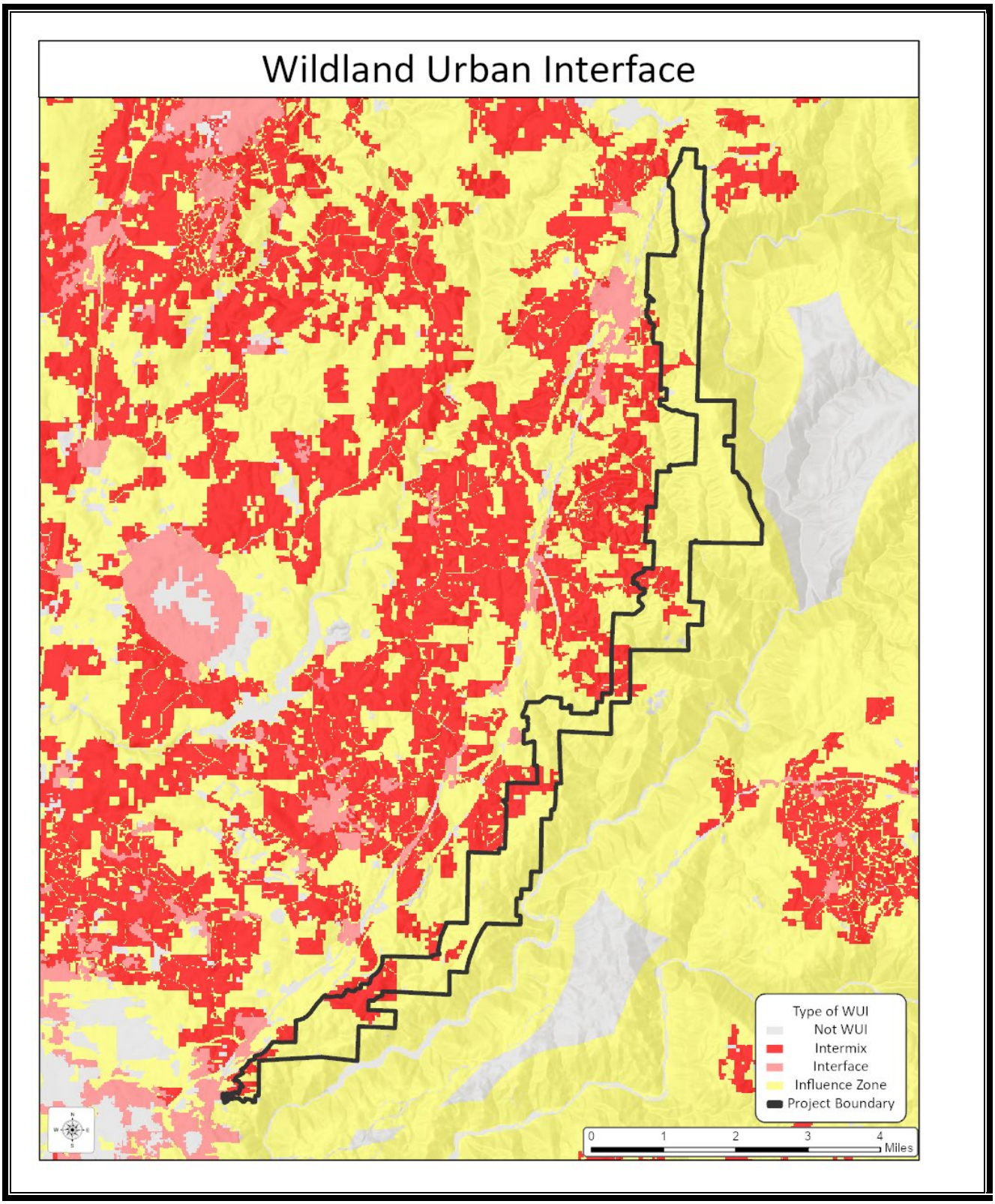

Figure 13. WUI and project location.

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3. *Conclusion of the Mitigated Negative Declaration*

3.1 ENVIRONMENTAL PERMITS

The proposed project may require the following environmental permits and CAL FIRE may be required to comply with the following state and federal regulations:

A. Smoke Management Plan and Permit– approved by Placer County Air Pollution Control District and entered into the Prescribed Fire Information Reporting System.

B. CA Fish and Game Code Section 1602 lake and Streambed Alteration Agreement for crossing repairs or water drafting

C. Clean Water Act 401 and 404 permits to adhere to state and federal water quality standards regarding potential discharges and protections of waters of the state and United States.

3.2 MITIGATION MEASURES

The following twelve (12) mitigation measures will be implemented and monitored by CAL FIRE to avoid or minimize adverse environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

Where feasible, treatment boundaries will be designed to connect with natural features such as topographic breaks and natural changes in vegetation type. Large scale removal of all vegetation along ridgelines will be avoided by retaining overstory tree canopy and patches of chapparal to prevent stark contrast of horizon and skyline views.

Items marked with an * are additional items that have been added to this MND to address comments received during the first-round 30-day public comment period of the MND (04/11/25-05/11/2025).

Mitigation Measure #1: Air Quality

A. Smoke Management: Prescribed burning will require development and approval of supporting documentation (approved MND, Burn Plan, CA State RM-75-Prescribed Burning Project Standard Agreement form for each property treated for project work, Smoke Management Plan, BEHAVE fire modeling for burning operations, emissions calculations, etc.) prior to burning. Generally, broadcast burning will not occur within 500 feet of residences, or other structures occupied by humans unless arrangements are made in advance with the buildings occupants to ensure impacts do not occur. Implementation of a smoke management plan before burning will limit prescribed burning to permissible burn days with ideal weather conditions and ensure that toxic air contaminants do not

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reach sensitive receptors. If the weather conditions reach certain thresholds, the burn will be cancelled and rescheduled for a day where conditions are safe for burning. For this project, abiding by CAL FIRE requirements will provide weather monitoring and protocols that would allow the project to avoid impacts related to unpredictable weather patterns. Additionally, abiding by the smoke management plan will prevent smoke from prescribed burning from reaching sensitive receptors, and providing notifications ahead of time will allow potentially sensitive receptors to avoid entering the area where smoke is present.

B. Dust Management: within 200 feet of residences, open public roads, or trails, masticators shall operate during periods where the soil moisture is high enough to prevent generation of noticeable airborne dust. If operations must occur within 200 feet of residences, open public roads, or trails during low soil moisture periods, applied watering or other methods (e.g., chemical dust suppressants, surfactants, etc.) will be utilized to minimize dust, or switch to the use of hand cutting and chipping of material.

   Masticators will not operate if conditions allow noticeable fugitive dust in the atmosphere to escape outside the project area, or if operations obscure an observer's view at any location of such a degree of opacity equal to or greater shading as that designated No. 2 on the Ringelmann Chart (i.e., 40% opacity), as published by the United States Bureau of Mines.

Mitigation Measures 2-9: Biological Resource Protections

Mitigation Measure #2: Environmental awareness training:

All personnel implementing fuel reduction activities within the project area shall attend an environmental education program presented by the Registered Professional Forester lead, their supervised designee, or qualified biologist. The training shall include an explanation of the special status species and nesting birds that have potential to be found within the project area, and how to adequately avoid and protect the species if found. The field meeting shall include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures. Training shall be repeated at least annually for the duration of the project period.

Mitigation Measure #3: Botanical resource protections

Private parcels will be surveyed prior to any ground disturbing work and evaluated for suitable habitat for special status plants or sensitive natural communities. Botanical field surveys shall be conducted by a RPF, their supervised designee, or qualified biologist and will comply with survey protocols for plants species listed under the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant

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Populations and Sensitive Natural Communities (2018). If no special status plants are found, no further measures pertaining to special status plants are necessary. If special status plant species are identified during the botanical surveys, the individuals will be avoided. The treatment prescription for the parcel will be modified to exclude activities within 25 feet of the individual and exclusionary flagging or fencing will be placed around the plants prior to operations on the parcel to establish the avoidance area during project implementation.

Mitigation Measure #4: Mammal protections

A. **Mammal Den Surveys** (fisher): All private parcels will be surveyed prior to any project work and evaluated for suitable mammal den habitat. If potential den habitat for fisher is identified within the treatment unit, the project proponent will implement a limited operating period for project treatments occurring the maternal period (May 1-June 30). If the limited operating period for fisher is determined infeasible, to avoid impacts on the species, focused surveys for fisher, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing treatments during the fisher maternity season within habitat suitable for the species. If presence of fisher is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, a no-disturbance buffer of at least 500 feet will be established around the den, and no treatment activities will occur within this buffer until the den is no longer occupied as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.

B. **Bat Maternity Roost Protections** (Townsend's big-eared bat): All private parcels will be surveyed prior to project work during the bat maternity season (April 1-August 31) and evaluated for suitable bat (Townsend's big-eared) roosting habitat (e.g., caves, mines, tunnels, or dwellings). Caves and mineshafts will be clearly marked and reported to the RPF. If no suitable Townsend's big-eared bat roosts are found within the project area, no further measures are necessary. If suitable Townsend big-eared bat roosting habitat is identified within 50 feet of project activities, a RPF or qualified biologist will assess the suitable roosting habitat for signs of bat presence (i.e., guano, insect pieces, etc.). If no roost is present, then no buffer is needed. If a roost is present, then a 250-foot non-disturbance buffer shall be implemented around the roost structure to prevent changes to the roost or cause the species to disperse or be displaced from their roost.

C. **Ringtail Maternity Season Protections*:** If it is not feasible to avoid mechanical treatments, manual tree and snag removal (trees >12"DBH), or prescribed burning activities within habitat suitable for ringtail during the maternity season (April 15–June 30), focused surveys for ringtail will be conducted using trail cameras, track plates, or other non-invasive survey methods to determine

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whether ringtails are present within the treatment area, or presence may be assumed. If focused surveys determine ringtail may be present within the treatment area, the qualified RPF or biologist will conduct a den search within habitats determined to be suitable for this species, such as hollow logs, snags, rock piles, and large trees (i.e., greater than 12 inches DBH) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If suitable den structures are found, the qualified biologist or RPF will inspect the cavity to determine whether ringtails are present, if safely accessible. If active ringtail dens are discovered, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and broadcast burning, mechanical treatments, and manual tree and snag removal will not proceed within the buffer until the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. If an active den is discovered, CDFW will be notified.

Mitigation Measure #5: Avian protections

A. If project activities are to occur during the avian nesting season (February 15-August 31), the RPF, supervised designee, or qualified biologist will conduct pre-treatment surveys for nesting migratory birds in the project area no more than ten days prior to the start of operations. If pre-treatment surveys indicate the presence of any migratory bird nests, a no-disturbance buffer zone (50-100 feet for common passerine species or 500 feet for raptors) will be placed around the nest, depending on species needs and other applicable factors (topography, vegetation screening, nest height, disturbance level etc.).

B. If an active nest of a special status avian species is found within the project area during pre-operational surveys, an appropriately sized no-disturbance buffer will be established around the active nest until the young have fledged. Proposed no-disturbance buffers for special status species that have the potential to occur in the project area are described in Table 6 below. If work within the established no-disturbance buffer is necessary, CAL FIRE will consult with the appropriate wildlife agency (CDFW/USFWS) to ensure take is prevented and impacts are less than significant.

Table 6: Special Status Avian Species Nest Buffers

Species	Buffer Distance
Golden eagle	1 Mile
Bald eagle	560 feet
American goshawk	½ mile
California spotted Owl	¼ mile
Yellow-breasted chat	100 feet

Mitigation Measure #6: Amphibian protections

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Foothill yellow-legged frog: If vegetation treatments are to occur within 200 feet of Class I and Class II watercourses, the habitat suitability for foothill yellow-legged frog will be assessed. If no suitable habitat for foothill yellow-legged frog is found within the treatment area, then no further actions are required. If suitable habitat is present within the treatment area daily inspections will be required.

A. Daily inspection of the day's treatment area within suitable habitat will be performed by the qualified biologist, qualified RPF, or supervised trained designee. If a frog is observed, activities will cease in the vicinity of the frog and a no-disturbance buffer zone of a size that will appropriately avoid foothill yellow-legged frog will be created until the frog has left the area.

California red-legged frog: During the dispersal season (October 1 through April 15), pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological monitor, prior to implementation of prescribed burning, mechanical treatments, within 300 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet intermittent streams, wet seep) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring will be performed year-around prior to any activities within 30 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet Class III streams, wet seeps). If a California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified RPF or biologist that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified biologist, and USFWS.

A. If California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, the specific habitat features used by the frog when detected will be evaluated by a qualified RPF or biologist for habitat retention, if habitat retention will meet the project goals.

B. If operators need to move or treat large woody debris greater than 12 inches in diameter in suitable upland habitat, that piece of woody debris will be evaluated for California red-legged frog by a qualified biologist, qualified professional, RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.

Mitigation Measure #7: Reptile protections

All private parcels will be surveyed prior to any project work and evaluated for suitable terrestrial reptile habitat. If potential habitat for Blainville's horned lizard or Northwestern pond turtle is identified, visual encounter surveys will be completed within suitable habitat within 15 days prior of ground disturbing activities. If a horned lizard or Northwestern pond turtle is identified during

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surveys, or assumed to be present, biological monitoring by a qualified RPF or biologist will occur during prescribed burning or mechanical treatments within or adjacent to sensitive habitat areas. If the qualified RPF or biologist detects a special-status reptile during treatments, a non-disturbance buffer of 100 feet, will be implemented around the individual unless it is determined by a qualified RPF, biologist, or RPF supervised designee that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal has left the area.

Mitigation Measure #8: Invertebrate protections

Western and Crotch's* bumble bee: Prior to project work, all private parcels will be evaluated for bumble bee habitat and/or surveyed for special status bumble bees. The project proponent will refer to CDFW's Survey Considerations for California Endangered Species Act (CESA) prior to conducting surveys or habitat evaluations. If special status bumble bees or suitable habitat features are observed, presence will be assumed, and the following avoidance measures will be applied:

A. Treatment areas in occupied or suitable habitat will be divided into multiple treatment units and conducted in a patchy pattern such that the entirety of suitable habitat is not treated within the same year. The size and distribution of treatment units will be designed by the RPF to provide refuge and ensure habitat features necessary for native bumble bees will be retained.
B. Prescribed burning within occupied or suitable habitat for special status bumble bees will occur from October through February to avoid the bumble bee flight season, to the extent feasible.
C. Herbicides will not be applied to flowering native plants within occupied or suitable habitat during the bumble bee flight season (February through November), to the extent feasible.
D. If a bumble bee nest is identified within the project area, the RPF or qualified biologist will establish a 50-foot no-disturbance buffer around the nest.

Valley elderberry longhorn beetle (VELB): The USFWS developed conservation guidelines to avoid impacts to VELB (USFWS 1999). Due to Valley elderberry (host plant to VELB) being present in the project area, the following measures apply.

A. The Project area will be surveyed by a RPF, their supervised designee, or a qualified biologist for elderberry host plants prior to any Project-related activities.
B. In May and June, no vegetation removal shall occur within 100 feet of any elderberry plant over 1 inch in diameter until inspected to determine

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potential presence of VELB. Elderberry plants will be retained and protected from cutting, removal, or damage.

C. No herbicides will be used within 25 feet of any elderberry plant with a stem measuring greater than 1 inch in diameter at ground level.

D. Removal of nearby ground vegetation (within 5 feet of elderberry plants) may be completed from July through April.

Mitigation Measure #9: Notification of Species detection*

If any Federally or State Listed, candidate, or Fully Protected species is encountered during operations, the RPF shall be notified immediately. All project work within 100 feet of the species occurrence will cease and the appropriate wildlife agency (CDFW or USFWS) will be contacted within two (2) working days for further guidance. CAL FIRE will document the occurrence in the CNDDB and collaborate with CDFW and/or USFWS to ensure the proposed protection measures and/or operational buffer is adequate to protect the listed species.

Mitigation Measure #10: Geology and Soils Protections

A. Identification of unstable areas: No unstable areas or highly erosive soils are known to occur or have been previously identified within the project area. Prior to treatment operations in areas over 30% slope; the treatment area will be traversed by a RPF, or their supervised designee, to identify any unstable areas requiring avoidance by heavy machinery. If an unstable area is identified, ground disturbance and heavy equipment use will not occur in the area and be buffered at minimum 25 feet to prevent the potential for landslides.

B. Equipment slope limitation: Heavy equipment shall be limited to the following slopes:

Equipment Type	Maximum Slope Percent
Wheeled front end loaders or masticators	30%
Tracked Chippers	50%
Tracked Masticators or front-end loaders	50%
Walking Type Excavator / Masticators	65%

C. Soil loss and compaction: Heavy equipment use will be limited to existing and stable road surfaces during saturated soil conditions. Saturated Soil conditions are defined as follows:

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Soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing material during equipment operations, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials.

Mitigation Measure #11: Watercourse Protections

Prior to project treatments, watercourses will be identified, and appropriate buffer widths will be flagged by a RPF or supervised designee. Watercourse and Lake Protection Zones (WLPZs) have been adopted from the California Forest Practice Rules (FPRs; Title 14, California Code of Regulations Chapters 4, 4.5 and 10). These buffers and corresponding protections will be followed for implementation of the proposed project covered under this analysis (see Tables 3.0 and 3.1 above) and are as follows:

Watercourse and WLPZ protection measures:

A. Watercourse protection zones will be established within 25 to 50 feet of Class III watercourses, within 75 to 100 feet of Class II watercourses, and within 75 to 150 feet of Class I watercourses within the Project area. Wider protection/buffer zones will be determined by slope percent of the watercourse (see Table 3.1-Protection Measures by Watercourse Classification).
B. Equipment will be excluded from the watercourse protection zone except for existing equipment crossings of Class III watercourses which are dry at the time of operations.
C. Within the watercourse protection zone of Class I and II watercourses, no mastication or prescribed burning will be applied; only hand treatment. Treatments will retain at least 50% of the existing groundcover and 50% of the existing overstory canopy.
A. Within the watercourse protection zone of Class III watercourses, hand treatments and mastication may be applied. Treatments will retain at least 50% of the understory vegetation to maintain soil stability.

Mitigation Measure #12: Cultural Resource Protections

A. Prior to any ground disturbing work, proposed treatment areas will be evaluated for the presence of cultural resources utilizing the *Updated Cultural Resource Review Procedures for CAL FIRE Projects (2020).* These procedures are briefly described below.
    i. An archival document review of records housed at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS).

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ii. Coordination with the California Native American Heritage Commission (NAHC) and geographically affiliated tribes to identify potential heritage interests in the Project area.
iii. Pre-field research and historical records investigation of the Project area.
iv. Pedestrian archaeological survey of the project area conducted by a CAL FIRE Archaeologist, Consultant Archaeologist, or certified archaeological surveyor overseen by a professional Archaeologist.
v. Preparation of site records or updated site records for resources identified.
vi. Development of a report (Archaeological Survey Report or ASR) which summarizes the above referenced information and provides resource management recommendations and measures to be taken to protect cultural resources within the treatment areas. ASR and resources protection measures will be reviewed by a CAL FIRE archaeologist prior to being implemented to ensure adequate resource assessments and protections have been made.

B. Encountering Human Remains: In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CAL FIRE and/or the project contractor(s) shall immediately halt potentially damaging activities in the area of the burial and notify the Placer County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. 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[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Placer County and CAL FIRE to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

3.3 SUMMARY OF FINDINGS

This IS-MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS-MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

- The proposed project will have no effect related to Agriculture and Natural Resources, Minerals, Population and Housing, Public Services, Recreation, Land Use and Planning, Transportation and Traffic, Energy and Utilities and Service Systems.

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- The proposed project will have a less than significant impact on Hazards and Hazardous Materials and Wildfire.

- Mitigation is required to reduce potentially significant impacts related to Aesthetics, Air Quality, Greenhouse Gas Emissions, Noise, Biological Resources, Cultural Resources, Geology and Soils, Hydrology, Water Quality and Mandatory Findings of Significance.

The Initial Study-Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses that were conducted by the Department. This initial study revealed that potentially significant environmental effects could result from the proposed project. However, CAL FIRE revised its project plans and has developed mitigation measures that will eliminate impact or reduce environmental impacts to a less than significant level. CAL FIRE has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS-MND is therefore the appropriate document for CEQA compliance.

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INITIAL STUDY-ENVIRONMENTAL CHECKLIST

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.

4. *Environmental Factors Potentially Affected*

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

5. *Determination*

On the basis of this initial evaluation:

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

☒ I find that although the proposed project COULD have a significant effect on the environment, there WOULD 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 would be prepared.

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

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

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

DocuSigned by:
John Melvin
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8/11/2025

John Melvin
Assistant Deputy Director
California Department of Forestry and Fire Protection

Date

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6. *Environmental Checklist and Discussion*

6.1 AESTHETICS

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

Less Than Significant with Mitigation Incorporated: The area of the project is generally scenic with deep canyons, mountain views, waterbodies, and diverse vegetation. While there is no designated scenic vista, the visual character and quality of views surrounding the project area is high. Numerous landowners have homes and properties that can view the project area and there are several roads within and adjacent to the project area. While treatments may be observable, it is expected that impacts on aesthetics will be less than significant as project activities will be limited to removing ladder fuels and increasing spacing between trees to create a more resilient forested landscape. The North Fork American River is a designated Wild River, and the southern half mile of the designated section is roughly one-half mile away from the project area. Vegetation treatments from project work will occur on higher, up canyon ridge sections in this area and project work will not alter or affect the aesthetics of the landscape or general area, even when viewed from the river. Where feasible, treatment boundaries will be designed to connect with natural features such as topographic breaks and natural changes in vegetation type.

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

No Impact: No significant damage is anticipated to scenic resources. While most overstory trees will be retained, some minor damage to residual trees in the form of scuffs to trunks or broken limbs may occur. Damage to residual trees and vegetation will be minimized to the greatest extent feasible and will only be visible from neighboring residences. There are no scenic highways within view of the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Except as provided in Public Resources Code § 21099, <u>in non-urbanized areas</u>, would the project substantially degrade the existing visual character or quality of	☐	☐	☒	☐

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

Less Than Significant: The project will involve the removal of ladder fuels which will alter the appearance of the treatment areas to some degree, however large trees and a mosaic of understory vegetation will be retained. Although less vegetation would be present following treatments, the visual character would not be substantially altered. The proposed treatments would occur on privately owned land and does not contain any public use areas or public recreational opportunities. Long-range and expansive views from scenic vistas would continue to be dominated by the existing visual resources, including trees and other vegetation. Currently, much of the project area has a thick understory of small trees and brush which obscures the sight distance. The project will create a more open understory and will increase sight distances between treatment areas. In areas surrounding the project area, there is currently a mosaic of vegetation density ranging from open grassland to dense forest with a thick brush understory. The treatment will transition the project to a more open condition than that which is currently present throughout the landscape. In some cases, the natural vegetation present provides a visual screen between neighboring residences and between residences and roadways or other public viewpoints. Smoke from prescribed burning could be visible from public viewpoints along Highway 80. Smoke from prescribed burns would not result in substantial aesthetic impacts, because burning would be temporary, and the requirement to prepare and adhere to a smoke management plan which prescribe the conditions under which prescribed burning can occur to reduce the generation and visibility of smoke. The project has the potential to reduce the visual screening effects of natural vegetation and BMPs listed above are incorporated into this MND to maintain visual screening and public vantage points of the project treatment area.

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

No Impact: The project does not propose construction of a light source, or reflective material. Existing light sources in the area are associated with residences and are generally of low intensity. The vegetation retention standards of the project will be sufficient to not significantly alter day or nighttime views.

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6.2 AGRICULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No Impact: The project area contains very little agricultural activity. No areas within the project area are identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No impact will occur to this resource.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒

No Impact: Although no Williamson Act Lands are known within the project area, the proposed activities are consistent with allowable uses for agricultural zoning and Williamson act contracts. No impact will occur to this resource.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☒

No Impact: No rezoning is required or proposed with this project and any of its activities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐

Less Than Significant: No conversion of forest land will occur. The project will involve the felling and chipping, masticating, or burning of some trees 12 inches DBH or less. Trees larger than 12 inches DBH may be determined by an RPF as required for removal

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to accomplish project objectives or to remove safety hazards within the project work area. Trees larger than 12 inches requiring removal will be marked prior to cutting, and such occurrences are projected to be rare and on an as-needed basis during project implementation. When the RPF determines the necessity for habitat retention, certain dead trees may be left intact. The treatment specifications were designed to retain tree cover in amounts which would not transition the project area from forested to non-forested condition. Specifically, the tree removal specifications will result in at minimum 150 trees per acre when present prior to treatment activities, with no areas falling below 75 percent of their original stocking densities. Although, treatment activities would alter forest land through vegetation removal, the project area will still support at least 10 percent of native tree cover thereby maintaining consistency with the definition of forest land as defined by PRC Section 12220(g). Treatment activities would not result in the loss of forest land or other changes in the existing environment that would result in the conversion of forest land to a non-forest use.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use?	☐	☐	☒	☐

Less Than Significant: The project does not constitute “timber operations” under the forest practice act because no commercialization of forest products will occur, and timberland will not be converted to other uses. No changes in zoning are proposed by the project, and all activities are allowable under existing zoning of the project area. The project design and lack of farmland within the proposed treatment area results in impacts that are less than significant.

6.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: (Mitigation Measure 1: Air Quality)
The proposed project is not expected to conflict with or obstruct with implementation of any applicable air quality plan. The Project area is within the Placer County Air Pollution Control District (PCAPCD). PCAPCD adopted a district wide smoke management program in 2001 to allow for the continuation of prescribed burning as a resource management tool while minimizing potential smoke impacts to the public. Burn projects greater than 10 acres or that will emit in excess of one ton of particulate matter must

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complete a PCAPCD Smoke Management Plan (SMP). This program is intended to help minimize smoke impacts on air quality and the public through planning, use of automated weather stations to provide meteorological data to predict smoke transport and dispersion, and the use of fuel load reduction prior to burning. Part of this program includes the requirement for project proponents to complete a SMP which includes measures to reduce or eliminate air quality impacts on sensitive receptors, including but not limited to, meteorological prescription of the burn, contingency actions, smoke mitigation, identification of sensitive receptors and public noticing. The development and PCAPCD approval of the project specific SMP will ensure impacts to air quality from prescribed burning will be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: (Mitigation Measure 1: Air Quality)

The Mountain Counties Air Basin portion of Placer County is in nonattainment status for Ozone and PM10 under state designations, and in nonattainment status for 8-hour ozone under federal standards. The project will involve some emissions of PM 10 and substances leading to ozone generation, but such emissions will only occur during operations and will not be a long-term source. The purpose of the project is to assist in controlling wildfire which is a major source of PM10 in Placer County; therefore, the project may result in a net emissions reduction over time. Emissions of criteria pollutants may be generated by mechanical equipment, hand tools, worker commute and haul trips, and prescribed burning. Depending on the number of acres that would undergo treatment on the same day (or same year) within the same air basin, the levels of criteria air pollutants and precursors emitted by treatment activities could exceed the mass emissions thresholds recommended by local air districts without any mitigations applied.

PAPCD daily construction phase emissions thresholds of significance are presented in the table below.

Pollutant	Daily Threshold (lbs.)
ROG	82
NOX	82
PM10	82

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Vehicular Emissions

Placer APCD Thresholds of Significance sites examples of projects that would exceed ozone precursor (ROG + NOx) emissions standards. Such projects have population uses tied to them where people would travel in vehicles to and from the projects, creating emissions. The proposed project will not increase population nor increase vehicle use, as the project is located on private property and the amount of people using or visiting the area would not increase. The only increase in vehicular emissions and would be temporary and less than significant, occurring once to establish the fuel break, and possibly reoccurring every several years to maintain the fuel break.

As an example of daily vehicular emissions, hand crew work will require one or two crew carrying vehicles, while mastication work will consist of the machinery itself and one or two vehicles for equipment operators and a one-time drop-off and pick-up of equipment. Emissions of Diesel Particulate Matter (DPM) will be insignificant, consisting of the crew carrying vehicles, the transport for the masticator and the mastication equipment itself. The daily emissions from light duty vehicles will not be significant or have impacts to the local air quality. All light duty equipment used for crew transport or project activities will be modern, maintained, CARB compliant vehicles that conform to all California emissions regulations.

The daily emissions from heavy equipment were estimated using the Sacramento Metro Air Quality Management District: Construction Mitigation Calculator (Version 9), assuming the potentially most active operational scenario of a skid steer loader, excavator, and tracked chipper all operating simultaneously on the same day for 8 hours. This yielded daily emissions of 0.31 lbs. ROG, 1.82 lbs. NOX, 0.01 lbs. PM10, and 0.01 lbs. of PM2.5, all of which are far below the Daily Threshold.

Particulate Matter from Fugitive dust

Particulate matter from fugitive dust may be generated during project activities through mechanical removal of vegetation resulting in ground disturbance or by vehicles utilizing dirt roads. During project activities, generation of fugitive dust will be minimized utilizing dust control BMPs. Due to the short project duration, minor amount of soil disturbance anticipated, and dust control BMPs implemented, this project is not expected to result in significant impacts.

BMPs intended to reduce fugitive dust include project design features incorporated to reduce dust generated during mastication activities by minimizing soil disturbance by utilizing low ground pressure rubber tracked equipment and instructing equipment operators to keep the shredding head of mastication equipment at or above the duff layer, minimize sharp turns, and operate up and down slopes rather than on contour, and cessation of operations during the hottest and driest parts of the year. Moreover, this equipment will primarily be operated on a path of mulched material, minimizing the amount of soil disturbance. Other BMPs to reduce fugitive dust emissions include watering roads near residences or stopping mechanical operations if noticeable fugitive dust in the atmosphere has the potential to escape outside the project area.

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Furthermore, all project operations will comply with Placer County Air Pollution Control District's Rule 228 which regulates project activities that have the potential to generate fugitive dust: https://www.placerair.org/1861/Rules.

To reduce the potential impacts of fugitive dust from mastication operations and comply with PCAPCD Rule 228, Mitigation Measures 1B have been incorporated into the project.

Mitigation Measure #1B-Dust Management: within 200 feet of residences, open public roads, or trails, masticators shall operate during periods where the soil moisture is high enough to prevent generation of noticeable airborne dust. If operations must occur within 200 feet of residences, open public roads, or trails during low soil moisture periods, applied watering or other methods (e.g., chemical dust suppressants, surfactants, etc.) will be utilized to minimize dust, or switch to the use of hand cutting and chipping of material.

Masticators will not operate if conditions allow noticeable fugitive dust in the atmosphere to escape outside the project area, or if operations obscure an observer's view at any location of such a degree of opacity equal to or greater shading as that designated No. 2 on the Ringelmann Chart (i.e., 40% opacity), as published by the United States Bureau of Mines
Hand crew work has low potential to generate dust and emissions. Small areas of disturbed soil may result from crews dragging cut material to a chipper, or where piles were placed and burned. Such areas are not sufficient in size to act as a source of significant dust generation. Emissions from small equipment such as chainsaws is expected to be minimal will not have significant affect to the air quality of the project area. All small equipment used for project work will be well-maintained and CARB compliant.

Burning Emissions
Pile and broadcast burning has the potential to impact air quality. Burning operations associated with this project would be regulated by PCAPCD's Prescribed Burning and Smoke Management Program (Rule 303) which can be found at: http://www.placerair.org. This program requires the preparation of a SMP as well as public notification of proposed burning operations. Compliance with PCAPCD's requirements and the developed SMP will reduce air quality impacts and prevent any considerable net increase in criteria pollutants.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐

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Less Than Significant with Mitigation Incorporated: (Mitigation Measure 1: Air Quality)

While the proposed project may result in minor and short duration air quality impacts, it is not expected to expose sensitive receptors to substantial pollutant concentrations. Compliance with PCAPCD's Prescribed Burning and Smoke Management Program (Rule 303) requires the preparation of a SMP to reduce prescribed burn related emissions, direct potential emissions away from sensitive receptors (such as elder care facilities or schools), as well as notifying the public and nearby residents of the planned burn. The project includes **Mitigation Measure #1**, as well as BMPs to reduce fugitive dust particular matter, especially near residences. Additionally, the project has been designed to minimize the production of ozone precursors (ROG + NOx) by limiting vehicle traffic. Furthermore, this project has the potential to prevent or lessen wildfires which can result in serious air quality impacts on sensitive receptors.

*During the initial 30-day CEQA comment period for this project, the California Department of Toxic Substance Control (DTSC) made a formal comment regarding two areas of past DTSC regulatory oversight relating to this impact that are within the project boundary. The two areas include the Ellsworth MacFadden Property (160 acres) and the Bunch Creek site (600 acres); both located east of the town of Colfax. These two properties are discussed below:

1) Ellsworth MacFadden Property: Placer County Department of Health Services inspected the Ellsworth MacFadden Property in May 1987 and found excessive accumulation of refuse, debris, and junk (including lead-acid batteries and drums of unknown content), and abatement was ordered. Approximately 200 lead-acid batteries were removed from the property. The inspection noted soil discoloration in the vicinity of the battery storage area. (The area was approximately 10 feet by 4 feet). In October 1988, a drum recycler removed the drums. Also in October 1988, soil sampling was conducted where the soil discoloration was discovered. The soil samples revealed high levels of lead. Placer County informed the owner that the contaminated soil area must be properly delineated and remediated. In the spring of 1999, the owner hired a consultant to excavate the lead contaminated soil and dispose of it. The dimensions of the excavation were approximately 6 feet (east-west), 20 feet (north-south), and two feet deep (approximately 9 cubic yards). Following the excavation there was no visual evidence of impacted soil in the base or sidewalls of the excavated area. Two confirmation samples were collected and were below the cleanup goals. A memorandum dated March 9, 2000, from Placer County Environmental Health included a "No Further Action"(NFA) letter for cleanup of the lead contaminated soil.

   The property was subdivided in 2004. A February 2, 2004, Placer County Environmental Health memorandum stated potential health issues from the presence of naturally occurring asbestos and elevated background arsenic concentrations may be present on the site. The county required no further action to evaluate the arsenic and asbestos but did require a notice to be placed on the final subdivision map advising owners of the situation and to perform "any and all

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necessary assessments to evaluate the risk". The 2004 memorandum also stated that "naturally occurring asbestos and elevated arsenic concentrations are beyond the expertise of the Placer County Environmental Health's office." No further evaluations of any of the now subdivided properties are known to have occurred.

2) Bunch Creek: In 2009, following an attempt by the landowner to rezone and subdivide the property, Placer County requested a Phase I and Phase II environmental assessment to evaluate known historical mining features on the property to ensure they did not pose an environmental health hazard. The Phase I report examined underground and mill site workings and quartz veins and analyzed rock samples for sulfide minerals. Findings showed the site consists of Mariposa Formation rock with quartz veins that lacked gold or sulfides. No evidence of hazardous materials or contamination was found.

   The Phase II assessment included follow-up field investigations and laboratory testing to determine if known historic mining infrastructure (e.g., abandoned tunnels, rock crusher) or remaining materials (e.g., mine tailings, contaminated soil) pose a risk to public health. Soil samples collected adjacent to historical mining features revealed elevated arsenic and chromium levels above the Maximum Acceptable Concentration Levels (MACLs). elevated levels of both were also found in naturally occurring native soils in the However, similarly elevated levels of both metals were also detected in background samples from native, undisturbed soils, suggesting that these elevated concentrations may be attributable, at least in part, to naturally occurring conditions. Given the limited access and rocky and steep terrain, the recommended approach favored administrative solutions, but if removal was necessary, filling tunnels with mine tailings was suggested to minimize environmental impact and reduce disruption.

In summary, DTSC identified two areas within the project boundary that have been subject to prior DTSC regulatory oversight. The Ellsworth MacFadden property had a historic dump site that was remediated in 1999, and Placer County Environmental Health (PCEH) issued a NFA letter in 2000. Additionally, in 2004, PCEH determined this site has potential for naturally occurring asbestos and elevated arsenic concentrations. The Bunch Creek property has known historic mining features (e.g., adits, tailings, mill site) and a 2009 phase II assessment revealed local native soils contained arsenic and chromium levels above heath-based screening levels.

The inclusion of DTSC comment information that was shared about the Ellsworth MacFadden and Bunch Creek properties does not result in any new significant project impacts and does not require any changes or additions to the original proposed mitigation measures. DTSC recommended ensuring that Health and Safety Code section 101480 be adhered to as applicable to ensure risks to the public are minimized. Refuse and contaminated soils detected on the Ellsworth MacFadden Property were removed and a NFA letter was issued. The Bunch Creek property phase II site results

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determined that both native soils and those associated with mining features contain elevated levels of arsenic and chromium. Because the identified hazardous substances (e.g., asbestos, arsenic, chromium) are naturally occurring in these locations, they are not considered "contamination" and not subject to this code section. DTSC also recommended that all imported soil be tested and to review the DTSC Information Advisory Clean Imported Fill Material Fact Sheet if importing fill is necessary. However, importing of fill is not proposed for any portion of the proposed project

PCAPCD was further consulted about **MM#1B** regarding project work within these areas of naturally occurring potentially elevated heavy metal soils as well. PCAPCD concurred that **MM#1B** would adequately protect air quality during implementation of the proposed project work. Additionally, PCAPCD noted that the California Air Resources Board's *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations* (NOA ATCM), codified in California Code of Regulations, Title 17, Section 93105 (c) (3), includes has an exemption for Agriculture and Timber Harvesting Operations. As such the mastication activities proposed as part of this project fall within this exemption.

Data from the California Geological Survey (CGS) indicates that no large deposits of serpentine (ultramafic and containing asbestos) soils are known to occur within the project area. See map in Appendix B, page 136 to view the CGS Geology Map of the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less Than Significant: As discussed in item a) and b) above, the project will result in some temporary increases in emissions, and may temporarily result in objectionable odors (primarily smoke) to nearby residences. Adherence to the SMP would reduce overall burn related emissions and project-related emissions would not persist in a given area for a prolonged period of time. Mechanical operations may expose nearby residences to diesel odors temporarily, however, these impacts would be temporary and these types of odors are common for this rural area given the proximity to the I-80 corridor and timber harvesting activities.

6.4 BIOLOGICAL RESOURCES

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: (Mitigations 2-9, 11)
The below section describes the analysis conducted to ensure the proposed project would not have a significant impact on any sensitive species of plant or animal, or conflict with any plans or regulations developed by CDFW or USFWS. A summary of the results of this analysis can be found in Table 4: special status faunal species and Table 5: special status plants.

<u>This analysis considered the following sensitive species:</u>

- Listed as Endangered or Threatened under the Federal or California Endangered Species Act (ESA and CESA respectively)
- Proposed for listing under the ESA or CESA (Proposed or Candidates for listings)
- Identified by CDFW as a Species of Special Concern (SSC)
- Designated as Fully Protected (FP) by the California Fish and Game Code (§3511, §4700, §5050 or §5515)
- Protected under the California Native Plant Protection Act
- California Rare Plant Rank (CRPR) status of 1A through 2B by the California Native Plant Society (CNPS)

Field review, a 8.6-mile (9-quad) buffered CNDDB search, range maps, and CDFW consultation was conducted to scope for potential species that may occur within the project area. An analysis for each species or group of similar species (e.g., terrestrial insects) that could experience potentially significant impacts and a discussion of proposed mitigation measures that will reduce the level of impact to a less than significant level follows each summary table. Mitigations for taxa as well as individual species are provided. The detailed analysis discusses each species or group in three sections:

- Species status and habitat requirements.
- Potential impacts of the proposed Project.
- Proposed avoidance and mitigation measures.
- Conclusion and significance determination.

<u>Section A</u> describes the existing environment, including species life history, habitat requirements, and other relevant information.

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Section B addresses the potential impacts (both direct and indirect impacts) of the proposed Project on the various species that may be present in the project area. CEQA Guidelines Section 15358 describes direct and indirect impacts. Direct impacts are those which "are caused by the Project and occur at the same time and place." Examples may include mortality or disturbances that result in flushing, displacement, or harassment of the subject animal. Indirect impacts "are caused by the Project and are later in time or farther removed in distance but are still reasonably foreseeable." An example of an indirect impact may include the modification of understory habitat, reducing cover, making it harder to hide from predators.

Section C provides the design features and/or mitigation measures that have been incorporated into the project to reduce or eliminate significant impacts.

Section D provides a summary of supporting conclusions and the statement of determination for each species or group based upon relevant information provided in Sections A and B.

*During the initial 30-day public comment period of the MND, the California Department of Fish and Wildlife (CDFW) submitted informal comments recommending updates to Mitigation Measures, including clearer notification procedures and consideration of additional species such as ringtail, and Crotch's bumble bee. In response, **Mitigation Measures #4, #8, and #9** were revised to incorporate protections for these species and to require notification of listed species detections within two working days. These revisions represent substantive updates to the mitigation measures but do not introduce any new significant environmental impacts. The updated mitigation measures ensure alignment with CDFW guidance and consistency with the California Endangered Species Act (CESA).

Table 7. Assessment of Special Status Faunal Species

Special Status Mammal Species	Species Status[1]	Habitat Requirements	Present In Project Area: Habitat and/or Detections	Impact Determination
Fisher *Pekania pennanti*	SSC BLM-S	Upland and lowland forests, coniferous, mixed, and deciduous. Dense canopy cover.	One CNDDB recording of species within the project buffer area (1973), and no CNDDB recordings within project area. Habitat is present in the Project area, and northern 450 acres of project area is currently in CNDDB range for species (BIOS)	May Occur, LTS with MM#4A
Townsend's big-eared bat *Corynorhinus townsendii*	SSC BLM-S LC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites	Four CNDDB recordings of species within the project buffer area, and no CNDDB recordings within project area. Suitable roosting and foraging habitat is present within the Project area.	May Occur, LTS with MM#4B

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		limiting. Extremely sensitive to human disturbance.		
Ringtail* *Bassariscus astutus*	FP	Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations.	Detections for this species are not tracked within the CDFW CNDDB, but the project area is within the CDFW BIOS Ringtail Range data layer. Potential habitat for species is present within the project area.	May Occur, LTS with MM#4C
Special Status Bird Species	**Species Status[1]**	**Habitat Requirements**	**Present In Project Area: Habitat and/or Detections**	**Impact Determination**
Golden Eagle *Aquila chrysaetos*	FP BLM-S	Forests, canyons, shrublands, grasslands and oak woodlands	Not observed; Some suitable nesting habitat is present and the area may be used to forage.	May occur, LTS with MM# 2 & 5
Bald eagle *Halieaeetus leucocephalus*	SE FP BLM-S LC	Large coniferous trees near bodies of water	Not observed; Some suitable nesting/roosting habitat is present.	May occur, LTS with MM# 2 & 5
American goshawk *Accipiter atricapillus*	SSC BLM-S	Coniferous forest with high canopy cover and open understory	Not observed; Some suitable nesting habitat is present and the area may be used to forage.	May occur, LTS with MM# 2 & 5
Burrowing owl *Athene cunicularia*	SSC BLM-S LC	Open, dry, sparsely vegetated land with available burrow; grasslands and along irrigation banks adjacent to intensive agriculture	Not observed; Project is outside of species range.	Not expected to occur, No Impact
California spotted owl *Strix occidentalis occidentalis*	SSC BLM-S FPT	Old growth forest, multi-layered canopy, abundant woody debris, standing dead trees	Not observed; Some suitable nesting habitat is present, and the area may be used to forage.	May occur, LTS with MM# 2 & 5
Great gray owl *Strix nebulosa*	SE LC	Mixed conifer forest with ponderosa pine, Douglas fir, incense cedar and black oak	Not observed; Areas of dense canopy cover, however limited open space (meadows, clearings) necessary for hunting.	Unlikely to occur, LTS with MM# 2 & 5
Swainson's hawk *Buteo swainsoni*	ST BLM-S LC	Open grasslands, agriculture areas, nest near riparian systems	No; No suitable habitat present.	Not expected to occur, No Impact
American peregrine falcon *Falco peregrinus anatum*	FP CC	Open landscapes, cliffs, along rivers, and lake edges, up to 12,000 ft. elevation	Occurrence documented in buffer. Limited nesting habitat in the form of cliffs, rocky outcrops, or steep ledges.	Unlikely to occur, LTS with MM# 2 & 5
Black swift *Cypseloides niger*	SSC CC VU	Ledges or shallow caves in steep rock faces and canyons	Occurrence documented in buffer but no records in Project area. Project area is outside of species range.	Not expected to occur, No Impact

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California black rail *Laterallus jamaicensis coturniculus*	ST FP BLM-S EN	Shallow freshwater marshes, wet meadows, and flooded grassy vegetation	Occurrence documented in buffer but no records in Project area. No suitable habitat present.	Not expected to occur, No Impact
Yellow-breasted chat *Icteria virens*	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Occurrence in buffer. Some suitable nesting habitat is present along watercourses that will be protected from project treatments.	May occur, LTS with MM# 2, 5 and 11.
Special Status Amphibian and Reptile Species	**Species Status[1]**	**Habitat Requirements**	**Present In Project Area: Habitat and/or Detections**	**Impact Determination**
California red-legged frog *Rana draytonii*	FT SSC VU	Found mainly near ponds in humid forests, woodlands, grasslands, and streamsides with plant cover. Most common in lowlands or foothills.	Occurrences in buffer but no records in Project area. Some suitable habitat is present along watercourses.	May occur, LTS with MM# 2, 6B and 11.
Foothill yellow-legged frog. north Sierra DPS *Rana boylii pop. 3*	ST BLM-S	Found in or near rocky perennial streams and rivers in a variety of habitats including riparian, mixed conifer, and wet meadow types below 6,000'.	Known to Occur. Three recorded occurrences within the CNDDB search within the project area.	May occur, LTS with MM# 2, 6A and 11.
Blainville's horned lizard *Phrynosoma blainvillii*	SSC BLM-S LC	Valley foothill hardwood, conifer and riparian habitat, pine-cypress, juniper and annual grassland habitat	Occurs in buffer but no records in Project area. Some suitable habitat is present within project area.	May occur, LTS with MM# 2 and 7A.
Northwestern pond turtle *Actinemys marmorata*	SSC BLM-S VU FPT	Marshes, streams, rivers, ponds, and lakes with logs or boulders	Occurs in buffer but no records in Project area. Some suitable habitat is present and the area may be used to forage.	May occur, LTS with MM# 2 and 7B.
Special Status Fish Species	**Species Status[1]**	**Habitat Requirements**	**Present In Project Area: Habitat and/or Detections**	**Impact Determination**
Central valley steelhead *Oncorhynchus. mykiss irideus pop. 11*	FT	Upper Sacramento River tributaries.	Occurs in buffer but no records in Project area. Habitat for species is immediately downstream of project areas within the American River.	Less than Significant Impact with Mitigation Measure 16
Central valley spring-run chinook salmon *Oncorhynchus tshawytscha*	FT ST	Streams and rivers with riparian vegetation and woody debris	Not observed; Out of species range.	No Impact
Central valley fall/late fall run ESU chinook salmon	SSC	Streams and rivers with riparian vegetation and woody debris	Not observed; Out of species range.	No Impact

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Oncorhynchus tshawytscha				
Special Status Invertebrate Species	**Species Status[1]**	**Habitat Requirements**	**Present In Project Area: Habitat and/or Detections**	**Impact Determination**
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	Requires elderberry for entire life cycle.	Occurs in buffer but no records in Project area. Habitat for host Sambucus genus of elderberry is present within the project area.	Less than Significant Impact with Mitigation Measure 12B and 16
Western bumblebee *Bombus occidentalis*	SC VU	Ground burrows and abundant nectar-producing flowers.	Occurs in buffer but no records in Project area. Habitat for overwintering, nesting, and floral foraging exists within the project area.	Less than Significant Impact with Mitigation Measures 12A and 16
Crotch's* Bumble Bee *Bombus crotchii*	SC VU	Ground burrows and abundant nectar-producing flowers.	Occurs in buffer but no records in Project area. Habitat for overwintering, nesting, and floral foraging exists within the project area.	Less than Significant Impact with Mitigation Measures 12A and 16

[1]Key:

Federal:
FE Endangered (legally protected)
FT Threatened (legally protected)
FPT Proposed for listing as Threatened under ESA
FC Candidate for Listing under ESA

State:
SE Endangered (legally protected)
ST Threatened (legally protected)
SC Candidate for Listing under CESA (legally protected)
FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)

S = BLM Sensitive, CC = USFWS Conservation Concern, , IUCN-(LC,VU,EN) = International Union for Conservation of Nature Least concern (LC), Vulnerable (VU), Endangered (EN)

Species Specific Review:

SPECIAL STATUS MAMMALS:

Fisher (*Pekania pennanti*), Townsend's big-eared bat (*Corynorhinus townsendii*), and Ringtail* (*Bassariscus astutus*)

- **Species Information and Preferred Habitat**
  Fisher is an uncommon permanent resident of the Sierra Nevada and occurs in intermediate to large-tree stages of coniferous forests and deciduous-riparian habitats with a high percent of canopy closure. Fishers den in a variety of protected cavities, brush piles, logs, or under an upturned tree. Hollow logs, trees, and snags are especially important (Zeiner *et al.* 1988-1990).

  The Townsend's big-eared bat is found in all habitat types except subalpine and alpine. This species prefers mesic habitats and focuses foraging efforts along ecotones. Roost sites are a limiting habitat factor, and the bat requires caves, or man-made cave-like structures such as tunnels or buildings (Zeiner *et al.* 1988-1990).

  Ringtail is widely distributed and is a common to uncommon permanent resident within the state. The species occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Species uses

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hollow trees, logs, snags, cavities in talus and other rocky areas, and other recessed areas are used for cover and reproduction (Zeiner *et al.* 1988-1990).

- **Effects of the Proposed Project**

  Direct impacts: Noise produced by Project-related activities could disturb denning fishers, ringtails, or roosting bats, that are known to be sensitive to disturbance while denning and roosting. Project-related vegetation removal could harm denning or roosting individuals, or their young, if structures such as dead or hollow suitable denning trees are removed or if trees near suitable roosting sites are removed.

  Indirect impacts: Proposed project activities are not likely to result in habitat alterations that negatively impact these species. The more open post-fuel-treatment canopy could improve habitat for foraging bat species. The northern 450-acre section of project area that is within the CNDDB species range for fisher is non-riparian and unlikely to have species present due to its distance from a water source or riparian area (Zielinski *et al.* 2005). Furthermore, this northern 450-acre section is bordered by Interstate 80 to the west and is bisected by the Union Pacific Railroad. Noise from this heavily trafficked area is likely a deterrent for fisher and the species is likely further away near less-noisy areas and within closer proximity to water or riparian areas. Smoke or other emissions could enter caves, mines, and cavities or dens within trees, depending on air-flow characteristics and weather conditions of the project area, which could potentially affect bats, ringtails, and fishers, if they are present. Smoke from prescribed burning is not likely to be toxic to bats in caves or mines, but gases could potentially cause arousals during hibernation (Perry 2012).

- **Design Features and Mitigation Measures to prevent significant impacts**

  While it is unlikely that fisher, ringtail, or Townsend's big eared bat will be utilizing the project area during the vulnerable maternal season, mitigation measures (MMs) have been included in the project design to prevent indirect or direct impacts to special status mammals. These mitigation measures are described below.

  Mitigation Measure #2: Environmental awareness training:

  All personnel implementing fuel reduction activities within the project area shall attend an environmental education program presented by the Registered Professional Forester lead, their supervised designee, or qualified biologist. The training shall include an explanation of the special status species and nesting birds that have potential to be found within the project area, and how to adequately avoid and protect the species if found. The field meeting shall include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures.

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Training shall be repeated at least annually for the duration of the project period.

Mitigation Measure #4: Mammal protections

A. **Mammal Den Surveys** (fisher): All private parcels will be surveyed prior to any project work and evaluated for suitable mammal den habitat. If potential den habitat for fisher is identified within the treatment unit, the project proponent will implement a limited operating period for project treatments occurring the maternal period (May 1-June 30). If the limited operating period for fisher is determined infeasible, to avoid impacts on the species, focused surveys for fisher, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing treatments during the fisher maternity season within habitat suitable for the species. If presence of fisher is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, a no-disturbance buffer of at least 500 feet will be established around the den, and no treatment activities will occur within this buffer until the den is no longer occupied as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.

B. **Bat Maternity Roost Protections** (Townsend's big-eared bat): All private parcels will be surveyed prior to project work during the bat maternity season (April 1-August 31) and evaluated for suitable bat (Townsend's big-eared) roosting habitat (e.g., caves, mines, tunnels, or dwellings). Caves and mineshafts will be clearly marked and reported to the RPF. If no suitable Townsend's big-eared bat roosts are found within the project area, no further measures are necessary. If suitable Townsend big-eared bat roosting habitat is identified within 50 feet of project activities, a RPF or qualified biologist will assess the suitable roosting habitat for signs of bat presence (i.e., guano, insect pieces, etc.). If no roost is present, then no buffer is needed. If a roost is present, then a 250-foot non-disturbance buffer shall be implemented around the roost structure to prevent changes to the roost or cause the species to disperse or be displaced from their roost.

C. **Ringtail Maternity Season Protections*:** If it is not feasible to avoid mechanical treatments, manual tree and snag removal (trees >12"DBH), or prescribed burning activities within habitat suitable for ringtail during the maternity season (April 15–June 30), focused surveys for ringtail will be conducted using trail cameras, track plates, or other non-invasive survey methods to determine whether ringtails are present within the treatment area, or presence may be assumed. If focused surveys determine ringtail may be present within the treatment area, the qualified RPF or biologist

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will conduct a den search within habitats determined to be suitable for this species, such as hollow logs, snags, rock piles, and large trees (i.e., greater than 12 inches DBH) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If suitable den structures are found, the qualified biologist or RPF will inspect the cavity to determine whether ringtails are present, if safely accessible. If active ringtail dens are discovered, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and broadcast burning, mechanical treatments, and manual tree and snag removal will not proceed within the buffer until the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. If an active den is discovered, CDFW will be notified.

MM #2: All Project workers will receive environmental awareness training.
MM #4A: A limited operating period (LOP) will occur during the fisher maternal season. If the LOP is not feasible, a pre-project survey within suitable habitat will occur. Potential or observed dens will receive 500-foot no-disturbance buffer.
MM #4B: Evaluation of potential bat roost locations during the maternity season. Potential or observed roosts will receive 250-foot buffer.
MM #4C*: Focused surveys for ringtail if treatments are to occur during ringtail maternity season within species denning habitat. Found active dens will be buffered 0.25-miles from project activity until the end of the maternity season.
MM #11: Riparian habitat, which may be used for shelter or foraging, will be protected from operations. Streamside buffers will also prevent pollution or water quality degradation which may adversely affect wildlife species.

- **Conclusions and Determination**
  Both fisher and Townsend's big-eared bat are classified as CDFW SSC's and have no other state or federal listing designation. Implementation of the proposed Project will not substantially degrade the quality of habitat for these species, cause the populations to drop below self-sustaining levels, nor restrict the range of these species. Direct and indirect impacts on fisher and Townsend's big-eared bat are expected to be less than significant with implementation of the above-referenced Mitigations.

SPECIAL STATUS BIRDS

Golden eagle (*Aquila chrysaetos*), Bald eagle (*Halieaeetus leucocephalus*), American goshawk (*Accipiter atricapillus*), California spotted owl (*Strix occidentalis occidentalis*), great gray owl (*Strix nebulosa*), American peregrine falcon (*Falco peregrinus anatum*), yellow-breasted chat (*Icteria virens*), and migratory and nesting birds.

A. Species Information and Preferred Habitat

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Golden eagles typically inhabit foothills, mountainous terrain, and arid flats or desert habitat types. They most often nest on cliffs but will also use large trees in open-canopy habitats. This species requires open terrain for hunting (Zeiner *et al*. 1988-1990).

Bald eagles are associated with a variety of forested habitat types. The most important habitat elements for bald eagles include the presence of a large body of water, or river abundant with fish, and appropriate nesting and roosting trees. Nest trees are typically large, old growth live trees or snags located near water. Breeding typically occurs between January 1st and August 31st (Zeiner *et al*. 1988-1990).

American goshawk prefers mature, old-growth, dense conifer or deciduous-dominated forests that are interspersed with meadows, riparian areas, and other openings. The species will hunt in various wooded habitats but prefers to nest in the densest portion of a north-facing stand that is also proximal to a water source (Zeiner *et al*. 1988-1990).

California spotted owl occupies dense, multi-layered coniferous forest, and also oak-conifer habitats. Nesting and roosting sites are typically located in structurally mature, multi-layered and dense forest. Breeding season is March 1 through August 15th. Foraging habitat can include mid- to late-seral forest with at least 40 to 50% canopy closure (Verner *et al*., 1992). Optimal habitat conditions likely involve mixtures of forest stands with differing compositions and densities (Bias and Gutiérrez, 1992; LaHaye *et al*., 1997; Irwin *et al*., 2007). This species is heat intolerant, favoring north-facing at lower elevations slopes in summer (Zeiner *et al*. 1988-1990).

Great gray owl requires a mix of meadow habitat for foraging on rodents, and dense forest stands for roosting cover. This species will nest in the broken top of a large snag or live tree, and sometimes in old hawk or eagle nests. Great gray owls are known to prey on meadow-dwelling rodents, especially pocket gophers and voles, from low, exposed perches in or on edge of meadows, which may be present within the project area (Zeiner *et al*. 1988-1990).

American peregrine falcon occurs in many terrestrial biomes in North America. Presence of suitable nesting structure is a key habitat element. Breeding peregrine falcons most often nest on cliffs, but occasionally nest on man-made structures such as towers (Sauer *et al.* 2015, White *et al.* 2002). Peregrine falcons generally utilize open habitats for foraging, but the nest location is typically near water (Zeiner *et al.* 1988-1990).**Yellow-breasted chat** is an uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. This species is found in valley foothill riparian areas and requires riparian thickets of willow and other brushy tangles near watercourses for cover (CWHR 2005).

Habitat for the above-referenced bird species is present within the project area. The CWHR habitat types within the Project area include some stands of mature conifer and hardwood timber (class 4 and 5), with a range of canopy closures. Nesting habitat in the Project area is not optimal for American goshawk or

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California spotted owl due to a lack of contiguous mature forest or north-facing slopes, but the area could be used as foraging habitat. Great gray owls could also nest in older stands where they border grassland pockets. Bald eagles are more likely to nest in the Project area than golden eagles due to its proximity to the North Fork of the American River. Riparian thickets of willow and other bushes near watercourses that could be used by yellow-breasted chat are present throughout riparian sections within the project area,

The CNDDB data search returned no occurrence records for special status birds within the Project area. There is one CNDDB occurrence record for American peregrine falcon approximately 2-miles south of the project area and is listed as a breeding pair utilizing an abandoned limestone rock quarry. The CNDDB search also returned several records for California spotted owl near the eastern edge of the 8.6-mile (nine-quad) search buffer. One CNDDB recording of yellow-breasted chat exists near the northern edge of the 8.6-mile Project buffer area, Near Empire Mine SHP and Grass Valley, CA (CNDDB 2023).

B. Impacts of the Proposed Project

Direct impacts to special status bird species could occur as a result of noise-generating project-related activities or any vegetation removal project work that could physically harm or disturb a nest or nesting bird.

Indirect impacts: Vegetation thinning that reduces canopy cover and structural diversity could affect habitat suitability in the future as nesting sites for California spotted owls, goshawks. The Project-related activities are not expected to alter the CWHR habitat types and could open the under-story making the area more accessible to foraging goshawks and California spotted owls. Excessive smoke from prescribed burning during the sensitive period of the species' life history (e.g., during the breeding or nesting season) which the species may be more susceptible to disturbance could result in loss of eggs, young, or general disturbance of species.

C. Design Features and Mitigation Measures to prevent significant impacts

While it is possible for any of the above-referenced avian species to breed or forage in the project area, the following design features and mitigation measures have been included in the project design to prevent significant impacts to special status avifauna.

MM # 2: All Project workers will receive environmental awareness training.

MM #5: Pre-project nesting bird surveys and no-disturbance buffers for identified nests.

MM # 11: Riparian habitat, which may be used for shelter or foraging, will be protected from operations. Streamside buffers will also prevent pollution or water quality degradation which may adversely affect wildlife species.

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D. **Conclusion and Determination**

All bird species described above are protected by the federal Migratory Bird Treaty Act (MBTA) and California State Fish and Game Code sections 3503 and 3503.5. Bald and golden eagles are also protected by the Federal Bald and Golden Eagle Protection Act. In California, the golden eagle is designated as a Fully Protected species. The Great gray owl is State listed as Endangered. Due to recovery efforts, the American Peregrine falcon was federally delisted in 1999 and state delisted in 2009 but remains a CDFW designated SSC. American goshawk, California spotted owl, and yellow breasted chat are also classified as species of special concern by CDFW. The California spotted owl (Sierra Nevada DPS) is also Federally threatened with a (Proposed) rule under section 4(d) of the ESA (4d rule, USFWS Proposed as of 03/05/2025). The 4d rule allows for take incidental to an otherwise lawful activity caused by "forest or fuels management to reduce the risk or severity of wildfire."

Implementation of the proposed Project will not result in take of a state or federally protected bird species. Additionally, the project will not substantially change or degrade the quality of nesting or foraging habitat for any special status species. Additionally, this fuel reduction project aims to reduce the threat of catastrophic wildfire, which can substantially degrade avian nesting habitat. Direct and indirect impacts on special status or listed avian species are expected to be less than significant with implementation of the above-referenced Mitigations.

SPECIAL STATUS AMPHIBIANS

Foothill yellow-legged frog (*Rana boylii*) and California red-legged frog (*Rana draytonii*)

A. Species Information and Preferred Habitat

Foothill yellow-legged frogs are found in or near rocky perennial streams and rivers in a variety of habitats including riparian, mixed conifer, and wet meadow types located up to 6,000 feet in elevation (Stebbins 2003, Stebbins and McGinnis 2012). These frogs prefer partial shade, shallow riffles, and cobble sized or greater substrate (Hayes and Jennings 1988). Occasionally, this species is also found in other riparian habitats, including moderately vegetated backwaters, isolated pools, (Hayes and Jennings 1988), and slow-moving rivers with mud substrates (Fitch 1938). Perennial streams or intermittent streams with perennial pools and ponds below 6,000 feet in elevation on the west slope of the Sierra Nevada should be considered suitable for foothill yellow-legged frogs. Little is known about the movement and dispersal of this species (Jennings and Hayes 1994). During breeding and summer, foothill yellow-legged frogs are rarely encountered far from permanent water. During the winter, frogs have been observed in abandoned rodent burrows and under logs as far as 100 meters from a stream (Zeiner et al. 1988).

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California red-legged frogs occupy ponds and slow-moving streams up to approximately 5,000 feet in elevation. Adults and dispersing juveniles widely utilize riparian and upland habitats for foraging, cover, and dispersal during wet periods. Individuals have been confirmed to occupy upland areas for long periods of time several hundred feet from the nearest water source. Breeding typically takes place in February and March, with tadpoles undergoing metamorphosis in late summer and early fall or delaying until the following spring (75 FR 12816).

The CNDDB data accessed for this report indicated three recordings of foothill yellow-legged frogs (North Sierra DPS pop.3) within the project area. The species is known to be present along the North Fork American River, which is a Class I waterway located within the Project search area buffer. Within the Project area, Class II waterways exist that could provide potential foothill yellow-legged frog habitat. In addition, there are Class III stream habitats that could be used for dispersal and migration corridors. The CNDDB data concluded that several red-legged frog occurrences were nine miles east of the search buffer, and no CNDDB recordings exist within in the Project area. California red-legged and foothill yellow-legged frogs could use upland habitats during wet periods, as well as the Class II-IV waterways within the Project area.

B. Impacts of the Proposed Project

Direct impacts to foothill yellow-legged frogs or California red-legged frogs may occur if Project-related activities are performed within 300 feet of waterways during dispersal season.

Indirect impacts to these species may occur as a result of the Project in the form of increased runoff and sediment loading within waterways from reductions in vegetation cover and ground disturbance. The potential for high intensity wildfire that could cause adverse, long-term direct and indirect impacts to foothill yellow-legged frogs and California red-legged frogs through habitat degradation will be reduced as a result of this Project.

C. Design Features and Mitigation Measures to prevent significant impacts

MM # 2: All Project workers will receive environmental awareness training.
MM #6A: Areas within 200 ft of perennial surface waters will be evaluated for suitable foothill yellow-legged habitat. Suitable habitat will be avoided or inspected daily for frogs. If observed, work will stop, and an appropriately sized buffer will be established.
MM #6B: Work within 300 ft of a perennial surface water will receive daily visual encounter surveys for CRLF during the dispersal season (October 1 through April 15). If observed, work will stop, and an appropriately sized buffer will be established.

D. Conclusions and Determination

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Implementation of the Project is expected to result in a Less than Significant Impact with Mitigations Incorporated on foothill yellow-legged frog or California red-legged frog.

SPECIAL STATUS REPTILES

Blainville's horned lizard (*Phrynosoma blainvillii*) and northwestern pond turtle (*Emys marmorata*)

A. **Species Information and Preferred Habitat**

Northwestern pond turtles are most commonly found in suitable habitat below 5,000 feet in elevation (Stebbins 2003). This species generally utilizes heavily vegetated deeper pools of streams, rivers, irrigation ditches, as well as isolated ponds. Key habitat elements include basking sites such as downed wood, rock, or vegetation mats. Vegetation habitat type can vary widely from hardwood-dominated woodlands to coniferous forest, to grassland (Stebbins and McGinnis 2012).

Blainville's horned lizards (formerly "Coast horned lizards") occupy open areas with sandy soils up to about 8,000 feet in elevation. They are found in a wide variety of habitat types ranging from grasslands to conifer-dominated forests, and hardwood woodlands and chaparral. Key habitat elements include open areas with low vegetation and sandy soils (Stebbins and McGinnis 2012).

The CNDDB 2023 data indicated three occurrences of western pond turtles are located within the Project buffer, but no occurrences within the Project area. Three records of occurrence for Blainville's horned lizards were reported in sandy soil habitat areas with black oak and coniferous vegetation locations along I-80; outside and west of the Project area but within the Project buffer. Due to the proximity of these records and similar habitat types to those found in parts of the Project area, it is possible that these two species occupy the Project area. The turtles would be associated with Class I-IV watercourses, while the horned lizard may be found in areas with patchy and exposed sandy soils, including dirt roads, or sandy washes associated with Class III watercourses and other topographic depressions.

B. Effects of the Proposed Project

The likelihood of direct impacts to western pond turtles or Blainville's horned lizards is low primarily due to their association with either watercourses, or sandy exposed soils (which are typically found in draws); but also because of their low probability of occurring within the Project area.

<u>Indirect impacts</u> to northwestern pond turtles and Blainville's horned lizards may occur as a result of this Project in the form of habitat alteration from reductions in vegetation cover and ground disturbance. Vegetation reduction could result in an increase of exposed sandy or open soils, which could support Blainville's horned

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lizards and potentially benefit the species. The potential for high intensity wildfire that could cause adverse, long-term direct and indirect impacts to western pond turtles and Blainville's horned lizards through habitat degradation will be reduced as a result of this Project.

C. Design Features and Mitigation Measures to prevent significant impacts

Mitigation Measure #2: Environmental awareness training:

All personnel implementing fuel reduction activities within the project area shall attend an environmental education program presented by the Registered Professional Forester lead, their supervised designee, or qualified biologist. The training shall include an explanation of the special status species and nesting birds that have potential to be found within the project area, and how to adequately avoid and protect the species if found. The field meeting shall include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures. Training shall be repeated at least annually for the duration of the project period.

Mitigation Measure #7: Reptile protections

All private parcels will be surveyed prior to any project work and evaluated for suitable terrestrial reptile habitat. If potential habitat for Blainville's horned lizard or Northwestern pond turtle is identified, visual encounter surveys will be completed within suitable habitat within 15 days prior of ground disturbing activities. If a horned lizard or Northwestern pond turtle is identified during surveys, or assumed to be present, biological monitoring by a qualified RPF or biologist will occur during prescribed burning or mechanical treatments within or adjacent to sensitive habitat areas. If the qualified RPF or biologist detects a special-status reptile during treatments, a non-disturbance buffer of 100 feet, will be implemented around the individual unless it is determined by a qualified RPF, biologist, or RPF supervised designee that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal has left the area.

D. Conclusions and Determination

Implementation of the Project is expected to result in a Less than Significant Impact with Mitigation (LTSM) on the northwestern pond turtle and Blainville's horned lizard.

SPECIAL STATUS FISH

Central Valley steelhead (*Oncorhynchus mykiss irideus*)

A. Species Information and Preferred Habitat

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Central Valley steelhead are not known to occur within the Project area, but the CNDDB database confirmed presence of the species downstream from the Project area within the project buffer area, within Secret Ravine and Auburn Ravine.

B. Effects of the Proposed Project

Direct Impacts: The proposed Project would not directly impact this species, or other special status fish species.

Indirect impacts to downstream habitat through increased sediment input to Class I-III watercourses could occur as a result of vegetation removal activities and associated equipment use in the Project area; however, the Project will implement disturbance buffers to mitigate potential impacts of the project to Class I--III watercourses within and downstream of the project area (see below). Although the proposed Project could temporarily affect Class II and III watercourses by removing vegetation that provides watercourse shading, the Project is intended to provide longer-term protection of the area by reducing the potential for wildfire, an event which could result in much greater sediment loading of watercourses on and downstream from the Project. Mitigations to provide a baseline for watercourse shading are provided below.

C. Design Features and Mitigation Measures to prevent significant impacts

Mitigation Measure #11: Watercourse Protections

A) Watercourse protection zones will be established within 25 to 50 feet of Class III watercourses, within 75 to 100 feet of Class II watercourses, and within 75 to 150 feet of Class I watercourses within the Project area. Wider protection/buffer zones will be determined by slope percent of the watercourse (see Table 3.1-Protection Measures by Watercourse Classification)
B) Equipment will be excluded from the watercourse protection zone except for existing equipment crossings of Class III watercourses which are dry at the time of operations.
C) Within the watercourse protection zone of Class I and II watercourses, no mastication or prescribed burning will be applied; only hand treatment. Treatments will retain at least 50% of the existing groundcover and 50% of the existing overstory canopy.
D) Within the watercourse protection zone of Class III watercourses, hand treatments and mastication may be applied. Treatments will retain at least 50% of the understory vegetation to maintain soil stability.
E) All California Department of Pesticide Regulation (DPR) herbicide application laws and regulations will be followed, and applications will be performed only by DPR Qualified Applicators. Project herbicide applications will follow all environmental applications laws products will be applied according to manufacturer recommendations listed on the product label.
F) Project activities near Class IV-manmade watercourses will be determined by consultation with the facility owner.

D. Conclusions and Determination

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Implementation of the Project is expected to result in a Less than Significant Impact with Mitigations Incorporated on the Central Valley steelhead.

SPECIAL STATUS INVERTEBRATES

Western bumble bee (*Bombus occidentalis*), Crotch's* bumble bee (*Bombus crotchii*), and Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)

- **Species Information and Preferred Habitat**

  Western and Crotch's bumble bees rely on pollen and nectar gathered from a wide variety of flowering plants primarily determined by mouthpart morphology (Evans *et al*. 2008, Hatfield *et al*. 2014). This species occupies open grassy areas, mountain meadows, and chaparral/shrub vegetation communities (Williams et al. 2014).

  Valley elderberry longhorn beetle (VELB) only utilizes a single host plant, the elderberry (*Sambucus spp.*) (USFWS 2006).

  One western bumble bee CNDDB recording is within the Project buffer, mapped as 5 road miles east of Colfax, CA (year 1951, CNDDB 2023), and the preferred habitat for the species is within the project area. Three valley elderberry longhorn beetle CNDDB recordings are within the Project buffer, and no recordings of species exist within the Project area. Host elderberry plant Sambucus genus for species does exist within the Project area and project is within species' known elevation range.

- **Effects of the Proposed Project**

  Direct Impacts: Individuals disturbed during vegetation removal and direct removal of host elderberry plants or flowers during vegetation treatment and burning, post-treatment herbicide application, or mechanical trampling during field layout.

  Indirect Impacts: Habitat disturbance, removal of flowing plants during flowering period

- **Design Features and Mitigation Measures to prevent significant impacts**

  Mitigation Measure #8: Invertebrate Protections:

  Western and Crotch's* bumble bee: All private parcels will be surveyed prior to project work for special status bumble bee suitable habitat (foraging, nesting, overwintering). Areas considered as potential foraging habitat will consist of locations with high floristic diversity, including non-native and invasive plants. Areas to be considered as potential nesting habitat will contain bare ground, rodent burrows, wood piles, and other potential nesting sites that could support bumble bee colonies during the active summer season. Special status bee presence will be assumed in areas with found suitable habitat, and the following mitigations will be followed:

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a. Treatment areas in occupied or suitable habitat (foraging, nesting, and overwintering) will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year. The size and distribution of treatment units will be determined and designed by the RPF to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.
b. Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat (foraging, nesting, and overwintering), such that the entirety of the habitat is not burned, disturbed, or removed and untreated portions of occupied or suitable habitat are retained.
c. Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.
d. Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (February through November)

Valley elderberry longhorn beetle (VELB): The USFWS developed conservation guidelines for the Valley elderberry longhorn beetle that describe additional protective measures (beyond those listed above) used to avoid impacts to this species (USFWS 1999). Measures to be implemented by the Project are:

e. The Project area will be surveyed by a RPF, their supervised designee, or a qualified biologist for elderberry host plants prior to any Project-related activities.
f. In May and June, no vegetation removal shall occur within 100 feet of any elderberry plant over 1 inch in diameter until inspected to determine potential presence of VELB. Elderberry plants will be retained and protected from cutting removal and damage.
g. No herbicides will be used within 25 feet of any elderberry plant with a stem measuring greater than 1 inch in diameter at ground level.
h. Removal of nearby ground vegetation (within 5 feet of elderberry plants) may be completed from July through April.

Mitigation Measure # 11: Watercourse Protection Measures:

G) Watercourse protection zones will be established within 25 to 50 feet of Class III watercourses, within 75 to 100 feet of Class II watercourses, and within 75 to 150 feet of Class I watercourses within the Project area. Wider protection/buffer zones will be determined by slope percent of the watercourse (see Table 3.1-Protection Measures by Watercourse Classification)
H) Equipment will be excluded from the watercourse protection zone except for existing equipment crossings of Class III watercourses which are dry at the time of operations.

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I) Within the watercourse protection zone of Class I and II watercourses, no mastication or prescribed burning will be applied; only hand treatment. Treatments will retain at least 50% of the existing groundcover and 50% of the existing overstory canopy.
J) Within the watercourse protection zone of Class III watercourses, hand treatments and mastication may be applied. Treatments will retain at least 50% of the understory vegetation to maintain soil stability.
K) All California Department of Pesticide Regulation (DPR) herbicide application laws and regulations will be followed, and applications will be performed only by DPR Qualified Applicators. Project herbicide applications will follow all environmental applications laws products will be applied according to manufacturer recommendations listed on the product label.
L) Project activities near Class IV-manmade watercourses will be determined by consultation with the facility owner.

- **Conclusions and Determination**

  Implementation of the Project, including impact avoidance and Mitigation Measures #8 and #11, is expected to result in a Less than Significant Impact on the western bumble bee and valley elderberry longhorn beetle. Mitigation measure number eight (8) will protect important habitats for these species including foraging resources, nesting habitat, and the protection of host plants. Additionally, mitigation measure number 11 will protect watercourses, riparian and mesic areas, which are the primary habitat for the VELB host-plant elderberry (Sambucus genus), and floral resources used by western and Crotch's bumble bee.

SPECIAL STATUS PLANTS

A summary of the assessment of Project-related impacts to the thirteen (13) special status plants within the 8.6-mile (three 7.5-minute quad width) buffered CNDDB search of the project area is presented in Table 5. All life history information provided in the existing environment sections below was obtained from the California Native Plant Society Rare and Endangered Plant Inventory (CNPS Rare Plant Program 2017 and 2023). Habitat preferences described in the CNPS database were based on an assessment conducted in 2017 and 2023.

Six of the thirteen special status plant species with potential to be within the project area prefer or have been previously recorded to grow on serpentine or gabbro soils. Data from the California Geological Survey (CGS) indicates that no serpentine or gabbro soils are known to occur within the project area, and roughly half of the project area may contain volcanic or metavolcanic soils. This data indicates that plants that prefer rocky or well-draining soil may have elevated potential to be present within the volcanic soil sections within the project area. See map in Appendix B, page 136 to view the CGS Geology Map of the project area.

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Table 8. Assessment of Special Status Plants Within 8.6-Mile Buffer of the NFARSFB.

Special Status Plant Species	Species Status[1]	Habitat Requirements	Habitat Present in Project Area and/or Detections	Impact Determination
Jepson's onion *Allium jepsonii*	BLM-S USFS-S 1B.2	Cismontane woodland, serpentine and volcanic, chapparal, lower montane coniferous forest. Blooms April-August.	Yes	Less than Significant Impact with Mitigation Measure #3
Nissenan manzanita *Arctostaphylos nissenana*	BLM-S USFS-S 1B.2	Rocky, closed-cone coniferous forest, chaparral. Blooms February-March.	Yes	Less than Significant Impact with Mitigation Measure #3
big-scale balsamroot *Balsamorhiza macrolepis*	BLM-S USFS-S 1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Can sometimes be found on serpentine soils. Blooms March-June.	Yes	Less than Significant Impact with Mitigation Measure #3
Van Zuuk's morning-glory *Calystegia vanzuukiae*	BLM-S 1B.3	Gabbroic or serpentine, chaparral openings, cismontane woodland. Blooms May-August.	Yes	Less than Significant Impact with Mitigation Measure #3
Red Hills soaproot *Chlorogalum grandiflorum*	BLM-S 1B.2	Serpentine or gabbroic and other soils; chaparral, cismontane woodlands, lower montane coniferous woodland. Blooms May-June	Yes	Less than Significant Impact with Mitigation Measure #3
Pine Hill flannelbush *Fremontodendron decumbens*	FE SR	Gabbroic or serpentine, rocky; chaparral, cismontane woodland. Blooms April-July.	Yes	Less than Significant Impact with Mitigation Measure #3
Parry's horkelia *Horkelia parryi*	BLM-S USFS-S 1B.2	Ione formation and other soils, chaparral, cismontane woodlands. Blooms April-September.	Yes	Less than Significant Impact with Mitigation Measure #3
finger rush *Juncus digitatus*	1B.1	Cismontane woodland (openings), lower montane coniferous forest (openings), vernal pools. In full sun, in the vernally damp ground of seeps, vernal pools and swales on	Yes	Less than Significant Impact with Mitigation Measure #3

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		gentle slopes over volcanic bedrock. Blooms May-June.		
Layne's ragwort *Packera layneae*	FT SR 1B.2	serpentine or gabbroic, rocky, chaparral, cismontane woodlands. Blooms April-August.	Yes	Less than Significant Impact with Mitigation Measure #3
Sierra blue grass *Poa sierrae*	BLM-S USFS-S 1B.3	lower montane coniferous forest, shady, moist, rocky slopes. Often in canyons. Flowers April-June	Yes	Less than Significant Impact with Mitigation Measure #3
brownish beaked rush *Rhynchospora capitellata*	2B.2	Lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest. Occurs in mesic areas. Flowers July-August	Yes	Less than Significant Impact with Mitigation Measure #3
Scadden Flat checkerbloom *Sidalcea stipularis*	SE 1B.1	freshwater marsh, marsh & swamp, wetland, wet montane marshes fed by springs. Blooms July-August.	Yes	No Impact
Oval-leaved viburnum *Viburnum ellipticum*	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Blooms May-June.	Yes	Less than Significant Impact with Mitigation Measure #3

Federal:
FE Endangered (legally protected)
FT Threatened (legally protected)
FPT Proposed for listing as Threatened under ESA
FC Candidate for Listing under ESA

State:
SE Endangered (legally protected)
ST Threatened (legally protected)
SC Candidate for Listing under CESA (legally protected)

BLMS-S = Bureau Land Management Sensitive
USFS–S = United States Forest Service Sensitive

California Rare Plant Rank:
1A = Plants presumed extinct in CA
1B = Plants rare, threatened, or endangered in CA and elsewhere
2A = Plants presumed extirpated in California but common elsewhere
2B = Plants rare, threatened, or endangered in California but common elsewhere

Decimals following the CA Rare Plant Rank Numbers:
x.1 = Seriously endangered in CA
x.2 = Fairly endangered in CA
x.3 = Not very endangered in CA

As noted in Section 2.1, the BLM and BOR manage 105 acres of federal that is entirely surrounded by the project area, as well as areas adjacent to the Project area. These lands are not within the project work areas for proposed fuel reduction and mitigations of this project. Each agency has a Resource Management Plan (RMP) with requirements for managing botanical resources. Included in the federal BOR RMP is the requirement that for any potentially deleterious activity, the affected area must be surveyed by a qualified

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resource ecologist for sensitive plant and animal species during the appropriate season. The BLM indicated a similar requirement as the BOR for their lands (B. Brenneman, pers. Comm., Botanist, BLM, February 23, 2017), and this is also stated in the RMP in conservation plans developed for specific species (BLM 2008). This project and subsequent CEQA approval will not apply to the 105-acre internal BLM lands within the project area, as they are subject to separate NEPA permitting and federal agency guidelines. Separate NEPA compliance with additional species scoping's will occur if federal entities decide to participate and align with this project's goals.

Species information and preferred habitat, effects of the proposed project, and conclusions and determinations for individual special status plant species are addressed in the following section. Design features and mitigation measures to prevent significant impacts are not discussed because the same mitigation measure (#3: Botanical resource protections) will apply to all individual plant species covered under the analysis.

Mitigation Measure #3: Botanical resource protections

Private parcels will be surveyed prior to any ground disturbing work and evaluated for suitable habitat for special status plants or sensitive natural communities. Botanical field surveys shall be conducted by a RPF, their supervised designee, or qualified biologist and will comply with survey protocols for plants species listed under the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018). If no special status plants are found, no further measures pertaining to special status plants are necessary. If special status plant species are identified during the botanical surveys, the individuals will be avoided. The treatment prescription for the parcel will be modified to exclude activities within 25 feet of the individual and exclusionary flagging or fencing will be placed around the plants prior to operations on the parcel to establish the avoidance area during project implementation.

Allium jepsonii (Jepson's Onion)

A. Jepson's onion: Species Information and Preferred Habitat

This perennial bulbiferous herb is found on serpentine or volcanic soils within the chaparral, cismontane woodland and lower montane coniferous forest habitat types. This species blooms between April and August and is found between 980 and 4,330 feet in elevation. Review of the California Department of Fish and Wildlife's Natural Diversity Database showed no known locations of Jepson's onion within the Project; however, there is one known occurrence within the Project buffer, three miles west of the project area, near Dry Creek Road. The known occurrence within the Project buffer is along a roadside north of Auburn in a rural, residential area. Although there are no records for this species within the Project area, there is potential habitat and volcanic soils suitable to support the species' presence within the project area. No serpentine or gabbro soils are known to occur within the project area, but roughly half of the project area does contain volcanic or metavolcanic soils plant is known to inhabit.

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B. Jepson's onion: Effects of the Proposed Project

The Project has the potential to affect Jepson's onion individuals directly or indirectly through habitat modifications. The majority of the Project includes chaparral, cismontane woodland and lower montane coniferous forest habitat types, which is known to support Jepson's onion. The project will disturb the forest floor by mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species range.

C. Jepson's onion: Conclusion and Determination

Vegetation treatment on serpentine or volcanic soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has moderate potential to be present within the project area, as one CNDDB recording for the species exists three miles west of the project area and suitable habitat for the plant is present within the project. No serpentine soils are known to occur within the project area, but roughly half of the project area may contain volcanic soils the species is known to inhabit. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Jepsons' onion with mitigation.

Arctostaphylos nissenana (Nissenan manzanita)

A. Nissenan manzanita: Species Information and Preferred Habitat

Nissenan manzanita is a perennial evergreen shrub that blooms from February to March. This species is found in rocky areas within the closed-cone coniferous forest and chaparral habitat types and occurs between 1480 and 3600 feet in elevation. This species is known from one location within the Project buffer approximately six miles east of the southern portion of the project area. There are no known occurrences within the project area. Suitable closed-cone coniferous forest and chaparral habitat capable of supporting species is present with the project area, and roughly half of the project treatment area is comprised of rocky volcanic soil the species is known to inhabit.

B. Nissenan manzanita: Effects of the Proposed Project

The Project has the potential to affect Nissenan manzanita individuals directly and indirectly through habitat modifications. The Project includes the closed-cone coniferous forest and chaparral habitat types, as well as rocky soils. The proposed project will disturb the forest floor through mechanical and hand thinning efforts , as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. Nissenan manzanita: Conclusion and Determination

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Vegetation treatment on rocky or metamorphic soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has moderate potential to be present within the project area as one CNDDB recording is located 6 miles east of the project area and suitable habitat for the plant is present within the project. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Nissenan manzanita with mitigation.

Balsamorhiza macrolepis (Big-scale balsamroot)

A. Big-scale balsamroot: Species Information and Preferred Habitat

Big-scale balsamroot is a perennial herb sometimes found on serpentinite soils within the chaparral, cismontane woodland and valley and foothill grassland habitat types. This species blooms between March and June. It is found between 290 and 5,100 feet in elevation and there is one known occurrence within Project buffer along the edge of the Folsom Lake reservoir, 7-miles southwest of the Project area. Suitable chaparral, cismontane woodland and valley and foothill grassland habitat types capable of supporting species are present throughout the project area.

B. Big-scale balsamroot: Effects of the Proposed Project

The Project has the potential to affect big-scale balsamroot individuals directly or indirectly through habitat modifications. The Project includes the chaparral, cismontane woodland and valley and foothill grassland habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. Big-scale balsamroot: Conclusion and Determination

Vegetation treatment within chapparal, valley grassland, or occasional serpentine soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has moderate potential to be present within the project area due to one CNDDB recording located 7 miles southwest of the project area. and suitable habitat for the plant is present within the project. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on big-scale balsam root with mitigation.

Calystegia vanzuukiae (Van Zuuk's morning glory)

A. Van Zuuk's morning glory: Species Information and Preferred Habitat

Van Zuuk's morning glory is a perennial, rhizomatous herb found on gabbro and serpentinite soils within the chaparral and cismontane woodland habitat types. This species blooms between May and August and is found between 1,640 and 3,870

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feet in elevation. There are eight known occurrences within the eastern edge of the Project buffer; and there are no known occurrences within the project area. No serpentine or gabbro soils required by species are known to occur within the project area.

B. Van Zuuk's morning glory: Effects of the Proposed Project

The Project has the little potential to affect Van Zuuk's morning glory individuals directly and indirectly though habitat modifications. The Project includes the chaparral and cismontane woodland habitat types but lacks the gabbro or serpentine soils the plant is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project does not contain suitable habitat within the species' range.

C. Van Zuuk's morning glory: Conclusion and Determination

Vegetation treatment on gabbro and serpentinite soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has low potential to be present within the project as all CNDDB recordings for the species are six miles east of the project area and no gabbro or serpentine soils are known to occur within the project area. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Van Zuuk's morning glory with mitigation.

Chlorogalum grandiflorum (Red Hills soaproot)

A. Red Hills soaproot: Species Information and Preferred Habitat

Red Hills soaproot is a perennial bulbiferous herb that is found on serpentinite, gabbroic, and other soils within the chaparral, cismontane woodland and lower montane coniferous forest habitat types. This species blooms between May and June and is found between 800 and 5,540 feet in elevation. There are fifteen occurrences within the eastern side of Project buffer, one occurrence within the western side of the Project buffer, and there are no known occurrences in the project area. Suitable chaparral, cismontane woodland and lower montane coniferous forest habitat types the species prefers are present throughout the project area.

B. Red Hills soaproot: Effects of the Proposed Project

The Project has the potential to affect Red Hills soaproot individuals directly and indirectly through habitat modifications. The Project includes the chaparral, cismontane woodland and lower montane coniferous forest habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely

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be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. Red Hills soaproot: Conclusion and Determination

Vegetation treatment on serpentinite, gabbroic, and other soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a moderate potential to be present within the project as multiple CNDDB recordings for the species exist outside of the project area, and suitable habitat for the plant is within the project area. No gabbro or serpentine soils the species is known to inhabit occur within the project area, but the species is known to be present on other types of soils. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Red Hills soaproot with mitigation.

Fremontodendron decumbens (Pine Hill flannelbush)

- **Pine Hill flannelbush: Species Information and Preferred Habitat**

  Pine Hill flannelbush is a perennial evergreen shrub that is found on gabbroic and serpentinite soils and rocky areas within chaparral and cismontane woodland habitat types. This species blooms from April to July and is found between 1,390 and 2,490 feet in elevation. There is one known CNDDB recording of species near Grass Valley, CA, 8.6-miles northwest of the project area. There are no known occurrences within project area. No serpentine or gabbro soils are known to occur within the project area, but roughly half of the project area does contain volcanic or metavolcanic rocky soils plant is known to inhabit.

- **Pine Hill flannelbush: Effects of the Proposed Project**

  The Project has the potential to affect Pine Hill flannelbush individuals directly and indirectly through habitat modifications. The Project includes the chaparral and cismontane woodland habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

- **Pine Hill flannelbush: Conclusion and Determination**

  Vegetation treatment on serpentinite, gabbroic, and rocky soils the plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a moderate potential to be present within the project, as one CNDDB recordings for the species exist outside of the project area, 8.6 miles northwest of the project. No gabbro or serpentine soils the species is known to inhabit occur

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within the project area, but the species is also known to be present on rocky soils, which are present in roughly half of the project area. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Pine Hill flannelbush with mitigation.

Horkelia parryi (Parry's horkelia)

- **Parry's horkelia: Species Information and Preferred Habitat**

  Parry's horkelia is a perennial herb found in the Ione formation and other soils within the chaparral and cismontane woodland habitat type. This species blooms from April to September and is found between elevations of 260 and 3,510 feet. In addition, this species is potentially threatened by clay mining, road maintenance, erosion, vehicles and non-native plants. There is one occurrence outside the eastern edge of the Project buffer; however, there are no known occurrences within project area. Suitable chaparral and cismontane woodland forest habitat type the species prefers are present throughout the project area. Plant has been found in El Dorado County and south, and has not been found north, towards the project area.

- **Parry's horkelia: Effects of the Proposed Project**

  The Project has the potential to affect Parry's horkelia individuals directly and indirectly through habitat modifications. The Project includes the chaparral and cismontane woodland habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

- **Parry's horkelia: Conclusion and Determination**

  Vegetation treatment on Ione formation and other soils within the chaparral and cismontane woodland habitat type plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a low potential to be present within the project, as one CNDDB recordings for the species exists just outside of the project area search buffer, and species is recorded to only exist 9 miles south in El Dorado County and continue further south along the Sierras. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Parry's horkelia with mitigation.

Juncus digitatus (finger rush)

A. **Finger rush: Species Information and Preferred Habitat**

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Finger rush is an annual herb found in vernally mesic areas within cismontane woodland, lower montane coniferous forest, seeps, vernal pools, and swales on gentle slopes over volcanic bedrock. This species blooms between May and June and is found at elevations between 2,300 and 2,620 feet. There is one known occurrence 8 miles northwest within the Project buffer, and there are no known occurrences within the project area. Plant is known in CA only for one CNDDB recoding in Nevada County and two recordings 100 miles northwest in Shasta County. Suitable vernally mesic areas within cismontane woodland, lower montane coniferous forest, and seep forest habitat type the species prefers are present throughout the project area.

B. **Finger rush: Effects of the Proposed Project**

The Project has the potential to affect finger rush individuals directly and indirectly through habitat modifications. The Project includes the cismontane woodland, lower montane coniferous forest, and seep habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. **Finger rush: Conclusion and Determination**

Vegetation treatment on vernally mesic soils plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a low potential to be present within the project, as only three known CNDDB recordings exists in California, one in Nevada County and two in Shasta County. Furthermore, Mitigation Measure #11 WLPZ buffers would likely prevent any disturbance to species, if present within the project area. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on finger rush with mitigation.

Packera layneae (Layne's ragwort)

A. Layne's ragwort: Species Information and Preferred Habitat

Layne's ragwort is a perennial herb found on serpentinite, gabbroic or rocky areas within chaparral or cismontane woodland habitat types. This species blooms between April and August and found at elevations between 650 and 3,560 feet. There are three occurrences within the eastern side of the Project buffer; there are no known occurrences within project area. No serpentine or gabbro soils are known to occur within the project area, but roughly half of the project area does contain volcanic or metavolcanic rocky soils plant is known to inhabit.

B. Layne's ragwort: Effects of the Proposed Project

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The Project has the potential to affect Layne's ragwort individuals directly or indirectly though habitat modifications. The Project includes the chaparral or cismontane woodland habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. Layne's ragwort: Conclusion and Determination

Vegetation treatment on serpentinite, gabbroic or rocky soils plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a low potential to be present within the project area, as the three returned CNDDB recordings are on the far eastern edge of the project buffer area. No gabbro or serpentine soils the species is known to inhabit occur within the project area, but the species is also known to be present on rocky soils, which are present in roughly half of the project area. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Layne's ragwort with mitigation.

Poa sierrea (Sierra blue grass)

A. Sierra blue grass: Species Information and Preferred Habitat

Sierra blue grass is a perennial rhizomatous herb found within lower montane coniferous forest, shady, moist, rocky slopes. Species occurs often in canyon habitat types. This species blooms between April and July and is found within elevations of 1,200 and 4,920 feet. There are eight CNDDB recordings of species within the eastern Project buffer, and there are no known occurrences within project area. Suitable lower montane coniferous forest, and shady, rocky slopes the species prefers are present throughout the project area.

B. Sierra blue grass: Effects of the Proposed Project

The Project has the potential to affect Sierra blue grass individuals directly or indirectly through habitat modifications. Such habitat would likely occur within riparian areas with limited project disturbance due to WLPZ protections. The Project includes the lower montane coniferous forest, shady, moist, rocky slopes the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within species' range.

C. Sierra blue grass: Conclusion and Determination

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Vegetation treatment on shady, moist, rocky slopes and soils plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a moderate potential to be present within the project area, as the returned CNDDB recordings are outside of the project area. Project work is unlikely to take place in areas the plant is known to inhabit. Furthermore, Mitigation Measure #11 WLPZ protections will likely buffer all Sierra blue grass, if present within the project area, from all project work without further mitigation. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Sierra blue grass with mitigation.

Rhynchospora capitellata (brownish beaked-rush)

B. Brownish beaked-rush: Species Information and Preferred Habitat

Brownish beaked-rush is an perennial herb found in lower montane coniferous forest, meadows and seeps, marshes and swamps, and upper montane coniferous forest. This species blooms between July and August and is found at elevations between 150 and 5,580 feet. There is one known occurrence 8 miles north on the edge of the Project buffer and there are no known occurrences within the project area. Upper and lower montane coniferous forest, meadows and seep habitat types the species prefers are dispersed throughout the project area

C. Brownish beaked-rush: Effects of the Proposed Project

The Project has the potential to affect brownish beaked-rush individuals directly or indirectly through habitat modifications. Such habitat would likely occur within riparian areas with limited project disturbance due to WLPZ protections. The Project includes the upper and lower montane coniferous forest, meadows and seeps forest habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range and project work will not take place in mesic areas that the plant requires.

D. Brownish beaked-rush: Conclusion and Determination

Vegetation treatment on mesic soils and areas plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a low potential to be present within the project area, and one CNDDB recordings was returned from 8 miles north of the project area. Project work is unlikely to take place in mesic areas the plant is known to inhabit. Furthermore, Mitigation Measure #11 WLPZ protections will likely buffer all brownish beaked-rush, if present within the project area, from all project work without further mitigation. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft

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surrounding observed individuals. Project activities are expected to result in a less than significant impact on brownish beaked-rush with mitigation.

Sidalcea stipularis (Scadden Flat checkerbloom)

A. Scadden Flat checkerbloom: Species Information and Preferred Habitat

Scadden Flat checkerbloom is a perennial rhizomatous herb found in freshwater marsh, marsh & swamp, wetland, wet montane marshes fed by springs habitat types. This species blooms between July and August and is found at elevations between 2,300 and 2,400 feet. There is one known occurrence on the northern edge of the Project buffer and there are no known occurrences within the project area. Plant is only known to occur near Grass Valley and Peardale areas (three total populations statewide), which are not within the project area. Suitable wet montane marshes fed by springs habitat type species prefers is present within the project area.

B. Scadden Flat checkerbloom: Effects of the Proposed Project

The Project has the potential to affect Scadden Flat checkerbloom individuals directly or indirectly through habitat modifications. The Project includes wet montane marshes fed by springs habitat type the species is known to inhabit. Such habitat would occur within riparian areas with limited project disturbance due to WLPZ protections. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

C. Scadden Flat checkerbloom: Conclusion and Determination

Vegetation treatment on marsh or swamp areas plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a very low potential to be present within the project area, as only two CNDDB recordings exist within CA. The two CNDDB recordings of species are 5 and 10 miles northwest of project area. Project work is unlikely to take place in marsh or swamp areas the plant is known to inhabit. Furthermore, Mitigation Measure #16 WLPZ protections will likely buffer all Scadden Flat checkerbloom, if present within the project area, from all project work without further mitigation. Mitigation Measure #7 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on Scadden Flat checkerbloom with mitigation.

Viburnum ellipticum (Oval-leaved viburnum)

A. **Oval-leaved viburnum: Species Information and Preferred Habitat**

Oval-leaved viburnum is a perennial shrub that is found within the chaparral, cismontane woodland, and lower montane coniferous forest habitat types. This

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species blooms between May and June and is found between 650 and 4,600 feet in elevation. There are no known occurrences within project area and there are three known CNDDB recordings of species within the Project buffer. Suitable chaparral, cismontane woodland, and lower montane coniferous forest habitat type the species prefers are present throughout the project area.

C. **Oval-leaved viburnum: Effects of the Proposed Project**

The Project has the potential to affect oval-leaved viburnum individuals directly or indirectly though habitat modifications. The Project includes the chaparral, cismontane woodland, and lower montane coniferous forest habitat types the species is known to inhabit. The proposed project will disturb the forest floor through mechanical and hand thinning efforts, as well as through prescribed burning and follow-up herbicide treatment. Direct and indirect effects would likely be limited in scope as the Project comprises a small percentage of the available suitable habitat within the species' range.

A. Oval-leaved viburnum: Conclusion and Determination

Vegetation treatment on chaparral, cismontane woodland, and lower montane coniferous forest areas plant is known to inhabit has potential to affect individuals, if present within the project area. The plant has a moderate potential to be present within the project area, as three CNDDB recordings were returned from south of the project area and suitable habitat for the species is present within the project area. Mitigation Measure #3 requires focused pre-project surveys and a no-disturbance buffer of 25 ft surrounding observed individuals. Project activities are expected to result in a less than significant impact on oval-leaved viburnum with mitigation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The proposed Project will require protection of sensitive resources including watercourses and their associated riparian zones. Protections for watercourses and riparian areas have been built into the project guidelines as **Mitigation Measure #11** and are defined within Table 3.1-Protection Measures by Watercourse Classification above. These protections include no mechanical, prescribed burning, or herbicide treatments within the Class I and II WLPZ, and no fire ignition or herbicide spraying within the Class I-III WLPZ areas. Class IV (manmade) watercourse WLPZ treatments will vary, depending on landowner and

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operating or owning agency preference. Vegetation mapping with MCV alliances and potential sensitive natural communities are available for lands within the Auburn State Recreation Area, which is directly east of the project area. One section of the sensitive S3-Goodding's willow - red willow riparian woodland and forest alliance does butt-up to the project area. This designated sensitive natural community likely continues along the mapped drainage and into the project area. **Mitigation Measure #3** includes pre-survey for any sensitive natural communities or special status plant presence, with CDFW protocol-level survey if sensitive communities or special status plants are found. The implementation of Mitigation Measure #7 will ensure avoidance and protection of any sensitive natural communities, if found within the project area. With these watercourse buffers and restrictions, as well as pre-treatment botanical surveys built into the project, impacts to riparian habitat and sensitive natural communities will be less than significant with mitigation incorporated**.**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐

Less Than Significant with Mitigation Incorporated: The US Fish and Wildlife Service's (USFWS) National Wetland Inventory GIS dataset (NWI) indicates that 70.53 acres (1.2%) of the project area is mapped as NWI wetland habitat types (NWI 2023). Four NWI wetland types are present within the project area: Freshwater Pond (15.7 acres), Freshwater emergent wetland (0.37 acres), Freshwater forested/shrub wetland (19.23 acres), and Riverine (35.23 acres). The Riverine and Freshwater forested/shrub wetland habitats are considered Class II and III watercourses of the Project area and will be protected by implementation of buffer requirements of Mitigation Measure #16 for these resources (Table 3.1). The remaining 16 acres of Freshwater pond and Freshwater emergent wetland habitat types will see no project work due to their aquatic/mesic nature and no alteration to habitat or wetland type will occur. If any wetlands are encountered during Project related activities, the RPF will be notified, and the identified wetland area will be avoided and excluded from project work. The proposed project would therefore result in no impacts to wetlands and less than significant impacts on watercourses.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

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Less Than Significant: The BLM Sierra Resource Management Plan (BLM 2008) indicates the presence of important migration routes for deer in the foothills of the Sierra Nevada between 1,500 to 3,500 feet in elevation. The proposed Project is located in this elevation band. Fuels reduction activities are not expected to significantly impact deer migration movements through the Project area. Much of project area contains or is within the border of an Essential Connectivity Area of the California Essential Habitat Connectivity GIS dataset (CNDDB 2023). Project work will reduce overgrown vegetation and increase access potential and use of Essential Connectivity Area and provide a net benefit to wildlife movement post project work. Project work will take place over time, and the Essential Connectivity Area will still function as such during all project work. If the Project attains its intended goal, the area will experience a higher level of protection from high-intensity wildfire and maintain the connectivity function for wildlife migration corridors

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

Less Than Significant: The proposed Project would be completed in compliance with the Placer County general county-wide requirements for tree preservation (Placer County Code Chapter 12 Article 16; Section 12.16.030).

The proposed Project is consistent with the Placer County Strategic Plan for the Wildfire Protection and Biomass Utilization Program (Placer County 2007).

The proposed Project is not expected to conflict with local policies and ordinances and will result in Less Than Significant impact to biological policies or ordinances.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Impact: The project will not conflict with any Habitat Conservation Plan or Natural Community Conservation Plan. Placer County adopted the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) as part of the greater Placer County Conservation Program (PCCP) in September of 2020. However, this HCP/NCCP only applies to development projects within Placer County and fuel reduction work is not a “covered activity” within the HCP/NCCP. Additionally, project work will not be undertaken by a permittee of the HCP/NCCP or by individuals or entities under their jurisdiction. Furthermore, take authorization is not required for this project, as take of a listed species will not occur. Due to the nature of

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project work of vegetation reduction and the absence of any development, the Placer County PCCP/HCP does not apply. (PCCP 2023).

https://media.fisheries.noaa.gov/2021-03/appendix-a-hcp-pccp-vol1-03052020.pdf (dated February 2020)

6.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated: Pursuant to Public Resources Code (PRC) Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archeological resources. CEQA mandates state agencies take into consideration the effects of their actions on cultural resources listed on, or eligible for inclusion in, the California Register of Historical Resources (CRHR) (defined as historical resources at 14 CCR § 15064.5[a]). Section 15064.5(a)(3) of the CEQA Guidelines defines cultural resources as objects, buildings, structures, sites, areas, places, records, or manuscripts that are determined historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Relative to the Proposed Project, these resources can be further described as prehistoric archaeological sites, historic-era archaeological sites, historic buildings and structures, landscapes, districts, and linear features. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period. Historic-era archaeological sites reflect the activities of people after initial exploration and settlement in the region by the Spanish during the late 1700s, and later by others. Native American sites can also reflect the historic era. Prehistoric and historic-era sites may contain artifacts, cultural features, subsistence remains, and human burials.

Introduction:

Large portions of the North Fork American River Fuel Break Project area have undergone a cultural resource inventory and evaluation (Selverston, Walker, and Dollinger 2018). Each portion of the proposed project will undergo a cultural resource assessment and survey by a consulting archaeologist or qualified natural resource professional as 6 months prior to operations being conducted. An archaeologist or qualified natural resource professional with a current certification as a cultural resource surveyor obtained through CAL FIRE shall complete thorough field evaluations of the entire Project area, prior to commencing work. Information, data, analysis, and site-specific mitigation measures developed during these efforts will be outlined in a confidential archaeological survey report (ASR), or within a supplemental confidential

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archaeological addendum if a previous ASR exists for coverage area, for each portion of the proposed project. Due to the sensitive nature of some information contained in these documents, locations and records of cultural resources will not be included in the MND. The following procedures (Mitigation Measure #12) will be completed in a manner that adheres to state environmental analysis requirements.

1. An archival document review of records housed at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) and comply with resources listed in the National Register of Historic Places (pursuant to PRC Section 5024.I);
2. Coordination with the California Native American Heritage Commission (NAHC) and Tribes with potential heritage interests in the Project area;
3. An historical records investigation of the Project area;
4. Identification, definition, and intensive archaeological inventory of the proposed Project's Area of Potential Effects (APE);
5. Documentation of potentially affected cultural resources greater than 50 years old;
6. Evaluation of the integrity and National Register eligibility evaluation and determination of Findings of Effects for all potentially affected heritage resources by a CAL FIRE professional archaeologist, and;
7. Heritage resource management recommendations.

Would the project:

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

The proposed project has the potential to impact historical resources pursuant to Section 15064.5. The following procedures are required by CAL FIRE policy and shall be implemented to protect cultural resources during implementation of the Project:

- The North Central Information Center (NCIC) database will be queried for existing surveys and recorded sites within the proposed project area prior to implementation. A professional archaeologist or qualified natural resource professional with a current certification as a cultural resource surveyor obtained through CAL FIRE shall conduct field inspections in all areas that may be impacted by project operations. A CAL FIRE professional archeologist will also evaluate the integrity of recorded resources.
- Based on results of the records search and field inspections, protection measures will be discussed and implemented with input from participating tribes, the CAL FIRE State Archeologist, and the consulting archeologists or qualified natural resource professional. The results of this evaluation will be written up in a confidential archaeological survey report addendum.

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- Protection measures may vary based on treatment type and feedback from consultations. These measures may include excluding archeological sites from treatment or altering proposed treatments within site boundaries to avoid significant impacts to cultural resources. Active and appropriate communications with field personnel will be a critical component of the protection of archeological and historical resources during project operations.

If unrecorded sites are found during project operations, project managers will follow procedures in the Post-approval Discovery of Cultural Resources outlined in CAL FIRE's "Cultural Resources Review Procedures for CAL FIRE Projects." Project work within 100 feet of the site shall cease until project managers have consulted with a CAL FIRE professional archaeologist or natural resource professional with a current certification as an archaeological surveyor obtained through CAL FIRE. Site protections will then be implemented. The site shall be recorded with the State Historic Preservation Office (SHPO) by a professional archaeologist. Operations may continue outside of the 100-foot perimeter during the identification and avoidance process.

Inclusion of mitigation measure #12: Archaeological resource protection will prevent any changes or damages to historical resources, if present within the project area. Implementation of Mitigation Measure#12 will result in a less than significant impact to historical resources within the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The proposed project has the potential to impact archaeological resources pursuant to Section 15064.5. As lead agency, CAL FIRE has designed the project to avoid impacts to cultural resources and ensure the proper survey, recordation, review, and disposition of archaeological information. The following procedures are required by CAL FIRE policy and shall be implemented prior to ground disturbing activities to protect cultural resources during implementation of the Project:

A. The North Central Information Center (NCIC) database will be queried for existing surveys and recorded sites within the proposed project area prior to implementation. A CAL FIRE professional archaeologist or natural resource professional with a current certification as an archaeological surveyor obtained through CAL FIRE shall conduct field inspections in all areas impacted by project operations. A CAL FIRE professional archeologist will also evaluate the integrity of recorded resources.

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B. Based on results of the records search and field inspections, protection measures will be discussed and implemented with input from participating tribes, the CAL FIRE State Archeologist, and the consulting archeologists. Protection measures may vary based on treatment type and feedback from consultations.

C. These measures may include excluding archeological sites from treatment or altering proposed treatments within site boundaries to avoid significant impacts to cultural resources. Active and appropriate communications with field personnel will be a critical component of the protection of cultural resources during project operations.

Project operations include the removal of vegetation through handwork, mechanical equipment, and prescribed burning for fire resilience. If unrecorded sites are found during project operations, project managers will follow procedures in the Post-approval Discovery of Cultural Resources outlined in CAL FIRE's "Cultural Resources Review Procedures for CAL FIRE Projects."

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The potential to uncover Native American human remains exists in locations throughout California. The potential for this project to disturb human remains is low due to the limited and shallow depth of any project-related soil disturbance. Most treatment activities associated with this project (manual and mechanical treatments and low intensity burning) will only remove the above ground portions of biomass. Mechanical treatments could result in the churning up the surface material, however, would still be shallow relative to the anticipated depth of human remains. Additionally, implementation of Mitigation Measure #12 will reduce likelihood of disturbing these types of resources by requiring a records search, pre-field research, an archaeological survey, coordination with Native American groups, and worker training to recognize potential sensitive archaeological resources. If human remains are discovered during operations, California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 will be adhered to. These statutes require that, if human remains are discovered, ground-disturbing activities in the area of the remains will be halted, and the county coroner and will be notified immediately. If the remains are determined by the coroner to be Native American, NAHC will be notified within 24 hours and the guidelines of the NAHC will be adhered to in the treatment and disposition of the remains. The limited ground disturbance associated with this project, coupled with implementation of Mitigation Measure 12, will result in the project having a less than significant impact to potential buried human remains within the project area.

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6.6 ENERGY

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

No Impact: There are no energy impacts that will occur as a result of this project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Impact: There are no renewable energy or energy efficiency plans that will be impacted by the implementation of this project.

6.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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 California Geological Survey Special Publication 42.)	☐	☐	☐	☒

No Impact: There are no potential impacts from this project that would impact the geology within or near the project area and no earthquake hazard zones within the California Geological Survey EQ Zapp: California Earthquake Hazards Zone Application are near the project area (CGS EQ Zapp 2023).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	☐	☐	☐	☒

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No Impact: There are no potential impacts from this project that would impact the geology or seismic susceptibility within or near the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

No Impact: There are no potential impacts from this project that would impact the geology or cause seismic-related ground failure within or near the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated: Vegetation removal and heavy equipment operations on unstable areas has potential to increase the risk of landslides. There are no known unstable areas within the project area, but it is possible that small unidentified unstable areas could exist within the project area. To reduce the risk to a less than significant level, Mitigation Measure #10 has been implemented into the project activities. As part of Mitigation Measure #10, prior to treatment operations in areas over 30% slope, the treatment area will be traversed by a RPF or their supervised designee to identify any unstable areas requiring avoidance. Vegetation removal and heavy equipment use shall not occur on any unstable areas, if found, and project work will be buffered at minimum 25' or greater/as needed from found unstable areas to prevent the potential for landslides. The United States Geological Survey (USGS) Landslide web viewer was utilized, and no known or predicted landslides are present or have occurred within the project area. No California Geological Survey (CGS) landslide maps exist for the project area. These mitigations reduce the impacts of the project to Less Than Significant with Mitigation Incorporated. See USGS Landslide Map of project area on page **142** for more info.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The project will involve the removal of vegetation which can act as protective cover and thus increase the potential

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for soil erosion. The use of heavy equipment on steep slopes has the potential to result in increased erosion by destabilizing the slope or leading to soil movement. The use of heavy equipment also has the potential to cause accelerated erosion through soil compaction, particularly if operations occur during saturated soil conditions.

Erosion hazard rating (EHR) is a risk assessment tool that helps identify areas that are prone to soil erosion. Areas that have been identified as having an EHR of high or extreme, are thought to be highly prone to erosion. EHR's for the project were calculated utilizing methods described in the Board of Forestry Technical Rule Addendum No. 1. The results of the calculations and associated soil erosion hazard are generally low to moderate and summarized in the Table 9 below.

Table 9: Erosion Hazard Rating for NFARSFB Project Area

Treatment Method	0-30% slopes	30-50% slopes	50%+ slopes
Mastication	Low	Moderate	Moderate
Hand Thinning and Pile Burning	Low	Moderate	Moderate
Broadcast Burning	Moderate	Moderate	Moderate

The vegetation removal and slash treatment specifications found in the project description were designed to retain post-treatment groundcover in levels adequate to protect soil from rainfall and wind erosion. Additionally, the low to moderate EHRs of the project area suggest the area is not heavily susceptible to erosion. To further mitigate the risk of soil erosion over the course of the project, mitigation measure # 10 will also be implemented to ensure substantial erosion and loss of topsoil does not occur by preventing heavy equipment to work on steep slopes or when saturated soil conditions exist, limiting the chance of soil compaction.

Mitigation Measure #10: Geology and Soils Protections

<u>Equipment slope limitation:</u> Heavy equipment shall be limited to the following slopes:

Equipment Type	Maximum Slope Percent
Wheeled front end loaders or masticators	30%
Tracked Chippers	50%
Tracked Masticators or front-end loaders	50%

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Walking Type Excavator / Masticators	65%

Soil loss and compaction: Heavy equipment use will be limited to existing and stable road surfaces during saturated soil conditions. Saturated Soil conditions are defined as follows:

> Soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing material during equipment operations, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials.

The low to moderate EHR, incorporated project design elements, and mitigation measure #10 will reduce the potential erosion impacts of the project to Less Than Significant with Mitigation Incorporated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒

No Impact: There would be no impact on unstable soils because the project is a minor alteration to the vegetation above the soil surface, and unstable areas are not proposed for operations. There are no excavation components in the project scope including road and trail establishment in or near any unstable soils.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒

No Impact: There would be no impact directly or indirectly on expansive soils because the project is a minor alteration to the vegetation above the soil surface. There are no excavation components in the project scope.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

No Impact: There would be no impact directly or indirectly on capacity of soils to carry a septic system because the project is a minor alteration to the vegetation above the soil surface. There are no excavation components in the project scope.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

No Impact: There would be no impact directly or indirectly on a unique paleontological resource or site or unique geologic feature because the project is a minor alteration to the vegetation above the soil surface. There are no excavation components in the project scope.

6.8 GREENHOUSE GAS EMISSIONS

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

Less Than Significant with Mitigation Incorporated: The project will directly generate greenhouse gas emissions using fossil fuel powered handheld and heavy equipment, prescribed fire, vehicle trips to the project area and indirectly through the decomposition of treated material. After project work, the improved growing conditions will improve residual stands photosynthetic capacity, increase vigor in residual trees and result in an overall increase in carbon sequestration rates. The Placer County Air Pollution Control District CEQA Air Quality Handbook and associated review policy document were reviewed to determine thresholds of significance for GHG gas emissions. The bright line threshold is 10,000 metric tons of CO2 per year for construction projects.

The table below summarizes the estimated greenhouse gas produced for treatment of all 5,946 acres of the project area. The projected total of CO2 produced from the treatment of project area is 186,735 total tons of CO2. With a bright line limit of 10,000 tons of CO2 per year as per PCAPCD regulation, this yields an estimate project timeline of 18.67 years to complete,

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Emissions from decomposition

Emissions through decomposition of treated material will occur over several years, resulting in such emissions being slight over time. Additionally, following treatment growth of retained vegetation will increase as additional soil moisture, nutrients, and sunlight become more available resulting from removal of the competing vegetation. The project focuses on thinning understory trees, many of which would have died due to competition induced mortality if the project were not to occur. Because of these factors emissions from decomposition are determined to be less than significant.

Emissions from equipment use

Onsite equipment and vehicles would generate greenhouse gas emissions from equipment usage onsite as well as for crew travel to the project area. Crew travel to and from the project area will not contribute significantly to GHG emissions of the project area and is considered negligible in the scale of GHG production and emissions. All equipment used onsite will meet the CARB requirements for emissions and equipment used for project work will utilize the following BMPs to reduce the GHG emissions of equipment use.
-Maintain equipment per manufacturer's specifications
-Exhaust emissions cannot exceed PCAPCD Rule 202 visible emissions limits; if exceeded, operations must cease and equipment must be repaired within 72 hours
-Fuel all off-road and portable diesel equipment with CARB-certified diesel fuel
-Minimize idling time to less than 5 minutes for all diesel equipment.
-No diesel engine idling, or staging or queuing areas, within 1,000 feet of any sensitive receptor
-Idling times will be minimized.

No significant impacts from GHGs are expected as a result of the proposed equipment use for project vegetation treatment.

Emissions from burning
Some carbon emissions will occur associated with the project from prescribed burning. The amounts of carbon emitted will depend on the fuel model for the burn unit and fuel consumption rate achieved by the burn. Due to constraints on smoke emissions imposed by Placer County Air Pollution Control District's Rule 303, burning will likely need to be staggered over time, and not result in significant CO2e emissions for a given year. Prior to conducting burning operations, an appropriate greenhouse gas prediction model will be used to determine the CO2e emissions from proposed burning operations. The burning will be conducted in a manner which the annual CO2e emissions from burning and equipment use does not exceed the 10,000 MT CO2e threshold of significance set by the Placer County Air Pollution Control District. As part of Mitigation Measure #1, broadcast burning activities will include the use of support documentation and decision making tools that will assist with the prediction of projected carbon emissions from project burning actions.

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47% of the project area consists of the Fuel Characterization Classification System (FCCS) #16-Jeffrey pine-ponderosa pine-Douglas-fir-California black oak forest fuel type and is the largest amount of FCCS fuel type within the project area. The FCCS#16 fuel type has an estimated biomass removal of 19 tons per acre during fuel consumption within First Order Fire Effects Model (FOFEM) application, and yields an estimated 58,580lbs (29 tons) per acre of CO2 emissions. The second most abundant fuel type is FCCS #14-California black oak woodland (15% of project area) and has a similar FOFEM estimate of 62,038lbs (31 tons) per acre of CO2 emissions. Together, these two FCCS types represent 62% of the project area. FOFEM analysis for these two majority fuel types of the project area are displayed in the tables below.

TITLE: Results of FOFEM model execution on date: 1/15/2025

FUEL EMISSIONS CALCULATIONS

Region: PacificWest
Cover Type: 016 Jeffrey pine -- ponderosa pine -- Douglas-fir -- Califor
Fuel Type: Natural

	Emissions -- lb/ac flaming	smoldering	total
CO 2	38030	20550	58580
CO	139	5049	5188
CH 4	17	230	247
NOX	68	0	68
SO2	21	17	38
PM 2.5	56	379	435
PM 10	66	447	513

	Consumption T/ac	Duration hour:min:sec
Short Term Flaming and Smoldering:	10.69	00:02:45
residual smoldering:	8.37	00:38:45
Total:	19.06	

Component	Burnout Time hour:min:sec	total seconds
Litter	00:01:00	60
1 Hour	00:01:30	90
10 Hour	00:07:30	450
100 Hour	00:30:45	1845
1000 Hour	00:38:30	2310
Duff	00:27:30	1650

Table 10: FOFEM emission calculations for FCCS #16

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TITLE: Results of FOFEM model execution on date: 1/15/2025

FUEL EMISSIONS CALCULATIONS

Region: PacificWest
Cover Type: 014 California black oak woodland
Fuel Type: Natural

	Emissions -- lb/ac flaming	smoldering	total
CO 2	55460	6578	62038
CO	203	1616	1819
CH 4	25	74	99
NOX	100	0	100
SO2	31	5	36
PM 2.5	81	121	202
PM 10	96	143	239

	Consumption T/ac	Duration hour:min:sec
Short Term Flaming and Smoldering:	15.59	00:01:00
residual smoldering:	2.68	00:17:00
Total:	18.27	

Component	Burnout Time hour:min:sec	total seconds
Litter	00:01:00	60
1 Hour	00:01:30	90
10 Hour	00:09:15	555
100 Hour	00:16:45	1005
1000 Hour	00:16:45	1005
Duff	00:09:30	570

Table 11: FOFEM emission calculations for FCCS #14

<u>FOFEM CO2 Estimates for Project-Wide Implementation:</u>

The following table displays estimated CO2 emissions calculated using FOFEM, based on 2020 FCCS vegetation classifications mapped within the project area. FCCS data was accessed and downloaded from Landfire.gov/viewer, then clipped and processed in Arc GIS PRO to create a Project-wide analysis. CO2 emissions were estimated by applying FOFEM outputs for each FCCS model and the corresponding acres of the model within the mapped project area. Four FCCS classifications present within the project area were not contained within FOFEM dataset; for these, the project-wide average CO2 emissions (tons per acre) from the available FCCS types were used to estimate emissions. These average-based estimates are highlighted in the table 12.

The FOFEM and ArcGIS analysis estimated that the total CO2 emissions from burning the entire project could create 162,915 total tons of CO2 emissions project wide. With the previously stated 10,000 tons of CO2 a year brightline threshold within Placer County, that would mean that it would take approximately 16.3 years to complete prescribed burning. The 10,000 ton emissions limit equates to being able to treat about

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375 acres a year with prescribed burning treatments, assuming the 26.6 ton per acre average emissions estimate provided by FOFEM. Project implementation of prescribed burning is not expected to reach above 375 acres of treatment a year, and thus the project work will not contribute significantly to GHG emissions within the project area.

Table 12: FOFEM estimated CO2 emissions for entire project area

FCCS Code	Fuelbed Description	Acres	Flaming (lbs./ac)	Smoldering (lbs./ac)	Total (lbs./ac)	Tons/Acre	Total Tons/Acre
16	Jeffrey pine-ponderosa pine-Douglas-fir-California black oak forest	2,811.35	38,030.00	20,550.00	58,580.00	29.29	82,344.52
14	California black oak woodland	899.66	55,460.00	6,578.00	62,038.00	31.02	27,906.55
36	California live oak-blue oak woodland	400.77	14,839.00	8,389.00	23,228.00	11.61	4,654.55
0	Bare Ground	381.71	0.00	0.00	0.00-	0.00	0.00
39	Sugar pine-Douglas-fir-oak forest	380.95	62,544.00	15,247.00	77,791.00	38.90	14,817.06
44	Scrub oak chaparral shrubland	284.18	46,199.00	2,307.00	48,506.00	24.25	6,892.19
77	Eucalyptus plantation forest	157.15	77,620.00	43,604.00	121,224.00	60.61	9,525.34
533	California ruderal grassland meadow	142.46	not within FOFEM	not within FOFEM	-	26.64	3,795.15
427	Red spruce-northern white cedar-tamarack forest	131.21	24,443.00	37,608.00	62,051.00	31.03	4,070.95
214	Giant sequoia-white fir-sugar pine forest	72.23	37,038.00	25,987.00	63,025.00	31.51	2,276.23
401	Holly-privet shrubland	68.57	34,849.00	28,436.00	63,285.00	31.64	2,169.76
303	Cottonwood/willow savanna	58.65	25,516.00	4,591.00	30,107.00	15.05	882.82
222	Interior ponderosa pine forest	29.89	24,253.00	3,467.00	27,720.00	13.86	414.23
426	Sugarberry/acacia forest	29.84	30,502.00	1,890.00	32,392.00	16.20	483.23
409	Virginia pine-chestnut oak/little bluestem forest	27.42	9,894.00	4,145.00	14,039.00	7.02	192.49
219	Ponderosa pine-white fir/quaking aspen forest	12.68	43,423.00	45,418.00	88,841.00	44.42	563.06
15	Jeffrey pine-red fir-white fir/greenleaf-snowbrush forest	11.93	57,258.00	116,705.00	173,963.00	86.98	1,037.59
1261	Fallow field - growing season	10.16	4,090.00	-	4,090.00	2.05	20.77
213	Wheatgrass-cheatgrass grassland - post prescribed burn	9.55	747.00	-	747.00	0.37	3.57
530	Temperate Pacific subalpine-montane wet meadow	8.96	not within FOFEM	not within FOFEM	-	26.64	238.58
48	Douglas-fir-tanoak-madrone-bay forest	8.38	78,852.00	54,516.00	133,368.00	66.68	558.79
43	Arizona white-gray-Emory oak woodland	4.96	13,756.00	6,790.00	20,546.00	10.27	50.99
307	Paloverde shrubland	3.24	2,219.00	-	2,219.00	1.11	3.59
493	Temperate Pacific freshwater emergent marsh	0.44	not within FOFEM	not within FOFEM	-	26.64	11.85
65	Tussock grass-oatgrass grassland	0.22	10,101.00	1,179.00	11,280.00	5.64	1.25
	Total Acres:	**5,946.55**				**Total Tons of CO2:**	**162,915.12**

Table 12: FOFEM CO2 Estimates and Fuel Models of Project Area.

**26.64 tons/acre project average used for FCCS models not with FOFEM (highlighted)*

With these project parameters and with the addition of Mitigation Measure #1, impacts of greenhouse gas emissions of the project are Less Than Significant with Mitigation Incorporated.

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

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No Impact: No plan, policy, or regulation exists which conflicts with the management of vegetative fuels intended to reduce the occurrence, severity, and emissions from uncontrolled wildland fire.

6.9 HAZARDS AND HAZARDOUS MATERIALS

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

Less Than Significant Impact: Hazardous materials transportation and use associated with this project will be limited to substances used to maintain and operate equipment, or transportation of herbicides. Such movement of material will be limited to the time period where implementation takes place and will not occur for extended amounts of time. Additionally, quantities of hazardous materials used will be low relative to normal transportation which occurs in the area. Based on the amount of hazardous material planned for use the chances for an upset or spill, or released into the environment is low.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

Less Than Significant Impact: All California Department of Pesticide Regulation (DPR) herbicide application laws and regulations will be followed, and applications will be performed only by DPR Qualified Applicators." as stated above. Petroleum-based fuels and lubricants are potential sources of hazardous materials release. Regulations and prudence by operators will ensure the potential for these impacts to remain less than significant.

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

Less Than Significant Impact: The only school within ¼ mile of the project area is Bowman Charter School. The school is .2 miles to the west of the project, and on the

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opposite side of Interstate 80 from the project. No emissions of hazardous material will occur form the project, and the amount of hazardous waste handling will not be significantly more than under current conditions.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project 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?	☐	☐	☒	☐

Less Than Significant: The proposed project is not located on or near a hazardous material site.

*The project area includes or is adjacent to sites with known naturally occurring hazardous materials and former mining operations (e.g., the Bunch Creek site and Ellsworth MacFadden Property-discussed in Air Quality-Section 6.3(c). While the project area includes or is adjacent to sites with known naturally occurring hazardous materials and former mining operations, the project does not include grading or excavation, and most fuel reduction activities in these areas will be conducted manually by hand crews, without mechanized equipment due to the steep and rugged terrain and limited access. Additionally, the project includes dust control BMPs (see Section 6.3-Air Quality) which minimize the potential for airborne transport of potentially hazardous soil particles. Given the limited soil disturbance, and protective measures in place, the potential for significant impacts from exposure to hazardous materials is considered less than significant and does not result in any new significant impacts or require any changes or additions to the proposed mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

No Impact: The project is located 1.86 miles Southeast of the Auburn Municipal Airport at its nearest point. The project would not expose people working in the project area to significant risk from the presence of the airport.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

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No Impact: The project will not involve alterations to the project site which would interfere with a emergency response plan or an emergency evacuation plan.

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

Less than Significant Impact: The primary purpose of the project is to mitigate risks associated with wildland fire; therefore, such risks would be reduced by the project. Equipment and vehicle operation as well as increased human presence in the project area could result in a temporary increased risk of fire during vegetation treatment activities. Standard wildland fire guidelines will be implemented during project work which always include the storage of fire suppression equipment onsite during project treatment. Project activities will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Upon completion, the project will provide for safe ingress and egress of evacuated residents and emergency personnel during wildland fires, increase defensible space to effectively fight fires from the roads and reduce roadside fuels to slow the spread of a fire started in or adjacent to the roadway.

These project guidelines and standards create a Less than Significant risk of wildfire to the project area and treatment parcels during project operations.

6.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The project area contains class I, II, III, and IV watercourses based on the watercourse classification system found in the California Forest Practice Rules. Impacts to water quality could include potential changes in water temperature due to reductions in stream shading by removal of vegetation within riparian zones, and a potential increase in sediment inputs from exposed upslope areas. Mitigation Measure #11 would prevent these potential impacts by imposing watercourse buffers which would limit operations near watercourses and retain riparian vegetation in order to prevent changes in water temperature and significant sediment discharge. Operations within 500 feet of any watercourse will require field work to identify, classify, and protect watercourses using flagging. Field work at a work site shall take place prior to the start of activity by a Registered

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Professional Forester or their supervised designee. The classification standards for Mitigation Measure #16 are adopted from similar standards within the California Forest Practice Rules (FPRs; Title 14, California Code of Regulations Chapters 4, 4.5 and 10), and will be followed for implementation of the proposed project covered under this analysis (Tables 3.0 and 3.1 above). These WLPZ buffers and restrictions will ensure the protection of watercourses and the prevention of any impacts to surface or ground water quality and systems. Mitigation Measures #10 has also been incorporated into the project guidelines to minimize topsoil loss caused from erosion, which could subsequently adversely affect water quality is eroded material reaches a watercourse. These mitigations reduce the impacts of the project to Less Than Significant with Mitigation Incorporated.

*The Central Valley Regional Water Quality Control Board (Central Valley Water Board) reviewed the MND for the North Fork American River Shaded Fuel Break Project during the initial 30-day comment period, and offered the following comments relating to several regulatory and permitting requirements:

Regulatory Setting:

- **Basin Plan:** The Central Valley Water Board is required to adopt Basin Plans, which include water quality objectives and implementation programs to protect beneficial uses of water. These plans are updated periodically and require approval from the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL), and sometimes the United States Environmental Protection Agency (USEPA).
- **Antidegradation Considerations:** All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and its implementation policy in the Basin Plan. This policy requires that discharges to high-quality waters apply the best practicable treatment or control to maintain the highest water quality possible. An antidegradation analysis is a mandatory part of permitting processes like the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs). The environmental review document should assess potential impacts to both surface and groundwater quality.

Permitting Requirements:

- **Construction Storm Water General Permit:** Projects disturbing one or more acres of soil, or part of a larger common plan disturbing one or more acres, need coverage under the Construction General Permit. This permit requires a Storm Water Pollution Prevention Plan (SWPPP).
- **Clean Water Act Section 404 Permit:** If the project involves discharging dredged or fill material into navigable waters or wetlands, a permit from the U.S. Army Corps of Engineers (USACE) may be required. The Central Valley Water Board reviews such applications to ensure water quality standards are not violated.
- **Clean Water Act Section 401 Permit - Water Quality Certification:** If a federal permit (like a USACE permit) is needed due to disturbance of waters

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of the United States, a Water Quality Certification must be obtained from the Central Valley Water Board before starting project activities.

- **Waste Discharge Requirements (WDRs) - Discharges to Waters of the State:** If USACE determines only non-jurisdictional waters of the State are present, a WDR permit from the Central Valley Water Board may be required. Discharges to all waters of the State are subject to State regulation under the California Porter-Cologne Water Quality Control Act.
- **Dewatering Permit:** If the project includes construction or groundwater dewatering discharged to land, coverage may be sought under the State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085.
- **Limited Threat General NPDES Permit:** If construction dewatering requires discharge to waters of the United States, coverage under a National Pollutant Discharge Elimination System (NPDES) permit, specifically the General Order for Limited Threat Discharges to Surface Water, may be required.
- **NPDES Permit:** If the project discharges waste that could affect the quality of surface waters of the State (not into a community sewer system), a full NPDES permit is required.

In summary, the Central Valley Water Board provided comments acknowledging their regulatory and permitting authority under the Porter-Cologne Water Quality Act and the Clean Water Act. However, the Board did not express specific concerns with the project or adequacy of the incorporated mitigation measures. The Central Valley Water Board comments received during the initial 30-day public do not result in any new significant impacts and does not require any changes or additions to the mitigation measures. All potential impacts to Waters of the State or Waters of the US have been avoided or reduced to less than significant levels through project design, implementation of best management practices (BMPs), and the included mitigation measures in the North Fork of the American River Shaded Fuel Break Mitigated Negative Declaration.

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

No Impact: The proposed project will not involve any activities which relate to groundwater supplies or recharge.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The project has been designed to avoid operations within and near watercourses and to prevent alterations to their drainages. Additionally, project activities will not result in increased erosion, siltation, nor a stream diversion. Mitigation Measure #10 and #11 have been incorporated to avoid these impacts. Mitigation Measure #11 establishes WLPZ buffers for watercourses and riparian areas. Mitigation Measure #10 prevents erosion and loss of topsoil, which may result in siltation and sedimentation of watercourses, by limiting heavy equipment on steep slopes and preventing soil compaction. These mitigations will reduce the impacts of the project to Less Than Significant level with Mitigation Incorporated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The project has been designed to avoid watercourses and alterations to their drainage patterns. While some vegetation will be removed during the course of project activities, potentially increasing the amount of runoff and overland flow during heavy precipitation events, runoff would not be of sufficient quantity to result in on- or off-site flooding. Additionally, mitigation #11 has specifically been incorporated to avoid these impacts. Mitigation Measure #11 adopts similar standards from the California Forest Practice Rules (FPRs; Title 14, California Code of Regulations Chapters 4, 4.5 and 10) and establishes WLPZ buffers for watercourses and riparian areas (see Table 3 and 3.1 above). Mitigation Measures #10 have also been incorporated into the project guidelines. Mitigation Measure #10 limits the allowed operation slope percentage for equipment depending on equipment type and requires surveying and the limitation of equipment usage on soils that could lead to erosion, soil loss, or compaction of soil, which could subsequently alter drainage patterns and lead surface runoff and flooding. The project design and these mitigations reduce the impacts of the project to Less Than Significant with Mitigation Incorporated

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would 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?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: All operations are designed to occur outside of watercourses and their associated protection zones unless a specific streambed alteration agreement is developed with CDFW prior to operations. While some vegetation will be removed during the course of project activities, potentially increasing the amount of overland flow and runoff during heavy precipitation events, these events would be rare, nor would it exceed the capacity of stormwater drainage systems. Given the rural location of the project, it is not expected that any runoff from the project area would enter any existing or planned stormwater drainage system. Additionally, Mitigation Measure #11 will require the retention of riparian buffers around watercourses which will filter runoff prior to entering the stream and allow for increased infiltration. The project has been designed to avoid watercourses and alterations of their drainage patterns, and project activities will not increase the rate or amount of surface runoff in a manner which would result to exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff into waterways. Mitigation Measures #10 has also been incorporated into the project guidelines. Mitigation Measure #10 limits the allowed operation slope percentage for equipment depending on equipment type, and includes surveying and the limitation of equipment usage on soils that could lead to erosion, soil loss, or compaction of soil, which could subsequently alter drainage patterns and lead to exceeding the capacity of existing or planned stormwater drainage systems or substantial additional polluted runoff. The project design and these mitigations reduce the impacts of the project to Less Than Significant with Mitigation Incorporated

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flows?	☐	☒	☐	☐

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Less Than Significant with Mitigation Incorporated: All operations are designed to occur outside of watercourses and their associated protection zones unless a specific streambed alteration agreement is developed with CDFW prior to operations. The project has been designed to avoid watercourses and alterations to water quality and their drainage patterns, and project activities will not impede or redirect flows. Mitigation #11 has specifically been incorporated to avoid these impacts. Mitigation Measure #11 establishes WLPZ buffers for watercourses and riparian areas. Mitigation Measures #10 has also been incorporated into the project guidelines. Mitigation Measure #10 limits the allowed operation slope percentage for equipment depending on equipment type, and includes surveying and the limitation of equipment usage on soils that could lead to erosion, soil loss, or compaction of soil, which could subsequently alter drainage patterns and impede or redirect flows. The project design and these mitigations reduce the impacts of the project to Less Than Significant with Mitigation Incorporated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	☐	☐	☐	☒

No Impact: All work, storage of materials and equipment will occur outside any potential flood zones or watercourse buffers established in Mitigation Measure #16.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

No Impact: The project is not in conflict with any of these plans.

6.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project physically divide an established community?	☐	☐	☐	☒

No Impact: The project will not involve construction of barriers or block access routes which could divide an established community.

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

No Impact: There are no land use plans, policies, or regulations, or ordinances which conflict with the project.

6.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No Impact: The project will have no effect on mineral resource availability.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

No Impact: The project will have no effect on mineral resource recovery sites.

6.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐

Less Than Significant with Mitigation Incorporated: The use of equipment associated with the project has the potential to temporarily increase noise to levels which would be in violation of the Placer County Noise Ordinance if such activities were in close proximity to residences or other areas occupied by humans. BMP's have been incorporated into the project to prevent noise impacts around occupied areas within the project area. During the implementation of project. Noise for all project work will be

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limited, and the hours of operation of internal combustion equipment will be between the hours of 7:00AM and 9:00PM within 300-feet of any occupied dwelling or areas. The project design and this BMP results in the impact of the project to Less Than Significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Less Than Significant: The proposed project activities and treatments will not generate groundborne vibration or noise at levels that are significant. The project does not include the use of heavy equipment would generate excessive levels of groundborne vibration nor activities that are known to cause ground borne vibration and noise such as pile driving or blasting. Mechanical equipment such as grinders and masticators will result in some low levels of ground vibration and noise which may be perceptible in the immediate vicinity of the equipment. However, equipment will not operate in any single location for an extended period of time. The project will not generate excessive levels of vibration that could result in any form of structural damage to buildings. The project design and activities will result in ground vibration and noise levels that are less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

No Impact: All noise increases associated with the project will be temporary. The project is located 1.86 miles Southeast of the Auburn Municipal Airport at its nearest point. The project would not expose people working in the project area to excessive noise from the presence of the airport.

6.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly	☐	☐	☐	☒

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(for example, through extension of roads or other infrastructure)?				

No Impact: The project does not involve construction of homes, or infrastructure which could support future home construction.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact: The project will not involve housing displacement.

6.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 fire protection?	☐	☐	☐	☒

No Impact: The project does not involve the installation or altering of facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project 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 police protection?	☐	☐	☐	☒

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No Impact: The project does not involve the installation or altering of facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project 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 schools?	☐	☐	☐	☒

No Impact: The project does not involve the installation or altering of facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project 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 parks?	☐	☐	☐	☒

No Impact: The project does not involve the installation or altering of facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project 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 other public facilities?	☐	☐	☐	☒

No Impact: The project does not involve the installation or altering of facilities.

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6.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

No Impact: Portions of the project occur near or adjacent to the Auburn State Recreation Area, however, it is not anticipated that the vegetation treatments that occur on nearby or adjoining private parcels will change the level of public use of Auburn State Recreational Area and deterioration of recreational facilities is not expected to occur. No impact or change to existing recreation facilities or areas is expected.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

No Impact: Construction or expansion of recreational facilities will not be required as a result of this project.

6.17 TRANSPORTATION

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

No Impact: All project work near roadways occurs in a rural setting where traffic levels are very low. The project will have no effect on these traffic levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3(b)?	☐	☐	☐	☒

No Impact: The project is not a transportation related project.

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

No Impact: The project is not a transportation related project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project result in inadequate emergency access?	☐	☐	☐	☒

No Impact: The project is not a transportation related project.

6.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: The proposed project has the potential to impact tribal cultural resources. However, prior to implementation of the proposed project, mitigation measures #12 will be implemented, which requires a CAL FIRE professional archaeologist or qualified natural resource professional with a current certification as a cultural resource surveyor obtained through CAL FIRE shall complete the following tasks:

a. An archival document review of records housed at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) and comply with resources listed in the National Register of Historic

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Places (pursuant to PRC Section 5024.1(c)).

b. Coordination with the California Native American Heritage Commission (NAHC) and Tribes with potential heritage interests in the Project area.

c. An historical records investigation of the Project area.

d. Identification, definition, and intensive archaeological inventory of the proposed Project's Area of Potential Effects (APE).

e. Documentation of potentially affected cultural resources greater than 50 years old and completion of a CAL FIRE Archaeological Survey Report (ASR).

f. Evaluation of the integrity and National Register eligibility evaluation and determination of Findings of Effects for all potentially affected heritage resources by a CAL FIRE professional archaeologist.

g. Incorporating heritage resource management recommendations to prevent adverse effects to resources. This includes conducting thorough inventories and assessments, developing comprehensive preservation plans, prioritizing community engagement, implementing mitigation strategies for potential impacts, promoting public education and interpretation, establishing strong legal protections, and fostering collaborations between stakeholders to ensure long-term sustainability of cultural heritage sites.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Idivision (c) of Public Resources Code § 5024.1? In applying the criteria set forth Isubdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: Implementation of mitigation measure #12 will ensure that Tribal cultural resources are identified and protected prior to project operations. Protection measures will be developed in consultation with participating tribes, the project manager, and the CAL FIRE or consulting archeologist.

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Due to the nature of Mitigation Measure #12 the project will result in an impact that is Less than Significant with Mitigation to potential changes to significance of tribal cultural resources.

6.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒

No Impact: The project does not involve the relocation or construction of new or expanded water, gas, communications, or energy infrastructure.

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

Less Than Significant Impact: The project is a short-duration project. The project will require water for dust suppression during vegetation treatment and prescribed burning activities. The source of water for the project will depend on the location within the project area and the treatment contractor. The project is not anticipated to require significant quantities of water for dust or prescribed fire suppression, and the need for water will cease upon completion of project activities. Less-than-significant impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project 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?	☐	☐	☐	☒

No Impact: The project does not involve water, sewer, gas, communications, or energy infrastructure.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒

No Impact: The project does not involve water, gas, communications, or energy infrastructure. Additionally, no solid waste will be generated by this project.

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

No Impact: The project does not involve water, gas, communications, or energy infrastructure. Additionally, no solid waste will be generated by this project.

6.20 WILDFIRE

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

No Impact: The project purpose is to benefit emergency response and improve emergency access and egress through wildfire fuel reduction and hazardous vegetation removal within the wildland urban interface. The project vicinity is known to experience vegetation fires, however most of the project area has yet to experience a major destructive fire. This project is aimed at assisting in a rapid mitigation of wildfire to reduce the impacts on the community and environment from the fire. This in turn will improve the effectiveness of emergency response and evacuation plans. No emergency response or evacuation plan will be adversely affected by this project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to,	☐	☐	☐	☒

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pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				

No Impact: This project is aimed at assisting in a rapid mitigation of wildfire to reduce the impacts on the community and environment from the fire including pollutant concentrations. The project vicinity is known to experience vegetation fires, however most of the project area has yet to experience a major destructive fire. As the project is designed to accomplish, diligent effort to fully treat vegetation during operations on the project will ensure there is no impact from wildfire pollutants.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or impact to the environment?	☐	☐	☒	☐

Less Than Significant Impact: The project will require the installation of fuel breaks that will be constructed using equipment, vehicles, and tools which require compliance with Public Resource Code Division 4, Chapter 6, §4427-4442. Other provisions of the Public Resource Code also apply. Work during fire season will require periodic shutdowns during hazardous wildfire conditions, Red Flag Warning conditions, and other times that low relative humidity, wind conditions, temperatures, or any other natural conditions that allow ignitions to become uncontrolled wildland fire.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

No Impact: The project will improve emergency response and egress through wildfire fuel reduction and hazardous vegetation removal and the project will not result in slope instability or risk from flooding and landslides.

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6.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated: Mitigation measures have been incorporated into the project design to ensure that impacts on fish and wildlife resources are less than significant. Mitigation measure #2 will require environmental awareness training for all project workers. Mitigation measure #3 will require pre-project botanical surveys and protection of special status plants. Mitigation measures 4-9 will provide protections for mammals, birds, amphibians, reptiles, invertebrates, and will require that sightings of listed animals be reported to the appropriate fish and wildlife agency (CDFW or USFWS). Furthermore, mitigation 10 and 11 will protect watercourses by creating watercourse protection zones and limiting erosion and the potential for sedimentation of surface waters used by wildlife species.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐

Less Than Significant: The project is aimed at protection of life, property, and natural resources. Each of the mitigations and provisions of regulation that guides the implementation of the project are designed to prevent significant environmental impacts from this and any previous project that could combine to have a significant environmental impact. No future projects are known which would cause a different result than that of the proposed project or result in cumulative impacts. All project activities are temporary, no habitat will be converted or permanently changed because of the project work, and no cumulative impacts are expected as a result of the proposed project activities.

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Within the project area, there have been three approved timber harvest documents within the last 20 years (https://egis.fire.ca.gov/Watershed_Mapper/). These three documents are comprised of two Timber Harvest Plans (THP) (plan number: 2-01-221-PLA and 2-09-025-PLA), and one recently (2019) completed Nonindustrial Timber Management Plan (NTMP) (plan number: 2-93NTMP-001-PLA). All three of the timber harvest documents have been operated on, are in compliance with the Forest Practice Rule requirements, and are under the Closed status.

Two State funded fuel break projects have previously occurred within the project area. The first previous project was the North Fork American River Shaded Fuel Break Phase 1 project. This project was a Governor's Office priority project and was implemented under Governor Newsom's Executive Order (EO-N-05-19) in 2019. The Placer County Resource Conservation District (PCRCD) is currently in the process of implementing 800 acres and second phase continuation of the original EO-N-05-19 project. The PCRCD project includes fuels reduction activities in the form of hand thinning, hand piling, machine thinning, machine piling, tracked chipping, roadside chipping, mastication, pile burning, broadcast burning, and herbicide on 800 acres within the project area. The 800 acres are located along Gillis Hill Road and East Weimar Cross Rd, near the communities of Colfax and Weimar in Placer County, CA. Both the original NFARSFB Phase 1 (EO-N-05-1) and PCRCD 800-acre project align with the same goals and treatments of the proposed project. All treatment areas within the project will result in the same vegetation conditions aimed at protection of life, property, and natural resources.

Routine vegetation maintenance work to maintain utility right of way is ongoing within the project area. Other fuels reduction related work occurs to achieve PRC 4291 compliance and independently to meet private property owners' objectives around private residences within the project area. For projects known to exist within the project boundary, there is no known singular past event, activity, or project which could combine with this project to cause a negative environmental impact. Future impacts include ongoing residential development, population growth, and increased recreational uses in a rugged fire prone environment.

All the combined prior treatments known to have occurred within the project area listed above do not constitute significant cumulative impacts to the project area, and cumulative impacts are of the project is Less Than Significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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Less Than Significant: The project is aimed at protection of life, property, and natural resources and will result in net positive effects on humans in the vicinity of the project through increased safety and reduced threat of extreme wildfire. Adverse effects to human beings will be minimal and short lived (e.g., temporary noise, travel, or aesthetic impacts to the few surrounding residences).

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APPENDIX

7. *Mitigation Monitoring and Reporting Plan*

In accordance with CEQA Guidelines § 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a mitigation monitoring and reporting plan (MMRP) that ensures compliance with mitigation measures required for project approval. CAL FIRE is the lead agency for the above-listed project and has developed this MMRP as a part of the final IS-MND supporting the project. This MMRP lists the mitigation measures developed in the IS-MND that were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the mitigation measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

7.1 POTENTIALLY SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The following is a list of the resources that will be potentially affected by the project and the mitigation measures made part of the Initial Study-Mitigated Negative Declaration.

Mitigation Measure #1: Air Quality

A. Smoke Management: Prescribed burning will require development and approval of supporting documentation (approved MND, Burn Plan, CA State RM-75-Prescribed Burning Project Standard Agreement form for each property treated for project work, Smoke Management Plan, BEHAVE fire modeling for burning operations, emissions calculations, etc.) prior to burning. Generally, broadcast burning will not occur within 500 feet of residences, or other structures occupied by humans unless arrangements are made in advance with the buildings occupants to ensure impacts do not occur. Implementation of a smoke management plan before burning will limit prescribed burning to permissible burn days with ideal weather conditions and ensure that toxic air contaminants do not reach sensitive receptors. If the weather conditions reach certain thresholds, the burn will be cancelled and rescheduled for a day where conditions are safe for burning. For this project, abiding by CAL FIRE requirements will provide weather monitoring and protocols that would allow the project to avoid impacts related to unpredictable weather patterns. Additionally, abiding by the smoke management plan will prevent smoke from prescribed burning from reaching sensitive receptors, and providing notifications ahead of time will allow potentially sensitive receptors to avoid entering the area where smoke is present.

B. Dust Management: within 200 feet of residences, open public roads, or trails, masticators shall operate during periods where the soil moisture is high enough to prevent generation of noticeable airborne dust. If operations must occur within 200 feet of residences, open public roads, or trails during low soil moisture periods,

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applied watering or other methods (e.g., chemical dust suppressants, surfactants, etc.) will be utilized to minimize dust, or switch to the use of hand cutting and chipping of material.

Masticators will not operate if conditions allow noticeable fugitive dust in the atmosphere to escape outside the project area, or if operations obscure an observer's view at any location of such a degree of opacity equal to or greater shading as that designated No. 2 on the Ringelmann Chart (i.e., 40% opacity), as published by the United States Bureau of Mines.

Schedule: Throughout the life of the project.
Responsible Party: Timberland Owner or Agent where the mitigation applies.

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #2:

Mitigation Measure #2: Environmental awareness training:

All personnel implementing fuel reduction activities within the project area shall attend an environmental education program presented by the Registered Professional Forester lead, their supervised designee, or qualified biologist. The training shall include an explanation of the special status species and nesting birds that have potential to be found within the project area, and how to adequately avoid and protect the species if found. The field meeting shall include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures. Training shall be repeated at least annually for the duration of the project period.

Schedule: During and after burning operations.
Responsible Party: CAL FIRE

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

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Mitigation Measure #3:

Mitigation Measure #3: Botanical resource protections

Private parcels will be surveyed prior to any ground disturbing work and evaluated for suitable habitat for special status plants or sensitive natural communities. Botanical field surveys shall be conducted by a RPF, their supervised designee, or qualified biologist and will comply with survey protocols for plants species listed under the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018). If no special status plants are found, no further measures pertaining to special status plants are necessary. If special status plant species are identified during the botanical surveys, the individuals will be avoided. The treatment prescription for the parcel will be modified to exclude activities within 25 feet of the individual and exclusionary flagging or fencing will be placed around the plants prior to operations on the parcel to establish the avoidance area during project implementation.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #4:

Mitigation Measure #4: Mammal protections

A. Mammal Den Surveys (fisher): All private parcels will be surveyed prior to any project work and evaluated for suitable mammal den habitat. If potential den habitat for fisher is identified within the treatment unit, the project proponent will implement a limited operating period for project treatments occurring the maternal period (May 1-June 30). If the limited operating period for fisher is determined infeasible, to avoid impacts on the species, focused surveys for fisher, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing treatments during the fisher maternity season within habitat suitable for the species. If presence of fisher is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, a no-disturbance buffer of at least 500 feet will be established around the den, and no treatment activities will occur within this buffer until the den is no longer occupied as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.

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B. Bat Maternity Roost Protections (Townsend's big-eared bat): All private parcels will be surveyed prior to project work during the bat maternity season (April 1-August 31) and evaluated for suitable bat (Townsend's big-eared) roosting habitat (e.g., caves, mines, tunnels, or dwellings). Caves and mineshafts will be clearly marked and reported to the RPF. If no suitable Townsend's big-eared bat roosts are found within the project area, no further measures are necessary. If suitable Townsend big-eared bat roosting habitat is identified within 50 feet of project activities, a RPF or qualified biologist will assess the suitable roosting habitat for signs of bat presence (i.e., guano, insect pieces, etc.). If no roost is present, then no buffer is needed. If a roost is present, then a 250-foot non-disturbance buffer shall be implemented around the roost structure to prevent changes to the roost or cause the species to disperse or be displaced from their roost.

C. **Ringtail Maternity Season Protections*:** If it is not feasible to avoid mechanical treatments, manual tree and snag removal (trees >12"DBH), or prescribed burning activities within habitat suitable for ringtail during the maternity season (April 15–June 30), focused surveys for ringtail will be conducted using trail cameras, track plates, or other non-invasive survey methods to determine whether ringtails are present within the treatment area, or presence may be assumed. If focused surveys determine ringtail may be present within the treatment area, the qualified RPF or biologist will conduct a den search within habitats determined to be suitable for this species, such as hollow logs, snags, rock piles, and large trees (i.e., greater than 12 inches DBH) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If suitable den structures are found, the qualified biologist or RPF will inspect the cavity to determine whether ringtails are present, if safely accessible. If active ringtail dens are discovered, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and broadcast burning, mechanical treatments, and manual tree and snag removal will not proceed within the buffer until the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. If an active den is discovered, CDFW will be notified

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

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Mitigation Measure #5: Avian protections

A. If project activities are to occur during the avian nesting season (February 15-August 31), the RPF, supervised designee, or qualified biologist will conduct pre-treatment surveys for nesting migratory birds in the project area no more than ten days prior to the start of operations. If pre-treatment surveys indicate the presence of any migratory bird nests, a no-disturbance buffer zone (50-100 feet for common passerine species or 500 feet for raptors) will be placed around the nest, depending on species needs and other applicable factors (topography, vegetation screening, nest height, disturbance level etc.).

B. If an active nest of a special status avian species is found within the project area during pre-operational surveys, an appropriately sized no-disturbance buffer will be established around the active nest until the young have fledged. Proposed no-disturbance buffers for special status species that have the potential to occur in the project area are described in Table 6 below. If work within the established no-disturbance buffer is necessary, CAL FIRE will consult with the appropriate wildlife agency (CDFW/USFWS) to ensure take is prevented and impacts are less than significant.

Table6: Special Status Avian Species Nest Buffers

Species	Buffer Distance
Golden eagle	1 Mile
Bald eagle	560 feet
American goshawk	½ mile
California spotted Owl	¼ mile
Yellow-breasted chat	100 feet

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #6: Amphibian protections

Foothill yellow-legged frog: If vegetation treatments are to occur within 200 feet of Class I and Class II watercourses, the habitat suitability for foothill yellow-legged frog will be assessed. If no suitable habitat for foothill yellow-legged frog is found within the treatment area, then no further actions are required. If suitable habitat is present within the treatment area daily inspections will be required.

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B. Daily inspection of the day's treatment area within suitable habitat will be performed by the qualified biologist, qualified RPF, or supervised trained designee. If a frog is observed, activities will cease in the vicinity of the frog and a no-disturbance buffer zone of a size that will appropriately avoid foothill yellow-legged frog will be created until the frog has left the area.

California red-legged frog: During the dispersal season (October 1 through April 15), pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological monitor, prior to implementation of prescribed burning, mechanical treatments, within 300 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet intermittent streams, wet seep) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring will be performed year-around prior to any activities within 30 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet Class III streams, wet seeps). If a California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified RPF or biologist that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified biologist, and USFWS.

C. If California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, the specific habitat features used by the frog when detected will be evaluated by a qualified RPF or biologist for habitat retention, if habitat retention will meet the project goals.

D. If operators need to move or treat large woody debris greater than 12 inches in diameter in suitable upland habitat, that piece of woody debris will be evaluated for California red-legged frog by a qualified biologist, qualified professional, RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #7: Reptile Protections

All private parcels will be surveyed prior to any project work and evaluated for suitable terrestrial reptile habitat. If potential habitat for Blainville's horned lizard or Northwestern pond turtle is identified, visual encounter surveys will be

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completed within suitable habitat within 15 days prior of ground disturbing activities. If a horned lizard or Northwestern pond turtle is identified during surveys, or assumed to be present, biological monitoring by a qualified RPF or biologist will occur during prescribed burning or mechanical treatments within or adjacent to sensitive habitat areas. If the qualified RPF or biologist detects a special-status reptile during treatments, a non-disturbance buffer of 100 feet, will be implemented around the individual unless it is determined by a qualified RPF, biologist, or RPF supervised designee that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal has left the area.

'**Schedule**: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #8: Invertebrate protections

Western and Crotch's* bumble bee: Prior to project work, all private parcels will be evaluated for bumble bee habitat and/or surveyed for special status bumble bees. The project proponent will refer to CDFW's Survey Considerations for California Endangered Species Act (CESA) prior to conducting surveys or habitat evaluations. If special status bumble bees or suitable habitat features are observed, presence will be assumed, and the following avoidance measures will be applied:

E. Treatment areas in occupied or suitable habitat will be divided into multiple treatment units and conducted in a patchy pattern such that the entirety of suitable habitat is not treated within the same year. The size and distribution of treatment units will be designed by the RPF to provide refuge and ensure habitat features necessary for native bumble bees will be retained.

F. Prescribed burning within occupied or suitable habitat for special status bumble bees will occur from October through February to avoid the bumble bee flight season, to the extent feasible.

G. Herbicides will not be applied to flowering native plants within occupied or suitable habitat during the bumble bee flight season (February through November), to the extent feasible.

H. If a bumble bee nest is identified within the project area, the RPF or qualified biologist will establish a 50-foot no-disturbance buffer around the nest.

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Valley elderberry longhorn beetle (VELB): The USFWS developed conservation guidelines to avoid impacts to VELB (USFWS 1999). Due to Valley elderberry (host plant to VELB) being present in the project area, the following measures apply.

E. The Project area will be surveyed by a RPF, their supervised designee, or a qualified biologist for elderberry host plants prior to any Project-related activities.
F. In May and June, no vegetation removal shall occur within 100 feet of any elderberry plant over 1 inch in diameter until inspected to determine potential presence of VELB. Elderberry plants will be retained and protected from cutting, removal, or damage.
G. No herbicides will be used within 25 feet of any elderberry plant with a stem measuring greater than 1 inch in diameter at ground level.
H. Removal of nearby ground vegetation (within 5 feet of elderberry plants) may be completed from July through April.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #9: Notification of Species detection*

If any Federally or State Listed, candidate, or Fully Protected species is encountered during operations, the RPF shall be notified immediately. All project work within 100 feet of the species occurrence will cease and the appropriate wildlife agency (CDFW or USFWS) will be contacted within two (2) working days for further guidance. CAL FIRE will document the occurrence in the CNDDB and collaborate with CDFW and/or USFWS to ensure the proposed protection measures and/or operational buffer is adequate to protect the listed species.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

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Mitigation Measure #10: Geology and Soils Protections

A. Identification of unstable areas: No unstable areas or highly erosive soils are known to occur or have been previously identified within the project area. Prior to treatment operations in areas over 30% slope; the treatment area will be traversed by a RPF, or their supervised designee, to identify any unstable areas requiring avoidance by heavy machinery. If an unstable area is identified, ground disturbance and heavy equipment use will not occur in the area and be buffered at minimum 25 feet to prevent the potential for landslides.

B. Equipment slope limitation: Heavy equipment shall be limited to the following slopes:

Equipment Type	Maximum Slope Percent
Wheeled front end loaders or masticators	30%
Tracked Chippers	50%
Tracked Masticators or front-end loaders	50%
Walking Type Excavator / Masticators	65%

C. Soil loss and compaction: Heavy equipment use will be limited to existing and stable road surfaces during saturated soil conditions. Saturated Soil conditions are defined as follows:

Soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing material during equipment operations, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

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Mitigation Measure #11: Watercourse Protections
Prior to project treatments, watercourses will be identified, and appropriate buffer widths will be flagged by a RPF or supervised designee. Watercourse and Lake Protection Zones (WLPZs) have been adopted from the California Forest Practice Rules (FPRs; Title 14, California Code of Regulations Chapters 4, 4.5 and 10). These buffers and corresponding protections will be followed for implementation of the proposed project covered under this analysis (see Tables 3.0 and 3.1 above) and are as follows:

Watercourse and WLPZ protection measures:

D. Watercourse protection zones will be established within 25 to 50 feet of Class III watercourses, within 75 to 100 feet of Class II watercourses, and within 75 to 150 feet of Class I watercourses within the Project area. Wider protection/buffer zones will be determined by slope percent of the watercourse (see Table 3.1-Protection Measures by Watercourse Classification).
E. Equipment will be excluded from the watercourse protection zone except for existing equipment crossings of Class III watercourses which are dry at the time of operations.
F. Within the watercourse protection zone of Class I and II watercourses, no mastication or prescribed burning will be applied; only hand treatment. Treatments will retain at least 50% of the existing groundcover and 50% of the existing overstory canopy.
B. Within the watercourse protection zone of Class III watercourses, hand treatments and mastication may be applied. Treatments will retain at least 50% of the understory vegetation to maintain soil stability.

Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

<u>Verification of Compliance</u>:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

Mitigation Measure #12: Cultural Resource Protections

A. Prior to any ground disturbing work, project areas will be evaluated for the presence of cultural resources utilizing the *Updated Cultural Resource Review Procedures for CAL FIRE Projects (2020).* These procedures are briefly described below.
   vii. An archival document review of records housed at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS).

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viii. Coordination with the California Native American Heritage Commission (NAHC) and geographically affiliated tribes to identify potential heritage interests in the Project area.
ix. Pre-field research and historical records investigation of the Project area.
x. Pedestrian archaeological survey of the project area conducted by a CAL FIRE Archaeologist, Consultant Archaeologist, or certified archaeological surveyor overseen by a professional Archaeologist.
xi. Preparation of site records or updated site records for resources identified.
xii. Development of a report (Archaeological Survey Report or ASR) which summarizes the above referenced information and provides resource management recommendations and protection measures. ASR and resources protection measures will be reviewed by a CAL FIRE archaeologist prior to being implemented to ensure adequate resource assessments and protections have been made.

B. Encountering Human Remains: In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CAL FIRE and/or the project contractor(s) shall immediately halt potentially damaging activities in the area of the burial and notify the Placer County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. 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[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Placer County and CAL FIRE to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

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Schedule: Throughout the life of the Project
Responsible Party: CAL FIRE RPF, Contract RPF or an RPF Supervised Designee

Verification of Compliance:
Monitoring Party: CAL FIRE
Initials: _____
Date: _____

A copy of the completed MMRP will be forwarded to: CAL FIRE Environmental Protection Program, P.O. Box 944246, Sacramento, CA 94244.

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8. List and Definitions of Acronyms and Symbols in this Document

Acronyms:

AGS	Annual grassland
APCD	Air Pollution Control District
ASRA	Auburn State Recreation Area
BLM	Bureau of Land Management
BOP	Blue Oak-Foothill Pine
BOR	Bureau of Reclamation
BOW	Blue Oak Woodland
CA	California
CAL FIRE	California Department of Forestry and Fire Protection
CCR	California Code of Regulation
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Parks and Recreation
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWHR	California Wildlife Habitats Relationship
DBH	Diameter at Breast Height
DPR	California Department of Pesticide Regulation
DPM	Diesel Particulate Matter
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ELZ	Equipment Limitation Zone
ESA	Endangered Species Act
FPR	Forest Practice Rules
EPA	Environmental Protection Agency
FHSZ	Fire Hazard Severity Zone
FMP	Forest Management Plan
GHG	Greenhouse Gas
GP	General Plan
HWY	Highway
IS	Initial Study
IS-MND	Initial Study / Mitigated Negative Declaration
MCH	Mixed chaparral
MHW	Montane hardwood
MMRP	Mitigation Monitoring and Reporting Plan
NAHC	Native American Heritage Commission
NAIP	National Agriculture Imagery Program
NCIC	North Central Information Center

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NEPA	National Environmental Policy Act
NFA	No Further Action
NOX	Nitrogen Oxides
NTMP	Nonindustrial Timber Management Plan
PCA	CA Licensed Pest Control Advisor
PCAPCD	Placer County Air Pollution Control District
PFIRS	Prescribed Fire Information Reporting System
PM10	Fugitive particulate Matter
PPN	Ponderosa pine
RA	Residential Agriculture Zoning
RMP	Resource Management Plan
ROG	Reactive Organic Gases
RPF	Registered Professional Forester
RS	Residential Single-Family Zoning
SHPO	State Historic Preservation Office
SMC	Sierra Mixed Conifer
SMP	Smoke Management Plan
SSC	Species Special Concern
THP	Timber Harvest Plan
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMP	Vegetation Management Program
WLPZ	Watercourse and Lake Protection Zone
WUI	Wildland Urban Interface

Symbols

§	Section
#	Number
%	Percent

9. Preparers of this Document

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10. Experts Consulted

Biological Issues

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Cultural Resources Issues

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Zach Emerson, United Auburn Indian Community, Member

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Placer County Air Pollution Control District

Ann Hobbs

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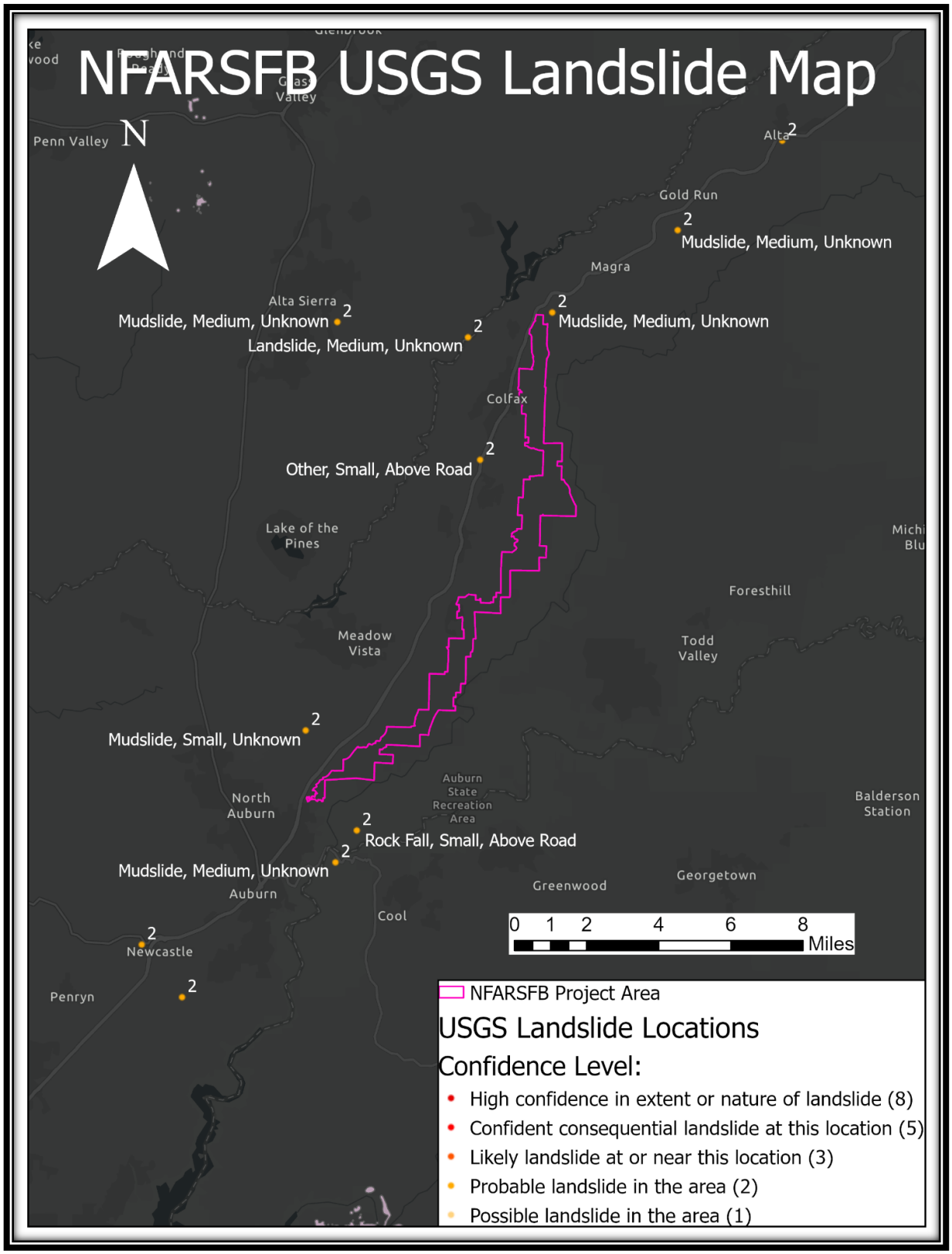

Figure 28: USGS landslide map around NFARSFB project perimeter

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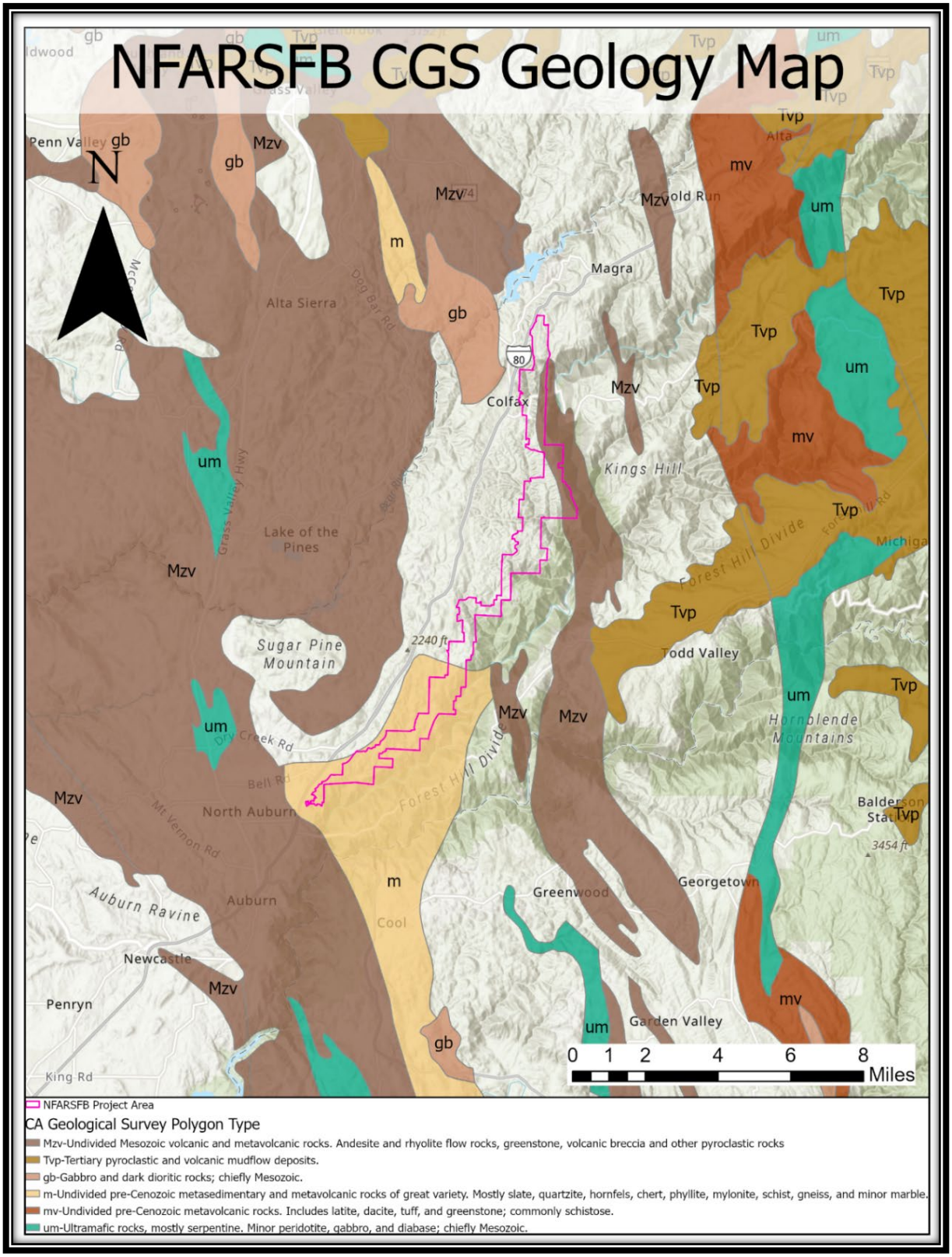

Figure 29: Map of volcanic, gabbro, or serpentine soils within the project area.

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11. References Cited

- Bias, M. A., and R. J. Gutiérrez. 1992. Habitat associations of California spotted owls in the central Sierra Nevada. Journal of Wildlife Management 56(3):584-595.

- California Natural Diversity Database. 2023. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed: May 2023.

- California Geological Survey. "EQ Zapp: California Earthquake Hazards Zone Application." Conservation.CA.gov, California Geological Survey, 2019, www.conservation.ca.gov/cgs/geohazards/eq-zapp. Accessed 19 Dec. 2023.

- California Wildlife Habitat Relationship System (CWHR). 2005. Yellow-breasted chat (*Icteria virens*) Life History. California Department of Fish and Wildlife, California Interagency Wildlife Task Group. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2125&inline=1. Accessed June 2023.

- Evans, E., R. Thorp, S. Jepsen, and S.H. Black. 2008. Status Review of Three Formerly Common Species of Bumblebee in the Subgenus Bombus: *Bombus affinis* (the rusty patched bumblebee), *B. terricola* (the yellow banded bumblebee), and *B. occidentalis* (the western bumblebee). The Xerces society, Portland, OR. 63 pp.

- Fitch, H. S. 1938. *Rana boylii* in Oregon. Copeia 3:148.

- FR 75 12816. Federal Register. Department of the Interior Fish and Wildlife Service. 50 CFR Part 17. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-legged Frog. Final Rule. Federal Register Vol. 75 No. 51, Wednesday, March 17, 2010, 12816-12959.

- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2014. *Bombus caliginosus*. The IUCN Red List of Threatened Species 2014: e.T44937726A69000748. http://dx.doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937726A69000748.en. Downloaded on 08 March 2017.

- Hayes, M. P., and M. R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylii*): implications for management. Proceedings of the Symposium on Management of Amphibians, Reptiles and Small Mammals in North America. Gen. Tech. Rpt. RM-166, Rocky Mountain Research Station, USDA Forest Service. Fort Collins, CO. pp 144-158.

- Irwin, L. L., L. A. Clark, D. C. Rock, and S. L. Rock. 2007. Modeling Foraging Habitat of California Spotted Owls. Journal of Wildlife Management 71(4):1183-1191.

Docusign Envelope ID: DD2F8FCB-826E-47AC-833F-8BD6E2967A22

- Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game, Final Report.255 pp.

- LaHaye, W. S., R. J. Gutiérrez, and D. R. Call. 1997. Nest-site selection and reproductive success of California spotted owls. Wilson Bulletin 109(1):42-51.

- Perry, Roger W. 2012. A review of fire effects on bats and bat habitat in the eastern oaks region. In: Dey, Daniel C.; Stambaugh, Michael C.; Clark, Stacy L.; Schweitzer, Callie J., eds. Proceedings of the 4th fire in eastern oak forests conference; 2011 May 17-19; Springfield, MO. Gen. Tech. Rep. NRS-P-102. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station: 170-191.

- Placer County Air Pollution Control District 2017 CEQA Air Quality Handbook. Available on-line at: https://www.placerair.org/1801/CEQA-Handbook

- Placer County Conservation Program. 2020. WESTERN PLACER COUNTY HABITAT CONSERVATION PLAN/ NATURAL COMMUNITY CONSERVATION PLAN. Placer County, CA. Available at: https://www.placer.ca.gov/DocumentCenter/View/44657/Placer-County-Conservation-Program---Volume-I-PDF. Accessed June 2023.

- Sauer, J.R., J.E. Hines, J.E. Fallon, K.L. Pardieck, D.J. Ziolkowski, Jr., and W.A. Link. 2016. The North American Breeding Bird Survey, Results and Analysis 1966–2015, Version 01.30.2015. USGS Patuxent Wildlife Research Center, Laurel, MD.

- Stebbins, Robert C. 2003. A Field Guide to Western Reptiles and Amphibians. 3rd Edition. Houghton Mifflin Company, 2003.

- Stebbins, Robert C., and Samuel M. McGinnis. 2012. Field Guide to Amphibians and Reptiles of California: Revised Edition (California Natural History Guides), University of California Press, 2012.

- U.S. Department of Agriculture, Forest Service, Missoula Fire Sciences Laboratory. 2012. Information from LANDFIRE on fire regimes of California oak woodlands. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: www.fs.usda.gov/database/feis/fire_regimes/CA_oak_woodlands/all.html [2023, December 7].

- U.S. Department of Agriculture, Forest Service, Missoula Fire Sciences Laboratory. 2018. Fire regimes of California montane mixed-conifer communities: Information

Docusign Envelope ID: DD2F8FCB-826E-47AC-833F-8BD6E2967A22

from the Pacific Southwest Research Station and LANDFIRE. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: www.fs.usda.gov/database/feis/fire_regimes/CA_mixed_conifer/all.html [2023, December 7].

- US DOI U.S. Fish and Wildlife Service (USFWS). 2006. Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimporhus*) 5-Year Review: Summary and Evaluation. Sacramento Fish and Wildlife Office, Sacramento, California. September 2006.

- United Stated Forest Service (USFS) n.d. Ecological Subregions of the United States, Chapter 33, Section M261E, Sierra Nevada and Section M261F Sierra Nevada Foothills. Available on-line at: https://www.fs.usda.gov/land/pubs/ecoregions/ch33.html

- United States Geological Survey. U.S Landslide Inventory Web Viewer. Website located at:https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d. Accessed on 11/08/2023

- Verner, J., K. S., R. J. Gutiérrez, and G. I. Gould, Jr. 1992. The California spotted owl: General biology and ecological relations. Pp 55-77 in J. Verner, K. S. McKelvey, B. R. Noon, R. J. Gutiérrez, G. I. Gould, Jr., and T. W. Beck (technical coordinators); The California spotted owl: a technical assessment of its current status. Gen. Tech. Rep. PSW-GTR-133. U. S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Albany, California.

- White, C. M., Clum, N. J., Cade, T. J., & Hunt, W. G. (2002). Peregrine falcon (*Falco peregrinus*). Birds of North America Incorporated.

- Williams, P. H., Thorp, R. W., Richardson, L. L., & Colla, S. R. (2014). The Bumble bees of North America: an identification guide. Princeton University Press.

- Zielinski, William J.; Truex, Richard L.; Schlexer, Fredrick V.; Campbell, Lori A.; Carroll, Carlos. 2005. Historical and contemporary distributions of carnivores in forests of the Sierra Nevada, California, USA. Journal of Biogeography. 32(8): 1385-1407. [64028]

- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.